Coronial Inquiries into Fatal Adverse Events in South Australian Hospitals: From Inquest to Practice

Carol Grech

A thesis submitted to fulfil the requirements for the Degree of Doctor of Philosophy.

Department of Public Health

Faculty of Health Science

The University of Adelaide

October 2004

Table of Contents

List of Figures

List of Tables

Abstract

The role of coroners as investigators and advocates of death and injury prevention has gained considerable attention from stakeholders interested in improving quality and safety in acute hospitals. In Australia, it is estimated that over 5,000 deaths per year are caused by unintended injury, errors and/or iatrogenic causes related to the medical management of patients. A coronial inquest into a single such hospital death, or a series of these deaths, can result in a comprehensive source of information for future analysis and may also result in a set of findings and recommendations aimed at preventing or reducing the likelihood of future death or injury. This thesis examines whether coronial findings have any value in safety and quality improvement, particularly at the level of bedside practice in an era where sophisticated risk assessment has become an increasingly important part of hospital management.

The modern South Australian coronial system, like others across the world, is a product of its social, political and legal history. A detailed analysis of the impact these factors have on how the coroner has come to manage fatal adverse events provides answers to explain why many recommendations are not being implemented in practice. The office of coroner was created 800 years ago to represent the Crown's interest and although it has undergone multiple reforms over the years, it remains an office largely driven by political agendas and government interests. While coroners enjoy some degree of judicial independence, when it comes to recommending changes to the way in which the state run health system operates, implementation processes are often overshadowed by professional control issues and broader government agendas associated with cost containment and minimising public exposure of failures in the health system.

This thesis also contends that social attitudes toward death have changed significantly over the last century, largely due to improved public health and medical advances that prolong life. In general, the public expect to live a long and healthy life and, if they become acutely ill, they expect a straightforward and

uncomplicated hospitalisation. When errors and mishaps occur they are viewed as unacceptable, blameworthy and warranting compensation.

There is a growing body of knowledge about the causes of adverse events and many solutions have been proposed to reduce the incidence. The findings of my study indicate that the coroner regularly and repeatedly identifies the same factors underlying fatal adverse events as those recognized in the literature. Despite this knowledge, and the fact that many adverse events are predictable and preventable, there is little evidence that the incidence of medical fatalities is declining. Consumers of health care services as well as those who work in the health system are deserving of a safer hospital system. If government and health bureaucrats are serious about preventing fatal adverse events, then serious attention needs to be given to implementing recommendations handed down by the coroner and strategies developed to address deficiencies. Immediate actions should include overcoming obstacles that impede hospital deaths being reported to the coroner; improving the communication of coronial findings to clinicians (the group most likely to benefit from this form of education), and, lifting the barriers that currently impede change at the practice interface.

Declaration

This work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in text.

I give consent to this copy of my thesis, when deposited in the University Library, being available for loan and photocopying.

Signature:. Date: 3/12/04

C. M. Grech

Acknowledgements

The completion of this thesis has been due to the support and assistance of a variety of people. Foremost, I would like to thank my supervisor, Dr Neville Hicks, for his intellectual guidance, intelligent advice and mentorship. Neville's considerable academic insight was invaluable in guiding me through many of the philosophical, theoretical and political debates that arose during the course of this study.

I am very grateful for the support I received from the South Australian Coroner's Office while undertaking the field work component of this study. Particular thanks to State Coroner Wayne Chivell and members of his staff who gave their time willingly to be interviewed as part of this study. As someone from outside the legal profession, the opportunity to meet with key staff and attend a number of inquests assisted me to better understand the coronial process as it is enacted in this state.

Thank you to Ms Anna Holasek and Associate Professor Phil Ryan for their assistance with proof-reading chapters of this thesis.

A special thank you to Paul, Tina, Cathy and Alana for supporting me over the last four years during my doctoral studies.

I also acknowledge the victims and families of those who have suffered a fatal adverse event. This thesis relates some of their stories.

Glossary of abbreviations used in this thesis

ACIS	Assessment and Crisis Intervention Service
ACS	Australian Coroner's Society
ACSQHC	Australian Council for Safety and Quality in Health Care
ACT	Australian Capital Territory
ADRAC	Adverse Drug Reactions Advisory Committee
AIDS	Acquired Immunodeficiency Syndrome
AIHW	Australian Institute of Health and Welfare
AMA	Australian Medical Association
CDC	Center for Disease Control
CEO	Chief Executive Officer
CISU	Coronial Investigation Services Unit
CPR	Cardiopulmonary Resuscitation
DHS	Department of Human Services
DPP	Director of Public Prosecutions
ED	Emergency Department
GP	General Practitioner
HMPS	Harvard Medical Practice Study
ICU	Intensive Care Units
IDSC	Intellectual Disability Services Council
IOM	Institute of Medicine
ISU	Insurance Services Unit
JAMA	Journal of the American Medical Association
LAVH	Laparoscopically Assisted Vaginal Hysterectomy
MHS	Macarthur Health Service
MI	Myocardial Infarction
MUNCCI	Monash University National Centre for Coronial Information
NCIS	National Coronial Information System
NHS	National Health Service
NPSA	National Patient Safety Agency
NSW	New South Wales
QuIC	Quality Interagency Coordination Task Force
RN	Registered Nurse
RPN	Registered Psychiatric Nurse
SAHC	South Australian Health Commission
SAMHS	South Australian Mental Health Services
SAPOL	South Australian Police
TGA	Therapeutic Goods Administration
UK	United Kingdom
US	United States of America
VIFM	Victorian Institute of Forensic Medicine
WHO	World Health Organisation

CHAPTER 1

INTRODUCTION

1.1 Hospitals, fatal adverse events and coroners

You're very ill.
You may need an operation.
We're admitting you to hospital.
You'll be in safe hands.
You'll be well and home in no time!

Those who have been hospitalised with an acute illness may recognise these phrases and even have drawn comfort from them. They reflect the notion that, during an episode of infirmity, hospitals offer a secure and protected haven with highly skilled and specialised professionals dedicated to ensuring the safety and wellbeing of their patients. But will you be safe? Over the last decade this notion has been considerably tempered by widespread attention given to catastrophic hospital related injuries and deaths suffered by patients while in the care of those 'safe' hands. Such injuries and deaths have become collectively categorised under the aggregate of adverse medical events and have challenged modern beliefs that hospital care is safe, efficacious and beneficial.

Of course, for the sick and infirm, hospitals have always been somewhat dangerous places. The very nature of hospital environments makes them hazardous. Collectively housing those already compromised by illness and exposing them to complex, often invasive treatment regimes, increases the risk of consumers experiencing an untoward event. Most will not and, if they do, the outcome may be a minor setback in an otherwise trouble-free hospitalisation. Conversely, a small but appreciable number of patients suffer catastrophic events. A disoriented patient, for example, may sustain minor bruising from a fall out of bed, whereas a similar patient, encountering the same fall, may suffer a major head injury with fatal consequences. Deaths attributed to adverse events are at the very sharpest end of hospital related misadventure and those fatalities are of particular interest to this thesis. Since the majority of hospitals have high patient occupancy and turn over rates, the incidence of such catastrophic events, although seemingly small,

produce worrisome statistics when extrapolated to broader patient populations.

This has been demonstrated through an increasing body of epidemiological knowledge that flowed from benchmark studies in the United States of America (hereafter cited as the US) and Australia that estimated the prevalence of adverse events to be somewhere between 3.7% and 16.6% of all hospital admissions[1]. Of these, between 4.9% and 13.6% were found to be fatal, equating to about 98,000 deaths each year in the US and 5,500 deaths per year in Australia[2]. The assumption underpinning the majority of research in this area has been that by understanding the nature and cause of adverse events they can be prevented. Conjecture that only incompetent practitioners are responsible for inflicting serious harm on patients has been discarded by increasing evidence that even the most experienced and skilled clinicians are capable of making errors that cause serious injury and death[3].

There have been several key drivers for this research, but by far the most compelling has been the economic cost associated with serious adverse events. Successful clinical negligence claims, the rising cost of medical indemnity insurance, extended hospital stays and increased readmission rates have become a drain on public and private purses. Moreover, adverse events that cause serious harm or death significantly undermine public confidence in the healthcare system. Media exposure surrounding such failures also renders governments and health bureaucrats vulnerable to damaging criticism from constituents and adversaries alike.

---

1 These and other studies will be discussed in Chapter 6, meanwhile, see, Brennan, T. Leape, L. Laird, N. et al 'Incidence of adverse events and negligence in hospitalized patients: results of the Harvard Medical Practice Study I', *New England Journal of Medicine*, Vol. 324, 1991 pp370-376; Wilson, R. Runciman, W. Gibberd, R. et al 'The quality in Australian health care study', *Medical Journal of Australia*, Vol.163, 1995 pp458-471.

2 While these estimates are frequently cited in the literature it is worth noting that at best such figures are speculative and estimates vary considerably across the literature with some experts suggesting the number of fatalities is likely to be higher. For example, Leape indicates the figure could be as high as 180,000 per year in the US. Leape, L. Swankin, D. Yessian, M. 'A conversation on medical injury', *Public Health Reports*, Vol.114, 1999 p304.

3 For a general discussion about the mechanisms of health professionals and errors see, Leape, L. 'Error in Medicine', *JAMA* Vol.272, 1994 pp1851-1857. An extensive literature critique of research into adverse events is presented in Chapter 5 at 5.3 pp151-176.

To illustrate the severity of this problem and the seriousness that governments now afford to managing adverse events, one only needs to look toward the substantial sub-set health industry that has grown around mitigating hospital related injury. At the local level, most hospitals now have clinical risk managers and committee structures responsible for investigating, analysing and managing adverse events. At the regional and national levels, government health departments have established units, committees, boards and councils accorded the task of reducing the incidence of adverse events[4]. Medical literature abounds with articles and editorial comments devoted to the topic, and conferences and forums have proliferated alongside the research to inform health professionals about failures in their industry.

One of the most consistent themes to emerge from the sizeable attention bestowed upon medical mishaps has been the importance of learning from adverse events. Major enquiries conducted in the US, the United Kingdom (hereafter cited as the UK) and Australia have all acknowledged that any comprehensive strategy to improve patient safety must involve active learning[5]. Within such a learning framework, incident/error reporting schemes, consumer complaint systems, medical litigation case studies, confidential inquiries and coronial findings have been cited as among the most valuable resources from which to extract knowledge to reduce the likelihood of similar failures being repeated.

Of these resources, the most long-standing and, arguably, most independent and public mechanism to address hospital related fatalities has been the coronial system. This judicial office has existed in the English speaking world for over 800 years and it has been the coroner to whom the public has largely turned when seeking answers to unnatural, suspicious or unexplained deaths. According to Knapman and Powers, two English barristers who have written

---

4 Like similar national committees set up in the US and United Kingdom, the Council for Safety and Quality in Health Care was established in 2000 under the Australian Health Ministers to provide national leadership in Australia to improve patient safety and reduce the cost associated with adverse events.

5 Kohn, L. Corrigan, J. Donaldson, M. *To err is human: building a safer health system,* Institute of Medicine, National Academy Press, Washington DC 1999; Department of Public Health, *An organisation with a memory: report of an expert group on learning from adverse events in the National Health System,* The Stationery Office, London 2000. [NHS Report]; Australian Council for Safety and Quality in Health Care, *Safety in numbers,* Second report to the Australian Health Ministers' Conference, ACSQHC, Canberra, 2001.

extensively on coronial law, unnatural deaths are those caused by violent or unnatural means such as homicide, accidental injury, misadventure, poisoning, drowning or burning and not by reason of disease or old age[6]. While this definition seems clear-cut, in practice the chain of causation leading to cause of death can be unclear and often it is left to the coroner to determine what category the death fell under. Historically, coroners have presided over a court of record, where the facts surrounding a death are carefully documented so that lessons can be learned about how to prevent similar deaths. While there are some basic differences within coronerships across global jurisdictions, the principle of neutral fact finding and the prerogative of coroners to make recommendations to mitigate future fatalities is a feature generally common to all systems.

In Australia and the UK, coroners investigate deaths on behalf of the Crown, and the hallmark of this office has been one of independence, impartiality and fairness. Fatalities from medical misadventure fit within the nature of deaths that coroners are obliged by statute to scrutinise. For the victims, and most especially their family, the presence of a coronership provides an opportunity to seek justice in death through moral interrogation of the facts uncovered during a public inquest. However, the key beneficiary of a robust coronial system is the wider community. Recommendations arising from an impartial, transparent and objective inquiry into a hospital related fatality have the potential to improve public health by ensuring a safer healthcare system. This is conditional, of course, on intended recipients of such recommendations actively learning from the findings and translating this knowledge into policies that are embedded into clinical practice. This thesis sets out to examine the extent to which coronial recommendations arising from inquests into fatal adverse events are translated into practice and reduce the likelihood of similar deaths recurring.

---

6 Knapman, P. Powers, M. *The law and practice on coroners*, Barry Rose, Chichester, 1985 p82, esp.13.04. Conversely then, a 'natural' death, whether sudden or unexpected, occurs in the course of 'nature' from old age or disease. Knapman is also a London coroner.

1.2 Mapping parameters: definition of key terms and ethical considerations

In the medical world, the term adverse event has been broadly and interchangeably applied to describe a variety of untoward outcomes incurred by consumers as the result of being exposed to healthcare. In Australia, adverse events that cause serious harm are termed sentinel events[7]. These events have been identified as those requiring systematic investigation and analysis to determine causal relationships in order to prevent repetition. While there is some uncertainty among the experts as to whether all adverse events can be prevented, there is sufficient acceptance that those caused by errors can be avoided[8]. Much of this thinking has been informed by the work of cognitive psychologists and while this thesis does not attempt to address in any detailed way the nature and construction of errors, research undertaken in this field has produced relatively coherent theories of why humans make errors and the type of errors that contribute to adverse events[9]. However, as I will point out in Chapters 6, 7 and 8, knowing about the types of errors involved does not necessarily translate easily into practical solutions to reduce or eliminate errors associated with hospital related adverse events.

Medical adverse events are usually characterized by cause and degree of harm inflicted. Medical misadventure, mishaps, accidents, failures, blunders, errors and slip-ups have been among the more common descriptors linked to such events. Not all adverse events, however, are caused by mishaps and errors. A person may suffer an idiosyncratic drug reaction to an appropriately prescribed medication with or without detrimental outcome. Therefore, in the medical literature objective scales of harm have been applied to refine definitions. Most commonly, degrees of disability aligned to recovery have been identified. For example, in 1991 Brennan and colleagues defined an adverse event as any injury that was caused by medical management, as

---

7 Australian Council for Safety and Quality in Health Care, *Safety through action*, Third report to the Australian Health Ministers' Conference, ACSQHC, Canberra, 2002.

8 Brennan, T. Hebert, L. Laird, N. et al, 'Hospital characteristics associated with adverse events and substandard care', *JAMA*, Vol.265 1991, pp3265-3269; Kohn, Corrigan, Donaldson, 1999 p24.

9 See for example the seminal work of UK based James Reason in Reason, J. *Human Error*, Cambridge University Press, Cambridge 1990; and, more recently, the work of US Professor of Psychology Robert (Bob) Helmreich ie. Helmreich, R. 'On error management: lessons from aviation', *British Medical Journal*, Vol.320 2000 pp781-785, and Sexton, J. Thomas, E. Helmreich, R. 'Error, stress, and teamwork in medicine and aviation: cross sectional surveys', *British Medical Journal*, Vol.320 2000 pp745-749.

opposed to the patient's underlying condition, which resulted in a prolonged hospitalisation or produced a disability evident at the time of discharge[10]. They separated disabilities into minor impairments where patients were observed to recover in one month; more series injuries that disabled patients for more than one month but less than six months; and very serious injuries causing permanent disability or death.

For the purpose of this study, and in keeping with how most of the medical literature has come to understand adverse events, the term is defined as any unintended injury or death caused by medical management arising from misdiagnosis, exposure to investigations, treatments, procedures, or omissions thereof. To enhance readability, the term adverse event is used interchangeably with clinical iatrogenesis, misadventure, failure and sentinel event. It will be made clear in the context of the discussion should deviations exist in how these terms are applied.

Throughout this thesis, the word 'medical' is broadly applied to encompass all aspects of clinical care. It is not meant to refer to doctors and their practice of medicine unless this is made explicit. However, because doctors and nurses comprise the mainstay of hospital personnel responsible for decision making and executing treatments, they are more likely to be implicated when an adverse event befalls a patient under their care. Hence, these two professional groups are principal players in the discussion about medical misadventure. This is not to suggest that other allied health professionals and hospital administrators share no part in adverse events. Indeed, it will become evident that administrators who manage hospitals are frequently at the forefront when it comes to system failures that contribute to patient injury, as are health bureaucrats responsible for overall policy direction including quality and safety within healthcare systems.

It is worth noting that contemporary notions of healthcare are not confined within the boundaries of hospitals and there is growing evidence that many adverse events occur outside these settings. One plausible explanation for

10 Brennan, Leape, Laird, p371.

this comes from decreasing length of hospital inpatient stays, meaning that more of the acutely ill are being managed in the community. Hospitals, however, have traditionally provided the main research environment for the study of adverse events. In Australia, a significant proportion of deaths associated with medical misadventure that come under the purview of coroners occur in hospitals. Therefore, the focus of this study is centred on fatal adverse events connected with the victim either being hospitalised or coming into contact with an acute hospital. Acute hospitals are classified as those public or private institutions that provide surgical, medical, obstetrical and/or psychiatric care for inpatients, inclusive of twenty-four hour qualified nursing and professional medical services.

Throughout this thesis I refer to the coroner in the masculine form, i.e. he or him. This is not meant to suggest that there are no female coroners nor that consideration to gender-neutral language was not considered. Instead, I have elected to conform to the literary style adopted in the majority of the literature and within statutes pertaining to the coroner.

1.2.1 Addressing the ethical considerations

Hospital deaths associated with adverse events are an emotive topic that requires careful and sensitive management. The fact that the study was designed around collecting primarily textual data did not eliminate the potential for emotional harm to be brought to relatives or acquaintances of victims or to those healthcare workers involved in medical misadventure. Prior to embarking on this study ethics approval was sought and granted by the University of Adelaide Human Research Ethics Committee in accordance with the National Statement on Ethical Conduct in Research Involving Humans[11].

By no means does this thesis present all coronial inquests into medical misadventure that were conducted over the period of interest to this study. Cases that are presented in Chapters 7 and 8 were selected on the basis that

11 See: National Health & Medical Research Council, *National statement on ethical conduct in research involving humans*, Commonwealth of Australia, Canberra, 1999.

they exemplify common accounts of fatal adverse events that come under the South Australian coroner's jurisdiction. In accordance with ethical guidelines, where these cases are summarized, all hospitals and health professionals have been de-identified and victims' names have been replaced by pseudonyms. Interviews conducted with key informants were on a voluntary basis, but their names have also been suppressed to preserve anonymity.

While remaining sensitive to victims, their family and other players in the coroner's court, accounts of hospital deaths presented are factual so that conclusions drawn fulfil the criteria of reliability, veracity and audibility. Significantly, coroners' inquests are public forums, published *Findings* are in the public domain and there is precedent for coronial cases to be factually reported in both the professional and 'popular' literature[12]. Nonetheless, the only persons identified by name in this thesis are public officials, like the current South Australian Coroner Wayne Chivell, whose views on a number of issues raised in this study have been expressed as a matter of public record.

1.3 Questions explored and approaches adopted to seek answers

The focus of this study brings together the healthcare sector and the law within the topography of the coronial system and its handling of fatal adverse events. How the law is interpreted and applied is at the core of social organisation, and as a social inquiry this study was interested in understanding how the coronial system manages adverse events in its endeavour to serve the community. Specifically, the study set out to explore the effectiveness of one Australian coronial jurisdiction, the South Australian system, to prevent local hospital related adverse events through its recommendatory powers. This system was of most interest for several reasons. South Australia was the first Australian jurisdiction to appoint a State Coroner and broke new ground in the way the office was to function and

12 For example, psychiatrist Ken O'Brien in his article on the devolution of mental health services and its implication for carers, reported on a coroner's inquest in South Australia into six deaths where psychiatric illness was found to be a contributing factor. See, O'Brien, K. 'Carers at risk - some forensic implications of the devolution of mental health services', *Psychiatry Psychology and Law*, Vol.5, 1998 pp167-176. More recently, former New South Wales State Coroner, Derrick Hand, has published an account of his more famous cases. See, Hand, D. Fife-Yeomans, J. *The Coroner: investigation sudden death*, ABC Books, Sydney, 2004.

coroners were to be appointed. While legislative differences exist across Australian coronial systems, the processes adopted in this state generally mirror those in other states and territories of Australia. On a more practical level, South Australia is the state in which I reside and my experience from working in the state's healthcare system and interest in building a safer work environment for consumers and colleagues made this jurisdiction the logical choice.

When the study commenced in 2000, it was apparent that research into adverse events in hospitals had coalesced around understanding the nature and prevalence of medical injuries. The questions posed in the literature were primarily quantitative ones and the methods selected to address them reflected attempts to measure and predict incidence. Many of the findings reported were inconclusive and offered only broad brush solutions like introducing 'no-blame' cultures, increasing clinical governance, improving education and establishing safety information systems[13]. Little, if any, work had been undertaken to investigate the effectiveness of existing systems to address failures. Most particularly, the coroner's system was a poorly researched office in relation to whether coronial recommendations arising from investigations into fatal adverse events were being communicated to health departments, hospitals and clinicians within a coherent system or set of communication structures to mitigate similar incidents.

The lack of an established body of work in this area necessitated an exploratory approach to investigating the issues surrounding the coronial system and how it has come to handle fatal adverse events at a local level. Therefore, the investigative net was cast widely beginning with questions of an historical orientation, namely:

> Does the history of how coronial systems evolved as judicial offices furnish clues to explain how contemporary coroners deal with hospital related fatalities?

and:

---

13 Leape, L. Brennan, T. Laird, N. et al 'The nature of adverse events in hospitalized patients: results of the Harvard Medical Practice Study II', *New England Journal of Medicine*, Vol. 324, 1991 pp377-384 esp.p383; Vincent. C. 'Risk, safety, and the dark side of quality', *British Medical Journal*, Vol.314, 1997, pp1775-1776; Wilson, R. Harrison, B. Gibberd, R. et al 'An analysis of the causes of adverse events from the Australian health care study', Medical Journal of Australia, Vol.170, 1999 pp411-415.

> What political and social forces have impacted on the way coronerships have developed and have these drivers influenced the way coroners now manage hospital related fatalities?

The work of coroners reflect social attitudes toward unnatural and unexplained death, therefore additional questions were:

> Have attitudes to death in Western society changed and if so, what part has medicine's history played in shaping these attitudes?

and:

> How does society view death by medical misadventure and has this influenced the way coroners manage hospital related fatalities?

From its origins in English law the coroner's system was carried across the globe to almost every country where English settlement occurred. Each country that adopted a coronership shaped the office to meet local needs, but the fundamental task of death investigation remained constant. The modern South Australian coronial system, like others across the world, is a product of its social, political and legal history. To better understand the forces that shaped this particular jurisdiction, a comparison is made between the Australian, UK and US coronial systems. The UK was selected as the history of the coronership in England and Wales has had considerable influence on the evolution of this office in Australia and South Australia. The US system, while sharing many similarities with the history of the office in Australia, has taken a somewhat divergent pathway with the medical examiner system. Nevertheless, this system was of interest because of recent moves in Australia to shift toward a more scientific medicalised system by aligning forensic science institutes within the office of coroner.

Coroners deal with death on a day-to-day basis and in Australia, the UK and US, religion and medicine have played key roles in shaping public thinking about death. In particular, medical advances in the 20th century such as the implementation of life support technologies necessitated the redefinition of when death occurred and helped reshape attitudes toward death and dying. By establishing the context of how death has come to be viewed in the broader social context and more specifically how fatalities related to medical misadventure have come to be viewed by society, this thesis turns to questions of a more specific and localised kind, namely:

In one Australian jurisdiction, South Australia, which adverse events come under the coroner's purview?

How does the coroner manage the inquiry?

What barriers exist within this coronership that can inhibit the inquiry process?

Are recommendations arising from inquests into fatal adverse events being embedded in practice to reduce deaths from similar or the same causes?

The questions posed in this study cover diverse fields of interest, hence the methods selected to address them do not easily fit within any one particular theoretical framework or disciplinary orientation[14]. This reflects the broad nature of public health, which requires organised and coordinated responses by health professionals to not only protect and promote health in society, but to prevent illness, injury, disability and premature death. Public health has built a strong research foundation on cross-disciplinary studies designed to investigate practical issues[15]. This study draws on insights offered through the knowledge base of a range of disciplines including public health policy, political science, law, medicine and the more general social sciences. The study is further informed by my primary disciplinary roots in nursing, which has a strong tradition in integrating knowledge from medicine, sociology, psychology and education, and I also draw on understandings gained from many years of experience as a nurse clinician and university based academic.

The questions identified and methods employed in this study are qualitative ones, they seek explanation and understanding about the coronial system and its handling of fatal adverse events. There is no attempt to measure or quantify data, apart from simple descriptive tables in Chapters 4 and 6 that set out the number of inquests held and deaths reported to the coroner over the period of interest to this study. The findings are conceptual rather than statistical, and while the understandings reached may give meaning to how other coronial jurisdictions manage similar fatalities, it is not my intention to

---

14 Here I use the term method to mean the techniques used to collect and analyse data.

15 Manuals outlining contemporary approaches to public health research encompass a diversity of paradigms and methods available to researchers. See for example Kerr, C. Taylor, R. Heard, G. (eds), *Handbook of public health methods*, McGraw-Hill, Sydney, 1998.

generalise conclusions outside the South Australian situation or to other types of fatalities investigated by coroners.

Maintaining objectivity is a challenge to all scientific research and I make no claim for greater or lesser neutrality than others, inside and outside the medical profession, who have conducted social inquiries into medicine and its practice[16]. Even so, every endeavour has been made to incorporate procedural rigor by applying triangulation to the design of the study. Triangulation refers to the combination of three or more methods to achieve completeness of understanding and has been identified as an important means to strengthen and safeguard reliability and validity of qualitative studies[17]. The strength of this study is its descriptive vividness and heuristic relevance to achieve the goal eminent qualitative theorists, Glaser and Strauss, expressed as the ability to 'describe the social world studied so vividly that the readers can almost literally see and hear its people'[18].

Methods were designed on specific sampling strategies that included an extensive and detailed literature review of relevant historical records, government papers, annual reports, findings from Royal Commissions and other inquiries, published and unpublished research material and seminal works by leading thinkers in medical sociology. In addition, a range of statutes pertaining to the coronial system in Australia, the UK and US were searched out, reviewed and analysed to determine how coronerships have evolved and been shaped by legislative reform. Primary sources comprised the main textual information analysed. Where secondary sources were used, they were selected to add depth or breadth of understanding, or to validate meanings and assumptions relevant to the topic under discussion. Television and newspaper reports that dealt with adverse medical events generally, and coroners cases specifically, were systematically collected and analysed over the

---

16 By way of example see, Taylor, R. *Medicine out of control: the anatomy of medicine out of control,* Sun Books, Melbourne, 1979; Willis, E. *Medical dominance,* Allen & Unwin, Sydney, 1989; and Rosenthal, M. *The incompetent doctor: behind closed doors, Open University Press,* Buckingham, 1995.

17 For further discussion of triangulation, see Mays, N. Pope, C. 'Rigour and qualitative research', *British Medical Journal,* Vol.311, 1995 pp109-112; and, Quine, S. 'Selecting and focusing the research problem', in *Handbook of public health methods,* C.Kerr, R.Taylor G.Heard (eds), McGraw-Hill, Sydney, 1998 pp10-23 esp.20.

18 Glaser, B. Strauss, A. 'Discovery of substantive theory: a basic strategy underlying qualitative research', *American Behavioural Scientist,* Vol.8, 1965 pp5-12 esp.p9.

four year duration of the study. This material provided additional insight into how victims, players and officials in coronial inquiries were being portrayed to the public and the moral judgements expressed therein.

Information was also collected from the South Australian Coroner's Office and archival research collections held at the State Records Office and Mortlock Library. Initially, historical records of coroners' inquests were obtained over randomly selected years from 1838 until 1991. This was undertaken to gain an appreciation of the type of cases that had come under the purview of South Australian coroners since English settlement in 1836 and, more particularly, to determine substantial shifts in the way medical misadventure have come to be managed by this office. Thereafter, transcripts from all public inquests held between 1990 and 2003 (comprising over 600 documents) were accessed to identify those cases associated with hospital related medical fatalities. In South Australia, the published account of an inquest proceeding is called *Finding of Inquest* and these documents are chronologically numbered in the order of when the inquest was held[19]. Each *Finding* is a public document and since 2000 inquest transcripts have been posted on the Coroner's Court website[20]. The *Finding* summarizes the salient points of each case and includes the name of the deceased, medical cause of death, the circumstances leading up to the event, key personnel involved in the death, expert witness testimony, findings and any recommendations the coroner believes will reduce the likelihood of a similar death. Inquests related to medical misadventure were reviewed in chronological order to determine if there were patterns of circumstances that culminated in a fatal adverse event and to identify cases where the coroner had repeated recommendations which indicated they had not been implemented when first handed down.

I also undertook three months of observational fieldwork at the Coroner's Court. This included attending seven inquests, each normally held over three days. Extensive field notes were kept and later compared with the *Findings*

---

19 For example, the third inquest held in 2000 would be catalogued as Inq.No.3 2000.

20 These documents may be accessed at http://www.courts.sa.gov.au/ courts/ coroner/index.html Although a coroner may choose not to publicly release a *Finding,* this is done under rare and exceptional circumstances. Such documents were not accessed in the course of this study due to the confidential nature of the finding.

once they became public. During this time I interviewed a number of key officials within the Coroners Court including the State Coroner (who conducted all inquests I attended), counsel assisting the coroner, the manager of the Coroner's Office (who is also an administrative coroner), the coordinator of operations and a police officer who is a member of the Coronial Investigation Services[21]. I also interviewed the head pathologist at the South Australian Forensic Science Centre who conducted many of the post-mortems for the Coroner's Office. Interviews were structured around several questions pertaining to how hospital deaths from medical misadventure were managed and an outline of the questions is included as Appendix A. In an endeavour to ensure a free-flowing conversational approach and allow anything said "off-the-record" to be easily deleted, interviews were not tape-recorded. However, extensive notes were taken and electronically transcribed soon after to ensure details were clearly captured.

I also spoke with a number of lawyers who frequently appear in the Coroner's Court including three whose services are often retained to represent the South Australian Department of Human Services (DHS) and major public hospitals. Other informants included personnel involved in patient safety and quality services from the DHS and the Australian Patient Safety Foundation. Policy and protocol documents pertaining to the management of hospital deaths reported to the coroner and the handling of coronial findings were obtained from the DHS Insurance Services Unit. The content of these and many other policy statements linked to adverse events were analysed to determine underlying assumptions and whose interests were being represented.

Qualitative analysis of data collected from interviews and coronial proceedings focused on producing a naturalistic account of how adverse events

---

21 These interviews were conducted between December 2000 and March 2002. I also had occasion to re-interview the State Coroner and the Manager of the Coroner's Office in March 2003 in relation to a consultancy project for the Victorian Institute of Forensic Medicine that examined, on a national scale, communication between coroners, health departments and healthcare professionals about patient safety and adverse events. During this consultancy I also interviewed the Western Australian State Coroner and the Manager of the Coroner's Office for that State.

investigated by coroners are managed in everyday life[22]. A prudent approach was taken to avoid over analysing these data by applying elaborate coding or thematic techniques that assumed there was one 'real truth'. For this reason, excerpts from interviews and narratives from coronial inquests are presented verbatim unless changes needed to be made to protect anonymity.

Throughout the study, data were systematically collected and analysed and counter explanations were considered to ensure meanings attached were well founded and well reasoned. The study aimed to produce coherent explanations of the phenomena under scrutiny and this thesis sets out to illustrate these understandings in a logical and reasoned way.

1.4 Thesis outline

The content of each chapter is constructed around a particular set of arguments that logically flow onto the next chapter. Detailed conclusions are not presented until the final chapter. The thesis begins with a review which maps the evolution of coronial systems, first in the UK followed by the US and later Australia. Considerable attention is given to the history of this office and the legal provisions it has laboured under in order to establish several keystones upon which this thesis builds. Coroners have not necessarily separated their own good from public benefit; coroners have often valued allegiance to Crown or State over specialist legal or medical training in fatality inquiry; the office has been subjected to political pressure; faced accusations of corruption; undergone significant legislative reforms; and, been the topic of repeated reviews, the outcomes of which have more often than not been ignored. Given its somewhat troubled history, it is quite remarkable that the coronial system has continued to exist for at least eight centuries. Its durability can largely be attributed to the capacity of this office to re-invent itself to suit the death investigation needs of the societies in which it operates.

---

22 Qualitative research methods seek understanding of social phenomena in natural (real world) settings by giving due emphasis to the meanings, experiences and views of all participants. Pope, C. Mays, N. 'Researching the parts other methods cannot reach: an introduction to qualitative research methods in health and health services research', *British Medical Journal*, Vol.311, 1995 pp42-45. For a discussion on the orientation of qualitative methods also see Green, J. Britten, N. 'Qualitative research and evidence based medicine', *British Medical Journal*, Vol.316, 1998 pp1230-1232.

Chapter 2 lays the foundation from which the adaptability of this office can begin to be explained. The coronial system is examined from its origins in medieval England to the system that now exists in both the UK and the US. In England, the office of coroner was originally established to further the Crown's financial interests and the coroner was foremost the *King's man.* Civic service, in terms of judicial duties and moral amelioration for those who died an unnatural or suspicious death, was of secondary, if not incidental, significance to early coroners. However, as the pecuniary interest of the Crown began to be met by other means and the coronership faced extinction, coroners were able to reinvent themselves to become 'truth finders' and keepers of public safety through the investigation of potentially preventable fatalities. Even in the US where the system evolved somewhat differently to that in England and Australia, the core business of coroners, and later medical examiners, remained that of providing insight into unexplained deaths.

Australia, like some parts of the US, was formerly under British rule and the coronial system was imported to this country in the 18th century. Chapters 3 and 4 trace the origins of coroners in Australia and the legal provisions that developed around the office from English settlement in 1788 to the system as it has evolved in the early 21st century. These chapters map the controversies, aliments and reforms of the Australian and South Australian coronerships and locate the coroner's system within the wider socio-political context of Australian society. Rounding out such contextual discussion, particular attention is given to medicine, its affiliations with the coronership and the advent of hospitals in South Australia. To fully appreciate the way deaths from medical adverse events in hospitals have come to be handled by the South Australian Coroner's Office, these chapters provide a solid basis from which to explain how medical fatalities have been managed from past to present. Two particular conclusions are established. First, while medicine has made significant technological progress over the last century, the profile of victims coming under the ambit of coroners has not changed markedly since hospitals were first established in South Australia. Second, through its professional status and links with empirical science, medicine holds considerable power, authority and influence in the coroner's court.

This theme is carried over in Chapter 5, which explores the medicalisation of death and how the rise of the medical profession shifted control over dying from the domain of the Church to that of medicine. The position adopted is that medical personnel are now perceived above priests to hold greater power, knowledge and skill to intercede between God and death. The price medicine has paid for such public perception of its power is that failure to heal has become unacceptable and death contestable, most particularly those deaths related to medical misadventure.

Chapter 6 provides a detailed review of the literature addressing iatrogenic injury. Medical discourses reviewed in this chapter illustrate that medicine has compounded assumptions about its power over death by locating adverse events within the realm of a disease that can be cured by studying its nature and pathogenic basis. Yet some patients defy prediction and it seems that despite hazard reduction strategies and the best intentions of medical personnel, iatrogenic fatalities continue relatively unabated. Indeed, they occur frequently enough to comprise a considerable proportion of the workload of coroners.

How the South Australian coroner manages fatal adverse events reported to the office is dealt with in Chapters 7 and 8. Ideally, the outcome of a coroner's inquest is that similar deaths will be prevented from recommendations that draw questionable practices to the notice of interested parties and relevant authorities. The capacity of this office to achieve this aim is mapped over a thirteen year period from 1990 to 2003. These are much more grounded chapters, where multiple cases of hospital related fatalities that were the subject of an inquest are presented. In Chapter 7, these cases are structured around each stage of the coronial process by way of explaining barriers and obstacles innate to the coronership and its handling of adverse events. These deaths represent the more general medical fatalities investigated by the coroner.

Even more compelling evidence that the coronial system is unable to significantly curtail adverse events comes from inquests into those who died while under the care of mental health services. For this reason, Chapter 8 outlines in detail this sub-set of medical fatalities that the coroner is obliged

by legislation to investigate[23]. As the coroner's court provides one of the few avenues available to ensure an institutional death is not overlooked or ignored, an independent and robust coronial system should be a priority for government and its citizenry. Indeed, public interrogation into institutional deaths has become even more crucial under a mental health system that has increasingly been subjected to rolling reforms and ongoing criticism about provision of services, quality and safety. Of perhaps all the cases that come under the coroner's jurisdiction, the potential to do great public good could be achieved by learning from the events that surround the circumstances of a mental health service fatality. This chapter suggests that these lessons are yet to be realized and translated into practice.

The final chapter draws together the threads of these arguments. Deaths involving medical misadventure are of significant public interest. Consumer and community demand for greater levels of external accountability and transparency when medical fatalities occur has resulted in an increased focus on coronial investigation into such deaths. The paradigm in which coroners now operate demands measurable outcomes and there is much that can be done to improve the way coroners investigate medical fatalities. Suggestions for improvements are presented with the understanding that the coronial system can only ever be one mechanism by which such fatalities can be reduced. The complexity of stemming adverse events will entail a concerted effort from every section and member of the healthcare industry and, most particularly, those who govern it.

23 Coroners Act 1975 (SA) s12 (1)(da) & s14(1a).

CHAPTER 2

ORIGINS OF THE CORONER'S OFFICE: THE ENGLISH AND US EXPERIENCE

2.1. Introduction

The business of investigating deaths, principally those related to unnatural causes, has long been associated with judicial officers known as coroners. This office is often considered an English invention, stemming from medieval England when the first official account of the coroner was recorded in 1194[1]. For the earliest of English coroners, death investigation was a commercial enterprise and not the largely moral public service that the office has come to be associated with, particularly in modern England and Australia. Medieval coroners were primarily revenue raisers for the incumbent King and dispersing social justice was, if anything, a very secondary feature of the role[2]. The office was, however, adaptable and while change was often slow in coming, the coronial system survived because it provided a visible means by which social intolerance to unnatural or unexplained deaths could be appeased.

The part that early coroners played in shaping the modern coronial system is important as it serves to explain many of the innate features that have endured in this office over 800 years. As England began to colonise, the coronial system was spread to many parts of the world, including the US and Australia, where it was later adapted by statute to meet local needs. This chapter traces the evolution of this office to explain the role and function of contemporary coroners and show how they have come to manage adverse events[3].

In this chapter, I compare the essentially English legal coronership with that of the medicalised system of death investigation and surveillance that has come about in the US. The existence of several historical treatises, many of which served as reference manuals for coroners, has proven valuable in

---

1 The claim that England produced the first death investigators has been subject to challenge, however, as archaeological evidence indicates China was likely the first country to appoint judicial officers to investigate unexpected or unexplained deaths. New evidence suggests a Chinese form of coroner existed during the Tang and Song Dynasties dating from as early as 618AD. See, Knapman, P. 'The crowner's quest', *Journal of the Royal Society of Medicine*, Vol.86, 1993 pp716-720 esp.716.

2 Knapman, 1993 p716.

3 This topic will be discussed at length in subsequent chapters.

exploring this history[4]. It is by no means a comprehensive history (such would comprise a thesis unto itself), but rather a practical account that serves to explain the main social, technological and statutory drivers that shaped the office. It demonstrates that the coronial system has been subjected on many occasions to intense scrutiny and the political nature of this office gave rise to many controversies that threatened its existence.

The coronial system transferred to the US and Australia was that enacted in England and Wales, therefore only these two UK jurisdictions will be discussed. Wales likely inherited the English coronial system after the Edwardian conquest of 1282, whereas Scotland was an independent nation state until its union with England and Wales in 1707[5]. By the 18th century Scotland had developed its own legal system based on civil law similar to that found in continental Europe and as a result does not have coroners. Death investigation of the type the coroner would normally handle in England and Wales is conducted in Scotland through the generic criminal and judicial processes by the procurator fiscal. Northern Ireland has a coroner system, but as it has its own statute and rules, the office in Northern Ireland will not be covered[6].

Coroners provide a public service that is largely a moral one. While it can be argued that all judicial offices provide moral meaning through the application and interpretation of law, the duties of coroners differ significantly to those of other judicial officials. Some of these differences can be traced to the origins of the office.

---

4 Coronial handbooks that have been utilised by English coroners across various periods include:
Bracton, H. *De Legibus et Consuetudinibus Angliae,* first published around 1256. The version of this early Latin text sourced for this thesis was Bracton, H. *De Legibus et Consuetudinibus Angliae,* S. Thorne translator, The Selden Society Harvard University Press, Cambridge, Vol.2 1968.
Umfreville, E. *Lex Coronatoria, or the law and practice of the office of coroner,* J.M.Gutch Bristol, 1822 [This text was first published in 1761].
Sewell, R. *A treatise on the law of coroner,* J.Crockford, London, 1850.
Burton, J. Chambers, D. Gill, P. *Coroners inquiries: a guide to law and practice,* The Coroners' Society of England and Wales, Brentford, 1998.
Matthews, P. Foreman, J. *Jervis on the office and duties of coroners* 12th edn, Sweet & Maxwell, London 2002 [This manual was first published in 1829).

5 Pounder, D. 'Law and forensic medicine in Scotland', *American Journal of Forensic Medicine and Pathology,* Vol.14, 1993 pp340-349 esp.340.

6 The Coroners Act 1959 (Northern Ireland); The Coroners (Practice and Procedure) Rules 1963 (Northern Ireland).

2.2. Historical markers: origin and evolution of the coronial system

The first formal edict that referred to the coroner was cited in the Articles of Eyre in September 1194. Charter 20 of the Articles stated that 'in every county of the King's realm shall be elected three knights and one clerk, to keep the pleas of the Crown'[7]. As was the literary custom of the time, the Articles of Eyre were written in Latin and the title coroner (or crowner) comes from the Latin *corona*, meaning crown. The coroner was originally created to represent the Crown's interest and one of his important judicial functions was to service the general eyre. In medieval England, the general eyre comprised a group of itinerant judges who travelled around the countryside dispersing the King's justice.

The role of the coroner in *keeping* (ie recording) the pleas of the Crown was an important distinction from the role of the justices as *holding* the pleas of the Crown. While some historians dispute the role distinction, as *keeper* of the pleas it was evident that the coroner was primarily charged with pecuniary matters of the King[8]. Thus, whereas the coroner existed for the King's profit, the justices of the eyre as *holders* of the pleas, tried cases and passed sentence on convicted felons. Still, in these early times the role of the coroner was not necessarily a clearly defined one and there is some evidence that medieval coroners may have moved outside their jurisdiction to engage in trying criminal pleas. This led to provision being made in 1215, to include in the Magna Carta the statement that 'No sheriff, constable, coroner or bailiff shall hold pleas of our Crown'[9].

The most important role of the coroner has always been an interest in the dead, specifically those who died a sudden, violent or unexplained death or those who died in prison. Henry de Bracton, who became an itinerant judge in 1245 and shortly thereafter a judge of the King's Court, wrote a treatise around 1256 on the law of England and appears to be the first to have

---

7 Gross, C. *Select cases from the coroners' rolls A.D. 1265-1413*, The Selden Society, Bernard Quaritch, London 1896 pxv; and, Hunnisett, R. *The medieval coroner,* Cambridge University Press, Cambridge, 1961 p1.

8 For a well reasoned account of the origin of the coroners office and the debate covering the role of medieval coroners see, Gross, 1896 pxv-xix. Hunnisett, while not always agreeing with Gross, also provides an authoritative version of the coroner's history. See Hunnisett, 1961 esp. pp1-36.

9 Knapman, 1993 p717.

described the actual duties of the English coroner. The statute *De Officio Coronatoris*, passed in 1276, identified the legal responsibilities of the coroner and according to Windeyer, a law historian, this Act was more or less copied from Bracton's book[10]. *De Officio Coronatoris* described the coroner's duties, which included inspecting the body and conducting an inquest with a jury, comprising representation from four, five or six neighbouring townships where the body had been found or the death had occurred. Since a death could bring financial rewards to the Crown, a process existed for reporting unexpected or sudden deaths. The first finder, on discovering a corpse thought to have died a sudden or unnatural death, had to raise the *hue-and-cry* and it became the responsibility of the township or neighbourhood to ensure that the body was not interfered with before the coroner arrived. According to Bracton, on viewing the deceased, the early coroner was required to inspect and feel the naked body, to look for wounds, bruises and signs of strangulation to ascertain whether the death was a matter of felony or misadventure[11]. Thus it appears that part of the coroner's duty was to conduct a post-mortem examination, albeit in a rough-and-ready manner. This primitive form of posthumous scrutiny would give rise centuries later to the more scientific techniques involved in forensic medicine, upon which the modern coroner would come to principally rely, in order to determine the medical cause of death.

As the coroner played an important role in raising revenue during a time when England was moving to a more centralised government and court system, coroners were appointed to service a range of jurisdictions[12]. These included the coroner of the King's household or verge, (additional to the King's butler who was ex officio coroner to the city of London), franchisal or manor coroners (in parts of the county where a lord replaced the King as the local law-giver), county coroners (in shires or districts of the kingdom) and borough coroners (in towns or municipalities)[13]. The county coroner's jurisdiction, qualifications, role and tenure are of most interest when examining the evolution of the coroner's office in England and Wales as many of the judicial

---

10 Windeyer, W. *Lecturers on legal history,* 2nd edn, The Law Book Company of Australasia, Sydney, 1957 esp.p135.

11 Bracton, 1968 p344.

12 Van Caenegem, R. *The birth of the English common law,* 2nd edn, Cambridge University Press, Cambridge 1988.

13 Gross, 1896 ppxx-xxiii.

limits established for these coroners were preserved intact for centuries, for example, the inquisitorial function of the office and the limited legal power that coronial findings would come to command.

As established in the Articles of Eyre, the early county coroners were knights (or near knightly class) and they needed to reside in their district and be honest, lawful and wise men. As medieval coroners were unpaid, they needed an independent income and were usually substantial landholders[14]. They were also required to account to King and people, therefore an independent income was necessary to forfeit assets in cases where they failed in their duty to collect fines deemed by the eyre as being rightfully owed the Crown[15]. Unlike contemporary English coroners, early coroners were not required to have any legal or medical knowledge, although it seems one Sussex coroner, William de Hastyngge, was considered to be a surgeon[16].

While some knights seemed to like the office of coroner, others apparently did not. The role offered some privileges, such as not having to serve on juries, a concession still afforded contemporary coroners in both England and Australia. For the unscrupulous knight, the coroner's office brought with it the chance of extortion which, while clearly illegal, was widely practised[17]. For the medieval knight, however, the office of coroner was considered inferior to that of sheriff and less dignified than military service to the King and after the 14th century it was the exception rather than the rule for coroners to be knights.

Apart from the primary interest of investigating unexpected or unexplained deaths, another function of coroners in the 12th to early 14th centuries was to establish *Englishry* of the deceased and the circumstances surrounding the death. For the early coroners, this was another way to extort money, because if citizenry could not be established, the men of the neighbourhood incurred a

14 See Fleta in *Fleta*. The Selden Society, Bernard Quaritch, London, Vol.2, 1955.
15 Hunnisett, 1961 p175.
16 Hunnisett, 1961 p177.
17 Hunnisett, 1961 p188-189.

murdrum fine[18]. While no such fines are imposed today, the function of determining the identity of deceased persons and establishing how, when and where they came by their death remains a central feature of the modern coroner's role.

Aside from death investigation, medieval coroners also appear to have had a range of other functions such as appraising and valuing chattels of persons indicted for murder, manslaughter or other crimes of the day. This was not only so that a murdrum fine could be imposed, but also to establish any *deodand* the Crown could confiscate[19]. Coroners also received the confessions and abjurations of felons who had fled to sanctuary[20].

Some of the more unusual functions attributed to county coroners included appraising shipwrecks (salvage), treasure troves and catches of whales and sturgeon within their jurisdiction and ensuring that they were placed in safe keeping for the Crown. Notably, a major part of their role was the recording of all details of their day-to-day duties on the rolls (parchments). Many of the medieval coroners' rolls have been preserved and continue to provide an informative source for those interested in the emergence of the legal system in England[21].

---

18 Linguistically, the term *murdrum* is related to the word murder. Originally introduced to safeguard the ascendant Norman minority, a murdum fine was only levied when a Norman died, thus if witnesses could demonstrate that the deceased was English or Welsh (ie presentment of Englishry or Welshry) the community did not have to pay the fine. See, Hunnisett, 1961 p27.

19 Deodand was considered to be the object that caused the death. While literally anything could be called a deodand (for example if a man fell from his horse and died the horse would be declared the deodand) the coroner was required to appraise the value of the object and where possible commit it to the care of the constable until such time that the eyre was held, where the justices would decide if it was forfeited to the Crown or granted to the family of the victim as compensation for their loss. This practice was abolished in England as late as 1846. See: Knight, B. *History of the medieval English coroner system,* 1999. A copy of this six part article written by Knight, a well renowned coronial researcher with a background in law and medicine who was Professor of Forensic Pathology at University of Wales College of Medicine, can be accessed at http://www.britannia.com/history/articles/coroner1.html

20 Knapman indicates that sanctuary could be claimed for 40 days by medieval felons in designated sites such as churches. While practices seemed to vary between counties, if a felon decided to 'adjure the realm' (ie accept banishment from England until the King's pleasure), the coroner was required to take the fugitive's confession, confiscate all lands and chattels and arrange the terms, inclusive of the port by which he was to leave the kingdom. Knapman, P. 1993 p718.

21 Hunnisett observes that coroners' rolls provide valuable historical accounts of the day-to-day duties of coroners. He warns that investigation of the coroner's role solely through legal texts and statutes paint an erroneous picture of the office, see Hunnisett 1961 p5. Certainly Gross used coroners' roles to good effect in tracing the origins of this office. See Gross, 1896.

For the early coroners, the tenure of the office was for life (or during good behaviour) and most county coroners were elected (rather than appointed) before royal justices or in the county court by 'all the knights and freeholders of the shire'[22]. The election of county coroners by the freeholders of the county lasted until the Local Government Act of 1888, which enacted that the county or borough council should appoint these officials[23]. Nevertheless, some notion of election seems to have been retained. Oswald, a London county coroner between 1902 and 1929 and former president of the Coroners' Society of England and Wales, describes his election by members of his county council[24]. While impossible to state with certainty whether the independence of the office was affected by the manner of appointment, it is important to acknowledge that while coroners were selected and paid by local councils, the office continued under the Crown. The Local Government Act 1888 and the passage of the Coroners (Amendment) Act of 1926 clearly maintained these officials ties to the Crown, and in this sense the coroner remained the *King's man*.

The other important function of the early county coroners, which has connection to their modern counterparts, is that pertaining to the holding of an inquest. The medieval coroner was charged with the duty to minister to the general eyre and one way this was achieved was by holding inquests of those who died suddenly, violently, in prison or by other unexplained or suspicious means, including suicide.

The jury was an integral part of the coroner's inquest. Early inquests seemed to have been held at the location of death, but due to the difficulty of gathering everyone concerned together, this was later abandoned and instead inquests were generally held in public places such as the village square, marketplace or a courthouse. Prior to 1259, inquests were large affairs with the jury made up of all males over twelve years from four or more nearest townships, together with additional men from the Hundred[25]. One of the major differences between the medieval coroner's jury and that of its modern counterpart was that jurors could have direct knowledge of the case. The intention behind

---

22 Hunnisett, 1961 p151.
23 Local Government Act of 1888 s3 & 5.
24 Oswald, H. *Memoirs of a London county coroner*, Stanley Paul & Company Ltd., London, 1936.
25 Hunnisett, 1961 p14. Hundreds appear to have been subdivisions of counties, in so much as a jurisdiction could be subdivided into county, hundred and borough.

such a large gathering was to ensure that at least some of the participants had knowledge of the deceased and could act as witness to the circumstances of the death. While it is not clear whether there needed to be a majority finding, Knight indicates that it was not unusual for men from the different townships, and the Hundred men, to return different verdicts[26]. Seemingly, coroners were not too bothered by this occurrence, as their main duty was to record it all on the rolls for presentment at the next eyre, where the justices would consider the verdict and determine the outcome.

Collecting together large numbers of men to serve the coroner's inquest created difficulties for local communities and in 1259 the composition of a coroner's jury was changed by the Provisions of Westminster to a *sufficient* number of men. This was, however, repudiated eight years later by the Statute of Marlborough[27]. By the late 14th century the coroner's jury was known to have consisted of between twelve and twenty four men and seems to have remained so until the Coroners Act 1887 when it was further downsized.

As coroners were considered important links between local administration and the judiciary, they were also obliged to attend the general eyre[28]. During these proceedings the coroner presented his rolls for the justices, outlining the details of the duties he had performed since the last eyre, and like his inquest jurors, the coroner could also be called upon as a witness. As the general eyre may have taken seven years or longer to arrive at any one county, it was not unusual for the coroner to have died in the interim. Under these circumstances, his heir or next-of-kin would normally have been responsible for safely delivering the rolls to the eyre justices.

The general eyre remained an important part of the English judicial system until the 14th century, when this mobile court appears to have faded out in favour of the Assize system[29]. With the decline of the eyre, much of the need

---

26 Knight, 1999.
27 Hunnisett, 1961 p14.
28 Gross, 1896, pxxviii.
29 Van Caenegem, 1988 p22. The term 'assize' was derived from the French-Norman for *sittings*. While it has a variety of meanings and nuances in the law of England (see for example Windeyer, W. 1957 or Ballentine, J. *Law dictionary with pronunciations*, W.S. Anderson Bancroft-Whitney Co, San Francisco, 1969), in this context it refers to a court (specifically the Crown court system), rather than any of its other meanings such as a statute, ordinance, writ or tax.

for coroners disappeared. In addition, the abolition of the murdum fine in 1340 meant that the coroner's fiscal importance to the Crown purse decreased. By the late 14th century many of the coroners' duties had been eroded. The rise of two new officials at local level, the escheator and the keeper of the peace (later know as the justice of the peace) saw an exponential reduction in the power and status of coroners[30]. By the 16th century coroners were almost entirely restricted to the investigation of sudden death, with little real support from the legal system. The general decline in the standing of coroners also meant that it became increasingly difficult to persuade them to conduct their duties conscientiously[31].

Justices of the peace, however, were not able to devote their duties to death investigation in the same inquisitorial fashion as coroners and community concern grew that many homicides and deaths from unexplained causes were going undetected[32]. Consequently, in the ensuing years there were some attempts to restore the dignity and purpose of the coroner's office, including providing some remuneration for the work undertaken. In 1487, and again in 1509, statutes were proclaimed providing for coroners to receive a small fee for conducting inquests[33]. As a means to ensure that the office was safeguarded against corruption, these same acts legislated that the coroner could be fined a substantially larger sum for not carrying out his duties diligently. In 1751 another act increased the fees paid to coroners for all duly held inquests, and also established the circumstances and grounds for removal of coroners from office[34].

---

30 Knapman and Powers indicate that escheators first appeared in the early 13th century and were originally charged with investigating the lands of noblemen who died without an heir, and effect their return to the King. The role extended into appraising and taking possession of lands, chattels and deodands belonging to outlaws, abjurers, suicides or victims of homicide and recording all information – duties that at one time had been the sole domain of the coroner. Justice of the peace was originally a role designed to assist in maintaining public order, however, these peace-keeping duties were extended to the power to arrest and make inquiries into felonies – and therefore had the power to *hold* as well as *keep* the pleas of the Crown. By the end of the 15th century, justices of the peace reached the position whereby they had control over the coroner and jurisdiction over their misdeeds. Knapman, P. Powers, M. *The law and practice on coroners*, Barry Rose, Chichester, 1985 pp4-5.

31 Knapman & Powers, 1985 p5 esp.01.19.

32 Knapman & Powers, 1985 p5 esp.01.20.

33 Act 3 Henry VII, c2 1487; Act 1 Henry VIII, c7 1509.

34 Act 25 George II, c29 1751.

Unfortunately the 1751 Act resulted in a series of disputes between coroners and judicial authorities for the next 100 years over what constituted a *duly held* inquest[35]. In 1836, the passage of two additional pieces of legislation also had significant consequences for the role of coroners. The first was the Births and Deaths Registration Act 1836, which placed specific duties on the coroner in dealing with and recording deaths. The second was the Attendance and Remuneration of Medical Witness at Coroners Inquests Act 1836. This Act gave the coroner specific powers to order a medical practitioner to perform an autopsy to establish cause of death and to attend an inquest as an *expert witness*[36].

By the end of the 18th century, forensic pathology was finally emerging in England as a specialty branch of medicine, long after its development in Germany, Italy and France[37]. The emergence of the police surgeon role (enacted in 1829), and the move to more scientific methods of establishing cause of death, resulted in coroners needing to consider the qualifications required to present medical evidence in court. In 1838, legislation was passed that restricted the presentation of medical testimony at inquest to 'qualified' medical practitioners[38], signifying the weight that expert medical testimony would come to hold in the coroner's court. This is not to suggest that ascertaining the medical cause of death would become the pivotal function for English coroners, unlike the situation that would evolve in the US[39].

Nevertheless, a coroner's system more fully reliant on scientific evidence to establish cause of death gained favour among advocates of a medical driven system over that of lay determination. One of the most outspoken 19th century proponents of such a system was Thomas Wakley. In 1840, Wakley became the first medical practitioner in England to become a county coroner[40]. Wakley, who founded the now prestigious medical journal, *Lancet*, used this

---

35 Knapman, 1993 p719.

36 For further details regarding the power this legislation provided to coroners refer to Eckert, W. 'The development of forensic medicine in the United Kingdom from the 18th century', *American Journal of Forensic Medicine and Pathology*, Vol.13, 1992 pp124-131.

37 Eckert, 1992 p124.

38 This was in the form of Act 3 Vic I, 1838.

39 I will argue later in this chapter that forensic medicine came to hold a much more central role within coronial death investigation in the US, spawning the role of the medical examiner and overtaking the need for coroners and their inquests.

40 Sassard, A. O'Leary, J. 'William S. 'Wadsworth and the evolution of the medical examiner', *American Surgeon*, Vol.65, 1999 pp794-795.

publication among other forums to aggressively promote a medical rather than a legal coronership and in the process alienated many colleagues in the legal fraternity[41]. Whether Wakley's view of a medical coronership had the support of the medical profession is not clear. Given however, that the number of doctors who became coroners were few in comparison with lawyers, it seems unlikely that there was any organised medical movement in the 19th century that backed Wakley's cause.

In 1846 the Coroners' Society of England and Wales was established to represent the professional interest of coroners and over the course of the 19th century a number of statutes were enacted in an attempt to refine the function of this office. For example, the Coroners Act of 1844 reasserted that county coroners must reside within the jurisdictional district they were assigned[42], a requirement that was upheld until 1972 when it was finally abolished[43]. In 1859 a Royal Commission into the office recommended that coroners be paid a salary to attract suitable applicants[44]. However, it was not until 1887 when new legislation shifted this office into its present era[45].

2.3 The coronial system in England and Wales: into the 21st century

The Coroners Act of 1887 was a watershed in the development of the coroner system in England and Wales and remains the statutory basis of contemporary English law pertaining to the coroner[46]. While this Act made it clear that the coroner's principal function was to hold inquests on dead bodies, it also implied that he maintained an interest in the detection of crime. Sections of the Act clarified the qualifications of jurors serving on inquests,

---

41 Cawthon, E. 'Thomas Wakley and the medical coronership - occupational death and the judicial process', *Medical History,* Vol.30, 1986 pp191-202.

42 Coroners Act 1844 (UK) s5.

43 Local Government Act 1972 s272(1).

44 Eckert, W. 1992 p129.

45 Levine, a coroner and past president of the British Academy of Forensic Sciences, indicates that it was not until the Coroners Act 1887 that coronial structures, duties and jurisdiction were clearly defined. See, Levine, M. 'The coroner's court, the past, the present and the future', *Medicine, Science & the Law,* Vol.35, 1995 pp9-11 esp.10. Also see, Levine, M. *Levine on Coroners' Courts*, Sweet & Maxwell, London,. 1999.

46 A recent report into death certification and coroners services in the UK found that the coroner system was primarily a creation of the 1887 Act and the most recent legislation, the Coroners Act 1987, was largely a consolidating measure. See, Luce Committee Report, *Report of the fundamental review 2003: Death certification & investigation in England, Wales & Northern Ireland,* Presented to Parliament by the Secretary of State for the Home Department, June 2003, p3. This report can be downloaded from http://www.homeoffice.gov.uk/justice/ legalprocess/coroners/dccsreport.html

outlined the conduct of proceedings and established liabilities of coroners including their removal and punishment[47]. The Act also stipulated that the jury should comprise no fewer than twelve and no more than twenty-three and a verdict could not be returned if fewer than twelve agreed[48]. The Act outlined the power to summon medical witnesses (inclusive of penalties on doctors for neglecting to attend inquests) and provided the coroner with the power to direct the performance of post-mortem examinations before the formal opening of an inquest. The Act held that a doctor against whom improper or negligent treatment of the deceased was alleged must not conduct the post-mortem examination. Sections 25 and 26 of the Act also provided authority for the coroner after termination of the inquest, to pay the fees of every medical witness and a scheduled allowance to all jurors. In 1892, provision was made for coroners to appoint and revoke a deputy, who was subject to the same jurisdiction, powers, obligations, liabilities and disqualifications as the full coroner[49].

Enacting of the 1887 and 1892 legislation, however, failed to curb the controversy within this office and throughout the 20th century, the role and function of the coroner became the subject of several parliamentary select committees, reports, reforms, rules, statutes, amendments and changes to legislation. While it is beyond the scope of this chapter to outline all of these inquiries[50] there were some landmark reviews and enactments that further shaped the office as it stands today.

The 20th century was just 10 years old when a public inquiry committee, set up to investigate the coroner system in England and Wales, published its second report[51]. Chaired by Sir Mackenzie Chalmers, this inquiry made a number of recommendations including that lawyers or medical men fill all coroner appointments and that coroners should be given the power to order a post-mortem without necessarily proceeding to inquest if the death was found to be due to natural causes.

---

47 Coroners Act 1887 s3(1), 4, 8(1&2).

48 Coroners Act 1887 s3(1). This number was reduced to no less than seven or more than eleven in the Coroners (Amendment) Act 1926 Sch.2.

49 Coroners Act 1892 s1.

50 For a discussion on these issues see instead Knapman & Powers, 1985 pp11-15.

51 Chalmers Committee Report, *Coroners' Committee: Second Report of the Departmental Committee appointed to inquire into the Law Relating to Coroners and Coroners' Inquests, and into the Practice in Coroners' Courts*, Cd.5004, London, 1910.

This recommendation was acted on fourteen years later in the form of the Coroners (Amendment) Act 1926. This Act was significant in that it reduced the coroner's interest in the detection of crime, while simultaneously verifying the importance of the coroner in accurate certification of the medical cause of death. This statute also empowered the coroner to sit without a jury in cases of suicide and most types of non-traffic accidents[52]. As a result, the coroner became obliged to adjourn an inquest in cases where a person(s) was charged with murder, manslaughter or infanticide of the deceased. Save for a few exceptional cases, this Act also saw the abolition of franchise coroners in England and Wales. There was also provision made for coroners to appoint assistant deputy coroners and for the first time it was noted that future holders of the office should have a medical or legal qualification, with no less than five years standing in their profession[53].

While the dual qualifications of both medicine and law might have been seen as ideal credentials for coroners[54], the findings of two other coronial reviews during this century upheld a legal background as the most essential qualification for coroners to hold. For example, the Wright Committee, which was established in 1935 following widespread criticism of how coronial inquests were being conducted, recommended that only barristers or solicitors should be appointed to the position[55]. This was also the recommendation of the Broderick Committee when they released their report into death certification and the coroner system in 1971[56]. It seems the view that lawyers were more likely to command public confidence by virtue of their independence from the medical profession won out over contrary beliefs that medical coroners would be better placed to evaluate medical evidence on which an inquest so often relied. Nevertheless, these recommendations were not translated into legislation and the qualifications for a coroner in England and Wales remain as stipulated in the 1926 Act.

---

52 Coroners (Amendment) Act 1926: s13(1).

53 Coroners (Amendment) Act 1926: s1(1).

54 London county coroner Oswald certainly thought so, perhaps because he happened to hold both a medical and law degree. See, Oswald 1936.

55 Lord Justice Wright chaired this review; see Wright Committee Report, *Departmental Committee on Coroners*, Cmd.5070, London, 1936.

56 Broderick Committee Report, *Report of the committee on death certification and coroners*. Cmnd.4810, London, 1971.

Coroners' rules introduced in 1953 made some attempt to uniform practices in coroners' courts and put into effect some of the recommendations of the Wright Committee related to reducing the number of county coroners[57]. These rules also limited the making of recommendations arising from inquests to those designed to prevent further deaths similar to that which the inquest was investigating[58]. The Coroners Act 1954 further amended the law with regard to fees and allowances payable by the coroner to expert witnesses and medical practitioners who conducted post-mortems[59]. Notwithstanding many of these changes, during the 1950s and early 1960s there appears to have been enough adverse publicity about the practice of coroners, coupled with the need to improve certification of death, for the Broderick Committee to have been formed in 1965. Their report, published six years later in 1971, was the result of a thorough analysis of coronial inquests and envisaged far-reaching changes in death certification including who should be eligible to sign death certificates[60]. The report contained 418 pages and 114 recommendations, a few of which were incorporated into the Coroners Rules of 1984, or in the case of the recommendation to abolish the coroner's power to find a prima facie case against named persons and then commit them for trial, given statutory effect in the Criminal Law Act of 1977[61].

Additional legislative changes during the 1970s and 1980s also shaped the role of the contemporary English coroner. For example, the Local Government Act 1972 legislated that all coroners were to be known as county coroners, effectively ending the tradition of the borough coroners in England and Wales[62]. While this Act resulted in a reduction in the number of coroners, the districts over which they held jurisdiction increased substantially. By this time the advent of a well established medical system meant that these districts could hold many large hospitals and public mortuaries, making it impractical for the coroner to view every body on which an inquest was to be held. Perhaps not unexpectedly, further legislation was passed in 1980 that

---

57 See, Coroners Rules 1953. Note that each Coroners Act makes provision for the Lord Chancellor, in concurrence of the Secretary of State, to make rules for regulating the practice and procedures of coroners. Rules and regulations serve to clarify how the legislation is to be enacted.

58 Waller, K. 'The modern approach to coronial hearings in Australasia' in *The aftermath of death*, H. Selby ed. The Federation Press, Annandale 1992 pp2-10 esp 3.

59 Coroners Act 1954 s1(1 a&b).

60 Broderick Committee Report, 1971.

61 Criminal Law Act of 1977 s56(1).

62 See, Local Government Act 1972.

abolished the obligation for coroners to view bodies and provision was also made for inquests to be held in districts other than where the body lay[63].

The Coroners Act 1988 is the current legislation in England and Wales and it is a consolidating Act, meaning that the Coroners Acts 1887 to 1980 (and certain related enactments and amendments) have been consolidated into this one new Act. It seems that the nature of this consolidating Act has resulted in many of the problems and ambiguities embedded in the previous coronial Acts being retained, and according to Knapman and Powers it is therefore not uncommon for inconsistencies to become apparent when the new Act is applied[64]. Nonetheless, a brief analysis of the 1988 legislation provides a useful tool to summarise the function, role, jurisdiction and qualification of the county coroner in England and Wales, at least as it is currently legislated[65].

The contemporary coroner in England and Wales, is an independent judicial officer of an inferior court of record with a fixed jurisdiction. An inferior court of record is 'one of which the acts and judicial proceedings are enrolled in its archives and are conclusive evidence of what is required'[66]. County coroners are appointed by the relevant council covering the district in which they are to practice and in order to qualify for the position applicants need to be a barrister, solicitor or legally qualified medical practitioner, with not less than five years standing in their respective profession[67].

Police, doctors or the local registrar of deaths usually reports deaths to the coroner. Although doctors report the majority of deaths, unlike Australia there is no statutory obligation for medical practitioners in England and Wales to report deaths[68]. Provided the coroner has jurisdiction, he is obliged to hold an inquest in public where there is reasonable cause to suspect that the deceased died:

---

63 Coroners Act 1980 s1; 2(1).

64 Knapman, P. Powers, M. *Casebook on coroners* Barry Rose/MediLaw, Chichester 1989.

65 While the existence of the coroner of the Queen's household (appointed by the Lord Steward) is noted to be included in the Coroners Act 1988, no mention will be made of the function, jurisdiction or role of this office as it is largely irrelevant to topic of the coroner inquiring into deaths from adverse medical events.

66 Matthews & Foreman, 1986 p149.

67 Coroners Act 1988 s.2(1).

68 The statutory duty to report a death to the coroner lies with the Registrar of Births and Deaths. See, Birth and Deaths Regulations 1987, Regulation 41.

- a violent or an unnatural death
- a sudden death the cause of which is unknown and remains unknown following post-mortem examination
- in prison
- in such a place as or under such circumstances as to require an inquest in pursuance of any Act.[69]

Coroners may hold inquests without a jury. In fact, statistics released from the UK Home Office indicate that the majority of inquests are now held without a jury (between 95-97% since 1998)[70]. There are cases, however, where the coroner is obliged to summon a jury. For example if the:

- death occurred in a prison
- deceased was in police custody at the time of death
- death resulted from an injury caused by a police officer in the course of their duty
- death was caused by an accident, poisoning or disease, notice of which is required to be given to a government department
- circumstances indicate possible reoccurrence that could prejudice the health and safety of the public[71].

In every inquest held with a jury, it is the jury and not the coroner that determines the verdict[72].

As of 2003, there were 123 coroners in England and Wales operating out of 414 offices across 127 jurisdictions[73]. The majority of coroners held legal rather than medical qualifications and most worked part-time while holding down private practices in their respective professions. The results of a coronial survey published in 1998, indicated that coroners were predominantly male with an average age of 58 years[74]. Since 1999, the number of deaths reported to coroners annually has remained static at about 201,000 and of these, inquests were held on 12-13% of all fatalities reported[75].

---

69 Coroners Act 1988 s.8(1).

70 Allen, R. *Statistics of the deaths reported to coroners: England and Wales,* Home Office, 1999, 2000, 2001, 2002, 2003.

71 Coroners Act 1988 s.8(3).

72 Coroners Act 1988 s11(3).

73 Luce Committee Report, 2003, p13; and, Blunkett, D. (Home Secretary), *Reforming the coroner and death certification service: a position paper,* Cm.6159, London, 2004 p6.

74 Tarling, R. *Coroner service survey,* Home Office Research & Statistics Directorate, London, 1998 pp7-12.

75 Allen, 1999, 2000, 2001, 2002, 2003. Note that the percentage of inquests cited in these statistics differed from those quoted by the Luce Committee Report which indicated the total number of deaths given a public inquest was 4.8% see, Luce Committee Report, 2003, p19.

Once a death has been reported, the coroner has basically three options in relation to certifying the death. He may certify the death on the basis of the information he already holds or acquires; he can certify the death after ordering an autopsy; or he can certify the death after holding an inquest. In England and Wales, the four most common verdicts returned at inquest are accident or misadventure, suicide, natural causes and industrial diseases[76].

When compared to the Australian experience, there are several differences in reporting rates, the number of post-mortems conducted and the frequency of inquests held. Approximately three times more deaths are referred to coroners in England and Wales, autopsy rates are over double that of Australia and while public inquests are almost four times more likely to be held in England and Wales, the length of such inquests is generally much shorter than those conducted in Australian jurisdictions[77].

Like Australia, a coroner's inquest in England and Wales has an inquisitorial function. It is a fact finding process and not a method for apportioning guilt. Unlike other court systems, the coroner's inquest provides a forum whereby any person who satisfies the coroner that he or she has a legitimate interest in the case is entitled to examine witnesses at an inquest, either in person or by representing counsel[78]. The Broderick Report highlighted the following functions of a coroner's inquest, and suggested that a coronial inquiry is in the public interest when it serves to:

- determine the medical cause of death
- allay rumours or suspicion
- draw attention to the existence of circumstances which, if unremedied, might lead to further deaths
- advance medical knowledge
- preserve the legal interests of the deceased person's family, heirs or other interested parties.[79]

As to the question of whether coronial inquests in England and Wales actually achieve these functions, the outcome of several recent public inquiries suggest not. By the close of the 20th century the coroner system in England was

---

76 Allen, 1999, 2000, 2001, 2002, 2003.

77 While no definitive studies have been conducted between the Australian and UK coronial systems, some comparative figures were outlined in the Luce Committee Report, 2003 p19.

78 For a list of those entitled to examine witnesses at a coroner's inquest in England or Wales see Matthews & Foreman, 1986 p150.

79 Broderick Committee Report, 1971.

subject to intense scrutiny sparked by the infamous Dr Harold Shipman case. Shipman, a general practitioner, was found to have murdered at least two hundred and fifteen of his patients over a twenty three year period. Following his conviction, a wide-ranging independent public inquiry was conducted to determine how these deaths had gone undetected for over two decades[80]. However, Shipman was not the only UK health worker convicted during the 1990s for the murder of patients. Beverley Allitt, a nurse working in the paediatric ward of a general hospital was convicted in 1992 for the murder of four children under her care. This case was also subject to an inquiry, the results of which identified a number of shortfalls in how patient deaths were being reported and investigated[81]. Other inquiries conducted, including the Alder Hey Hospital inquiry into the illegal procurement and retention of human organs[82] and the inquiry into cardiac surgical services at the Bristol Royal Infirmary[83] were also highly critical of coronial services.

In 2003, an independent review committee, commissioned by the Home Office, released its report into death certification and coronial services in England, Wales and Northern Ireland[84]. This extensive review, conducted over two years, found a number of defects in coronial processes including that:

> The coroner has no information on or responsibility for deaths not reported to him. No public authority is tasked or resourced to see that the certification process is being properly carried out and that deaths which ought to be investigated by the coroner are reported for investigation. There is thus little to stop an unscrupulous doctor from "certifying his way out of trouble"[85].

The inquiry produced one hundred and twenty three recommendations, calling for significant change to existing death certification processes and the

---

80 This inquiry was lead by Dame Janet Smith and thus far her investigation has produced three reports outlining system failures including those in the coronial service. See, Smith, J. *The Shipman inquiry, an independent public inquiry into the issues arising from the case of Harold Fredrick Shipman*, London, 2002, 2003, 2004. These reports can be accessed at http://www.the-shipman-inquiry.org.uk/reports.asp

81 Clothier, C. *Inquiry into deaths and injuries on the children's ward at Grantham and Kesteven General Hospital in 1991*, London, 1994.

82 Redfern, M. The Royal Liverpool Children's inquiry, London, 2001. This report can be accessed at http://www.rlcinquiry.org.uk/

83 This public inquiry followed an investigation by the General Medical Council in England into 53 children treated at the Bristol Royal Infirmary, 29 of whom died following open-heart surgery. The final report was presented to Parliament by the Secretary of State for Health in July 2001, see Kennedy, I. *Learning from Bristol: report into children's heart surgery at Bristol Royal Infirmary*, London, 2001. The full report can be accessed at http://www.bristol-inquiry.org.uk

84 Luce Committee Report, 2003.

85 Luce Committee Report, 2003 p16.

development of a more coherent coronial system based around full-time independent coroners with legal qualifications. Among the recommendations was the call for all deaths to be reported to the coroner and the appointment of statutory medical assessors in each coronial area to work along side coroners to determine the need for further investigation[86]. A list of reportable categories of deaths was included and it was suggested that statutory definitions of reportable deaths should be in clear and easily comprehensible language. It was also recommended that coroners should promptly notify relevant parties of the outcome of an inquest or investigation where services, activities or products were found to have posed a public health risk. While the report noted that the responsibility to act or not on such findings rested with the recipient bodies, the coroner should be informed within six months if a decision to act had not been made and this decision should be passed on to the deceased's family by the coroner[87].

Government response to the Luce Committee Report and the Shipman Inquiry was set out in a position paper presented to Parliament in March 2004[88]. Incorporating many of the recommendations included in the Luce Report, this paper outlined proposals to reform death certification and coronial services, promising to improve training for coroners, introduce performance management though the Coroner's Society, establish a Coroner's Council to handle administrative work and draft a new Bill and White Paper to make the necessary legislative reform needed to fix the system and restore public confidence in the office. Whether these measures will address the ailments of the coronial system in England and Wales is yet to be determined. The limited outcomes following the Wright Committee Report and that of the Brodrick Committee[89], and the considerable resources and support that will be needed to radically overhaul the system, suggest it may be otherwise.

86 Luce Committee Report, 2003 p220 (at 6).
87 Luce Committee Report, 2003 p224 (at 34).
88 Blunkett, 2004.
89 Luce Committee Report, 2003 p3.

2.4. Coroners and medical examiners in the US: similarities and divergences

Investigating the development of the coroner system in the US is complex and exacting without the clear statutory trail provided in English and Australian law reform. In addition, while there is a significant body of literature dealing with the US coronial system, much of it is contradictory and biased toward a system that either favours coroners or calls for their abolition. This bias is most often attributable to the professional orientation of the author(s), particularly the work published in the medical and forensic literature. Perhaps not surprisingly, medical practitioners (referred to in the US as physicians) clearly favour the medical examiner system over that of a lay or legal coronership. Some sections of the literature also consider the roles interchangeable or at least meeting the same ends. I argue, however, that while the role of contemporary medical examiners and coroners in the US can be defined separately, the nature of these roles is essentially different to that of coroners in the UK and Australia.

Across the US, diverse state laws deal with death investigation and they can vary considerably in terms of the qualifications, tenure and method of selection for coroners and medical examiners. Furthermore, in states where coroners still exist, there is little objective evidence to support the efficiency and effectiveness of their role in comparison to other death investigators. The term death investigator is used in the US to denote a variety of trained and non-trained personnel involved in inquiring into suspicious or unexpected deaths. Emphasising the complexity of the current medicolegal situation in the US, Prahlow and Lantz list eighteen titles given to death investigators around the country (summarised in Table 1)[90].

Adding to the confusion, these titles, particularly coroner and medical examiner, lack uniformity or consistency across states. For example, a coroner in one state can be an elected lay-person with no medical training, whereas in another state they are required to be a medical practitioner and are sometimes referred to as physician-coroners[91].

---

90 Prahlow, J. Lantz, P. 'Medical examiner/death investigator training requirements in state medical examiner systems', *Journal of Forensic Sciences*, Vol.40, 1995 pp55-58.

91 Kansas, Louisiana, North Dakota and Ohio require coroners to be physicians.

Table 1: Titles given to death investigators in the US

medical examiner	deputy medical examiner
medical examiner investigator	county medical examiner
county medical examiner investigator	physician medical examiner
district medical examiner	regional medical examiner
assistant medical examiner	medical investigator
deputy medical investigator	medicolegal death investigator
field investigator	investigator
forensic investigator	law enforcement personnel
coroner	deputy coroner

[From: Prahlow and Lantz 1995 p56]

In some state districts the coroner may also be ex officio, meaning that they have been elected or appointed to another position such as sheriff, magistrate or district attorney, but perform the role of coroner when necessary[92]. Likewise, the title medical examiner is used in some states to identify a physician who specialises in forensic pathology (with or without board certification)[93]. In other states, the title of medical examiner denotes a non-pathologist physician (similar to the physician-coroner), while in yet other states a medical examiner may be a non-physician non-pathologist death investigator[94].

While the lack of uniformity in applying these titles across states is noted, the approach taken in the literature, and the one I adopt, is to define these positions as they are most commonly construed in medicolegal journals and by the Centers for Disease Control (CDC). Thus, I use the term US coroner to refer to a layperson, usually elected to the position, who has no medical or legal training and who conducts death investigation by relying on medical expertise when required. Medical examiners are licensed physicians and pathologists, usually appointed, who may have additional training in forensic

92 Hanzlick, R. 'Coroner training needs', *JAMA*. Vol. 276 1996 pp 1775-1778.

93 Certification in forensic pathology was instituted for medical examiners by the American Board of Pathology in 1959, see Adelson, L. 'Forensic pathology then and now: retrospect and reflections', *American Journal of Forensic Medicine and Pathology* Vol.10 1989 pp251-260.

94 Table 2 on page 52 outlines the type of death investigation system operating in each US state.

medicine and medicolegal death investigation and whose primary purpose is to detect, analyse and document the medical aspects of certain types of deaths[95].

The US is made up of forty-eight contiguous states, two noncontiguous states (Alaska and Hawaii) and a Federal District (District of Columbia). As laws regulating the reporting and investigation of unexplained or suspicious deaths vary between states I have not attempted to analyse the medicolegal system in each state. Instead, I have examined the common features governing death investigation across the US, commencing with a brief chronicle of the history of the coroner in this country. This section illustrates how the office of coroner evolved from its early English roots and then diversified because of social and technological influences during the late 1800s and early 1900s, resulting in the creation of the medical examiner system.

2.4.1 History and evolution of the US coroner

As English emigrants colonised sections of the North American eastern seaboard in the 17th and early 18th centuries, they brought with them rudiments of the judicial system they had lived under, including the offices of sheriff and coroner. Although it is unclear exactly when the coroner was first introduced to these colonies, there is some suggestion that William Penn, who in 1682 arrived in Delaware and later became governor of Pennsylvania, appointed the first coroner[96]. It seems this newly appointed coroner was instructed to proceed in the same manner as was customary in England. However, in keeping with the new world's' socialist ideology, instead of coroners confiscating property of the deceased for the Crown purse, victims' assets were to be held in trust for their heirs[97]. As parts of America were colonies of Great Britain, the coroner was initially appointed as a Crown

---

95 Leading US researchers in coronial and medical examiner systems including Randy Hanzlick (an Associate Professor at the Emory University School of Medicine and Medical Examiner for the Fulton County, Atlanta, Georgia), have differentiated these positions by applying similar definitions. See, Hanzlick, 1996 p1775; Hanzlick, R. Parrish, R. 'The role of medical examiners and coroners in public health surveillance and epidemiologic research', *Annual Review of Public Health*, Vol.17, 1996 pp.383-409.Hanzlick, R. Combs, D. 'Medical examiner and coroner system: history and trends', *JAMA*, Vol.279, 1998 pp870-874.

96 Lilian, E. Mattioni, J. 'The Philadelphia medical examiner', *Temple Law Quarterly*, Vol.37, 1964 pp204-242 esp.p206.

97 Allegheny County Medical Society, *The American coroner, 1839-1962*, Bulletin of Allegheny County Medical Society, Vol.641, 1962.

administrator and after the American Revolution in 1776 he remained a government official[98].

Thereafter, provinces and later states developed their own statutes defining coronial jurisdiction. Not all of the duties of the English coroner, however, were transplanted to the new world. This led to confusion as to the powers coroners held in US law, inducing one judge to comment in 1911 that 'while the office of coroner is provided for by constitution, neither instrument nor any law passed in pursuance thereof gives any satisfactory statement of his (common law) powers"[99]. Nevertheless, it can be gleaned from early American law texts that during the 18th and 19th centuries there were several parallels between the duties of English and US coroners.

By way of illustration, Joseph Backus, an American legal counsel around 1800, published a digest of laws relating to the office and duties of the coroner[100]. He had already observed the emergence of different state laws pertaining to the offices of sheriff, coroner and constable and subsequently compiled a two volume manual to clarify basic duties and functions of these roles. The manual commenced with an overview of English common law, from whence these offices had originated, followed by statute regulations for several eastern states including New York, Massachusetts, Connecticut, and Rhode Island.

Backus made particular mention of the role of the coroner in Massachusetts and New York and these two states are of particular interest. Both Massachusetts and New York inherited the English judicial court system relatively early in their colonial history. Notwithstanding this fact, these two states became the first to introduce reforms to the coroner's office by establishing the medical examiner role, in 1877 and 1918 respectively. Both states have been at the forefront of medicine in the US, Massachusetts in particular housing the prestigious Harvard Medical School, which in 1937-1938 was also the first US medical school to establish a department of legal

---

98 Eckert, W. 'Medicolegal investigation in New York City: history and activities 1918-1978', *American Journal of Forensic Medicine and Pathology,* Vol.4, 1983 pp33-54.

99 Judge Sulzberger cited in Lilian & Mattioni, 1964 p207.

100 See, Backus, J. *Offices and duties of sheriff, coroner and constable,* Vol 1 & 2, W. A. Davis, New York, 1812.

medicine[101]. These two states therefore serve as interesting examples of coronerships that, while once sharing similarities with their counterparts across the Atlantic, were the first to diverge from the English coronial system.

According to Backus, during the early 1800s, coroners and sheriffs in New York State were appointed annually and could not hold their respective offices for more than four consecutive years. Similarities in the role of the county coroner in New York to that in England can be gleaned from the following passage of instruction included in Backus' manual.

> On being notified of a deceased thought to be slain or suddenly dead or wounded, or that houses were broken open or treasure was to be found, the coroner should proceed to the place and forthwith command twenty-four good and lawful men of his county to appear before him, at such place therein as he shall appoint, and upon their oaths or the oaths of any twelve of them, and upon the view of the body.....to inquire how and in what manner, and when and where such person was slain, or died; and who such person was, and of all the circumstances attending such death.[102]

Along with the sheriff, the US coroner played an important role in investigating sudden or unexplained deaths. Like the English system, the coroner's court in early New York was a court of record and the inquest was inquisitorial in nature. An important part of the coroner's duties was to ensure that all inquest proceedings were recorded on rolls and in cases where a person was indicted for murder or manslaughter, or as an accessory before the fact, the coroner was charged with binding witnesses to appear and testify and deliver their inquisitions, along with the rolls, to the relevant justices. In New York City, coroner's records from 1784 to 1816 revealed that inquests were usually held in the home of a respectable member of the community and jurors were selected from among middle-class citizens[103]. Physicians were often summoned to the inquest where a medical opinion was needed to establish cause of death. It seems that medical misadventure, however, was not the business of a coroner's inquest unless an incorrect medication was thought to have contributed to the death[104].

---

101 Adelson, 1989 p251-252.
102 Backus, Vol.2, 1812 pp77-78.
103 Blinderman, A. 'The coroner describes the manner of dying in New York City, 1784-1816', *American Journal of Medicine,* Vol.61, 1976 pp103-110.
104 Eckert, 1983 p36.

The qualifications to be appointed a coroner in New York State are not well documented, but it is likely they were similar to those of the sheriff who was required to be a substantial freeholder of the city or county. In New York, as well as all other states, the office of sheriff was considered higher than that of coroner, although coroners were considered important law enforcement officers[105]. Some reciprocity was evident between the two offices as when a sheriff died or was incapacitated in counties where there was no under-sheriff, the coroner was required to execute the office until a new sheriff was appointed[106]. In New York coroners were normally paid per inquest, however, in 1898 coroners in New York City had their salary fixed at $6,000 per year[107].

In Massachusetts, the sheriff and coroner were nominated and appointed by the governor with the consent of council. The nature of this governor's nomination introduced a political dimension to the appointment, which was later to play a major part in the demise of the coroner's office in many parts of the US. Apart from political affiliations, it was also likely that coroners and sheriffs in Massachusetts needed to be men of some independent means. Both were required on appointment to give sufficient security (at the discretion of the county court of common pleas) to ensure faithful performance of their duties and to cover the malfeasance of their respective deputies. If this security was not forthcoming, a fine of $150 for each month of neglect would be forfeited. Backus makes no mention of the tenure of office for Massachusetts' coroners, but it was likely to have been similar to that of the sheriff who could hold office during good behaviour and resign at pleasure[108].

Like their New York counterparts, county coroners in Massachusetts were charged with investigating death by violence or casualty. Statutes in this state provided specific procedures by which the coroner was to conduct an inquest. This included instructions outlining the process of issuing warrants to direct the constable of the town where the body was found, to assemble eighteen good and lawful men of the same town or towns, twelve or more of whom would comprise the jurors to be sworn in by the coroner. The coroner and jurors were required to view the body prior to the formal inquest and the

105 Lilian & Mattioni, 1964 pp211.
106 Backus, Vol.2, 1812 pp77-78.
107 Eckert, 1983 p36.
108 Backus, Vol 2, 1812 p106.

jurors were charged with determining the circumstances behind the death and whether the deceased died of felony (and if so who were the principals) or of mischance or accident[109].

Where the deceased was found to be the victim of a felony or misfortune caused by another, the coroner was required to inform the county justices of the person(s) instrumental to the death so that they could be apprehended, examined and secured for trial at the court of oyer and terminer and general gaol[110].

Coroners in Massachusetts were also responsible (after viewing the body) for the disposal of any strangers found deceased. In cases where an inquest found that the deceased was killed fighting a duel, the coroner was required to deliver the body to any surgeon(s) to be thereupon dissected and anatomised. This practice was likely to have been inherited from England where in the 18th century hanged felons were delivered to surgeons for dissection by order of the assize judges[111]. What is noteworthy about these practices is that they heralded what was to later become a close relationship between coroners and those medical practitioners skilled in the techniques of forensic science to establish cause of death. In the US, this was a forerunner to the emergence of the medical examiner system.

In 1887, Massachusetts became the first American state to abolish the office of the coroner and replaced it with a medical examiner in each local community or district[112]. Unlike the coroner, the medical examiner did not conduct inquests into death[113]. In this case, the judicial duties of coroners, including holding inquests into suspicious deaths, were transferred to the District Court justices. Medical examiners, who were required to be physicians and discreet

---

109 Backus, Vol 2, 1812 p78.

110 The court of oyer and terminer and general gaol delivery originated from the English court system where matters of a criminal nature were heard within certain local limits. See: Stephen, J. *A history of the criminal law of England,* Vol.1, McMillan & Co, London, 1883 pp106-107.

111 Hunnisett, R. 'The importance of eighteenth-century coroners' bills', in *Law, litigants and the legal profession,* E.Ives & A.Manchester (eds), Humanities Press, London, 1983 pp126-139. esp. p131.

112 Helberg, D. 'The coroner: a man more sinned against than sinner?', *Journal of Forensic Sciences,* Vol.3, 1958 pp156-173. Also see, Curran, W. 'Medical-examiner-system reorganisation in Massachusetts', *New England Journal of Medicine,* Vol.299, 1978 p295.

113 Mellen, P. Bouvier, E. 'Nineteenth-century Massachusetts coroner inquests', *American Journal of Forensic Medicine and Pathology,* Vol.17, 1996 pp207-209.

men 'learned in the science of medicine'[114] became responsible for all public medical investigations[115]. While it is difficult to locate specific evidence to identify exactly what triggered the demise of the coroner in Massachusetts, Mellen and Bouvier suggest that likely reasons included concern over the large number of officials investigating fatalities, possible corruption within the office and non-scientific death investigation methods employed by coroners[116].

By 1900 significant dissatisfaction with the coroner's office was being expressed by the media in both England and the US and the role of coroners was becoming a popular topic of scrutiny in the medico-legal literature of the day[117]. In addition, social and technological changes were occurring that, while precipitating reforms to the coroner's role in England, led to further erosion of the coroner's office in several US states. US lawmakers in particular, were of the opinion that in cases of homicide there was a greater need for death investigators to employ more scientific examination methods than the English coronial system of determination could provide[118]. By the early 1900s, the US had also began to establish systematic and centralised police forces to investigate violent deaths, which in many instances negated the need for lay-coroners to separately inquire into such fatalities.

The call for a more centralised and efficient system of death investigation was a motivating factor for New York City to follow Massachusetts and establish a medical examiner system in 1918[119]. What was significant about the medical examiner's appointment in New York City, however, was that not only did the incumbent need to be a physician, he was also required to be a qualified pathologist and skilled microscopist[120]. The importance of the post-mortem, which was to be conducted at the discretion of the medical examiner, was now recognized as an integral component of investigating cause of death. One intriguing anomaly in the changeover to medical examiners was that while New York City adopted this system, the state of New York itself maintained

---

114 Mellen & Bouvier, 1996 p208.
115 Curran, 1978 p295.
116 Mellen & Bouvier, 1996 p208.
117 Shapiro, E. Davis, A. 'Law and pathology through the ages: The coroner and his descendants - legitimate and illegitimate', *New York State Journal of Medicine,* Vol.72, 1972 pp805-809 esp.p806.
118 Sassard & O'Leary, 1999 p795.
119 Eckert, 1983 p37.
120 Helpern, M. 'Forensic medicine: past, present and future', *New York State Journal of Medicine,* Vol.72, 1972 pp801-804.

coroners in many districts and counties, thus creating a mixed coroner and medical examiner system that still exists today.

Another factor linked to the demise of the US coroner was the relationship of many elected or appointed lay coroners to political parties that called into question their ability to be independent inquisitors into suspicious deaths. In 1958, Helberg noted that one of the major drawbacks with the coronial system was the political pressure that could be applied to coroners who must please the county politician to secure a place on the party ticket in order to be elected[121]. A potential existed for unscrupulous politicians to apply adverse pressure on coroners to suppress evidence or influence the findings of an inquest, all clearly outside the interest of public welfare which coroners were appointed to serve. Yet once they attained office, coroners commanded extensive political influence and patronage, being exceeded in power by only the district attorney and sheriff. The coroner could hire and fire members of his staff, as well as influence those who comprised members of the coroner's jury.

Over the years various committees and commissions investigated complaints about the coroner's office in several US states. For instance, in 1915 the Wallstein committee, which was formed to investigate coroners' activities in New York City, reported wide spread corruption including payoffs to coroners by insurance companies, big business and industry officials to obtain preferential rulings in inquests examining industrial deaths[122]. In 1951 a Grand Jury was convened in Philadelphia to investigate fraud and corruption in the coroner's office, after which an Advisory Consolidation Commission called for the abolition of the office in this state[123]. The Commission found that unlike the lay-coroner, a medical examiner, as an independently appointed qualified professional, was less likely to be susceptible to exerting or being influenced by political pressure. While the Philadelphia City Council had been given express powers to abolish the coroner in 1953, it was not until 1956 that an examiner was actually appointed[124]. Similar to the New York experience, the state of Pennsylvania (where Philadelphia is located)

---

121 Helberg, 1958 p161.
122 Eckert, 1983 p33.
123 Lilian, & Mattioni, 1964 pp212-213.
124 Lilian, & Mattioni, 1964 pp212-213.

maintained coroners in many of its counties, giving rise to a mixed coroner and medical examiner system.

The qualification of coroners, or lack thereof, was another significant factor in their demise. Unlike England and Wales, which by 1926 had legislated that coroners needed to be either lawyers or medical practitioners of no less than 5 years standing, many states in the US did not require coroners to have even an elementary education[125]. There is also some evidence to suggest that at least in some American states, the office of the coroner was sought after for its business advantages. For example, in the 1950s there were a disproportionate number of undertakers in the coroner's office[126]. Under these circumstances the office became a potential 'feeder' for such coroners' undertaker and funeral businesses. This again created a potential for corrupt practices where families could exert pressure on the coroner not to order an autopsy on the deceased, particularly when refusal of insurance claims and/or incrimination in a homicide may have resulted from an accurate establishment of cause of death.

Another factor working against US coroners was the nature of their appointment and tenure. While tenure varied between states, on average most elected county coroners term of office was between two to four years[127]. While some could seek re-election, this situation called into question the efficiency of a system that did not support the development of long-term expertise in both the judicial and practical techniques required to competently investigate suspicious or unexpected deaths. By the time a coroner reached the stage of acquiring an adequate body of knowledge to be effective in the role, he could be replaced at the next election by another person with no experience or training.

From 1918 until the 1950s, the abolition of lay-coroners and their replacement with medical examiners was sporadic. Even in Massachusetts, which introduced the first state wide medical examiner system, physician coroners later emerged (as opposed to pathologist medical examiners) and these were not replaced until 1983[128]. From 1939 until 1946 four other

125 Helberg, 1958 p160.
126 Helberg, 1958 p159.
127 Hanzlick, 1996 p1777.
128 Hanzlick & Combs, 1998 p.872.

states, Maryland, Virginia, Vermont and Rhode Island implemented medical examiner systems. Thereafter, from 1950 until the mid 1980s the number of states to introduce some form of a medical examiner system grew.

One factor that may have influenced this growth was the release in 1954 of the Model Post-Mortem Examinations Act, which provided model legislation for the establishment of state medical examiner death investigation systems. This Act seems to have been an attempt to create some national uniformity in establishing the types of deaths that should be investigated, inclusive of those requiring post-mortem examinations. The Act advocated the office of a state chief medical examiner to coordinate trained personnel using the most modern scientific methods to determine causes of death. It was also noted that the office of chief medical examiner would in general supersede the authority of coroners in death investigation[129]. However, in recognition of the problems involved in abolishing coroner's offices that in some states were tied to constitutional status, this legislation was drafted as a model act rather than a uniform one.

This reason, among others, has been cited for the failure of the medical examiner system to be fully implemented across the US[130]. State laws, rather than federal ones govern death investigation and in many states the coroner was (and remains) a constitutional office that can only be abolished by a change to the state constitution. In the US, constitutions, while not impossible to change, are difficult and expensive to amend and require state-wide support. Lilian and Mattioni observed that perhaps the single most important event that permitted the elimination of the coroner's system in Philadelphia, was the City-County Consolidation Amendment which made the transition to a medical examiner system possible without resorting to changing state legislation[131]. Therefore some states may not have moved to implement a medical examiner system because of perceived difficulties in changing state constitutions as they relate to the office of coroner.

---

129 Model Post-Mortem Examinations Act 1954 s11(A B).
130 See for example, Helberg, 1958 p168; and, Hanzlick & Combs, 1998 p872.
131 Lilian & Mattioni, 1964 pp211-212.

Economic and geographic issues have also been cited as potential barriers to establishing a uniform medical examiner system across the US. The personnel and facilities required to sustain the old coroner's office differed markedly from the professional and technical services essential to support a dedicated medical examiner system[132]. As techniques used in forensic science became more advanced, the need for more specialist medical training exponentially increased. Two nationwide professional organisations, the American Academy of Forensic Sciences in 1948, followed by the National Association of Medical Examiners in 1966, were established to provide an outlet for research and academic scholarship in forensic medicine[133]. These organisations also identified criteria for educational standards, certification requirements and technical information for death investigators. It was apparent within the new standards that forensic investigation should move away from hospital laboratories to purpose built medical examiner facilities, where not only autopsies, but also other forensic examinations such as toxicological, serological and microbiologic examinations could be conducted independently. One of the reasons for separating these facilities was the need for impartiality when establishing cause of death, particularly in cases where deaths occurred in the hospital from medical misadventure[134].

2.4.2 Current US coroner and medical examiner systems

While US state law dictates the types of fatalities that must be investigated and the official(s) responsible to carry out such investigations, as part of is overall health surveillance activities, the CDC collects national death statistics. Figures published by this agency in 2001 estimated that 20% of all deaths in the US were subject to investigation by medical examiners or coroners[135]. More states have medical examiner systems in place, but on a national scale the three medicolegal models employed in the 1950s still operate across the country (ie medical examiner only, coroner only, or mixed

---

132 Lilian & Mattioni, 1964 p218.

133 Adelson, 1989 p253; and, Hanzlick, R. 'History of the National Association of Medical Examiners and its meetings, 1966-93', *American Journal of Forensic Medicine and Pathology*, Vol.16, 1995 pp278-313.

134 Lilian & Mattioni, 1964 p226.

135 CDC, *About medical examiners and coroner information sharing program*, Centre for Disease Control and Prevention, DC Epidemiology Program Office, 2001. http://www.cdc.gov/epo/dphsi/mecisp/index.htm [Accessed 8 March 2001]

medical examiner and coroner). Whichever system a state has in place, most jurisdictions require an investigation if the cause of death is attributable to:

- homicide, suicide or accidental causes such as motor vehicle accidents, falls, burns (badly burned or charred bodies), or the ingestion of drugs or other chemical agents
- sudden or suspicious deaths, sudden infant death syndrome; deaths unattended by a physician
- an agent or disease constituting a threat to public heath
- work place death
- deaths occurring while in custody or confinement or where the person was institutionalised for reasons other than organic disease
- deaths of people being cremated or buried at sea[136].

This list suggests that the types of death US medical examiners or coroners are required to investigate are similar to those English coroners are required to examine. In the US, however, the particular jurisdiction and state law will determine the extent of the investigation and although guidelines exist as to when a post-mortem examination is required, it usually depends on the discretion of the medical examiner or coroner as to whether this occurs as matter of public interest[137]. Like the old English coroners, medical examiners must personally view every dead body over which they assume jurisdiction and in most instances jurisdiction is determined by the place where the body is found and not necessarily the place where the cause of death was inflicted[138].

Figure 1 on the following page, provides a map of the US that depicts the type of death investigation system in each state. Table 2 on page 52 complements this map by providing a further state by state breakdown outlining the various sub-systems within the three major types of death investigation systems. While twenty-two states have a medical examiner system, they do not necessarily operate in the same way. Sub-sets exist, with some states appointing a chief medical examiner (n=19); others a county medical examiner (2 states) and one other with a district medical examiner instead (n=1).

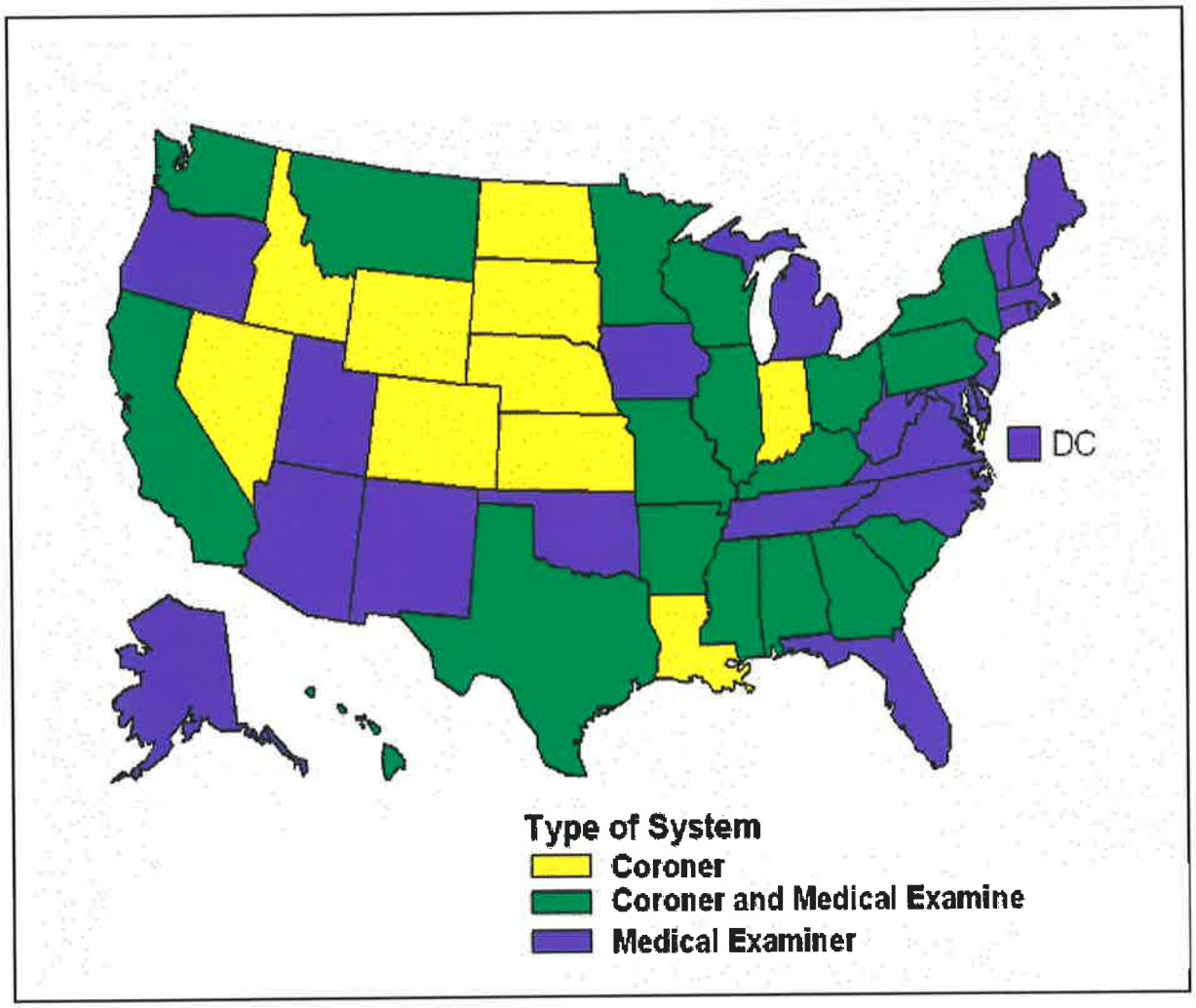
---

136 CDC, 2001.

137 Model Post-Mortem Examinations Act 1954 s5.

138 Department of Health & Human Services, Guidelines for Medical Examiners, 2000. These guidelines can be accessed at http://www.pathology.med.unc.edu/ocme/rules/guidelines.html

Figure 1. Map of the United States showing the three types of death investigation systems



Ten states have a coroner only system, and within this system two have district coroners, while eight have county coroners. It should also be noted that in at least five of these states the coroner is required to be a physician and in the other five states individual districts or counties may require the coroner to be a licensed medical practitioner. While the five states in which the coroner must be a physician come under this category, it could be postulated that these physician-coroners are more akin to district or county medical examiners than lay-person coroners.

The mixed medical examiner/coroner system exists in eighteen states. Of these, six have state medical examiners and county coroners/medical examiners, whereas twelve states have county medical examiners/coroners. Again the qualifications for being elected or appointed in these counties or

districts vary, however, in jurisdictions with large populations the medical examiner/coroner would normally be required to be a physician with additional training in medico-legal investigation.

Table 2. Type of death investigation system operating in each US state

Medical Examiner System **N=22**	**Coroner Only System** **N =11**	**Mixed Medical Examiner/Coroner System** **N=18**
State Medical Examiners	***District Coroners***	***State medical examiner and county coroners/ medical examiners***
Alaska Connecticut Delaware District of Columbia Iowa Maine Maryland Massachusetts New Hampshire New Jersey New Mexico Oklahoma Oregon Rhode Island Tennessee Utah Vermont Virginia West Virginia	Kansas* Nevada *States which require the coroner to be a qualified physician	Alabama Arkansas Georgia Kentucky Mississippi Montana North Carolina
District Medical Examiners	***County Coroners***	***County Medical Examiners/Coroners***
Florida	Colorado* Idaho Indiana* Louisiana* Nebraska North Dakota* South Dakota South Carolina Wyoming *States which require the coroner to be a qualified physician	California Hawaii Illinois Minnesota Missouri New York Ohio* Pennsylvania Texas Washington Wisconsin *Ohio has 1 county medical examiner system (Summit County)
County Medical Examiners		
Arizona Michigan		

Adapted from data obtained from CDC[139].

139 CDC, Death investigation summaries, [last updated 7 April 2004] http://www.cdc.gov (Accessed 24 June 2004). I contacted the CDC in June 2004 to seek permission to use their data in this thesis. The CDC responded that all information on their website is in the public domain, the only exception being the use of the CDC logo.

This breakdown shows that the majority of the US population resides in jurisdictions requiring the primary person responsible for investigating deaths to hold a medical qualification. A survey conducted during the 1990s indicated that 64% of the US population lived in areas where the principal death investigator needed to hold a medical degree, whereas approximately 25% of the population lived in jurisdictions where no medical qualification or training was required. Coroners who are not required to hold a medical degree, but are required to have some medicolegal training, served the other 11% of the population[140].

An examination of the geographical distribution of the various death investigation systems indicates that those states with large populations and potentially larger numbers of industries and institutions such as hospitals and prisons have tended toward the medical examiner only system or a mixed system. This is particularly the case in cities such as New York and Philadelphia, which have a Chief Medical Examiner coordinating death investigation. Other smaller populated states such as Idaho and Wyoming have opted for a coroner system. Certainly, the amount of forensic work required in some rural locations would not necessarily support a medical examiner system in terms of the funding and caseload required to support a modern forensic laboratory[141].

Interestingly, a study conducted out of a North Carolina medical school in 1995, which surveyed twenty five US states with either a medical examiner system (n=20) or a mixed county coroner/medical examiner system (n=5), found little difference between the two in terms of how well they functioned[142]. The results of the survey suggested some mixed systems worked well, while others worked poorly, which was the same for states with medical examiner only systems. The researchers concluded that just because one system works well in one state, did not mean that it would function efficiently in another[143].

---

140 Hanzlick, R. Combs, D. Gibson Parrish, R. et al, 'Death investigation in the United States 1990: a survey of statutes, systems, and educational requirements', *Journal of Forensic Sciences,* Vol.38, 1993 pp628-632.

141 Hanzlick & Combs, 1998 p873.

142 Prahlow & Lantz, 1995.

143 Prahlow & Lantz, 1995 p58.

2.4.3 US coroners and medical examiners: are they one and the same?

In comparing the coroner as the role has now emerged in the US to the role of the medical examiner, it is worthwhile reiterating the basic differences as they have been defined here. This is important because there has clearly been a move in several states (eg Colorado, Indiana, Louisiana, North Dakota, Kansas) to ensure that the coroner must be a qualified medical practitioner, even though these states are noted to have a coroner only system. There are grounds to suggest that physician-coroners undertake a role not dissimilar to medical examiners, and in many regions medical examiner systems emerged from offices in which physicians already had a primary role in investigating deaths[144]. Further evidence pointing toward their shared nature of interest, can be gleaned from the professional colleges, such as the National Association of Medical Examiners, whose membership while open to physician-coroners and medical examiners is closed to lay-coroners[145]. This raises the question of whether states that require coroners to be physicians in fact have a pseudo form of medical examiner system in place, rather than enacting the broader inquisitional function of the English coroner's office.

It has been established that medical examiners are usually licensed physicians who hold state, district or county jurisdiction over the investigation and certification of death. This role uses the skills and techniques arising from forensic medicine, defined by Adelson as 'the application of medical knowledge, medical 'know-how', and medical 'know-why' to aid the administration of justice'[146]. Medical examiners are concerned with the aetiology, pathology and scientific facts behind the cause of death, in other words, the physical evidence behind the event.

Preoccupation with a *medicalised* interest in death investigation, while not unique to America, is at odds with the English version of the coroner's function. In England and Wales, the coroner's inquest takes a full and open interest into all the events and circumstances surrounding a death. It

144 Hanzlick & Combs, 1998 p873.

145 Hanzlick & Parrish, 1996 pp383-409. Note that the latest information on the National Association of Medical Examiners website indicates membership is open to all physicians, investigators and administrations active in medicolegal death investigation. See http://www.thename.org/AboutNAME/NAMEdescription.htm (Accessed 24th June 2004).

146 Adelson, 1989 p253.

provides an inquisitorial forum to seek out and record the facts as they concern public health and safety[147]. It also allows relatives of the deceased and/or other interested parties to be informed about the cause and circumstances of the death. It presents an opportunity to subpoena witnesses and documents and provides a contemporaneous record of events that may prevent witnesses from changing their position should the case proceed to trial. In the US, this common law feature of the coroner's inquest has been virtually eliminated from the function of medical examiners 'based on the conviction that it is a wasteful, time consuming anachronism with no justification in the new medically-orientated philosophy of the (examiner's) office'[148].

There can be no doubt that the transfer of duties in the US from the lay coroner to the medical examiner produced a major shift in the business of investigating death. In Philadelphia for example, before the change to medical examiners the coroner estimated that 80% of his duties were legal, whereas after the transfer, the medical examiner estimated that 80% of his duties were medical[149]. Where medical evidence to establish cause of death aids the coroner's inquest to determine the manner and circumstances of death, the examiner system is primarily concerned with the medical grounds behind the death. For the medical examiner, the broader investigation into the surrounding events is left to the US adversarial court system.

This distinction does not mean that medical examiners are not interested in public heath and safety. Clearly they perceive themselves to play a vital role in this area through scientifically establishing cause of death and isolating trends to prevent unnecessary deaths in the future. Furthermore, they would contend that their expert executive function has generally removed any necessity for the old coroner's inquest and the need to explain complex medical and pathological jargon to coronial jurors[150].

147 Matthews & Foreman, 1986 p6.
148 Lilian & Mattioni, 1964 p229.
149 Lilian & Mattioni, 1964 p215.
150 Shapiro & Davis, 1972 p807.

It seems that not all medical examiner systems have completely abolished the formal inquest in situations best served by clearing the air[151]. On the rare occasion that such proceedings are held, the medical examiner can sit as prosecutor, judge and jury[152]. It is difficult to gauge from the literature, however, whether these proceedings are conducted in a public forum as is generally the case in the English coronial system. The position of medical examiners in the US judicial system is also unclear, particularly as it pertains to disclosure of their reports into deaths. At least in some jurisdictions, the medical examiner is prohibited from disclosing information to anyone except the district attorney, particularly in criminal cases[153].

It is also unclear whether the existing lay-coroners in the US conduct inquests in the English manner, but the evidence gathered here suggests that like the medical examiner, US coroners infrequently (if ever) conduct formal public inquests. The supposition here is that while the Americans discern substantial differences between the medical examiner and the lay-coroner, and clearly there are several, in fact neither of these offices serves the public interest in the social and moral sense of the English system. It seems that the position taken in the US, is that to attempt to combine the role of neutral scientific fact-finder, protector of the deceased family and guardian of public health in the one office[154] is likely to result in an inefficient and ineffective death investigation system. Therefore the system adopted in the US is one of detachment and scientific objectifying not one of moral arbitrator and truth negotiator.

In the next two chapters, I explore the Australian system of death investigation and in particular examine how effectual the office here has been in managing the complex and at times conflicting roles inherited from the English system. Unlike the US experience, Australia has not sought to detach the social and

---

151 See for example, Massachusetts Consolidated Laws, Chapter 38, s8. Medical Examiners and Inquests (date unknown) http://www.mass.gov/legis/laws/mgl/38-7.htm Last modified on 14-Jul-2004 (Accessed 2 August 2004).

152 Lilian & Mattioni, 1964 p229-230.

153 Helpern, 1972 pp801-804.

154 As raised on page 35 these are functions expected of an English coroner's inquest as described in the Broderick Committee Report 1971.

moral interests of coronial death investigation in quite the same manner the medical examiner system seems to have achieved. While this is particularly evident when examining the way coroners deal with medical misadventure, by no means has it diminished coroners' reliance on medicine's involvement in death investigation.

CHAPTER 3

THE CORONER'S OFFICE: THE AUSTRALIAN AND SOUTH AUSTRALIAN EXPERIENCE 1788 TO 1900

3.1. Introduction

The advent of the coroner system in Australia holds much in common with its introduction to the US eastern seaboard. The fact that Australia and parts of the US were initially settled as British penal colonies, and the English brought with them the laws of England, informed the way the coronial office was introduced to both countries. Similar to the US, the Australian coronership adapted to meet local conditions. Nonetheless, Australia has a relatively short legal history, founded on the law of England, and the way the coroner's office evolved in Australia shares more in common with the system operating in Britain than the US.

Principally, this chapter covers the origins of coroners in Australia from settlement in 1788 to 1900. While Australia encompasses vast geographical territory, its island status, initial colonisation by only one nation, Britain, and the way in which settlement occurred across the continent, ensured that Australia inherited the English legal system. Therefore, by way of examining how the coronership was introduced to Australia, and later South Australia, the chapter begins with a brief review of the judicial system as it was established in the first colony, New South Wales (hereafter NSW). I then move on to examine the coronership as it evolved in South Australia.

Prior to Federation in 1901, each Australian colony was a separate British province. Nonetheless, the statutes enacted during the 19th century upon which NSW's legal foundations were laid, were generally incorporated into the other colonies as they were formed during the 1800s. This also pertained to the law regulating coroners, although each colony looked toward English statutes when enacting their coronership, rather than those of NSW. In this manner each colony developed its own legislation pertaining to the office of coroner based on the English model.

As with coronerships in England and the US, early Australian coroners were not immune to controversy and this chapter further illustrates the political nature of this office by examining how some of the early coroners enacted the role. The history of the coronership, medicine and hospitals in South Australia is given particular attention in this chapter. As one of two colonies in Australia not founded as a convict settlement, South Australia enacted coronial law relatively early in its history[1]. Similarly, legislation and licensing of the medical profession occurred soon after proclamation, serving to delineate a 'qualified' doctor from one that was 'unqualified' to be a medical practitioner. This provided the legal foundation on which the colony's medical profession could organise and regulate its practice. However, it was also a means by which the colony's more prominent doctors could secure a competitive advantage in the medical marketplace and the coronership provided a useful forum to promote this endeavour.

The relationship between medicine and the coronership in South Australia, which was forged early in its history, provides a useful insight into how hospital deaths from medical misadventure came to be managed. In this chapter I explain how the establishment of state controlled hospitals, notably the Adelaide Hospital (now the Royal Adelaide Hospital), provided opportunity for a prominent group of medical practitioners to exert considerable power over the practice of medicine in the colony and how many of these medical elite took an active role in the coronership. This exploration takes into account the wider social context of this colony's foundation and two basic arguments begin to arise from this analysis. Firstly, many of the victims of medical fatalities were in life, venerable individuals[2]. Secondly, through its professional status and occupational function in investigating death, medicine has come to hold considerable power, authority and influence in the coroner's court. The threads of this argument are woven throughout the following chapters.

---

1 From 1836 to 1851 the region that was later to become Victoria was a district of NSW and convicts were assigned to work gangs in the Port Phillip District of the colony. Victoria separated from NSW on 1 July 1851 and became a colony in its own right and therefore, technically, Victoria like South Australia was not founded as a penal colony. See, Victorian Government, *History of Victoria: Convicts*, State Records Victoria, http://www.prov.vic.gov.au/access/PROVguide57.htm#victoria (Accessed 18th August 2004)

2 This argument will be elaborated on in Chapter 8 where contemporary coroner's cases will further illustrate this point.

3.2. Coroners in the Territory of NSW: the 18th and 19th centuries

Australia was first settled as a penal colony of Great Britain in 1788. On the arrival of the First Fleet, Captain Arthur Phillip assumed authority as Governor of the territory of NSW, which at that time comprised almost all the eastern half of Australia including Tasmania (formally Van Diemen's Land)[3]. Despite the establishment of NSW as a convict settlement under the charge of a military garrison, two historic enactments made NSW a colony with a civil rather than a military government[4]. This had the effect that all laws and statutes within the realm of England generally became the laws of the new colony. Consequently English common law came into force in NSW and the common law powers associated with the English coronial system were incorporated into the new colony[5]. Nevertheless, the judicial system first established in NSW reflected a military form of justice and it is doubtful that a coronership was considered during the very early years of settlement.

Instituting a legal system in the territory of NSW was first given into the charge of David Collins, a captain of marines who had arrived in NSW with Phillip. While Collins was commissioned as judge-advocate, he had no legal training. Despite this, he was given responsibility to establish the colony's entire legal system and with a handful of legal texts to guide him, Collins endeavoured to ensure that English law was followed in the colony[6]. Commissioned alongside Collins were six naval and military officials to preside over the criminal court which, to begin with, followed procedures of a court-marshal[7]. British statute passed in 1787 had provided for a court of criminal jurisdiction to be instituted in the territory and under this Act two courts were

---

3 Windeyer, W. *Lecturers on legal history.* 2nd edn, The Law Book Company of Australasia, Sydney, 1957 p296.

4 The first statute that made NSW a colony was The NSW Act, 4 Geo.1V, c96 1823. Five years later, the NSW Act, 9 Geo.1V, c 83 (1828) provided that all laws and statutes in force within the realm of England should be applied in the administration of justice in the courts of NSW and Van Diemen's Land. Originally proffered as temporary, this Act was continued by successive statutes.

5 Waller, K.. *Coronial law and practice in New South Wales.* 3rd edn, Butterworths, Sydney 1994 p2.

6 Castles, A. *An Australian legal history,* The Law Book Company Ltd, Sydney, 1982 p60; and Chapman, D. *1788 The people of the First Fleet,* Doubleday Australia Pty Ltd., Sydney, 1986 p65.

7 Windeyer, 1957 p301.

established in NSW, the *Court of Criminal Jurisdiction* and the *Court of Civil Jurisdiction*[8].

In 1797, Richard Dore was officially appointed to replace Collins as judge-advocate. While Dore was a lawyer he seems to have had little success in changing the judicial system and the courts continued to proceed in the manner of a military tribunal. This caused dissatisfaction among the colony's increasingly free population who believed that a tribunal composed of only military officers untrained in law was incapable of dealing with the diverse nature of cases being brought before the courts[9]. In addition, crime and the fear of homicide were becoming a concern among the free population, in what was still a penal colony, and the need for a coroner was gaining attention.

The appointment of Ellis Bent in 1809, described as a 'barrister of eminence', as the new judge-advocate of NSW initiated a much needed review of the judicial system[10]. Brent took office in Sydney on 1 January 1810, and was better qualified and more capable than his predecessors. A year after his appointment, Bent wrote to the Secretary of State for the colonies (the Earl of Liverpool) pointing out the ineptitude of the existing courts of justice and proposed a number of reforms[11]. In his letter, Bent appealed for two barristers and two attorneys to be induced to come to NSW to practice law, and that one of these attorneys should be appointed coroner for the territory.

By 1812, the need for a coroner had reached some urgency and Governor Macquarie appointed John W Lewin to the office of Coroner at Sydney Town. Bent's recommendation that a lawyer be appointed was ignored. Lewin, who arrived in the colony in 1799 with a recommendation from the Duke of Portland, was instead a painter and drawer in natural history[12].

---

8 Act 27 Geo.III c2 1787. This statue provided for the establishment of a criminal court only, and as a consequence there was some contention during the early 1800s that the civil court was improperly and unconstitutionally created. Windeyer, 1957 p302.

9 Windeyer, 1957 p306.

10 Commonwealth of Australia, *Historical Records of Australia.* Vol.VII, Government Printers, Canberra, 1916 p81.

11 Among Brent's recommendations for legal reform, he proposed the establishment of a Supreme Court of Judicature in Sydney to serve NSW and advocated for a system of trial by jury. Commonwealth of Australia, 1916 pp818-819.

12 Commonwealth of Australia, 1916, p810.

Macquarie's choice of Lewin to the coronership was not outside accepted practice. In 1812 English coroners were still covered by the statute De Officio Coronatoris[13] and under this statute Lewin was required to be honest, lawful and wise, a holder of substantial lands and reside in the district. As a free settler with a recommendation from an English aristocrat, Lewin easily met the first three criteria. In the new colony, the latter would not have been difficult to fulfil as land grants to free settlers were commonly allocated. Indeed, the list of land grant records for 1811-1812 show that Lewin was granted 200 acres just outside Sydney Town by Macquarie[14]. In addition, extensive powers were afforded to Governors, and unlike England where county coroners were elected, the Governor of NSW by his commission could appoint and remove anyone to the office of coroner[15].

Under the statute De Officio Coronatoris, Lewin would have been empowered to investigate sudden or unexpected deaths and determine who the deceased was, and how, when and where he died. It is highly likely that he would have conducted inquests in the English manner of the time, and held the power to arrest any person deemed guilty of having caused or been an accessory or instrumental to the death. Outside the coroner's Sydney jurisdiction, justices of the peace could assume the duties of the coroner as required.

On Lewin's death, he was replaced in 1820 by Edward Smith Hall, who was appointed coroner for the NSW territory along with two assistant coroners, Thomas Carne and John Eyre (to the districts of Liverpool and Parramatta respectively). Hall's appointment to the coronership was a contentious one, a trend that was to prove common to this office. Apart from being coroner, Hall was the editor of the colony's *Monitor* newspaper. In 1826 he was accused by Governor Darling of disturbing the peace of the territory by provoking the troops and convicts of the colony to mutiny and insurrection through publication of 'seditious and inflammatory articles'[16]. Hall was subsequently dismissed as coroner.

---

13 De Officio Coronatoris (4 Edw I c.2) was enacted in 1276, and was not repealed in England and Wales until the Coroners Act of 1887.

14 Commonwealth of Australia, 1916 p652.

15 Commonwealth of Australia, *Historical records of Australia.* Vol.XIV, Government Printers, Canberra, 1922 p403.

16 Commonwealth of Australia, *Historical records of Australia.* Vol. XII. Government Printers, Canberra, 1919 p762.

Darling then appointed a new coroner, Lawrence Halloran, a former convict who had been transported to the colony for seven years in 1818 for forgery[17]. Halloran was clearly unsuited to the coronership and was soon dismissed when it was brought to the Governor's attention that he had been involved in a series of altercations with Archdeacon Scott, the head of the church in NSW[18]. Halloran was replaced in 1828 by C.T. Smeathman, who had a military background and prior to emigrating to NSW was an inspector of Foreign Corps. Historical records do not allude to Smeathman's capabilities as coroner, but they do indicate his use of this judicial appointment to advance his acquisition of land in the colony[19].

Regular transportation of convicts to NSW ceased about 1840 and at this time there were seven 'official' coroners. As the number of free settlers continued to pour into the colony, the workload for coroners increased and it was not uncommon for doctors in the colony to supplement their income by accepting a retainer to act as local corners[20]. By 1856 the number of coroners had risen to twenty-nine.

By the mid 1800s the need to regulate the practices of coroners in the colony was evident and during the later part of the century various statutes relating to this office were enacted in NSW. These included the Act 1 Vic c.3 1837, which provided for medical witnesses at coroner's inquests and for inquiries to be held by justices of the peace. The Act 24 Vic c.10 1861 empowered coroners to investigate the cause and origin of fires by which property might

---

17 In reviewing various volumes of the *Historical records of Australia* it appears that Lawrence Halloran (first name was spelt Laurence in dispatches prior to 1828) was sometimes referred to as Dr Halloran in several Governor's dispatches to and from England between 1828 and 1829. However, there is no reference to his being a medical doctor, rather his profession was described as clergyman and school master. See for example, Commonwealth of Australia, 1919 p762 and Commonwealth of Australia, *Historical records of Australia.* Vol. X. Government Printers, Canberra, 1917 p478.

18 Commonwealth of Australia, *Historical records of Australia.* Vol.XIV, 1922 p391.

19 Smeathman was expecting four sections of land to be granted to him on arrival in the colony. In a letter to Viscount Goderich dated 30th April 1832, he further requested a land grant at Woolloomooloo, implying that this would be a reward for satisfactorily executing the office of coroner over the last four years for the salary of 100 pounds per annum. Commonwealth of Australia, *Historical records of Australia.* Vol.XVI, 1923 p769.

20 Golder, H. *High and responsible office: a history of the NSW magistracy,* Sydney University Press, Sydney, 1991 p118.

be destroyed; and the Act 39 Vic c.22 1876 abolished the law with respect to verdicts of felo-de-se (suicide)[21].

These Acts were finally consolidated into the NSW Coroners' Act of 1898, which also recited that the coroner could direct any legally qualified medical practitioner to perform a post-mortem examination, providing that the coroner was satisfied that the medical practitioner had not partly or entirely contributed to the deceased's death by improper or negligent treatment[22]. This Act was silent, however, as to the duties of the coroner and jury in conducting inquests into sudden or unexpected death. Nevertheless, in accordance with legal custom and practice at the time, the NSW coroner would have looked to the practices in England under the English Coroners Act of 1887, and common law, to resolve inquest matters and the verdicts to be returned.

NSW was not to remain the only colony in Australia. During the 19th century separate colonies were formed in a division of some of the territory that once comprised NSW. The island of Tasmania became a colony in 1825, followed by South Australia in 1836, Victoria in 1851 and Queensland in 1859. While the western half of Australia never formed part of NSW, it became a colony of the United Kingdom in 1829 when Captain Fremantle landed at the entrance of the Swan River and, under instructions from England, claimed the vast geographical territory of Western Australia[23]. Until Federation in 1901, each colony in Australia was a separate province of Great Britain, with its own government, based on the English system. In a manner not dissimilar to the NSW experience, English common law was incorporated into the other colonies, and hence the English coronial system was adopted throughout Australia.

---

21 The role of Australian coroners with respect to investigating fires is one of departure from the English practice. Although the City of London coroner was empowered by the City of London Fires Inquests Act 1888 (repealed in 1997) to hold an inquiry into fires within the city, this power was not extended to county or borough coroners. See, Matthews, P. Foreman, J. *Jervis on the office and duties of coroners with forms and precedents*. 10th edn, Sweet & Maxwell, London 1986. On the other hand, Australian coroners hold jurisdiction into the determination of the cause of fires in every state and territory.

22 Coroners Act 1898 [NSW] s8.

23 Windeyer, 1957 p297

3.3 South Australia: colonial coroners, hospitals and the first medical adverse events

3.3.1. The colony, law and the coronership

The formation of South Australia differed significantly from other Australian colonies, (NSW, Tasmania and Western Australia), in that it was never a convict settlement. The South Australian Act of 1834 guaranteed against the transportation of convicts in the hope of attracting a 'superior class of settler' to a colony established on the principles of civil liberty, social opportunity and equality for all religions[24]. The South Australian project was conceived in England during the late 1820s, when, in theory, the public were said to enjoy certain basic rights, but in practice, England had a clearly delineated class structure and any civil liberties were moderated by one's place in society[25]. Wade's published account of the abuses conducted by Church and State during the early 1800s implied that class delineation was intrinsic to State, and that 'England never had a constitution in which equality of civil rights and equal protection to all interests were recognised'[26]. Thus for those politically dissatisfied and disenfranchised with their place in British society, South Australia offered hope of liberty, freedom and opportunity, albeit within a society still contiguous with the Motherland, Christianity and English law.

John Hindmarsh was selected as the first Governor and he in turn appointed George Stevenson as his private secretary[27]. Hindmarsh and Stevenson arrived together and, shortly thereafter, South Australia was proclaimed a colony on 28 December 1836, the date subsequently fixed by statute as the day English law was introduced to South Australia[28]. In January of the following year, Hindmarsh appointed six justices of the peace including

---

24 Pike, D. *Paradise of dissent: South Australia 1829-1857*, Melbourne University Press, Melbourne, 1967 p283.

25 Pike, 1967 pp3-4.

26 Wade, J. *The extraordinary black book.* 2nd edn, 1832, reprinted A.M. Kelly, New York, 1970 p597. Wade first published his sociological account of Church and State as a series of periodicals in 1820 under the titles *The Black Book* or *Corruption Unmasked.* A second enlarged edition was published in 1832, and this is the version cited here. According to Pike, numerous copies of the book, in its periodical form, were included among the books brought to South Australia by the early settlers. See, Pike 1967 p4.

27 Stevenson, a Scot, was typical of the frustrated middle-class professional attracted to the colony. In his youth he was forced to abandon medical studies due to his involvement in fraud, and later, on becoming a joint editor of a Whig newspaper in England, he became enmeshed in further controversy and debt before joining the South Australian project. See Pike 1967p104.

28 Interpretation Act 1915: (SA) s48.

Stevenson, and through this appointment he became the colony's first coroner in 1837[29]. How much time Stevenson devoted to his duties as coroner is difficult to evaluate as he was concurrently justice of the peace, the governor's private secretary, clerk of the court, protector of Aborigines, registrar of shipping, agent for Lloyd's, postmaster, customs officer and editor and part owner of the *South Australian Gazette and Colonial Register* newspaper (referred to hereafter as the *Register*)[30]. This latter role, as founder and editor of the colony's first newspaper, seems to have been Stevenson's primary passion. Like Hall, his NSW coroner counterpart, Stevenson's journalistic endeavours and extremist views often brought him into conflict with the government of the day. Nonetheless, he seems to have executed the office of coroner with some merit until his death, aged 58 years, in 1856[31].

Stevenson used his newspaper, the *Register*, to publish details of many of the cases that came before him as the Adelaide coroner, and from this source it can been gleaned that the practices of the English inquest were closely followed in the colony[32]. Inquests were public forums, held in the closest 'public' house (often hospitals or licensed taverns) to where the deceased had been found and the body deposited until the inquest was held. Several medical practitioners in the colony acted as medical witnesses and conducted post-mortems under orders from Coroner Stevenson. As shall be raised later, it was not unknown for some of these medical practitioners to also carry out coronial duties. Outside of Adelaide, any justice of the peace or magistrate could assume the duties of coroner. By 1849, the colonial government in South Australia had began to recognise the need for the position and duties of

---

29 Despite an extensive search at the office of State Records of South Australia, no documents that authenticate Stevenson's appointment as the coroner could be located. However, his obituary reported in the Adelaide Times acknowledged his role as the first South Australian coroner [*Obituary George Stevenson, The Adelaide Times.* 20th October 1856]. It could be assumed that his previous medical studies were thought appropriate to his coronial duties, and his appointment as a justice of the peace certainly made him eligible to hold this office.

30 Pike, 1967 p104-105.

31 The Adelaide Times, 20th October 1856.

32 Several inquests were reported in 1838 in the *Register,* the first being that of Enoch Pegler, a labourer, who was found dead from head injuries. The *Register* reported that Coroner George Stevenson and a jury of 12 proceeded to the spot where the deceased lay, and, having viewed the body, examined several witnesses including Drs Cotter, Woodforde and Gill, who were directed by Stevenson to examine the body. On consideration of the evidence the verdict of the jury was that a native or natives unknown had wilfully murdered the deceased. See, Stevenson, G. (reporter) 'Coroners Inquest', *South Australian Gazette & Colonial Register,* Vol.1 No.16 1838.

the coroner to be regulated by legislature[33] and in the following year an Ordinance was enacted to regulate the office of coroner in South Australia[34].

The South Australian Ordinance predated the NSW Coroners Act of 1898 by 48 years and was a much fuller piece of legislation. The Ordinance stipulated that sheriffs, deputy sheriffs and every justice of the peace should be declared a coroner, which was not surprising given the scattered population and long distances between centres throughout the colony. It also outlined the duties of the coroner when he was notified (by a constable) of a sudden or suspicious death and gave coroners the power to summon a sufficient number of good and lawful men as jurors if he considered an inquest was necessary, and stipulated the qualifications of jurors upon inquest[35]. Following the English Act (3.Vic.I of 1838), the South Australian Ordinance also provided for 'legally qualified' medical practitioners to conduct post-mortems, which was to signify an important caveat in the development of medicine's relationship within the legal fraternity and the coronership in this state[36].

As was to appear in the NSW Coroners Act of 1898, the Ordinance prohibited medical officers from conducting post-mortems if they were alleged to have caused the deceased's death by improper or negligent treatment and also declared that when an inquest was held on the body of any person who had died in a hospital, infirmary, lunatic asylum or medical institution, the medical officer, whose duty it was to attend the deceased, was not entitled to fees or remuneration from attending the inquest[37]. Whether the attending doctor could also conduct a post-mortem was not stipulated, but it would have been expected that where improper treatment in an institution was suspected, section five of the Act would have prevented the attending doctor from performing a post-mortem.

---

33 This was outlined in a letter from the SA Colonial Secretary to Dr William Wyatt (Coroner) 6th February 1849 [SA State Records, Adelaide, GRG 24/4 Microfilm].

34 Coroner's Ordinance Act No. 7 1850 (SA). Note that an Ordinance is a declaration by the Crown in answer to a petition inquiring as to the law relative to a particular matter, as contrasted with a statute laying down new law. See, Walker, D. *The Oxford companion to law*, Clarendon Press, Oxford, 1980 p906.

35 Coroner's Ordinance 1850 (SA) s2; 3; 4.

36 Coroner's Ordinance 1850 (SA) s5.

37 Coroner's Ordinance 1850 (SA) s5; 7.

Like the NSW Coroners Act of 1898, the Ordinance was silent as to the verdicts the jury could return, and again, it is likely that common law was intended to fill these gaps[38]. Section 16 of the Ordinance made it clear that if issues arose during an inquest which were not provided for in the Act, then the coroner and jury were to follow the practices that would be adopted by their English counterparts, under similar circumstance. The Ordinance also gave the coroner the power to arrest any person present at the inquest, deemed guilty of causing or being an accessory or instrumental to the deceased's death[39]. If the person was absent from the inquest, the coroner had the power to issue a warrant for his/her apprehension[40]. In what may have been a slight departure from English practice, a clause in the Ordinance gave every person charged with having caused the deceased's death the right to cross examine witnesses and to produce evidence in his/her defence[41]. It is unclear, however, whether this was intended to endow the coroner's inquest with the powers of a committal proceeding, as while committal proceedings sometimes followed inquests in England, these were held before a magistrate, not a coroner[42].

How many accused took advantage of their right to cross examine witnesses and produce evidence in their defence is difficult to quantify. Nonetheless, given that many cases of a criminal nature that came before the colonial coroner seem to have involved the uneducated and disadvantaged, it appears unlikely that many availed themselves of this opportunity. The Brown inquest, held on 6 July 1867, illustrates this point.

The inquest was into the death of Margaret Brown's infant son, who had been found dead in a privy[43]. Brown, a 27 year old unmarried servant, testified that she did not realise she was so close to full term and delivered the baby while sitting on the privy, without knowing the infant had fallen in. A witness who worked with Brown, verified that she did not look pregnant, and that she was

---

38 Kitchin, C. *Evolving role of the coroner,* Unpublished honours thesis, University of Adealide, Adelaide, 1982 p15.
39 Coroner's Ordinance 1850 (SA) s15.
40 Sheridan, J. Bakewell, J. *The Magistrates' Guide,* Government Printer, Adelaide, 1879 p130.
41 Coroner's Ordinance Act No. 7 1850 (SA) s13.
42 Kitchin, 1982 p17.
43 Coroners Inquest into the death of Infant Brown 6 July 1867 [SA State Records, Adelaide, GRG 1/27 Microfilm].

unaware of Brown's condition until the birth transpired. When the incident was reported, police took Brown to the Adelaide Hospital where she remained a patient until a few days before the inquest was held[44].

The inquest findings were censorious of Brown's behaviour and it seems she had no advocates in court. Thomas Corbin, the medical practitioner who conducted the post-mortem, told the coroner and jury of fourteen men, that the baby had breathed, but the navel string (umbilicus) was torn and haemorrhage from the site was the likely cause of death. The fact that the privy was deep, and the weight of the child may well have torn the umbilicus, did not impress the jury. Corbin's testimony that the child had breathed was the basis for the jury's verdict that Brown 'did feloniously kill and slay the said child'[45]. There is no indication within the inquest records whether the coroner exercised his right under the SA Coroner's Ordinance of 1850 to arrest Brown. There was, however, a notation that the file was forwarded to the office of the Attorney-General for her prosecution.

Additional South Australian legislation pertaining to the coroner's office was passed during the 19th century, including Act No 5 of 1871, which established that a coronial verdict of felo-de-se did not prohibit the deceased from a Christian burial, nor did the deceased's property need to be forfeited to the Crown. The Coroner's Act of 1884, established the title and jurisdiction of a city coroner, to 'take all inquests on dead bodies or fires within a distance of ten miles from the General Post Office in the City of Adelaide'[46]. This Act also set the jury at not less than twelve men for inquests and not less than six for inquiries into fires[47]. The Act again stipulated that any interested person, with the coroner's permission, could attend the inquest personally or by counsel, and examine and cross-examine witnesses. The Act also empowered the

---

44 Margaret Brown's appearance in the coroner's court was cross referenced with the Adelaide Hospital Admission Register 1840-1871 which indicated she was admitted on 10 June 1867 and discharged on 2 July 1867. State Records: Adelaide, GRG 78/49 Microfilm.

45 Infant Brown Inquest 6 July 1867. The power of coroners to find someone criminally liable for a death was rescinded in the following century see, Coroner's Act 1975 (SA) s26(3). An inquest into a somewhat similar, but much more recent infant death in May 2003, provides an interesting comparison to the Brown finding. In 2004, the Victorian Coroners Court heard that a 14 year old girl, who was unaware she was pregnant, gave birth in the backyard of her home. As she lay on the ground in severe pain, her dog grabbed and mauled the infant to death. In this case the Coroner found the tragedy was without blame. See, 'Dog killed new baby', *The Advertiser*, 23 July 2004 p11.

46 Coroners Act 1884 (SA) s3.

coroner to punish any person, by imprisonment or fine, for contempt of court and all records of the proceedings were now to be transmitted to the South Australian Attorney-General and not the Colonial Secretary as the previous Ordinance of 1850 had directed[48].

The Coroners Act of 1884 also made reference to another piece of legislation enacted in the same year, the Anatomy Act of 1884. By this time the colony had founded the University of Adelaide and several public and private hospitals had been built in the city of Adelaide and rural locations. The need for a medical school and nurse training in the colony was now warranted, and the Anatomy Act was brought into force to authorise the establishment of anatomy schools and to regulate practices therein[49].

3.3.2. The affiliation of medicine and hospitals in the colony

The practice of medicine in South Australia was legislated early in the colony's history. From its beginning, Adelaide had been well supplied with men claiming the title doctor or surgeon and two years after the colony was first settled, an article appeared in the *Register* requesting that a medical board be established with a recommendation that Doctors Cotter, Wyatt, Wright and Woodforde form the first membership[50]. The Medical Practitioners Ordinance, proclaimed in 1844, stipulated that to gain a licence to practice one needed to be:

---

47 This was repealed to not less than six by the Coroners Amendment Act, 1889.

48 The office of the Attorney-General dates back to 13th century England, with the incumbent, titular head and first law officer of the Crown. See, Selway, B. *The Constitution of South Australia*, The Federation Press, Sydney, 1997pp80-81. Among other duties, the Attorney-General as head of the legal profession in South Australia was responsible for advising the Governor and later, Government, on judicial appointments. As the Crown could not appear in its own courts to support its interests, it was represented by the Attorney-General, a situation that remains today. At common law, the Attorney-General could accept service of legal proceedings on behalf of the Crown and institute proceedings. After the official opening of the South Australian Parliament in April 1857 the Attorney-General became a minister and member of Cabinet. Like the coroner, the office of the Attorney-General has evolved over time and continues today with the primary responsibility being the provision of legal advice to the Government and Parliament.

49 The University of Adelaide was founded by statute in November 1874 and in 1885 the first medical school in the colony was established at this University.
The first hospital to formally instigate a training program for nurses was the Adelaide Children's Hospital in 1879. It was not until the appointment of Maud Thackthwaite in 1889 (from The London Hospital) as superintendent of nurses, that formal training commenced at the Adelaide Hospital. Durdin, J. *Eleven thousand nurses: a history of nursing education at the Royal Adelaide Hospital 1899-1993,* Royal Adelaide Hospital, Adelaide, 1999 p18.

50 Pike 1967 p508.

> a Doctor or Bachelor of Medicine of some University, or a Physician, or Surgeon, licensed...by some College of Physicians or Surgeons in Great Britain or Ireland, or a member of the Company of Apothecaries of London or Dublin, or a regulate Graduate in Medicine of some Foreign University which shall appear to the said Medical Board to be of sufficient credit ... or a Medical Officer...of Her Majesty's sea or land service[51].

This legislation reflected the early 19th century English professional groupings. At that time medicine was essentially organised into three distinct groups. At the top of the professional tree were the physicians, who practised the profession of physic (internal medicine); followed by the surgeons, who practiced the craft of surgery; and lastly, the apothecaries, who practiced the trade of compounding, supplying and selling of drugs[52]. In England, these orders had been organised and regulated by various colleges or societies for the purpose of licensure. The distinguishing feature of the South Australian Ordinance was that it brought these three orders together under the one professional group with the Medical Board given the authority to register 'qualified' practitioners and regulate medical practice in South Australia[53]. The Adelaide Medical Board was created in the following year, 1845, and within five years 50 practitioners were registered. The establishment of the Medical Board, however, did not stop unregistered practitioners continuing to practice throughout South Australia, seemingly with various degrees of mastery and acceptance by the public and government agencies. According to Jennings' research into the history of medicine in South Australia, on some occasions these unqualified practitioners also provided 'medical' evidence at coroner's inquests[54].

Like similar attempts to regulate the practice of medicine through statute, the move to license medical practitioners in the colony was promoted as one of public interest to protect consumers from unscrupulous charlatans and quacks. That such laws have ultimately ensured medicine's exclusivity, power, prestige, status, privileges, authority and professional dominance has been raised by many, with Willis' account among the most articulate in the

---

51 Medical Practitioners Ordinance 1844 s1

52 Peterson, M. *The medical profession in Mid-Victorian London*, University of California Press, Berkeley, 1978 pp11-12.

53 According to Peterson, it was not until the passage of the Medical Act of 1858 that medicine and surgery in England and Wales were combined under the one qualification. See, Peterson 1978 p34.

54 Jennings, R. *The medical profession and the state in South Australia, 1836-1975*, PhD thesis, Adelaide University, 1998.

Australian context[55]. Berlant, in his sociological treatise on the medical profession in England and the US, also suggested that licensure has been successfully used by medicine to become a legally privileged group, with the power of self-regulation and determination that provided monopolistic benefits for the profession[56]. Nevertheless, licensure alone cannot account for the ascent of the medical profession in status, privilege and high social standing. While statute certainly secured, protected and safeguarded the medical profession by delineating medical turf, the supremacy medicine commands has also emanated from the creation of a vast and dynamic industry, which promotes and sells a commodity fundamental to human need, wellness, or perhaps more accurately put, being disease free[57].

A brief examination of medicine's history, particularly as it relates to the advent of the 'modern' hospital, illustrates the control medicine has come to exert over its practices in these institutions. The rise of medicine in these institutions is relevant to how hospital fatalities have come to be managed, both inside and outside the profession.

In England, hospitals had existed from at least 1123, but these were primarily charity organisations for the needy, infirmed and aged[58]. Those that could afford to pay for private medical attendance were cared for at home. While in cities like London, the sick poor in the early part of the 19th century continued to be nursed in either voluntary hospitals or workhouse infirmaries[59], these organisations began to change in accordance with changes that were occurring in medical education.

---

55 Willis used a sociological Marxist framework to examine the notion of medical dominance in the health division of labour. See: Willis, E. *Medical Dominance*, Allen & Unwin, Sydney, 1990 esp.51.

56 Berlant, J. *Profession and monopoly: a study of medicine in the United States and Great Britain*, University of California Press, Berkeley, 1975 pp128-129.

57 Medicine's role in the creation of the healthcare industry in Australia, England and the US has been well covered, in that order, by Willis, 1990; Peterson, 1978; and, Starr, P. *The social transformation of American medicine*, Basic Books, New York 1982.

58 According to Peterson, the oldest hospitals in London are St Bartholomew's, founded in 1123 and St Thomas's founded in 1207. See, Peterson, 1978 p12.

59 Workhouse infirmaries were administered under the British Poor Law for the destitute sick, with little in the way of medical or nursing care administered. Patients usually came from the working class with an expectation that once cured they would return to the workforce. On the other hand, voluntary hospitals were usually well endowed and financed from charitable subscriptions from the public or laymen ranging from the ranks of trade to the aristocracy. For a more comprehensive discussion of hospital charity,see: Woodward, J. *To do the sick no harm: A study of the British voluntary hospital system to 1875*, Routledge & Kegan Paul, London 1974.

Before 1800 medical training had varied considerably. For example, practitioners may have undergone a classical university preparation, a 'broom-and-apron apprenticeship' model, or had no discernible instruction whatsoever[60]. However, as medical knowledge advanced and the education and practice of medicine became regulated, hospitals became places for teaching medicine. This was to eventually have far-reaching effects, with the public's perception of hospitals changing from one of distaste and scepticism in the 1800s and early 1900s, to a general acceptance of hospitals as institutions of medical science, learning and technology in the treatment of serious disease.

The advent of the 'teaching' hospital also influenced the structure of the medical profession. As a professional group, already well entrenched within a status stratification, the hospital provided the means to delineate this hierarchal structure in a much more overt way. The emergence of the medical consultant, who held both hospital and medical school posts, served to establish a medical elite who acquired extensive power not only in the management of patients, but in influencing the day-to-day operation of hospitals and the direction of health care policy. As society increasingly valued the services provided by 'modern' medicine, a hospital industry evolved steadily, constructed around disease.

South Australia was not immune to the move to organised medicine and many of the changes that occurred within the British medical system were replicated in colonial South Australia. By 1900 there were significant similarities with the way medicine was taught and organised and the evolution of hospitals followed a model similar to the British hospital system.

In the early period of South Australia's settlement, those who could afford to pay for private medical care were nursed at home and any provision for hospitals in the colony was a matter of public welfare, particularly for the destitute sick. As the colony was expected to be a self supporting venture, there was an expectation on the part of Governor Gawler, who had replaced Hindmarsh in 1838, that the community would contribute to the building and maintenance of an infirmary, in the manner of the English voluntary hospital.

---

60 Peterson, 1978 p5.

Nonetheless, the principles of social reform on which South Australia was built did not extend to community charity in financing this infirmary, and it was left to the Governor to set aside monies to rent a hut as the colony's first hospital in 1837[61]. Dr William Wyatt was later selected to be in charge of the colonial infirmary and a board was appointed by the Governor to administer its operation[62]. The hospital board included Wyatt, surgeon Dr James Nash and two other non-medical members. An early article in the *Register* highlighted the terms of admission to the infirmary, indicating that the hospital was essentially a charitable establishment for the destitute, more in keeping with the English workhouse infirmaries, than the notion of a voluntary hospital[63].

Clearly a hut could not sustain the needs of the sick poor and destitute in the colony for long, and in 1841 the first Adelaide Hospital was officially opened[64]. Again, Wyatt was one of three honorary medical officers appointed, but the hospital soon experienced periodic overcrowding and a second Adelaide Hospital was built in various stages commencing in 1855 on the site of the present Royal Adelaide Hospital, which remains the largest public hospital in South Australia[65].

By 1867 the South Australian Hospitals Act had been passed, which allowed the Governor to proclaim public hospitals in the colony and appoint boards of

---

61 See Estcourt Hughs, J. *A history of the Royal Adelaide Hospital.* 2nd edn, Board of Management of the RAH, Adelaide, 1982.

62 Dr William Wyatt arrived in the colony in 1837, and was reputedly the first surgeon in the colony to amputate a patient's leg [South Australian Trained Nurses' Centenary Committee, *Nursing in South Australia: first hundred years 1837-1937.* 2nd edn, Griffin Press, Adelaide, 1989 p27]. In 1845 when the South Australian Medical Board was established, he was one of the original members and his name appeared second on the Register. As will become clear, Wyatt was a prominent member of the colony's community and more particularly, he was appointed coroner at Adelaide in 1847.

63 Stevenson, G. reporter 'Control of Infirmary' *South Australian Gazette & Colonial Register* Vol.1 No.46 1838.

64 While the Adelaide Hospital did not officially open until 1841, the admission register records four patients as having been admitted during 1840, increasing to sixty seven admissions in 1841. This register provides an insight to the sort of patients, and their primary diseases, treated in the hospital during the 1840s. While this establishment continued to cater for the sick poor, it was also utilized by the working class, including seamen with scurvy, injured labours and the 'insane'. Those patients deemed destitute were entitled to gratuitous medical attendance. The majority of patients were male and reflected the large number of accident cases in the colony during its establishment, and patients' ages ranged between 2 and 48 years, with the majority between 20-30 years old. Adelaide Hospital, *Admission Register 1840-1912*, State Records: Adelaide, GRG 78/49 Microfilm.

65 Estcourt Hughs, 1982 p27.

management who would be responsible for the general management, care, control and superintendence of hospitals in the colony[66]. Wyatt, who had experienced a somewhat turbulent relationship with the first Adelaide Hospital board, was appointed chairman of the new Adelaide Hospital Board from 1870 to 1886[67].

By the mid 1870s the colony's population had grown to well over 200,000[68]. The need for additional hospitals to meet the colony's growing population was met with a mixture of state and private charity funded institutions. Among other hospitals in Adelaide, an asylum for the insane, later the Glenside Hospital, was opened in 1870 and the Adelaide Children's Hospital was opened in 1879. In the 1880s two private hospitals were established, the Wakefield Street Hospital in 1883 and one in North Adelaide in 1884, which later became Calvary Hospital. In rural South Australia, mining in the mid north heralded a rapid increase in the population around Burra and a small casualty hospital was established there in 1849[69]. Additional regional hospitals were then opened including one in the colony's south at Mount Gambier in 1869, and in 1870 one on the Eyre Peninsula at Port Lincoln. In 1870 a hospital was opened in York Peninsula at Wallaroo followed in 1875, by the Port Augusta Hospital. The rural population of South Australia was, however, generally dispersed across a wide geographical area and the establishment of country hospitals generally made slow progress, with tent hospitals operating at some railway sidings and mining settlements[70].

By 1900 there was a scattered network of hospitals across South Australia, many of them following the voluntary system that had first been envisaged for the Adelaide Hospital. Many of these privately operated enterprises received grants from the government to provide services that the state would otherwise have been obligated to provide, creating a mutual partnership which proved crucial to these hospitals' ongoing existence and medical attendance.

---

66 Hospitals Act 1867 (SA) s13.10.

67 For an authoritative account of Wyatt's dispute with the first Adelaide Hospital Board see, Williams, J. *Supervised autonomy: medical specialties and structured conflict in an Australian General Hospital*, PhD Thesis, University of Adelaide, Adelaide 1992.

68 Commonwealth Bureau of Census & Statistics, *South Australian year book*, J. Thomas (ed), ABS, South Australian Office, Adelaide 1975 p121.

69 South Australian Trained Nurses' Centenary Committee, 1989 p251.

70 Forbes, I. 'Aspects of health care' in *The Flinders History of South Australia: Social History*, E. Richards (ed), Wakefield Press, Adelaide, 1986. pp260-282 esp.pp272-273.

3.3.3 Doctors and the coronership

Pike's authoritative observation on the leaders of the South Australian settlement indicated that they 'were ambitious middle-class townsmen with few claims to "good society" ...(that)...wanted to be the gentry of the new province'[71]. A list of the colony's gentry between 1850 and 1920 compiled by Van Dissel, identifies the diverse financial interests of the colony's leaders, but establishes that their principal occupations fell into four categories comprising pastoralists (50%), commercial agents and manufacturers (30%); professional men (15%) and government officials (5%)[72]. Professional men were noted to be the prominent doctors and lawyers of the colony and a particular group of elite medical practitioners including Wyatt, Mayo, Woodforde, and later Gosse, featured among the colony's urban upper class[73].

In 1847 Dr Wyatt was appointed as the Adelaide coroner, being succeeded in 1857 by his colleague Dr Woodforde when he was appointed to the post[74]. Woodforde, who had extensive experience in the coroner's court providing medical testimony, held this office until his death in 1866. The solicitor Rupert Ingleby, whose obituary notes that he also took a rather prominent role in public matters (and also acted as Crown Solicitor), followed Woodforde as coroner[75].

The opportunity for affiliations, connections and alliances between members of the colony's gentry, in what was a relatively small population, afforded them a considerable power base in matters of the state. Whether the gentry's interest extended to the appointment of justices of the peace and coroners is difficult to substantiate. Nonetheless, Ranson indicates that during the 19th century it

---

71 Pike, 1967 p145.

72 Van Dissel, D. 'The Adelaide gentry, 1850-1920' in *The Flinders History of South Australia: Social History*, E. Richards (ed), Wakefield Press, Adelaide, 1986 p354.

73 Peterson (1978 p136) established the distinction between medical elites, who lived and practised among the most prestigious and fashionable members of 19th English society and the rank-and-file members of the profession, and this distinction was apparent in South Australia. Wyatt, Mayo, Woodforde, and Gosse were elevated to the rank of medical elites by their respective state appointments, Medical Board membership, honorary medical officer status at the Adelaide Hospital and prominent role in public life within the colony. For a more comprehensive analysis on the social standing, professional power and political influence of doctors in the colony see, Jennings, 1998.

74 'Coroner Inquest', *The Adelaide Observer*, 12 December 1857, pG1.

75 'Mr Rupert Ingleby QC Obituary 1866', *Davies collection of biographical newspaper cuttings*, Mortlock Library Vol.22, Adelaide, nd p97.

was not uncommon for coronerships in England to be allocated on a political rather than a practical basis and there is no reason to suggest the same did not apply to the colony of South Australia[76].

During the 1800s the coronership was not a full-time appointment, but it did provide a means for the incumbent to supplement income while continuing professional practice[77]. While it might be argued that the office was not one of particular consequence, prestige or remuneration to captivate the interest of the colony's elite doctors (or for that matter lawyers) the coronership did offer an important civic rostrum, which would not have escaped the attention of South Australia's more ambitious professional men. Significantly, the coronership provided public exposure and a forum to promote causes that might not otherwise be brought to the public's attention in such an authoritative, visible and publicised manner.

By way of illustration, the inquest into the death of John Williams was a notable case, receiving extensive coverage in the *Register* and the *Adelaide Observer*. The case was held at a time when the colony's medical profession was attempting to organise and regulate its practice and the inquest was used as a public forum to berate the practices of unqualified medical practitioners in the colony[78]. Dr Oscar Stiasney provided a handy case-in-point.

The inquest was held in August 1856 with Dr John Fisher as coroner, and Dr's Woodforde and Bayer as expert medical witnesses[79]. Stiasney, who

---

76 Ranson, D., 'The role of the pathologist', in *The aftermath of death*, H.Selby (ed), The Federation Press, Annandale, 1992 pp80-125 esp.83. Associate Professor David Ranson is a forensic pathologist and lawyer who is currently the Deputy Director, Victorian Institute of Forensic Medicine.

77 Section 18 of the Coroner's Ordinance of 1850 stipulated that coroners received the sum of one pound sterling for each inquest and sixpence per mile for every mile they travelled from their place of residence to the inquest (with a proviso if more than one inquest was held per day). The fee for coroners holding an inquest was increased to one guinea per inquest by the Coroners Act 1884 s27.

78 The term unqualified is used here to mean doctors unregistered with the Medical Board. While many 'unqualified' practitioners in the colony may have had no medical qualifications or skill, it seems that some 'qualified' practitioners chose not to register with the Board. For a comprehensive analysis of the issues surrounding medical registration in the 19th century see, Willis, 1990 pp36-60.

79 Dr John Fisher was a Jewish doctor who arrived in South Australia in 1851, and practised at Salisbury where he was also visiting surgeon to Yatala Labour Prison before becoming resident surgeon at Wallaroo Mines. He was appointed a Justice of the Peace and subsequently acted as a coroner, primarily around the Salisbury and Gawler district. See, Dr John Fisher Obituary 1879, *Davies collection of biographical newspaper cuttings*, Mortlock Library Vol.20, Adelaide, nd p38.

testified that he held proper medical qualifications but did not believe licensure with the medical board necessary, was called to attend Williams whose legs had been crushed by the wheels of a dray. Stiasney had applied certain treatments but the patient did not recover and subsequently died.

At inquest, Woodforde first opined that the remedies applied by Stiasney were not sufficient, but afterward declined to say whether the treatments had been proper or not because 'no medical practitioner had been called in'[80]. On strong advice from Coroner Fisher, who happened to be a 'qualified' practitioner in the same neighbourhood as Stiasney, the jury found that the victim's death was hastened by the fact that Stiasney was not legally qualified. In relation to this finding, the astute editor of the *Adelaide Observer* wrote that there was no real objection to the treatment, rather:

> The objection lies wholly against Mr Stiasney personally, and this is because he is not legally qualified. Dr Woodforde cannot say whether the treatment was right or wrong, because Mr Stiasney has not got a diploma, but suppose he had a diploma, would that circumstance alter the treatment?'[81]

The fact that, four years later, Stiasney registered with the Adelaide Medical Board suggests that the finding of this inquest was, at the very least, dubious.

3.4. Hospital deaths and coroners

There are no official coronial records in South Australia prior to 1867, therefore the colony's early newspapers provide the primary source from which to grasp the manner and nature of cases to come before the early colonial coroners. Consequently, it is difficult to verify how hospital deaths from medical adverse events might have been dealt with in the coroner's court prior to 1867. Similarly, there are few accurate accounts of the inquests held by Wyatt and Woodforde during their coronership, and it is unclear whether they excused themselves from hearing inquests into hospital deaths, particularly

80 'Medical Qualifications' *The Adelaide Observer*, 16 August 1856.
81 *The Adelaide Observer*, 16 August 1856.

those at the Adelaide Hospital[82]. It is evident however, that such deaths were occurring in the colony's hospitals.

The earliest reported case of hospital misadventure seems to be that of George Pelham, who died at the Adelaide Hospital. Pelham sustained a compound fracture of the thigh after being hit by a dray near Gawler Town and after receiving some basic treatment by a local doctor it was decided to transfer him to the Adelaide Hospital. On arrival just after midnight, it was found that the hospital was locked and almost an hour lapsed before he was finally admitted. The key had been entrusted to the care of a patient, who that evening had taken too much to drink and seemingly disappeared. When Pelham was finally admitted, and the doctors summoned, he underwent an amputation of the thigh but died during surgery[83].

The inquest was held at the hospital, which was not uncommon practice under existing legislation[84]. The hospital would have provided an opportune facility in which to gather a jury and for Coroner George Stevenson and the jurors to observe the body where it lay. Thomas, the house surgeon, was the medical witness, and he testified that while the amputation may have hastened death, it was the only way of saving the patient's life. He further testified that the operation carried out by Dr Mayo, in the presence of Dr's Woodforde, Gosse and several others, was extremely well performed and he 'never saw less blood loss under similar operation'[85]. This was probably not surprising, given the patient's advanced state of shock and considerable blood loss during his transportation and delayed admission to hospital. The jury, under advice from Coroner Stevenson, returned a verdict of accidental death.

---

82 The South Australian State Records Office hold original coroners' inquest records from 1867 to 1976. These documents provide details of individual cases held throughout South Australia, but they are by not means complete. They start from the year 1867, well after 1838 when Stevenson conducted the first inquest. Records indicate that the Attorney-General's Department originally maintained these files, but the inquest records from 1877-1930 were authorised for destruction during World War II, presumably as part of the war effort when many materials, including paper, were recycled. See, State Records Of South Australia, *Ancestors in archives: a guide for family historians to South Australia's government archives*, Department for Administrative & Information Services, Adelaide, 2000 p194.

83 'Coroner Inquest', *South Australian Register,* 3 March 1856.

84 Section 3 of the Coroners Ordinance of 1850 held that the coroner on viewing the body and determining the need for an inquest had the authority to conduct the inquest at a convenient place.

85 *South Australian Register,* 3 March 1856.

Existing records indicate that the Adelaide Hospital was well utilised early in the colony's history as a forum for inquests and provided a number of the subjects for inquest, although clearly not all of these cases involved medical misadventure. Records also suggest that many of the victims who came within the ambit of the early coroners were often vulnerable individuals under the care of state operated institutions. The inquest into the death of George Pearce is one case example of many more recent institutional fatalities that will be presented in Chapter 8.

George Pearce, aged 7, resided at the Destitute Asylum, an institution opened in 1852 for the colony's deserving poor[86]. According to the Adelaide Hospital admission register he was admitted to the hospital on 8 January 1867 with synochus (continued fever of unknown cause) and died in the hospital on 4 February 1867[87]. Coroner Ingleby conducted the inquest with a jury of fourteen men and the evidence presented suggested that George's death was not directly linked to his illness, but rather to an event that took place within the hospital. However, for reasons not elaborated on in the findings, no person was found to have contributed to this event and as was common in inquests held at the Hospital, the jury returned a verdict of accidental death [88].

As I will establish in the next chapter, the relationship between hospitals, medicine and the coronership became even more firmly established in the 20th century. What will also become more apparent is that while the value of the coroner's court, as it was enacted in South Australia, might have been its public standing as an open forum to investigate deaths on behalf of the community, it seems public and open would not necessarily equate with reliable or egalitarian.

---

86 Dickey, B. 'Social welfare: the government sector', in *The Flinders History of South Australia: Social History*, E. Richards (ed), Wakefield Press, Adelaide, 1986 pp237-338.

87 Adelaide Hospital, GRG 78/49 Microfilm.

88 Coroners Inquest 1867, State Records, Adelaide GRG 1/27.

CHAPTER 4

MODERN CORONERS: CIVIC AGENTS IN THE 20TH CENTURY

4.1. Introduction

This chapter explains the political and social forces that brought the coronership to its current position within the Australian legal system. This entails a brief examination of the court system as it evolved after Federation. Australia entered the 20th century as a group of British colonies and, while they were federated shortly thereafter, each state retained statutory responsibility for its own coronership. This led to legislative differences among the various states and territories whose coronial system evolved to meet local needs rather than those of a national citizenry. These differences extended to the qualifications of coroners not only across states, but also within jurisdictions, and although the office was held to be a legal one, this did not stop non-legally trained doctors, clerks of the court and lay justices of the peace acting as coroners.

This chapter also outlines some of the major controversies that befell the coronership during the century and incited questions about judicial independence and accountability of coroners. Many of the disputes surrounding the office were linked to the qualifications and competence of incumbent coroners. The issue of untrained or lay coroners was one that was not easily laid to rest and problems associated with this came under the scrutiny of a Royal Commission in the latter part of the century[1]. This extensive investigation uncovered for the first time the extent of problems besetting the coronial system on a national scale. While significant legislative reforms to the office had been in place well prior to the Commission being established in 1987, including the advent of the state coroner system in some jurisdictions, the Commission found little had actually changed in the way coroners operated as a result of such reforms. The Commission's final report

---

1 A Royal Commission is an inquiry established pursuant to Crown prerogative at common law or under statute to inquire and report upon a specified subject matter. The *National Report of the Royal Commission into Aboriginal Deaths in Custody* by Commissioner Elliott Johnston QC was tabled in Federal Parliament in May 1991 by the Minister for Aboriginal Affairs, the Honourable Robert Tickner. Hereafter I reference this inquiry as the Johnston Royal Commission, 1991.

identified a number of problems plaguing the office including coroners' competence to be specialised death investigators, their lack of power to implement recommendations and the need for a centralised coronial reporting systems.

These were by no means the only issues that posed a threat to the survival of the office. While 20th century coroners continued their time-honoured role of inquiring into unnatural and suspicious deaths, advances in medical science and forensic detection were impinging on coroners' traditional role as death investigators. The emergence of forensic experts who could offer highly sophisticated answers to questions about not only the medical cause of death, but also the circumstances behind such events, removed the need for coroners to undertake this level of detection. However, it also opened opportunities for coroners to re-conceive the office as a type of public health watchdog over medical services. In this manner, coroners were able to maintain the relevance of the office as one that provides a visible means by which government can publicly demonstrate that it cares for its citizens through neutral fact-finding and detection of aberrant deaths in the community.

I argue in this chapter that one way coroners were able to emerge as a type of health ombudsman was by forming closer alliances with forensic medicine. The state of Victoria led the way in this endeavour by forming a partnership with the Victorian Institute of Forensic Medicine (VIFM), a model that operates in a manner not too dissimilar to the US medical examiner system. Through the establishment of the Australian Coroners Society, coroners were also able to facilitate a national coronial information system under the auspices of the VIFM and Monash University where death data could be used to inform public health policy. While this system was developed within a framework of altruistic and utilitarian intention, I conclude the chapter by briefly exploring the extent to which ownership and control of the National Coronial Information System may impact on coroners' broader civic function in the visible dissemination of information in the public interest.

4.2 Federation, the Australian court system and coroners

One of the most significant events to occur in Australian legal history, Federation, heralded the beginning of the 20th century in Australia. On 1 January 1901, the Commonwealth of Australia was proclaimed, and what had previously been a group of British colonies, each conducting its affairs independent of each other, now comprised the six states of Australia[2]. In the lead up to Federation, Australia had looked to other constitutions and systems of government to draw up its constitution and, not surprisingly given Australia's Anglo heritage, the two major influences were Britain and the US[3]. Australia based its federal system on that of the US, with a single central government and a number of states. The Constitution separated law making powers between the commonwealth and state parliaments. Unlike the US, however, the Australian Constitution did not include a Bill of Rights, with the system assuming that individual rights would be protected by parliament, the courts and Australians as a whole[4].

The Australian legal system was divided between federal courts, to deal with interpretation and application of the federal constitution and laws made by Federal Parliament, and the state courts, to deal with state constitution and laws made by State Parliaments[5]. State court jurisdictions (in this case the matters each court might hear) were generally separated into a three tiered hierarchy, whereby the lower courts were bound to follow decisions of the higher courts[6]. A simple representation of these jurisdictions is outlined in Figure 2 on the following page.

---

2 The Constitution also provided for a seat of Government separate to the six states and in 1911, NSW surrendered land that became the Australian Capital Territory (ACT). See, ACT Government, *A brief history of the ACT*, Report no.1000-4/96 (96/2082), Canberra, 1999. On November 16, 1910, the Northern Territory Acceptance Act 1910 (Cth) provided for the transfer of the Northern Territory to the Commonwealth. See, Commonwealth of Australia, *Documenting a democracy - Northern Territory Documents*, 2000 at http://www.fed.gov.au/KSP [Accessed 2 January 2002).

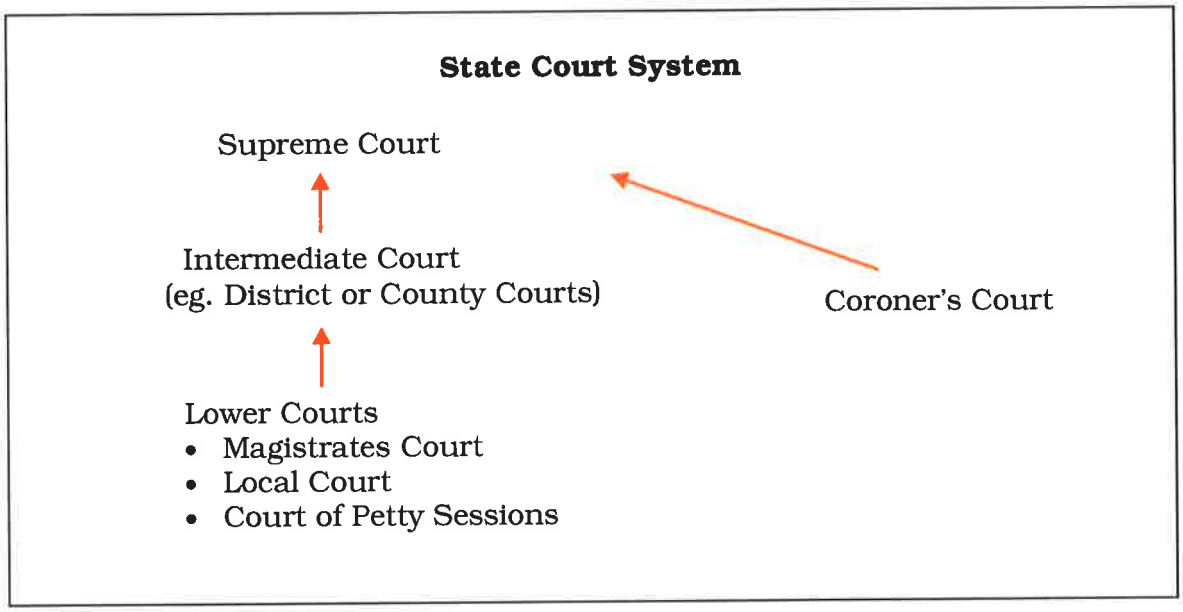
3 University of Melbourne, *What do you know about government in Australia?* University of Melbourne, *Melbourne*, 2000 p1-6. http://www.centenary.org.au/booklet/index.html (Accessed 17 May 2001].

4 University of Melbourne, 2000 p2.

5 Wallace, M. *Health care and the law*, Lawbook Company, Sydney, 2001 p19 at 2.1.

6 The exceptions were the Australian Capital Territory, Northern Territory and Tasmania, which developed a two tiered system with no intermediate courts. Intermediate Courts had been formed in Victoria, NSW and Queensland in 1852, 1858 and 1865 respectively. In South Australia, however, the District Court was first established in 1969, but it was not constituted by a separate act of parliament until the enactment of the District Court Act in 1991.

Figure 2. Schematic representation of the three-tiered state court system of Australia



Adapted from Wallace 2001, p23

Australian courts followed English common law tradition based on the adversarial approach to resolving disputes[7]. In this system, plaintiffs (in civil matters) and defendants (in criminal matters), or more often their representing counsel (lawyers), were to argue the merits of their case before a judge and/or jury. The lower courts were established to deal with minor civil and criminal matters, usually presided over by stipendiary (paid) magistrates. Intermediate courts were established to hear more serious crimes or civil claims involving large sums of money and these courts were to be presided over by a judge. The highest court established in each state, the Supreme Court, was to hear the most serious cases. Presided over by a Supreme Court judge, this court was to hear matters related to major crimes (homicide, rape, armed robbery), non-criminal matters like those involving unlimited sums of money and appeals from the lower courts.

While this represents a very elementary overview of the criminal and civil court system in Australia, it is beyond the scope of this thesis to delve too much further into complex procedural laws that govern these courts and the matters that come under their respective jurisdictions. What is more pertinent is the

7 Wallace, 2001 p5 at 1.12.

fact that Federation did not substantially alter coronial law and practice in that each state retained responsibility, through statute, for the function, jurisdiction and powers provided to coroners. In point of fact, the coroner's court never strictly fitted into the hierarchy of state and territory civil or criminal court structures. Nonetheless, over time this court has come to be considered a court of summary jurisdiction, meaning that decisions therein are made without a jury and, in as much as the coroner's court is subject to the supervisory jurisdiction of the Supreme Court, it has been identified at the level of an intermediate court[8]. There are, however, other more discernible features that distinguish the coroner's court as different to civil or criminal courts.

By way of example, criminal and civil courts encompass within their proceedings burden of proof and attribution of blame, whether that be *beyond a reasonable doubt* in criminal cases, or on the *balance of probabilities* in apportioning liability in civil proceedings[9]. These courts are described as accusatorial or adversarial in nature and court procedures are carried out according to established rules of evidence prescribed for the court. Verdicts are determined on admissible evidence and the relative validity of two or more versions of the truth.

Conversely, the coroner's court, being designated non-accusatorial, is not bound by the ordinary rules of evidence and procedure as it takes the form of an inquiry not a trial[10]. Like the English system, the Australian coroner's court is designed to find and record the facts and is not a court that apportions blame. Therefore, evidence that technically would not be admissible in another court of law, may, on the discretion of the coroner, be heard during an inquest. This can extend to hearsay evidence, affidavits and unsworn statements such as autopsy reports providing the coroner believes

---

8 A comprehensive account of coronial inquest law is provided in Freckelton, I. 'Inquest law' in H.Selby (ed), *The inquest handbook,* The Federation Press, Sydney. 1998 pp1-21. Also see Breen, K., Plueckhahn, V. Cordner, S. *Ethics, law and medical practice,* Allen & Unwin, Sydney, 1997 p231.

9 Wallace, 2001 p45 at 3.16 & 3.17.

10 This is stipulated in each Act. See, Coroners Act 2003 (Qld) s37(1); Coroners Act 1980 (NSW) s33; Coroners Act 1975 (SA) s22; Coroners Act 1995 (Tas) s51; Coroners Act 1985 (Vic) s44;: Coroners Act 1996 (WA) s41(a); Coroners Act 1997 (ACT) s47(i); Coroners Act 1997 (NT) s39.

that the evidence is relevant and necessary to establish matters within the scope of the inquest.

Within the provisions of respective state and territory coronial legislation, persons with a sufficient interest in the case may be represented by counsel at the inquest and may call, examine and cross-examine witnesses and make submissions. The privilege against self-incrimination applies to witnesses in the coroner's court as it does under general law, although there are differences in how this is provided for under individual state and territory acts. In NSW and South Australia for example, witnesses are entitled not to answer a question provided they can affirm to the coroner that by doing so they would incriminate themselves of a criminal offence[11]. Similarly, the coroner has an obligation to comply with the rules of natural justice. This means that the coroner should not make an adverse finding against person(s) to whom the right of representation has been granted without providing them with the opportunity to be heard in opposition to such a finding, nor must the coroner be biased or in a position where he could reasonably be regarded as biased[12]. In addition, while it had been a frequent practice in Australia for a police officer to assist the coroner at inquest, it is now more common for the coroner to have an independent legal counsel assisting him[13].

While a coroner's inquest is an inquisitorial, neutral, fact-finding forum, to an observer outside the legal profession, general procedures in the modern coroner's court appear to resemble closely the adversarial proceedings of a civil or criminal trial. In what seems to be a divergence from the English system, parties directly involved in the death(s) being investigated are likely to be represented during the inquest by counsel anxious to protect their clients'

---

11 See Coroners Act 1980 (NSW) s33; Coroners Act 1975 (SA) s16(2).

12 Freckelton, 1998 p13.

13 Victoria and Queensland are the only jurisdictions where the legislation refers to the appointment of a counsel assisting the coroner. Nevertheless, in states like South Australia the State Coroner has a legally qualified counsel assisting who, under the direction of the coroner, takes a significant role in the investigative process ensuring that relevant evidence is brought to the attention of the court and appropriately tested during inquest. Before being appointed, Counsel-Assisting the current South Australian incumbent had 10 years experience in the Crown Solicitor's Office which included experience in disciplinary hearings for doctors and nurses and a background in general civil litigation. Interview with Kate Hodder, Counsel Assisting the SA State Coroner, 12 December 2001.

interest[14]. In fact since taking office in 1993, the South Australian State Coroner has observed not only an increasing tendency for witnesses to have legal representation, but that it is becoming more common for senior members of the legal profession, with skills suited to the adversarial courts, to now represent parties at inquest[15].

This relatively recent phenomenon can be attributed to several factors. The number of inquests held has declined over the last decade and those deaths that proceed to inquest are likely to be of significant public interest. In these cases the media naturally become involved. While the media has long reported 'newsworthy' coronial cases, an adverse coronial finding can have damaging consequences, particularly in the presence of a community now more litigiously active. For these reasons, Freckelton, an eminent Australian barrister who has published extensively on coronial law, contends that inquests are now vigorously contested and, from a potential litigant's standpoint, these proceedings are often used as a test for future civil action and compensation claims[16]. Subsequently, it is now not uncommon in Australia for coroners' findings to be disputed on appeal[17].

In as much as hospital deaths from medical misadventure can have considerable fallout in relation to loss of reputation for individual health professionals, as well as diminish public trust in hospitals and the health system as a whole, coroner's inquests involving such matters feature among the more vigorously contested hearings. Hospitals will employ substantial resources to avoid an adverse finding and their legal representatives will often attempt to use methods familiar to the adversarial courts to protect their clients' interests. A common example, and one I observed in the coroner's court, was for counsel representing the hospital to cautiously concede that certain practices may have been deficient, which was followed by a full

---

14 It is not common in England and Wales for parties to be represented by professional counsel. See, Green, J. 'The medico-legal production of fatal accidents', *Sociology of Health and Illness,* Vol.14, 1992 pp373-389.

15 Notes from interview with Wayne Chivell, South Australian State Coroner, 30 January 2002.

16 Freckelton, 1992 p44.

17 For some examples of coronial cases subject to Supreme Court appeal see, Chivell, W. *Developments in the Coroner's Court,* The Law Society of South Australia, December 2001; Matthews, P. 'What is the coroner for?' *Law Quarterly Review,* Vol.110, October 1994 pp536-541; Devereux, J. 'Medical law reporter', *Journal of Law and Medicine,* Vol.6, 1998 pp19-29.

account of the actions that had been taken following the death to reduce the chance of a similar misadventure[18]. When I spoke with the State Coroner about this, he referred to this practice as 'confessing the void', a method common to the criminal court system when someone pleads guilty in anticipation that by 'confessing', the punishment may be less[19].

Attempts to shift the coroner's court away from its independent inquisitorial function have largely been unsuccessful. However, recent legislation in Queensland that provides for pre-inquest conferences to decide the issues to be heard at inquest, who may appear, the nature of the evidence and applications for and against disclosure of confidential information, single a move to curb a fully open and unconstrained inquiry[20]. Over the course of the 20th century a number of social and political drivers have brought the office to this present juncture. The more significant of these are reviewed next and provide an important basis from which to establish how contemporary coroners manage medical fatalities and the wider political implications attached to such investigations.

4.3 20th century reforms to the Australian coronership

4.3.1. The demise of the coronial jury

While inquiring into unexplained or violent deaths continued to be the primary business of Australian coroners, the 20th century was a period of rapid technological advancement that necessitated the office reforming some of its death investigating methods. For instance the introduction of motor vehicles, commercial aeroplanes, and more sophisticated and invasive medical technology gave rise to fatalities from causes that required complex investigative and analytic skills that had not confronted 19th century coroners. However, legislative changes to the coronial system, as well as the provision of increased resources to meet new challenges, did not necessarily match the pace of scientific innovations. Such coronial reforms necessary to meet social change were limited by each state and territory governing its own coronership,

---

18 As I will demonstrate in Chapters 7 and 8, managers and administrators from healthcare services were often called as witnesses to substantiate these claims.

19 Notes from interview with Wayne Chivell, South Australian State Coroner, 30 January 2002.

20 Coroners Act 2003 (Qld) s34(1)(a)(c).

and like the US experience, different statutes regulated each jurisdiction. Despite legislative diversities, successful reforms to coronial law in one jurisdiction were likely to be picked up by others, albeit not always in a timely manner. The demise of the coronial jury is one such example.

Queensland was the first state to totally abolish the coroner's jury[21]. Just over thirty years later, an amendment to the South Australian Coroners Act[22] gave coroners the power to hold an inquest without a jury and by 1935 new legislation abolished the coroner's jury in this state altogether[23]. Although other states were slower to enact legislation totally abolishing juries, presumption against their use eventually found its way into legislation across most jurisdictions[24].

The question of why the coroner's jury lapsed is an interesting one. Certainly, toward the latter part of the 19th century, there was a tendency to reduce the number of jurors required for an inquest. This was likely associated with several features peculiar to local Australian conditions which at that time made following English coronial rules impractical. For example, empanelling a jury of *good and lawful men* was a problem, particularly in sparsely populated rural Australian communities. This was compounded in some regions by the warm Australian climate where, without the benefit of refrigeration, corpses would rapidly decompose. For that reason the time-honoured ritual of coroner and jury viewing the corpse was also abandoned in several jurisdictions during the early part of the 20th century[25].

As the jury was legislated within the various state and territory coroners' acts, their abolition was a matter for government consideration. At the beginning of

---

21 This was provided for in the Inquests of Death Act 1863 (Qld), although it was not until 1866 that the coroner's jury was officially abolished in this state. See, Castles, A. *An Australian legal history*, Law Book Company, Sydney, 1982 p375.

22 The Coroners Further Amendment Act 1907 (SA).

23 Coroners Act 1935 (SA) s17.

24 The exceptions being NSW and Victoria.

25 In South Australian, the Coroners Further Amendment Act 1907 s5 stipulated that it was no longer necessary for jurors (if a jury was convened) to view the body. Later, the Coroners Act (SA) 1935 s16 enacted that the coroner was not required to view the body on any inquest. In Western Australia, the Coroners Act 1920 s10 provided that it was not necessary for coroner or jury to view the deceased unless they felt it advisable to do so or by order of the Supreme Court. Similarly, the Coroners Act 1950 (Vic) s9(1) enacted similar legislation in Victoria, however, in NSW this was not officially abolished until the Coroners Act 1960 s15.

the 20th century this provided a lively source of parliamentary debate in NSW when this state's government first attempted to get rid of the coroner's jury. While this attempt was unsuccessful, the Government maintained that coroners' juries were expensive and inefficient and convening such a jury was:

> a nuisance for business men...(and)...an embarrassing benefit for "professional" jurors who hung around the Sydney Coroner's Court and seemed to live on jury allowance[26].

A few years later the Government introduced another Bill providing for coroners to sit alone, but this time with provision that a jury could be empanelled under certain conditions. However, the Labour opposition in opposing the move complained that removing the coroner's jury amounted to the 'fritting away of an important safeguard of the people'[27]. Labour's affiliation with the trade union movement was clearly an underlying factor in their opposition to the Bill and members were concerned that any inquest into an industrial death in the presence of a mechanically ignorant coroner had the potential to be:

> an exercise in politics and publicity which allowed a technically-competent jury to expose employer negligence[28].

The Bill was passed and while the resultant NSW Coroners Act of 1912 legislated toward coroners sitting alone, Labour did win a minor victory with provision in the act for a jury of six to be empanelled on request of the secretary of any society or organisation of which the deceased was a member at the time of death[29]. Of interest, this stipulation was retained in successive NSW coronial acts[30].

While both NSW and Victoria have retained the opportunity for a jury to be empanelled within their respective coroners acts, an inquest must be held without a jury unless the Attorney-General or State Coroner directs otherwise[31]. In these states a relative can also request a jury, as can a police officer in Victoria and the secretary of a society or organisation to which the deceased belonged in NSW, provided the coroner is agreeable. Nonetheless,

---

26 Golder, H. *High and responsible office: a history of the NSW magistracy*, Sydney University Press, Sydney, 1991 p119.
27 Griffith, NSW Parliamentary Debates, II, Vol.15, 1904 pp379-380.
28 Golder, 1991 p119.
29 Coroners Act 1912 (NSW) s5(b).
30 Coroners Act 1960 (NSW) s14(a); Coroners Act 1980 (NSW) s18.(2)(b).
31 Coroners Act 1980 (NSW) s18.1&2(a); Coroners Act 1985 (Vic) s 49.

despite a brief resurgence of the coronial jury in NSW during the 1960s[32], the coroner's jury even in these jurisdictions is all but extinct.

Whether economically, politically or environmentally driven, the demise of the coronial jury in Australian had a similar effect in each state and territory. Without the added complication of empanelling and instructing jurors, coroners were able to conduct inquiries and inquests in a generally streamlined fashion. Significantly, coroners were now investigator, judge and jury, albeit within the scope of relevant statute, with the power to hold (or reject) an inquest, determine findings and, in most jurisdictions, add recommendations as they saw fit. The question was, were these newly empowered coroners suitably qualified to carry out these functions?

4.3.2. City coroners

Like other coronial reforms, legislative stipulation of the qualifications and attributes required to carry out the duties of coroner were slow to be enacted. During most of the 20th century, the standard of being a 'fit and proper person' remained the primary credential to hold office and in most states and territories justices of the peace, stipendiary or police magistrates acted as coroners by virtue of their office[33].

During much of the 20th century, immigration, particularly from Europe, was encouraged. As the population of Australia rose from around 3.7 million in 1900 to 8.3 million in 1950[34], the majority of the population was concentrated in cities or large townships with smaller numbers scattered over vast remote regions long distances from urbanised centres. Meeting the coronial requirements of the Australian population during this period seems to have been handled from a user needs basis, rather than the application of a considered or planned approach to determine a network of services. This was

---

32 Golder, 1991 p179.

33 While the term 'fit and proper person' seems to have provided government, by virtue of the State Governor, with some discretion in selecting appointees, it was not until much later in the century that any attempt was made to enact that coroners needed to be legally qualified. For example, the Coroners Act 1960 (NSW) s5(1)(a)(c) still stipulated that the Governor could appoint 'fit and proper' persons to the office of corner or deputy coroner.

34 Australian Bureau of Statistics (ABS), *Australian Historical Population Statistics 1788 onwards*, Cat. No. 3105.0.65.001, Canberra, 2003.

understandable, given that unnatural and violent deaths requiring coronial attention were not easy to predict, aside from the fact that such deaths were more likely to occur in greater numbers in large population concentrations.

Therefore, in most states a city coroner (and in some jurisdictions, a deputy city coroner) was appointed to act within identified geographical boundaries of a particular city. These were not full-time posts, however, and the incumbent was expected to perform other duties. In NSW, the appointee to the important post of Sydney Coroner was designated as police magistrate for the state and also assumed other magisterial functions[35].

Around the time of Federation, doctors in South Australia were still a popular choice to hold the position of coroner. In 1899 Dr William Ramsay Smith, a physician at the Adelaide Hospital was appointed Adelaide Coroner. Smith was a colourful character who had upset some of the state's prominent medical establishment by accepting a position at the Adelaide Hospital when the honorary medical staff had resigned on mass over a dispute with the government[36]. Smith had a particular interest in medical jurisprudence and evidently many members of the government viewed him in a favourable light. At the time he was given the post of City Coroner, he was also appointed Inspector of Anatomy, physician to the infectious diseases unit at the Adelaide Hospital, and Chairman of the Central Board of Health[37]. His dispute with medical colleagues continued, however, and in 1903 he was suspended from his position as City Coroner following charges of misusing human bodies[38]. The government established a public board of inquiry into the matter, which

---

35 For example, in addition to his duties as Sydney Coroner, A.N.Barnett, was appointed in 1905 to preside over the metropolitan Children's Court. See, Golder, 1991 p128.

36 The dispute started over the appointment of a nurse to the post of superintendent of night nurses and escalated to the point where the State Premier, Charles Kingston, became involved. This was a major scandal at the time and much has been written about the row. See for example, Estcourt Hughs, J. *A history of the Royal Adelaide Hospital (RAH)*, Board of Management of the RAH, Adelaide, 1967; and, van den Hoorn, R. Playford, J. 'The Adelaide Hospital Row', *The Flinders history of South Australia: Political history*, D.Jaensch (ed), Wakefield Press, Adelaide, 1986 pp215-225; and, Durdin, J. *Eleven thousand nurses: a history of nursing education at the Royal Adelaide Hospital 1899-1993*, Royal Adelaide Hospital, Adelaide, 1999 p29-37.

37 Serle, G. (ed), *Australian Dictionary of Biography*, Vol.11, 1891-1936, Melbourne University Press, Melbourne, 1998 pp674-675.

38 It seems Smith had a keenness for forensics and conducted a number of post-mortems and experiments on cadavers. By way of illustration, the inquiry heard of Smith's interest in ballistics from a mortuary attendant who witnessed Smith in the Adelaide Hospital mortuary shooting at the head of a corpse with a .303 rifle. See, James, R. James, H. 'Historical perspective: retention of human organs and the dismissal of Ramsay Smith', *Pathology*, Vol.33, 2001 pp172-173.

sat for 8 days and, among evidence, heard that Smith took advantage of his position as Coroner to obtain body parts including the skulls of two patients who had died at the Adelaide Hospital[39].

Smith did, however, have allies among his medical peers, three of whom testified that it was common practice for the medical profession to take body parts as specimens and without them the medical school would scarcely exist[40]. The Board considered the charges against Smith under the requirements of the Anatomy Act 1884, and found that:

> in the absence of objections by the person in lawful possession of the body, there is no illegality or impropriety in the removal of parts of the body for either pathological, anthropological or other purposes[41].

The Board dismissed all charges against Smith and commended his painstaking medical research. They did, however, recommend that in the public interest, Smith should be relieved of his duties as physician at the Adelaide Hospital, Inspector of Anatomy and Vaccination Officer as these were in conflict with the 'proper and independent performance of the duties as Coroner and Chairman of the Central Board of Health'[42]. Smith continued as Adelaide Coroner until his retirement in 1929 and among his many publications he wrote a manual for coroners, which was used for many years as a standard text for Australian coroners[43].

As the workload for city coroners increased, the role changed from a part-time one to a full-time appointment. The first such appointment was in Perth, Western Australia, when a stipendiary magistrate was allocated to perform coronial duties on a full-time basis in 1947[44]. In South Australia a full-time coroner was not appointed until 1973 when Kevin Barry Ahern, a partner in the law firm Riley, Grey and Ahern became the Adelaide City Coroner.

---

39 'Ramsay Smith Enquiry', *The Adelaide Observer*, 12 September 1903.

40 James & James, 2001 p173.

41 South Australian Parliament, *Report of Board of Inquiry Re: Dr Ramsay Smith*, South Australian Parliament Paper No.37, 1903.

42 South Australian Parliament, 1903.

43 Smith, W. (Ramsay) *A manual for coroners*, Hussey & Gillingham, Adelaide, 1904. Incidentally, the South Australian Coroners Office has a copy of this textbook among its historical references a copy of which was loaned to me for the purpose of this study.

44 Roberts-Smith, L. 'The conduct of coronial inquiries in Western Australia: a practitioner's guide', *Western Australian Law Review*, Vol 24, 1994 pp172-185 esp.173.

Outside cities, respective state statute stipulated who could perform the duties of coroner and in this regionalised system, which operated for most of the century, there was a preference for non-legal officials to enact the role independent of any structured centralised reporting mechanism. This allowed many local doctors, especially in country regions, to continue substituting as a coroner when the need arose. Where magistrates were present to assume coronial duties this remained only a small facet of their legal duties. For example, in Queensland, aside from coronial functions, magistrates retained the role of ex-officio mining wardens and industrial magistrates. In addition, it was not uncommon for them to also hold appointments such as chairman of the local hospital board, all of which significantly tested their ability to adequately superintend coronial investigations[45].

The two-tiered system of legally qualified and non-legally trained coroners was common across Australia. For the most part, after 1930 city coroner appointments were generally held by qualified lawyers, but outside the cities a mixture of magistrates, clerks of local courts and private citizens fulfilled the role. Therefore, during much of the 20th century, the interpretation of respective state and territory coronial law and the superintendence of investigations and inquests on a day-to-day basis came directly under the ambit of individual coroners, some of whom were legally qualified and others who were not. What all these coroners had in common, however, were wide discretionary powers in determining how thorough an inquiry should be conducted and whether to hold, or dispense, with a public inquest. Ineptitude in certain coronerships was therefore to be expected and inefficiencies attributed to coroners' qualifications in Australia, or lack thereof, were publicly aired in 1991 following the release of the landmark *National Report of the Royal Commission into Aboriginal Deaths in Custody*[46].

The Commission was established in October 1987 in response to growing public concern that deaths in custody of Aboriginal people in Australia were far too common and public explanations too evasive to discount the possibility

---

45 See, Johnston Royal Commission, Vol.1, 1991 at 4.5.6.

46 The Johnston Royal Commission produced an extensive report contained in five volumes which were supplemented by regional reports from all states and territories undertaken by the four other Commissioners.

that foul play was a factor in many of them[47]. The task given to the Commission was to inquire into the deaths of Aboriginal persons and Torres Strait Islanders in custody and into any subsequent actions taken in respect to these deaths including the conduct of coronial, police and other inquiries[48]. While the Commission was limited by its terms of reference to indigenous custodial deaths, the five Royal Commissioners had broad powers and considerable resources to conduct a detailed inquiry. In particular, the Commission's examination of coronial inquiries was extensive and the findings handed down by the Commissioners into the conduct of coronial investigations and inquests had widespread relevance to the work of coroners investigating all institutional deaths[49].

In their findings, the Commissioners expressed concern about the adequacy and impartiality of police investigations conducted on behalf of coroners. They found that deficiencies in the police inquiry also spilled over into the coroner's court where they observed that:

> Reliance was placed on misleading or inaccurate police evidence without the benefit of critical examination, relevant witnesses were not called or, if called, were not asked pertinent questions, the hearings of many inquests were delayed, and further delay attended the delivery of findings[50].

The Commissioners were also critical of hospital treatment given to some of those who died while in custody. Most often these criticisms pertained to poor assessment (or omission thereof) by medical staff, and in some cases it was found that victims had been inappropriately diagnosed with minor complaints, whereas subsequent post-mortem examination found they had been suffering a life-threatening complaint. The Commission recommended that the

---

47 Johnston Royal Commission, Vol.1, 1991 at 1.1.2. From January 1980 to May 1989 ninety-nine Aboriginal and Torres Strait Islander people died in the custody of prison, police or juvenile detention centres.

48 Johnston Royal Commission, Vol.1, 1991 at 1.1.4.

49 While there were some differences across jurisdictions, by the 20th century provision was made in each state and territory for the protection of those held in State operated or privately run institutions. Such legislation covered those held in prisons or in police custody; child welfare facilities; institutions housing the physically and intellectually disabled; and, those with a mental health illness held in a psychiatric facility. A death in custody or while the deceased was accommodated in an institution or while the person was under a detention order pursuant to a Mental Health Act were all classified as reportable deaths under coronial law. Where differences existed these primarily pertained to whether holding an inquest was mandatory or discretionary.

50 Johnston Royal Commission, Vol.1, 1991 at 4.5.5.

circumstances of these deaths justified careful scrutiny by those health and hospital authorities involved[51].

In their inquiry into the status and qualifications of coroners across Australia, the Commission found great disparity between jurisdictions. In Queensland and NSW for example, clerks of the court with no legal training or status to do so had conducted some of the inquests into deaths in custody. In other jurisdictions, legally qualified stipendiary magistrates performed these duties. The Commission concluded that the office was clearly in a state of flux and called for immediate action nationally to ensure that only legally qualified stipendiary magistrates or more senior judicial officers be conferred the office of coroner[52].

4.3.3 Coroners' qualifications and the question of competence

Prior to the Johnston Royal Commission, debate about the competence of coroners to perform their duties had not necessarily centred on incumbents holding legal or medical qualifications (as had been the case in the UK and US). Rather, questions had been asked about their ability to function independently from government influence. At the beginning of the 20th century justices of the peace, stipendiary and police magistrates were generally public servants and consequently not independent members of the judiciary. While these magistrates performed judicial duties including those of coroner, they were regulated by public service legislation in relation to wages, promotion and conditions[53]. As the work of coroners, particularly those holding full-time office, increasingly involved scrutiny of public servants and government departments, questions were being asked about whether judicial independence could be guaranteed within the public service. To command public confidence in the office, justice not only needed to be done, it needed to be seen to be done, and one way to achieve this was for coroners to become independent members of the judiciary.

---

51 Johnston Royal Commission, Vol.1, 1991 at 3.3.83.
52 Johnston Royal Commission, Vol.1, 1991 at 4.5.13.
53 For a well articulated account of the magistracy under the public service see, Golder, 1991 esp. Chap.7 'Living in interesting times', pp171-214.

While the move to insulate the magistracy from the government was a matter for individual state and territory legislation[54], it was designed to minimise outside criticism and instil public faith in the integrity of the courts. In South Australia legislators in the 1930s recognised the importance of coroners' judicial independence from the public service, at least for the City Coroner and his deputy[55]. In other states like NSW, however, it was not until the 1950s that questions were being publicly raised about the guarantee of judicial independence within the Public Service[56]. For coroners in this state separation was enacted in 1960[57].

Further judicial reforms occurred in the latter half of the century, with the aim of increasing public accountability and confidence in the office. For example, South Australia broke new ground in Australian coronial law in the mid 1970s by providing for the appointment of a legal practitioner to the office of State Coroner[58]. Unlike the city coroner, the State Coroner's jurisdiction was to encompass the whole state and he was to hear every inquest, or direct the deputy state coroner or another coroner to do so. The notion of a state coronial system caught on in Australia and as states and territories across the country updated their coronial legislation the appointment of a legally qualified State Coroner or Chief Coroner was provided for[59]. In Figure 3 on the following page, I have outlined the states and territories of Australia with existing legislation providing for coroners and their courts in each jurisdiction as of 30 June 2004.

---

54 For example, legislation that separated the magistracy from the public service was first enacted in Tasmania by the Magistrates Act 1969; then the Northern Territory with the Magistrates Act 1976; in Western Australia by the Stipendiary Magistrates Act Amendment Act 1979; in NSW by the Local Courts Act 1982; in South Australia by the Magistrates Act 1983; and in Queensland by the Stipendiary Magistrates Act 1991.

55 The Coroners Act, 1935, s5(3) provided that unless otherwise directed by the Governor, the provisions of any Act relating to the public service shall not apply to the City Coroner or the Deputy City Coroner.

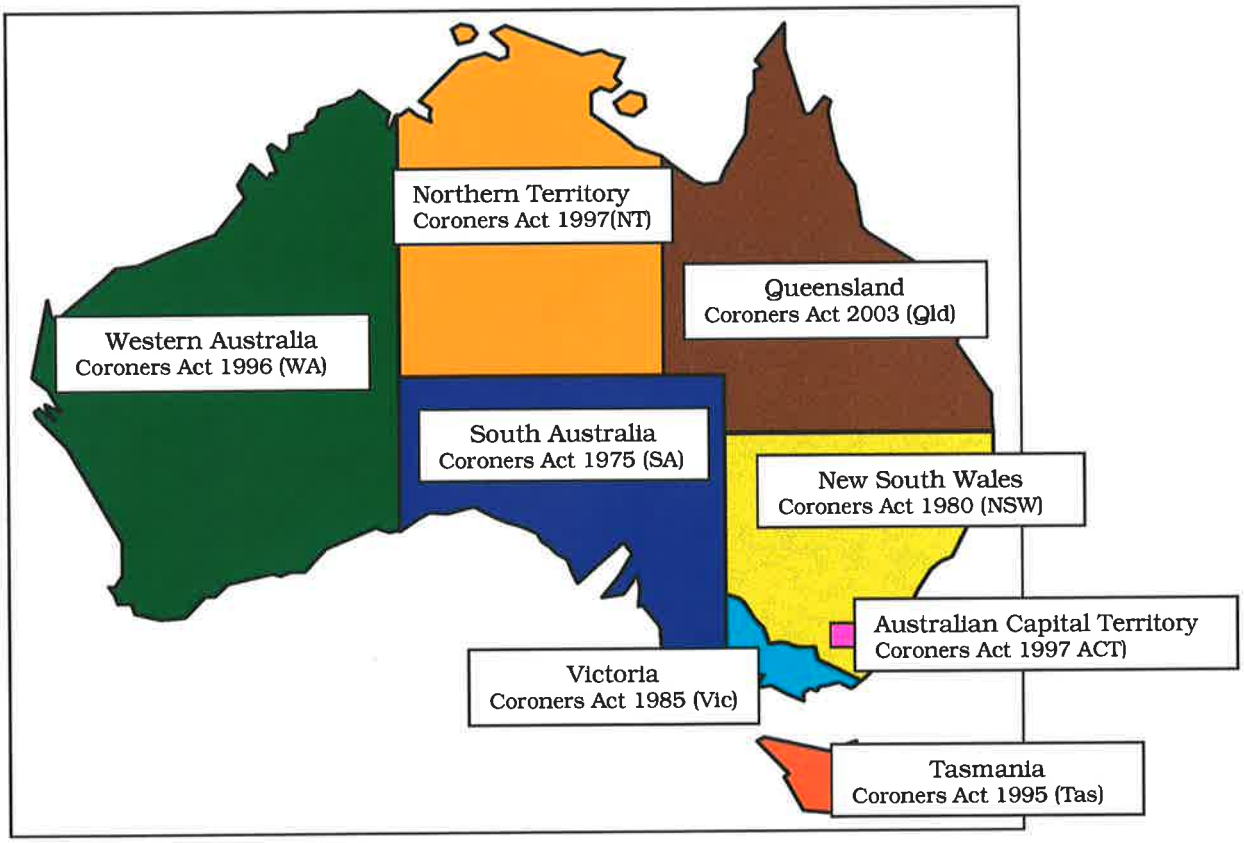
56 Golder, 1991 p176.

57 Coroners Act, 1960 (NSW) s 5.(2)b(i).

58 Coroners Act 1975 (SA) s7(1). It should be noted, however, that section 15 of the Act assumed that a medical practitioner could be appointed a coroner. In this section special provision was also made for precluding medical practitioners from holding an inquest into the death of persons they had attended in a professional capacity or from preforming post-mortem examination on patients they had attended. Coroners Act 1975 (SA) s15(a)(b). Similar provision was included in other jurisdictions for example, the Coroners Act 1980 (NSW) s26; and, the Coroners Act 1997 (ACT) s9(3).

59 See for example, the Coroners Act 1985 (Vic) s6; Coroners (Amendment) Act 1988 (NSW) s4A(1); Coroners Act 1996 (WA) s6(1) and Coroners Act 2003 (Qld) s70(1).

Figure 3. Map of Australia showing the states and territories and coronial legislation in place as of June 2004.



The question of whether the move to a state based coronial system resulted in a centrally administered, legal coronership, where coroners enjoyed full judicial independence, is worthy of close scrutiny. Ostensibly, a state operated coronial system, headed by a qualified legal practitioner with powers to direct inquiries, make rules under the act, superintend and/or conduct inquiries, reflected the reform needed to address the fragmented and uncoordinated system that had remained essentially unchanged since the 1800s. In practice, however, the effectiveness of this centralised system was highly dependent on several factors including the ability and zeal of the individual incumbent and the resources provided by government to underpin the functions of the office.

In South Australia for example, Kevin Ahern was the first person in Australia to be appointed a State Coroner. He had been the incumbent City Coroner since 1973 and, on the passage of the Coroners Act 1975, he assumed jurisdiction for a state-wide coronial service. A comparative analysis of the old

and the new coronership, however, suggests few, if any, real changes occurred when the new system was introduced. For example, similar to the tenure enjoyed by Ahern's city coroner predecessor, Thomas Erskine Cleland[60], the new State Coroner was still 'to hold office for a term, and upon conditions, determined by the Governor'[61]. In other words, while subject to parliamentary discretion, this was to be a 'life-long' appointment. The number and nature of inquests heard also remained similar over the course of both Cleland's and Ahern's tenures with a large number of inquests held into motor vehicle fatalities. Inquests during this period were generally conducted over one or two days and the *Findings of Inquest* usually amounted to a two to four page summary of the case.

Coroners' records reflect that even though Ahern had state-wide jurisdiction, like Cleland, he primarily stayed within the city, allowing local magistrates or justices of the peace to continue conducting inquests in regional South Australia. Table 3 on the following page, compares the number of inquests held from 1960 until 1979 under Cleland and then Ahern. It shows that between 1960 and 1972 when Cleland was City Coroner on average around 130 inquests/year were held, whereas between 1974 and 1979 under Ahern, about 175 inquests/year were conducted[62]. The slight slump in 1973 was likely due to the death of Cleland while still in office and the subsequent transition over to Ahern. While this table shows an increase in the workload when Ahern took office, it should be remembered that Cleland's appointment was part-time, the office only became a full-time one when Ahern took over in 1973.

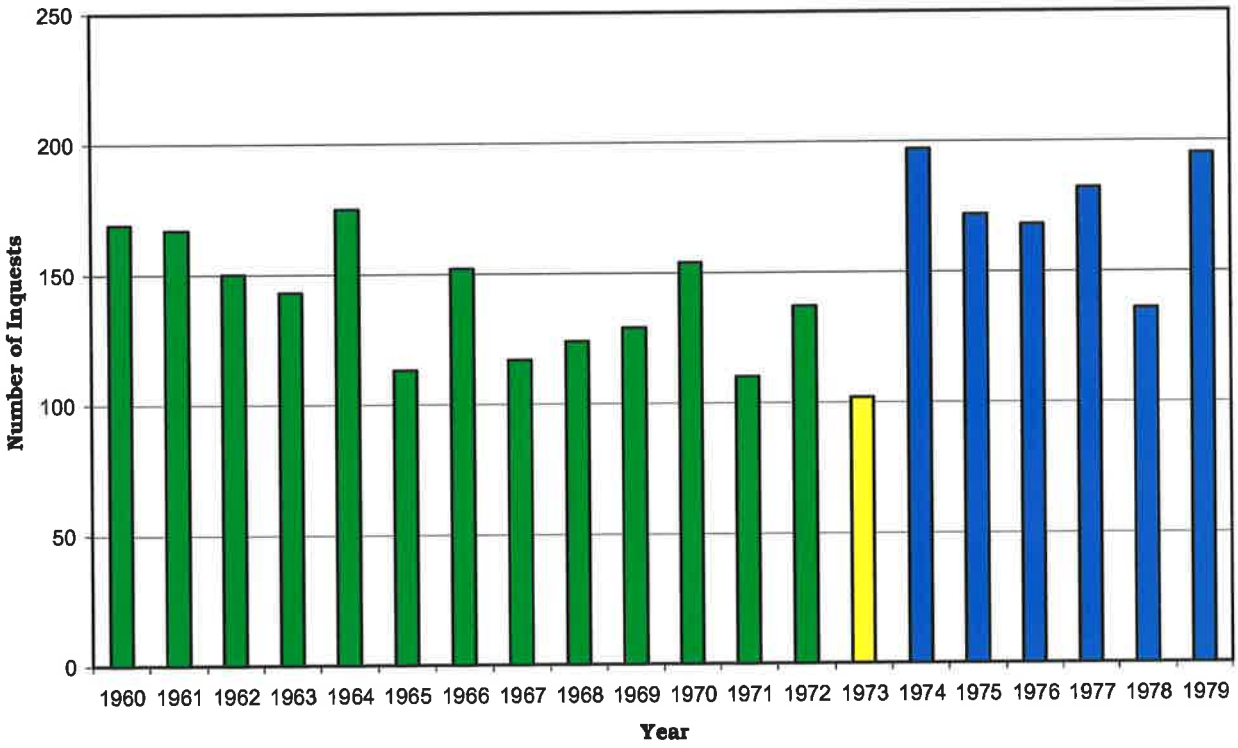
---

60 Thomas Erskine Cleland was a barrister who held the post of Adelaide City Coroner on a part-time basis from 1947 until his death in 1973. He was the cousin of Sir John Burton Cleland, honorary pathologist at the Adelaide Hospital and Professor of Pathology at Adelaide University from 1920 until 1948. Nairn, B. Serle, G. (eds), *Australian Dictionary of Biography 1891-1939*, Vol.8, Melbourne University Press, Melbourne 1981 p23.

61 Coroners Act 1975 (SA) s7.2(a).

62 Figures used to calculate Table 3 were taken from the 'Green Book' at the South Australian Coroner's Office. This register lists all inquests held in South Australia from 6 December 1955 until present including the dates of inquests and brief particulars of the case. It should be noted that neither Cleland nor Ahern would have conducted every inquest during this time.

Table 3. Number of coroners' inquests heard in South Australia from 1960 until 1979.



Legend to Table 3.

- Number of inquests conducted under City Coroner Thomas Cleland
- Transition year between Cleland & Ahern
- Number of inquests conducted under City Coroner/State Coroner Kevin Ahern

By the early 1990s, concerns with sections of the coronership during Ahern's tenure began to emerge. Although not specifically directed at Ahern, these concerns related to the qualifications of coroners and the standard of forensic examinations. For example, the *Royal Commission into Aboriginal Deaths in Custody* made it clear that the South Australian State Coroner system had not necessarily achieved its anticipated reforms in improving the standard of coronial inquires. In particular, the Commission was concerned that, while a State Coroner had been in place since 1975, there was still a 'prevalence of unqualified justices of the peace acting as local or country coroners'[63].

63 Johnston Royal Commission, Vol.1, 1991 at 4.5.26.

This was to change with the appointment of a new State Coroner, Wayne Cromwell Chivell, in July 1993. Unlike his predecessors, Chivell's appointment to the coronership was for ten years[64]. During this time significant reforms were made to the office starting with the abolition of all inquests conducted by non-legally qualified justices of the peace. Instead, Chivell was to hear all inquests and, when he couldn't, provision was made for an acting legally qualified magistrate to conduct cases. This extended to inquests in rural areas of the state and, whereas Ahern did not venture too far outside the city jurisdiction, Chivell was happy to do so. This was facilitated by South Australia being a relatively small volume coronial jurisdiction, unlike NSW, Victoria and Queensland, which required several coroners to meet the workload.

Chivell also reformed the South Australia coronership in other ways. In 1997 changes were made under his leadership to the way investigations were conducted. Chivell wanted a coronial investigation service that was not necessarily tied to the South Australian Police (hereafter SAPOL), one that could be totally dedicated to investigating fatalities and not bogged down in administrative matters or collecting bodies[65]. Before 1997, nine SAPOL officers had covered a variety of duties that included receiving calls notifying the coroner of deaths, attending the fatality scene, attending the post-mortem and conducting the investigation[66]. Thereafter, three Coronial Service Officers (administrative personnel) were appointed to take calls reporting deaths to the office and the Coronial Investigation Services Unit (CISU) was established with five SAPOL officers appointed to specifically investigate coronial cases[67]. Chivell also improved communication between the Coroner's Office, SAPOL and the Forensic Science Unit, and put in processes whereby all information

---

64 Notes of interview with South Australian State Coroner, Wayne Chivell, 30 January 2002. The Coroners Act does not stipulate the length of tenure and therefore it could be presumed that the appointment could be extended with approval of government executive, by virtue of the State Governor.

65 I pointed out on page 95 that the Johnston Royal Commission expressed concern about the adequacy and impartiality of police investigations conducted on behalf of coroners and it is likely that this proposed reform was a response to the Commission's findings.

66 Notes from interview with CISU officer, Wednesday 6 February 2002.

67 The CISU was to be headed by a Detective Senior Sergeant working with four other SAPOL officers at the level of Detective Senior Constable. While it seems legislation restricted these officers to be members of the SAPOL, new coronial legislation recently passed in South Australia has provision for the appointment of investigators who are other than police officers. Coroners Act 2003 s9(1).

divulged from the office had to be approved by either the State Coroner or Counsel Assisting.

The number and nature of inquests held also changed substantially under Chivell. With a more thorough investigation conducted into those deaths reaching inquest, the length of the court case increased to around three days for a 'typical' inquest. In deciding on the deaths that would be subject to an inquest, Chivell sought to ensure cases that would be of most public benefit would get a hearing[68]. As a lot was known about the nature of motor vehicle accidents, few of these fatalities reached inquest after 1993, unless there were particular public safety issues[69].

Deaths that occurred under the same or similar circumstances were often clustered together and heard at the one inquest. These cases were often conducted over many days or weeks such as the inquest into the death of three Aboriginal people in the Pitjantjatjara Lands from petrol sniffing and the inquest into the death of eight people when a regional aircraft crashed near Whyalla[70]. Correspondingly, the number of inquests held in any one year fell. Table 4 on the following page, compares the number of inquests conducted under Chivell in comparison with Ahern. While Ahern's inquest load fell from an average of 175/year between 1974 and 1979 to 100/year between 1980 and 1992, there was a steady decline after 1987. Once Chivell took office the numbers continued to decline to an average of about 39 inquests/year between 1994 and 2003[71].

---

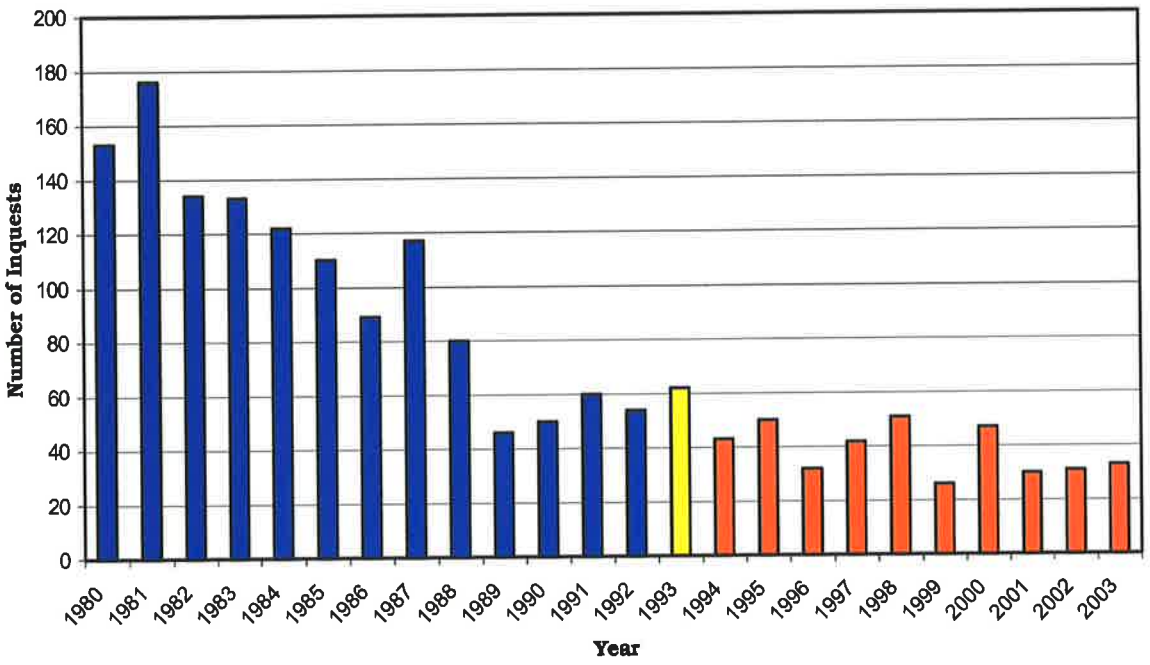
68 Notes of interview with South Australian State Coroner, Wayne Chivell, 30 January 2002.

69 For example, in early 1997 several motor vehicle fatalities were examined at an inquest. The inquest was prompted by a series of tragedies involving young people and the use of motor vehicles. In the findings, the Coroner noted, that 'although the death of young people on our roads is a phenomenon to which regrettably we have become too familiar, these particular incidents were different in that they involved the use of motor vehicles by very young and inexperienced drivers in the company of friends of similar age and driving experience using motor vehicles as a form of entertainment'. See, Chivell, W. *Finding of Inquest*, 1-5/97.

70 The inquest into petrol-sniffing fatalities was held over eight days and the Coroner travelled to the Pitjantjatjara Lands in northern South Australia to conduct the inquest. See, Chivell, W. Findings of Inquest, 11/2002. The inquest into the Whyalla airline crash was conducted over several months with the court sitting in Adelaide and Whyalla in South Australia as well as in Ada, Oklahoma and New York City, New York in the US. See, Chivell, W. Findings of Inquest, 21/2002.

71 Again, figures used to calculate Table 4 were from the 'Green Book' held at the South Australian Coroners Office and Ahern and Chivell would not necessarily have heard every inquest during these periods.

Table 4. Number of coroners' inquests heard in South Australia from 1980 until 2003



Legend to Table 4.

- Number of inquests conducted under State Coroner Kevin Ahern
- Transition year between Ahern & Chivell
- Number of inquests conducted under State Coroner Wayne Chivell

With the nature of inquests becoming more complex under Chivell, the *Findings of Inquest* also became much more detailed documents. They took the form of a comprehensive outline of the evidence provided at inquest and were written so that the average non-legal reader was able to follow decisions and conclusions reached by the Coroner. On the other hand, this attention to detail caused delays in making findings public, ranging from a few weeks to several months depending on the complexity of the case. In what was to be a first in Australia, from 2000 Chivell also made these findings more publicly accessible by posting them on the South Australian court website[72].

72 In 2001, the ACT Coroner also began to post this jurisdictions findings 'of interest' on its website, See http://www.courts.act.gov.au/magistrates/index.html. To date, these are the only two jurisdictions to make findings public using this medium.

The Coroner's Office has not, however, been without discord during Chivell's tenure. Most recently this has involved resource issues and claims of State Government interference in the judiciary. While questions about judicial independence in South Australia arose from Government and media misgivings about how the Director of Public Prosecutions (DPP) had dealt with some criminal cases, to some extent the Coroner's Office was drawn into the mêlée. Although the DPP had not been unaccustomed to dealing with questions raised by government and media about how certain cases were managed by his office, in 2003 this came to a head when the Government directed the DPP, against his wishes, to appeal against the leniency of a sentence imposed in a criminal matter. The matter involved a young man from an affluent Adelaide family who shoot and wounded a newspaper deliveryman. The DPP had been involved in a plea bargain in relation to this matter and the Government, sensing public concern over the sentence imposed, called for the matter to be reviewed[73]. Riding the wave of public concern over lenient sentencing in the criminal justice system, the Government also directed the Solicitor-General to investigate handling of plea bargaining processes in the DPP office[74].

In April 2004, the DPP told a Balanced Justice forum at Parliament House that the independence of the office was very much in the public interest and he would resign if that independence was not preserved[75]. Another issue the DPP had grave concerns about was the inefficient resources provided by Government to run the office. In his annual report to Parliament in 2003 he placed the Government on notice about funding shortfalls over the last 10 years and warned;

> Unless the office is given a significant injection of funds in the short-term, I am of the view that the DPP will not be able to properly perform its essential functions[76].

---

73 The South Australian Court of Criminal Appeal sat to hear the matter in September 2003 and found the three-year suspended jail term and $100 bond imposed on the defendant were manifestly inadequate and that there were errors in the sentencing process. See, Nemer v Holloway & ORS No. SCCIV-03-1209 [2003] SASC 372. A copy of this finding can be accessed at http://www.austlii.edu.au/au/cases/sa/SASC/2003/372.html

74 In releasing the report in April 2004, the Attorney-General described the report as 'scathing', the Solicitor-General finding that the DPP's handling of the criminal case inept. See, Bildstein, C. [reporter] 'Evans accuses DPP inquiry of stalling', *The Advertiser*, 22 April 2004 p2.

75 Bildstein, C. [reporter] 'You interfere – I quit', *The Advertiser*, 17 April 2004 p3.

76 Rofe, P. Quoted by Bildstein, C. [reporter], *The Advertiser*, 22 April 2004 p2.

This led to the Economic and Finance Committee voting unanimously in October 2003 for a Parliamentary Committee to inquire into the staffing levels and resources of the DPP and the Coroner's Office. Before this Committee was formally established, the DPP resigned, citing ill health and his wish to protect the office as the reasons for his decision[77]. In July 2004, the Government, in announcing the commencement of the Parliamentary Inquiry, indicated that it would investigate three issues:

- The need for any changes to legislation governing the offices of DPP and Coroner
- Resources needed to effectively carry out their roles and functions
- The relationship between the DPP, the Coroner, the Attorney-General, the Government and the State Parliament[78].

Whether the inquiry will go ahead as reported is now questionable. By August 2004 accusations were being raised that the Government was using its power to call off the inquiry and that the Economic and Finance Committee had a history of not summoning evidence or witnesses in politically sensitive issues[79].

4.3.4 Legislative reforms, state coroners and lawful power

Following South Australia's lead, Victoria established its statewide coronial system with the passage of the Coroners Act 1985[80]. The reforms identified in Victoria's new legislation reflected recommendations from a review that had been conducted into the previous Act[81]. Notably, this review identified that coroners should not only investigate death, but that they should also take an active role in public health through death prevention. The 1985 legislation paved the way for greater cooperation between medicine and the coronership, but not all doctors were happy with some sections of the Act. For the first time it became mandatory for the coroner to identify, if possible, any person

---

77 Kelton, G. [reporter] 'Get on your bike, Mr DPP', *The Advertiser*, 4 May 2004 pp1 & 4. According to *The Advertiser,* members of the state's legal fraternity indicated that the position of DPP in South Australia had become a 'poisoned chalice' that few senior lawyers would want. See, Craig, L. & Fewster, S. [reporters] 'Search for new holder of poisoned chalice', *The Advertiser*, 4 May 2004 p4. As of September 2004, no one has yet been formally appointed to hold this office.

78 'Inquiry into DPP, coroner', *The Advertiser*, 3 July 2004 p37.

79 Kelton, G. [reporter] 'Labor uses power to axe key inquiries', *The Advertiser*, 26 August, 2004 p2.

80 See, Coroner Act 1985 (Vic) s6(1).

81 Norris, J. *The Coroners Act 1958 – A general review,* Melbourne, Victoria, 1980.

who may have contributed to the cause of death[82]. For doctors and other heath professionals this meant that they could be named as contributing to a patient's death even though there may have been no negligence or other serious fault or blame on their part[83].

While coroners in most Australian jurisdictions under existing state statutes could name a person found to have caused the death, normally coroners would not make an adverse statement about a doctor or healthcare professional unless there was some element of blameworthiness or real degree of fault[84]. The provision in the 1985 Victorian act raised serious concern within medical circles about the impact an adverse coronial conclusion might have on professional character, reputation and employment prospects. This was particularly concerning to the medical fraternity given that a finding of contribution was likely to be reported by the media without necessary regard to the fact that the coroner naming a person did not necessarily imply blame or legal responsibility. The mandatory requirement of the coroner to identify persons contributing to the cause of death raised considerable legal debate and in 1999 an amendment to repeal this provision was passed by the Victorian Parliament[85].

Another significant feature of the Victorian Coroners Act 1985, was that it combined in law the coronership with the establishment of the Victorian Institute of Forensic Medicine (VIFM). This not only empowered the Victorian State Coroner to oversee and coordinate the state's coronial services, but enacted his membership on the VIFM's Governing Council[86]. The Victorian government further demonstrated its support of this model by funding the development of the Coronial Services Centre, a purpose built facility to house both the State Coroner's Office and the VIFM. The legislation also provided that only a judge of the County Court, a magistrate or a barrister and solicitor could be appointed as the State or Deputy State Coroner and that all other acting coroners must be legally qualified. In 1991, the Victorian system was

---

82 Coroners Act 1985 (Vic) s19(1)1(e). Tasmanian coroners were also directed to make this finding under the Coroners Act 1995 (Tas) s28(1)(f).

83 Gorton, M. 'Law report: coronial reform', *Australian & New Zealand College of Anaesthetists,* Bulletin Vol.8, 1999 p8.

84 Gorton, M. 'Law report: medical manslaughter revisited?' *Australian & New Zealand College of Anaesthetists,* Bulletin Vol.7, 1998 pp6-8.

85 Coroners (Amendment) Act (Vic) 1999 s10(b).

86 Coroners Act 1985 (Vic) s7(b) & s67.2(a).

touted as the most innovative and efficient in Australia, a model to be adapted elsewhere where geographic considerations so required[87]. To date, despite a number of states and territories enacting legislation seemingly based on the Victorian model, no other jurisdiction has combined the coroner's office with their local forensic science centre[88].

NSW set up its State coroner's system in 1988 and provided coroners with additional powers in 1989[89]. In the most populous state in Australia, the NSW coronial services operated out of two Sydney Coroner's Courts, one in Glebe and the other in Westmead. The high workload associated with this office, buttressed by statutory provision, allowed for legally unqualified clerks of the court to continue to act as coroners with the power to carry out judicial functions in the conduct of inquests[90]. Unlike the Victorian experience, the NSW State Coroner was not given control over resources relating to police investigations, forensic science services and the briefing of counsel to assist the coroner at an inquest[91]. Instead, like South Australia, the responsibility for the coronial system was divided between the Attorney-General's Department, the Health Department and the Police Department.

While the actual division of coronial services may traverse various government departments as demonstrated in NSW and South Australia, across Australia the coroner's office is now a legal post under the Attorneys-General portfolio of states or territories. Although the Attorney-General Department is a government portfolio, as previously described (4.3.3), legislative reforms were enacted to separate government from the judiciary through the creation of an executive arm and a judicial arm, with coroners afforded some degree of independence under the protection of the judicial arm[92]. The power of coroners, however, in comparison to their colleagues in other intermediate or lower courts, was prone to erosion under the guise of statutory reforms.

---

87 Johnston Royal Commission, Vol.1, 1991 at 4.5.18.

88 Freckelton, I. 'Legislation Commentary', *Journal of Law & Medicine,* Vol.6, 1998 pp26-29 esp.26.

89 Coroners (Amendment) Act 1988 (NSW); Coroners (Miscellaneous Amendments) Act 1989 (NSW).

90 Johnston Royal Commission, Vol.1, 1991 at 4.5.22.

91 Johnston Royal Commission, Vol.1, 1991 at 4.5.21.

92 In South Australia this is currently provided under the Courts Administrations Act 1993 which legislates the State Courts Administration Council as an administrative authority independent of control by executive government.

For example in South Australia, the 1935 Act had provided coroners with all the powers conferred upon justices under the Justices Act 1921, in respect of holding a preliminary hearing of an indictable offence and the like powers and duties to commit that person for trial[93]. The first move to withdraw this authority, which included the coroner's power to make a finding of guilt as a result of the evidence adduced on inquest, took place in 1952 when an amendment was made to the 1935 Act[94]. Thereafter, coroners in South Australia remained without criminal jurisdiction until the passage of the 1975 legislation, which reinstated the coroner's committal power. While State Coroner Ahern had cause to use his committal power soon after the 1975 Act was passed[95], this was the only occasion he exercised this provision and it was subsequently abolished again in 1981[96].

While this power was not re-enacted, tension between criminal and coronial powers was not fully laid to rest. The inquest into the death of Detective Sergeant Geoffrey Bowen provides a case in point.

Detective Sergeant Geoffrey Bowen died in 1994 as a result of haemorrhage due to blast injuries when a bomb exploded in his office at the Adelaide branch of the National Crime Authority. Just over a week later, Domenic Perre was arrested and charged with the murder (and the attempted murder of another victim of the blast). A preliminary examination of the charges commenced in the Adelaide Magistrates Court and in August 1994 Perre was committed for trial in the Supreme Court. However, in September 1994 the DPP submitted a *nolle prosequi* indicating that he did not propose to proceed with the charge against Perre, and subsequently the case became the subject of a coronial inquest held in 1999[97].

The case was heard over several months and as would be expected generated considerable public attention, particularly when State Coroner Chivell in handing down his findings, found that Detective Sergeant Bowen 'died when he opened a parcel bomb, sent to him by Domenic Perre, and the bomb

---

93 Coroners Act 1935 (SA) s22.
94 Coroners Amendment Act 1952 (SA) s20(b)(c).
95 See, Kitchin, C. *Evolving role of the coroner.* Unpublished honours thesis, The University of Adelaide, 1982 p25.
96 Coroners Amendment Act 1981 (SA).
97 Chivell, W. Finding of Inquest, 5/99 at 1.4.

exploded in his hands'[98]. Subsequent upon this finding, an application was made to the South Australian Supreme Court to have this finding set aside on the basis that it offended against Section 26(3) of the Coroners Act 1975[99]. The thrust of the argument was that since the bombing was so obviously a criminal act, the finding that Perre sent the bomb was at the least a suggestion that he was criminally liable[100]. Nonetheless, in refusing this application, Supreme Court Judge, Justice Nyland, found that the Coroner had simply recorded his findings as to the sequence of events that culminated in Detective Sergeant Bowen's death and that he had neither found nor suggested that Perre was criminally or civilly liable for his acts[101].

As in South Australia, provision now exists in all jurisdictions that prohibit coroners from finding a person guilty of criminal or civil offence. Until 2003, Queensland was the only State where the coroner could order a person committed for trial[102], but this was repealed on the introduction of new legislation[103]. At present the only role left to coroners within criminal law occurs when information is obtained while investigating the death that leads a coroner to reasonably suspect a person of committing an indictable offence. In this instance, the coroner is required to refer the matter to the Attorney-General or DPP[104].

To appreciate fully the constraints placed on coroners by the law, there is one final distinction between the powers of ordinary justices compared to a coroner that bears attention. Unlike their counterparts in the criminal and civil court system, the findings and recommendations handed down by coroners have no lawful power. In other words, while coroners' findings and recommendations may serve an important public health and safety purpose, there is no legal obligation on the part of any individual or agency to even consider, let alone act, on such findings. Indeed, eminent Canberra barrister and member of the Law Faculty at the Australian National University, Hugh

---

98 Chivell, W. Finding of Inquest, 5/99 at 11.6.

99 This section of the act prohibits coroners from making a finding, or suggestion, of criminal or civil liability. See, Coroners Act 1975 (SA) S26(3).

100 Chivell, W. *Developments in the Coroner's Court*, Law Society of South Australia, 2001 p5.

101 Nyland, J. *Perre v Chivell*, South Australian Supreme Court, 279, 2000.

102 Coroners Act 1958 (Qld) s41(1).

103 Coroners Act 2003 (Qld) s48.

104 Coroners Act 2003 (Qld) s48(2)(a); Coroners Act 1980 (NSW) s19(2); Coroners Act 1975 (SA) s27; Coroners Act 1995 (Tas) s30(3)51; Coroners Act 1985 (Vic) s21(3); Coroners Act 1996 (WA) s25(5)(a); Coroners Act 1997 (ACT) s58(1)(a); Coroners Act 1997 (NT) s35(3).

Selby, indicates that there is abundant evidence that coronial recommendations often vanished into the ether, thus denying any useful meaning to have come from the death and the inquest[105].

This was certainly the conclusion drawn from the Johnston Royal Commission. The Commissioners recognised the power of coronial recommendations to rectify unsafe or inadequate procedures and practices, but noted:

> It is essential that machinery exists to convey all coronial recommendations to the relevant authorities. In several cases investigated by the Commission it was found that the recommendations had never come to the notice of the relevant authorities[106].

Yet even when recommendations came to the attention of relevant authorities they were not always put into practice. For example, in 1989 the Victorian Attorney-General began to monitor Government and community responses to coronial recommendations in that state. A survey conducted by his department found that over a two-and-a-half year period only about two-thirds of recommendations were ever implemented[107].

The Johnston Royal Commission provided at least one answer for this failure. The Commission noted that no coroner in Australia had the jurisdiction to monitor whether or not recommendations were being put into practice. Despite the fact that the Commission received submissions arguing that it would be inappropriate for coroners to monitor the implementation of such recommendations and that the investigatory role of coroners should remain distinct from the decision-making role of the government or public authorities, the Commissioners concluded:

> It is in the public interest that some mechanism be established to ensure that the relevant authorities have received and considered those recommendations. It may well be, in some situations, that there are substantial reasons for not adopting the coroner's recommendations. It is not a question of compelling the government or public authorities to act on recommendations, but rather to ensure that they have received proper consideration[108].

---

105 Selby, H. 'Introduction' in H.Selby (ed), *The inquest handbook*, The Federation Press, Sydney. 1998 pxviii.

106 Johnston Royal Commission, Vol.1, 1991 at 4.5.91.

107 Johnstone, G. 'An avenue for death and injury prevention' in H.Selby, ed, *The aftermath of death*, The Federation Press, Sydney, 1992 p158.

108 Johnstone Royal Commission, Vol.1, 1991 at 4.5.97.

To achieve this end, the Commission made several recommendations including that coroners provide a copy of their findings and recommendations to all parties appearing at inquest and to the Attorney-General or Minister for Justice of the state or territory in which the inquest was conducted. The Commission also recommended that relevant authorities respond in writing within three calendar months to the minister of the Crown with responsibility for the agency or department recommendations had been directed, outlining whether any actions had been taken or were proposed to be taken. It was also recommended that State Coroners be required to report annually in writing to the Attorney-General or Minister for Justice on these responses and that this report be tabled in Parliament[109].

For most jurisdictions, it took at least another decade for these recommendations to find their way into coronial law. The first jurisdiction to do so was the Australian Capital Territory (ACT)[110], interestingly a region where such custodial deaths were extremely rare[111]. South Australia also attempted to enact the Commission's recommendations through the introduction of the Coroners Bill 2001[112]. This draft legislation went slightly further than the ACT Act by extending some of the Johnston Royal Commission's recommendations beyond those of just custodial deaths. For example, the bill made provision for forwarding all coronial findings and recommendations to the Attorney General as soon as practicable after an inquest[113].

Following a change of government in South Australia the 2001 Bill was sent back for changes and a new bill reintroduced in 2003[114]. The Coroners Bill, 2003, was assented to in July 2003, but as of September 2004 has not been

---

109 Johnston Royal Commission, Vol.1, 1991 Recommendations No.14-18.

110 See Coroners Act 1997 (ACT) s74; 75(1); 76.

111 It is also interesting to note that the wording of the ACT Coroners Act 1997 requires custodial agencies to respond only to the coroner's findings and therefore they are not obliged to address any recommendations that may have been made in connection with the inquest. Freckelton argues that it is agencies' responses to recommendations that is of most value in promoting public accountability and in this regard the ACT legislation has been unsatisfactorily drafted. Freckelton, I. 'Legislation commentary', *Journal of Law and Medicine,* Vol.6, 1998 pp26-29.

112 The Coroners Bill 2001, prepared by the Parliamentary Counsel, was introduced to the Legislative Council by the South Australian Attorney-General, Trevor Griffen.

113 Coroners Bill 2001 (SA) s9.1& s25.4(a).

114 Coroners Bill 2003 (SA).

proclaimed[115]. While all the cases presented in this thesis were conducted under the Coroners Act 1975, it is worth observing that this new legislation included many of the proposed changes that were outlined in the Coroners Bill 2001 such as extending the definition of a death in custody to all those who died while detained in any place in the State under any Act or law[116]. Under the new legislation, the coroner must forward a copy of findings and recommendations to:

- the Attorney-General and, in the case of a death in custody, the Minister, agency or instrumentality of the Crown responsible
- each person who appeared personally or by counsel at the inquest
- any other person who, in the opinion of the Court, has a sufficient interest in the matter[117].

The Minister or agency responsible is then obliged within six months to provide a report before each House of Parliament giving details of any action taken or proposed to be taken in consequence of the recommendations and forward a copy of the report to the Coroners Court[118].

Another important inclusion in the South Australian Coroners Act 2003 was a list of explicit circumstances in which deaths were to be reported to the coroner. This was done with the intention of removing the rather vague provision in the 1975 Act, which read:

> A person knowing of, or becoming acquainted with, the finding of a dead person, or the death of person apparently by violent or unusual cause, must immediately notify a coroner, or a police officer, of that finding or death[119].

The term 'unusual cause' had been open to interpretation by medical practitioners and had led some doctors to not report deaths, including some hospital deaths that were found later to have been due to medical misadventure[120]. The new legislation was crafted to stipulate a variety of circumstance under which doctors and others must report deaths. To improve the reporting of hospital related fatalities, the list not only assumed deaths in hospital from medical misadventure would be reported, but clearly stipulated

---

115 According to the South Australian Parliament the Act is unlikely to be proclaimed until the latter part of 2004.
116 Coroners Act 2003 (SA) s3 'death in custody'(a).
117 Coroners Act 2003 (SA) s25.4(a)(b).
118 Coroners Act 2003 (SA) s25.5.
119 Coroners Act 1975 (SA) s31(1).
120 See for example Chevill, W. Finding of Inquest, 24/96 and Chevill, W. Finding of Inquest, 35/97.

that anyone dying within 24 hours of being discharged from a hospital, including an emergency department, must be reported to the coroner[121].

The obligation of doctors to report unexpected, unnatural or violent deaths to the coroner was, of course, only one part of medicine's responsibility within coronial law. Over the course of the 20th century, medicine, or more particularly advances made in medical science, forced the need for statutory provision and reform that served to ensure medicine would hold a significant place within the coroner court.

4.4 Reportable deaths, medicine and legal implications

For at least the first half of the 20th century, coroners mostly conducted inquests under traditional coronial rules designed for the pre-scientific era. However, advances in several medical specialties provoked the need for statutory provision through new or existing legislation. These reforms included:

- the addition of anaesthetic and surgical deaths to the list of deaths reportable to the coroner
- the need to define in law what constituted death
- the requirement for coronial consent under transplantation Acts for the removal of tissue where the coroner held jurisdiction over the deceased.

While the medico-legal implications of administering anaesthetics had been identified at least as early as 1888[122], consideration to extend coronial jurisdiction to anaesthetic deaths became necessary around the 1950s as more sophisticated forms of anaesthesia were becoming the norm during surgical procedures. During the late 1800s and early 1900s inhalation anaesthesia was most commonly used, but by the 1940s and 1950s induction of anaesthesia using intravenous barbiturates and muscle relaxants, and the use of controlled ventilation through an artificial airway was becoming more common[123]. The more sophisticated and invasive these techniques became, the greater the problem for both doctors and coroners to determine whether the surgical procedure, the anaesthesia, or the underlying disease was the true cause of death. For instance, even on post-mortem, damage to the brain

121 Coroners Act 2003 (SA) s3 'reportable death' (d)(e).

122 By way of example see, Buxton, D. *Anaesthetics: their uses and administration*, HK Lewis, London, 1888.

123 Rushman, G. Davis, N. Atkinson, R. *A short history of anaesthesia: the first 150 years*, Butterworth Heinemann, Oxford, 1996 esp. Chaps.4&7 pp35-50&70-87.

due to lack of oxygen (cerebral anoxia) provided few clues as to whether the death was cause by haemorrhage, before or during surgery, failure of the anaesthetic apparatus or poor anaesthetic technique[124]. Discrepancies between clinical and post-mortem diagnosis and inconsistencies in documenting the correct cause of medical death on issue of death certificates were becoming increasingly troublesome. In cases where the cause of death could not be certified, or questions arose as to the cause or circumstances of a death, the coroner was given jurisdiction over the deceased to determine these matters. Queensland and NSW provided statutory stipulation over the reporting of anaesthetic deaths in 1958 and 1960 respectively[125]. All other states and territories followed suit either through coronial acts or within their respective rules and regulations[126].

The law relating to reporting anaesthetic or surgical deaths in Australia (including dental surgery) was not, however, solely constituted under coronial legislation. Provision for certifying death was also stipulated within each state and territory Registration of Birth, Deaths and Marriages Acts, one of a series of statutes overlapping coronial law. State and territory statutes dealing with the registration of deaths normally require the medical practitioner responsible for a person's medical care immediately before death, or who examined the body after death, to give written notice of the death to the registrar. This notification includes all particulars of the death required under regulations, including certification of the medical cause of death. Unlike England and Wales, in the case of anaesthetic deaths doctors are not required to notify the registrar. Instead, this duty falls to the coroner[127]. The coroner then investigates the matter (with or without going to inquest) and notifies the registrar accordingly. If the death is the subject of an inquest, statutory provision exists for the death to be registered before a finding has been made

---

124 Knapman, P. Powers. M. *The law and practice on coroners*. Barry Rose, Chichester, 1985, p83 at 13.14.

125 Coroners Act 1958 (Qld) s7(1)a (v); Coroners Act 1960 (NSW) s11(1)(f).

126 See for example: Coroners Act 1985 (Vic) s3 'reportable death' (f & g); Coroners Act 1996 (WA) s3 'reportable death' (b & c); Coroners Act 1997 (NT) s12 'reportable death' a (v & vi).

127 I also pointed out in Chapter 2, that unlike Australia, in England and Wales there is no statutory duty upon a doctor to report a death to the coroner, including those associated with an operation or anaesthetic, instead this duty falls to the Registrar of Births and Deaths under Regulation 41 of the Birth and Deaths Regulations 1987.

about the cause of death[128]. In South Australia, the normal practice in these cases is that is that the 'official' death certificate specifying the cause of death is not issued until after inquiries have been completed[129].

Certifying when extinction of life occurred and identifying cause of death is primarily a matter of medical judgment. For most of the 20th century at common law, a person who was breathing with a beating heart and circulation was deemed to be alive, whereas a person with irreversible cessation of respiratory and cardiac function was certified dead[130]. Medical advances, however, which provided doctors with the technology to support or replace vital organs such as the heart, lungs and kidneys challenged the notion of what constituted life; a beating heat or a functioning brain.

Organ transplantation commenced in Australia during the late 1960s and legislation on tissue grafting provided coroners with new responsibilities when it came to authorising the harvesting of human organs from bodies they held jurisdiction over[131]. The advent of organ transplantation raised considerable ethical debate, but by the mid 1970s there was widespread acceptance in legal, medical and theological circles, as well as among the general public, that the death of the brain and not the cessation of heat beat equated to life being extinct[132]. New attitudes to what constituted death prompted the Law Reform Commission of Australia to advise the government in 1977 that the law had a responsibility to legislate (however generally) a statutory definition of death. The Commission recommended that such a definition should state that a person had died when there was irreversible cessation of all functions of the brain, or when there was irreversible cessation of circulation of blood in the

---

128 Births, Deaths and Marriages Registration Act 2003 (Qld) s30(9); Births, Deaths and Marriages Registration Act 1995 (NSW) s40(2); Births, Deaths and Marriages Registration Act 1996 (SA) s37(3); Births, Deaths and Marriages Registration Act 1999 (Tas) s36(3); Births, Deaths and Marriages Registration Act 1996 (Vic) s38(3); Births, Deaths and Marriages Registration Act 1998 (WA) s48(3); Births, Deaths and Marriages Registration Act 1997 (ACT) s36(1); Births, Deaths and Marriages Registration Act 1979 (NT) s35(2).

129 Section 37(3) of the Births, Deaths and Marriages Registration Act 1996 (SA) states 'The Registrar may register a death even though the death is subject to an inquest or other coronial inquiry and a finding has not been made about the cause of death. Section 35(b) of the Act allows incomplete or incorrect registrable information to be corrected.

130 Breen, Plueckhahn, Cordner, 1997 p259.

131 Initially this was to authorise kidney and corneal grafts and in August 1967 the NSW Sydney City Coroner provided the first consent for a kidney transplant. See, Goldner, 1991 p179.

132 Plueckhahn, V. & Cordner, S. *Ethics, legal medicine and forensic pathology*, Melbourne University Press, Melbourne, 1991 p111.

body[133]. This statutory definition of death was subsequently legislated in all jurisdictions except Western Australia[134]. State and territory human tissue and transplantation Acts had significant implications for coroners, exponentially increasing their workload. These Acts stipulated that where a death fell into coronial jurisdiction, and consequently may be subject to an inquiry, consent had to be obtained from a coroner holding jurisdiction for removal of any tissue[135].

4.5 Forensic medicine, coroners and death surveillance initiatives

While 20th century coroners used their findings to alert the public to ways of preventing death, their role in death surveillance for public health purposes was not well established. For most of the century, coroners relied on their memory or informal discussion with colleagues to identify patterns or trends in deaths across, or within, jurisdictions. While this may have worked in small volume coronial offices, in larger coronerships such ad hoc methods were not meeting modern public health agendas or the drift, more generally, to a preference for more explicit epidemiological data. In addition, advances in medical science and forensic detection were providing much more rapid and conclusive methods to establish the cause of death[136] and the advent of computer technology provided a means by which death surveillance data could be more efficiently collated and studied.

Over the course of the century, obligations upon coroners to not only establish the medical cause of death, but to determine the circumstances leading to the event, progressively required diverse specialist knowledge. The issue of coroners being 'technically ignorant' that was raised by the NSW Labour opposition in early 1900 (see page 90) became an even greater concern as

---

133 Law Reform Commission of Australia, *Human tissue transplants*, Report No 7, Canberra, 1977.

134 In Western Australia, for human tissue to be harvested from a person whose respiration and circulation of blood is being maintained by artificial means, two doctors need to certify that irreversible cessation of brain function has occurred. See, Human Tissue and Transplant Act, 1982 (WA) s24(2).

135 See for example: Human Tissue Act, 1982, (Vic); Human Tissue and Transplant Act, 1982 (WA) s23; Transplantation and Anatomy Act, 1983 (SA) s 23; Human Tissue Act, 1983 (NSW) s25.

136 Like other areas of medicine, forensic pathology began the 20th century as an emerging speciality and by the close it had splintered into various sub-specialties that included histopathology, neuropathology, cytopathology, haematology, microbiology, immunology, chemical pathology and toxicology. For a more detailed discussion of the skills employed in forensic pathology see Ranson, D. 'The role of the pathologist' in H.Selby (ed), *The aftermath of death*, The Federation Press, Sydney, 1992 pp80-125 esp.96-99.

coroners investigated diverse death scenarios[137]. Increasingly, they needed to draw on medical, engineering and technical expertise to determine the exact manner of death. Although this posed a threat to coroners' survival inasmuch as advanced detection methods reduced their traditional investigative responsibilities, conversely, it allowed coroners to re-conceive the relevance of the office. By employing the same reasoning skills used to analyse complex forensic and technical evidence in civil or criminal matters, but this time in the form of an open inquiry into matters of public concern, coroners effectively reformulated the office as one that still had civic relevance. Becoming more active players in death surveillance and injury prevention was also an important means to demonstrate the value of the coronership to society, but to achieve this coroners needed to unite and develop systems to link information and identify mortality data.

In April 1991, just two months prior to the Johnson Royal Commission report becoming public, coroners got together and formed the Australian Coroner's Society (ACS). Among its many findings, the Commission had identified the absence of any uniform database to compile and maintain records of custodial deaths and recommended that coroners consider establishing such a record keeping system[138]. The ACS acted on this recommendation at a meeting in 1993 and, in 1994, engaged the National Injury Surveillance Unit and Worksafe Australia (now the National Occupational Health & Safety Commission) to undertake a feasibility study into the development a national coronial information system[139].

The National Injury Surveillance Unit and Worksafe Australia agreed to jointly fund the project and on completion of their study it was recommended that, in order to establish a national coronial database, all jurisdictions needed to develop a common core of information including standardised investigation and recording protocols for significant classes of deaths. This was to be quite

---

137 By way of example, some of the common circumstances behind deaths investigated by coroners included those associated with road, rail, shipping, aircraft and industrial accidents, drowning, falls, ingestion of poisons, strangulation and iatrogenic deaths in hospitals involving equipment failure and other forms of medical misadventure.

138 Johnston Royal Commission, Vol.1, 1991 Recommendations No.40.

139 Moller, J. *Coronial information systems: needs and feasibility study*, Australian Institute of Health & Welfare; National Injury Surveillance Unit, Adelaide, 1994 p4. Also see, Monash University National Centre for Coronial Information (MUNCCI), *Annual Report 1998-99*, MUNCCI, Melbourne, 1999 p5.

a significant task as coroners were used to operating autonomously and had developed their own record keeping methods, the majority of which were limited to say the least. The feasibility study also recommended that the ACS:

- Approach state and federal Attorneys-General for support and resources for the development of a national database system
- Seek the formal commitment of major users to the establishment of such a system
- Identify a timeline for its implementation
- Establish a steering committee (to include all state coroners or their nominees) to oversee its establishment
- Nominate an auspicing body and site of operation
- Establish an ongoing management mechanism[140].

In 1996, the ACS sought further consultancy, this time from Drummond Research Pty. Ltd. to report on the implementation aspects of developing a national coronial information system (NCIS). In March 1997, the Standing Committee of Attorneys-General gave in principle support to the development of the system which was to take the form of a computerised database. An auspicing body was selected to develop and manage the system, the Monash University National Centre for Coronial Information (MUNCCI), which was a consortium of the Victorian Institute of Forensic Medicine/Monash University Department of Forensic Medicine, the Monash University Department of Epidemiology and Preventive Medicine and the Monash University Accident Research Centre[141]. The NCIS database commenced operation in July 2000, and thereafter material collected in the course of coronial investigations such as demographic data, police reports, autopsy reports, supporting forensic reports and cause of death statistics were to be entered into the system in both text and coded forms.

While the NCIS was a national initiative it was a project clearly driven, at least in the first instance, by Victorian interests. The Victorian Institute of Forensic Medicine (VIFM) had provided infrastructure and intellectual support for the project since 1996, MUNCCI was to be located within the Victorian Coronial Services Centre and during 1997/98 capital funding for the NCIS was received from the Victorian Department of Justice ($165,000) and Monash University ($165,000)[142]. The link already established between the coronership and the

---

140 Moller, J. 1994 p55.
141 MUNCCI, *Annual Report 1998/99,* p2.
142 MUNCCI, *Annual Report 1998/99,* p8.

VIFM by way of the Victorian Coroners Act 1985, was further cemented by the NCIS. The NCIS exemplified the importance of forensic science to the coronership through the collection of epidemiological data of a medical nature, in a similar way that death surveillance programs had been established in the US under the medical examiner system[143].

Commonwealth funding for the NCIS was forthcoming in 1998 via the Department of Health and Family Services (now Health and Aged Care) ($355,000), the National Occupational Health & Safety Commission ($20,000) and the Federal Office of Road Safety ($20,000). In 1999, a national funding strategy was developed for a three year period based on a 50% contribution by the Commonwealth with the remaining 50% to be provided by states and territories on a per capita basis[144].

While the NCIS fits into science-related developments in public health surveillance, it has been a qualified success. There are a number of reasons for this, many of which can be traced to the eight Australian coronerships historically being autonomous entities. Queensland for example, decided not to become directly involved in NCIS, largely because it did not have a centralised state coronial system[145]. Each coroner's office had developed its own data collection systems and there was little compatibility between these systems and the one developed by MUNCCI. In addition, there were variations in the quality of data collected and consistency in the way data were coded across jurisdictions[146]. The cost of operating what was always going to be an expensive system to maintain was a concern for individual coronerships, particularly when their own staff were required to input data into the national system. Providing secure access and the need for data of a highly sensitive

---

143 For a review of the existing systems in the USA see, Hanzlick, R. Parrish, R. 'The role of medical examiners and coroners in public health surveillance and epidemiologic research' *Annual Review of Public Health*, Vol.17, 1996 pp383-409.

144 MUNCCI, *Annual Report 1998/99*, p8.

145 This changed with the passage of the Coroners Act 2003 (Qld), which provided for a State Coroner. In June 2003, the Licence Agreement between the State of Queensland and Monash University was signed meaning that Queensland data was to become available to other coroners, death investigators and authorised third party users. See, MUNCCI, *Annual Report 2002/03*, MUNCCI, Melbourne, 2003 p6.

146 VIFM & Australian Council for Safety and Quality in Health Care, Summary report: *National consultative workshop on improving the value of coronial data for patient safety initiatives*, PALM Management Pty Ltd, Melbourne 2002.

nature to be stored within the system also posed problems for some coronerships[147].

Access to this national database is an issue worth exploring. While it was never envisaged that NCIS would be opened to public access, Moller, who was involved in the original feasibility study to develop the system, indicated that registered users would be permitted access to information relevant to their research needs[148]. Major users of the system were to be coroners, forensic scientists, work safety authorities, road traffic safety groups, policy makers and medical and public health researchers[149]. Therefore, it was argued that the system needed to support a wide range of qualitative and quantitative research approaches 'maintaining the depth required for single and multiple case study methods and the precision and clarity of definition required for case aggregation'[150].

According to MUNCCI, access rules to the NCIS were based on instructions from state and chief coroners who identified two user categories[151]. Category one users were to be coroners and their death investigator staff, the latter being provided with access to data by MUNCCI only on the written authority of their respective coroners. Category two users, also referred to as 'third party' users, were originally identified as 'any individual, organisation or agency with statutory mandated statistical function or with a role in research into or development of policy for public health and safety'[152]. More recently, MUNCCI announced via their website that the NCIS was developed primarily as a research tool for coroners and those directly investigating coronial deaths on behalf of coroners. While other individuals and organisations may apply for access to NCIS data, current rules restrict third party access to 'Australian government agencies and research organisations with a role or interest in

147 For example, access to Western Australian (WA) data held by NCIS requires category one users (highest accesses) to submit an additional application to the WA Coronial Ethic Committee. See, MUNCCI, *Information sheet for access to NCIS data for government departments and agencies and death / injury surveillance or research agencies,* MUNCCI, Melbourne, 2004 p3. A copy of this information can be accessed at http://www.vifp.monash.edu.au/ncis/index.html

148 Moller, 1998 p78.

149 After being granted approval to access NICS as a third party user for the purpose of this research I found that the data were of a highly specific statistical nature that was unsuitable for the purpose of this study and consequently I did not further seek to become a registered user.

150 Moller, 1998 p71.

151 MUNCCI, *Annual Report 1999/00,* p13.

152 MUNCCI, *Annual Report 1999/00,* p13.

public health and safety or death and injury surveillance, or that have a statutorialy (sic) mandated statistical role'[153]. Applications are not open to commercial or media organisations.

To access the NCIS potential third party users first need to submit an application to the MUNCCI Research Committee. This Committee assesses the adequacy of each application and if approved submits it to the Monash University Ethics Committee for final approval[154]. Third party users are then required to sign an Access Agreement and pay any required fee[155]. This means that anyone outside the coronership[156] wishing to access coronial information in any jurisdiction must be authorised by MUNCCI. This has placed MUNCCI, a research centre of Monash University, in a unique position over information that was once within relative reach of the public domain.

Justification for this level of control seems to be based on two main concerns, privacy of information and prevention of unauthorised access to the database. While these are defensible concerns other restraints on access are less easily defended. For instance, the information available from the NCIS is limited to primarily epidemiological data. Items such as police briefs of evidence, sworn affidavits and *Finding of Inquest* are not yet contained on the database. In the case of inquest transcripts, this is perplexing from the standpoint of correction of system errors as it is within these documents that the coroner records recommendations for the purpose of preventing or reducing the likelihood of future death or injury. Third party users wishing access to coronial *Findings* or other information not held within the NCIS database are still restricted from contacting the relevant coroner's office directly. Instead they must first contact MUNCCI to discuss whether and how such information may be made available to them[157].

---

153 MUNCCI, *About the NCIS*, http://www.vifp.monash.edu.au/ncis/accessto.htm#access last updated 16 February 2004. [Accessed 12 July 2004).

154 MUNCCI, *Information sheet for access to NCIS data*, 2004 p3.

155 This is outlined in the Access Agreement, a licence contract that third party users are required to enter into to access the database. MUNCCI, *NCIS Access Agreement*, version 3, April 2001.

156 The exemption being the deceased's family and representing counsel who can have access to individual files on direct request to the office of the relevant State or Chief Coroner. MUNCCI, *Information sheet for government departments and agencies and death/injury surveillance or research agencies*. Monash University, Melbourne. December 2000.

157 Letter to Grech from the Manager State Coroners Office (SA), 29 December 2000. The exception is access to *Findings of Inquests* posted on the coroners website in South Australia and the Australian Capital Territory.

Apart from the wider political implications inherent in investing one such auspicing body with this level of control over coronial information, there are other issues worth probing. While third party users were originally identified rather broadly, access to information is now clearly restricted and the question of how widely available NCIS data will be in the future to individuals and organisations outside the defined groupings is unclear. If the current level of restriction remains in place this is likely to have significant implications for 'unauthorised' agencies, particularly media and public advocacy groups interested in death surveillance as a measure of public health. Presumably, access by these groups to this level of information will now be via a filtering process as government, research organisations and 'statutorialy' mandated agencies release specific findings within their area of interest.

In South Australia, and to some extent the ACT, the importance of unrestricted access to coronial findings and recommendations that have historically been in the public domain, has been recognised by publishing findings on the Internet. What needs to be kept in mind, however, is that the number of deaths that actually reach inquest is minimal. For example in South Australia the number of deaths proceeding to inquest between 1996 and 2000 averaged around 1.2% of all deaths reported to the coroner[158]. Therefore, the vast majority of information essential for epidemiological death surveillance, or to use the words of MUNCCI, information that is 'of assistance to policy makers and researchers in the field of public health and safety, to benefit the Australian community by contributing to a reduction in preventable death and injury'[159], is no longer publicly accessible.

In 1991, Perth based academic Allan Peachment, wrote an interesting paper critical of control over statistical data and dominance of the research methods agenda by epidemiologists[160]. Peachment was concerned about the quality of some medical statistics used to inform policy making processes and described a syndrome called 'keepers of the problem', which he believed was becoming

158 South Australian Coroner's Office: *Information relating to the role of the State Coroner and the inquest process,* South Australian Coroner's Office, Adelaide, June 2001.

159 MUNCCI, *Annual Report 1998/99,* Monash University, Melbourne. p6.

160 Peachment, was an Associate Professor in the Business School at Curtin University of Technology (now retired). He has an interest in public administration, public policy and governance. See, http://www.eropa.org.ph/list_of_experts.htm (Accessed 12 July 2004).

more common among certain disciplines[161]. He identified the problem as one where these disciplines, or individual experts, were not only dominating the research agenda, but the interpretation of data in particular fields. Peachment argued that keepers of the problem determined what constitutes legitimate knowledge and, at times, social reality.

More recently, epidemiologists have experienced difficulty in gaining access to data controlled by bureaucrats whose agendas are unknowable, but highly suspect[162]. While Peachment's concern about epidemiologists may now be outdated, his underlying message about authorities and officials dominating the quality and use of medical statistics to inform public health policy are still pertinent. Applying Peachment's analysis of 'keepers syndrome' to the MUNCCI and its ownership of the NCIS data raises interesting questions about the extent to which coroners' broader civic role in the visible dissemination of information in the public interest may be at risk of dissolving in a quest for institutionalisation of knowledge, albeit under the guise of utilitarian design. This institutionalisation of knowledge, particularly by medicine, and the utilitarian side of epidemiological research is further explored in Chapter 6.

Before examining the literature that attempts to explain medical injury, however, it is useful to explore how the rise of the medical profession has influenced ways of thinking about death and dying. Understanding modern attitudes toward death provides insight into how medical fatalities are viewed by the general population. In the following chapter I examine the rise of the medical profession in the context of an organised public hospital system. I argue that society's attitude toward death has been re-shaped by organised medicine to such an extent that fatalities from adverse events are now considered unacceptable causes of death and therefore deserving of public scrutiny by coroners.

---

161 Peachment, A. 'Science, risk and health policy: the changing operational relationship', *Australian Journal of Public Administration,* Vol.50, 1991 pp369-382.

162 Ryan, P. Annotation to draft thesis, 20 August 2004. Associate Professor Philip Ryan is a researcher and academic at the Department of Public Health, University of Adelaide. He was associate supervisor for my PhD study.

CHAPTER 5

DEATH, THE MEDICALISATION OF DEATH AND MEDICAL ADVERSE EVENTS

5.1 Introduction

Deaths form the central topic of this study, most especially those deaths that can be attributed to a hospital related medical adverse event. Such deaths have come to be represented in contemporary Western society as 'bad' or 'unnatural' and thus warranting independent analysis by coroners. To appreciate how this representation has come about, this chapter examines how society's attitude toward death has been influenced by organised medicine. Attitudes toward death are both complex and multifaceted, reflecting, perhaps, the significant but changing role of religion and medicine in shaping public thinking about death. At the time England began to colonise parts of North America and later Australia, the Church's authority over death and death rituals was well established. By the 19th century, however, medicine's focus on curing disease, albeit with limited success at that time, saw death begin to shift from the domain of the church to that of medicine with doctors replacing priests at the bedside of the dying[1].

As medicine flourished within the stronghold of an organised public hospital system during the 19th and 20th centuries[2], doctors acquired unparalleled opportunities for human experimentation and empirical observation on the living and the dead. Medical advances during this period cemented public perceptions of the role of doctors in intervening between God and death. By the end of the 1900s, hospitals that had been common death settings for over half the century, were reclassified as short stay facilities for the acutely sick

---

1 Walter, T. 'Sociologists never die: British sociology and death', in D.Clark, (ed), *The sociology of death*, Blackwell Publishers, Oxford, 1993 pp264-295 esp.274.

2 French philosopher and scholar, Foucault, locates the birth of modern medicine as the last years of the 18th century with the rise of the profession bound with the reorganisation of hospitals during the 19th century: See, Foucault M. *The birth of the clinic*, Vintage Books, New York, 1973 esp. Chap.5 'The lesions of the hospitals' pp64-87. On the other hand, Starr argues in his Pulitzer Prize winning book (non-fiction category) that in the US the scientific redefinition of the hospital and its incorporation into medicine came at the end of the 19th century and rose during the 20th century: see Starr, P. *The social transformation of American medicine*, Basic Books, New York, 1982 esp: Book One Chap.4 'The reconstitution of the hospital' pp145-179.

with temporary curable aliments. To illustrate this point two contrasting medical settings are examined. The new age hospice is examined from the viewpoint of contemporary palliative care literature to support the case that this venue is now the 'appropriate' death setting when mainstream hospital medicine fails. Juxtaposed against this view, the critical care unit is presented as the setting that most exemplifies the modern hospital's highly interventionist fight to control and conquer death.

In developed societies, public confidence in the power of medical intervention has led to a shared belief that 'premature' deaths are unnatural and that fatalities from disease, accidents and other misadventures should be predictable, avoidable and controllable[3]. This 'enlightened' view is evident in much of the medical discourse that supports contemporary understandings of adverse events. While the earliest physicians accepted the potential for patient death to be caused or precipitated by their interventions, this is no longer accepted. Certainly, from the 1970s iatrogenic deaths have gained increasing public attention to the extent they have now become unacceptable to the public. This can be attributed to many factors including increased public education and access to information in various media about health, illness and accountability of risk. In addition, the public health movement has served to demystify some aspects of medical mystique which has to some extent lessened medicine's exclusivity and 'untouchability', particularly in an increasingly litigiously active community.

---

3 Kearl, M. 'You never have to die: on Mormons, NDEs, cryonics, and the American immortalist ethos' in K.Charmaz, G.Howarth, A.Kellehear (eds), *The unknown country: death in Australia, Britain and the USA*, MacMillan Press Ltd, Houndmills, 1997 pp184-197.

5.2 Death as a contested event: toward immortality

This thesis has not been a study into the nature of death and dying, a topic that has been the doctoral research of others[4]. However, to fully appreciate the public attention and outrage that deaths from medical adverse events engender in contemporary Western society, it is useful to briefly explore how attitudes toward death have changed, particularly over the last two centuries.

Attitudes to death and discourses about it have been the subject of a good deal of complex research, yielding evidence of variable force. For instance Whaley, an historian and University of Cambridge academic, argues that despite a growing body of literature and interest in the subject, it is 'bedevilled by obscurity and confusion'[5]. Indeed, it is far from clear that one dominant set of attitudes prevails even within particular countries. In contemporary Great Britain, Australia and the US multicultural societies encompass a collage of diverse traditions, characteristics and perceptions about death. While many of those who have endeavoured to study the meaning of death have been cognisant of this issue, the methods they adopted to examine the topic have varied considerably.

The pioneer work of the French social historian, Ariés, is a good example of those who have used a broad-brush approach, studying death in Europe from the Middle Ages to the 20th century, to demonstrate how attitudes toward

---

4 Doctoral studies into death and dying include:
   i. David Sudnow's ethnographic research to depict the social organisation of deathwork from the perspective of staff members at two large US hospitals. See, Sudnow, D. *Passing on: the social organisation of dying*, Prentice-Hall, Englewood Cliffs, 1967.
   ii. Glennys Howarth's ethnographic inquiry of funeral directing that examined death from the perspective of passage into, through and out of the funeral work setting. See, Howarth, G. 'Investigating deathwork: a personal account' in D.Clark (ed), *The sociology of death*, Blackwell, Oxford, 1993 pp221-237.
   iii. Kirsten Schou's research using an interactionalist framework to investigate the relationship between micro and macro influences in the construction of accounts of dying. See, Schou, K. 'Awareness contexts and the construction of dying in the cancer setting: micro and macro levels in narrative analysis' in D.Clark (ed), *The sociology of death*, Blackwell Publishers, Oxford, 1993 pp238-263.
   iv. Mary Bradbury's study of social representations of death using social psychological theory. See, Bradbury, M. *Representations of death: a social psychological perspective*, Routledge, London, 1999.

5 By way of illustration he suggested that the study of attitudes to death involves the analysis of many forms of human activity and expression including death mythologies in art and literature; medical practices and beliefs; popular superstitions and folk law; burial rites and customs; ecclesiastical laws and structures; civil law and customs. Whaley, J. 'Introduction' in J.Whaley (ed), *Mirrors of mortality: studies in the social history of death*, Europa Publications Ltd., London, 1981 p1-14 esp.4.

death in Western societies changed over the course of time[6]. Other prominent death theorists, such as Choron, Illich and Elias provided generalised accounts of death and dying in advanced societies despite acknowledging that the experiences and attitudes to death differ from society to society[7]. Others have been much more specific in their choice of populations to study. Howarth, in an attempt to examine common cultural death rituals in Great Britain from the Victorian period to the late 20th century, confined her analysis to England, observing that, in death as in life, Scotland and Wales maintained their own cultural characteristics that required separate investigation[8]. Furthermore, she argued there were differences in the way in which death was represented across social classes and that 'the perceived deathways of the English remain those that emanate from the England of the white middle classes'[9]. To explain cultural images of an Australian way of death, Kellehear and Anderson adopted a twofold approach and divided their comments between white Australian and Aboriginal experiences and attitudes toward death[10]. On the other hand, Leming and Dickinson overlooked class and ethnicity and applied a more collective approach in their exploration of American society's attitudes to death[11].

The most accepted conclusion among the plethora of death studies is that the discipline of medicine has played a considerable role in shaping attitudes to death, particularly among the white Christian middle classes in Britain, Australia and the US. It seems these three countries share sufficient common histories to demonstrate that the rise of organised medicine relocated the process of death from the dominion of the church to the domain of the medical

---

6 Ariés, P. *Western attitudes towards death from the middle ages to the present*, John Hopkins University Press, Baltimore, 1974.

7 See for example, Choron, J. *Death and Western thought*, Collier Books, New York, 1963; and,
Illich, I. *Limits to medicine: medical nemesis: the expropriation of health*, Penguin Books, Harmondsworth, 1977; and, Elias, N. *The loneliness of the dying*, Basil Blackwell Ltd, Oxford, 1985.

8 Howarth, G. 'Is there a British way of death?' in K.Charmaz, G.Howarth, A.Kellehear, (eds), *The unknown country: death in Australia, Britain and the USA*, MacMillan Press Ltd., Houndmills, 1997 pp84-97.

9 Howarth, 1997 p95.

10 Kellehear, A. Anderson, I. 'Death in the country of Matilda', in K.Charmaz, G.Howarth, A.Kellehear, (eds), *The unknown country: death in Australia, Britain and the USA*, MacMillan Press Ltd, Houndmills, 1997 pp1-14.

11 Leming, M. & Dickinson, G. 'The American ways of death' in K.Charmaz, G.Howarth, A.Kellehear, (eds), *The unknown country: death in Australia, Britain and the USA*, MacMillan Press Ltd., Houndmills, 1997 pp169-183.

profession[12]. As medical science made inroads into understanding and treating disease, notions of death and immortality embedded within the Christian religion were replaced with understandings based on the prospect that medicine would eventually conquer death. Awareness of this historical shift in attitude is important in order to understand how and why death from a medical misadventure has become such a problematic and contested event.

5.2.1 Christianity, medicine and death attitudes

Christianity influenced Western attitudes and practices in relation to death over many centuries, partly through the management by members of religious communities, of medieval hospitals that existed for the sick and dying[13]. In the pre-modern world life expectancy was low, death a constant threat and dying a generally public event. Regardless of class or wealth, death often took place at close quarters to the living and the sight of decaying human bodies was commonplace[14].

Ariés depicted the pre-modern Christian death as one of acceptance, serenity and calm[15], a version strongly contested by Elias, who argued that earlier generations were likely to have experienced painful and tormented deaths[16]. Despite these seemingly conflicting accounts, two important suppositions emerge from the work of these seminal authors, as well as others like Giddens and Ballard, who also examined pre-modern perceptions of death. First, death was not a phenomenon to be concealed, but rather a normal part of human

---

12 Ariés, P. *The hour of our death*, Allen Lane, London, 1981 p583.
Walter, T. 'Sociologists never die: British sociology and death', in D.Clark, (ed), *The sociology of death*, Blackwell Publishers, Oxford, 1993 pp264-295 esp.p274.

13 Carlin describes four types of medieval hospitals established by various religious orders in England, i) leper houses, ii) almshouses, iii) hospices for poor wayfarers and pilgrims, and, iv) institutions that cared for the sick poor. Carlin, M. 'Medieval English hospitals' in L. Granshaw & R. Porter (eds), *The hospital in history*, Routledge, London, 1989 pp21-39.

14 Benoliel, J. 'Dying in an institution', in H.Wass (ed), *Dying: facing the facts*, Hemisphere Publishing Corporation, Washington, 1979 pp137-157 esp.140;
Elias, 1985 pp18,19&23.

15 See in particular Chap.1 'Tamed death' and Chap.2 'One's own death': Ariés, 1974 pp1-52.

16 Elias, 1985 p13. Also refer to pages 12-13 of this text for a description of Elias' concerns with Ariés' assumptions about pre-modern death. Others such as Cannadine have also suggested that Ariés' view of Victorian death may be mistaken and the nostalgia which underlies it misplaced. See Cannadine, D. 'War and death, grief and mourning in modern Britain' in J.Whaley (ed), *Mirrors of mortality: studies in the social history of death*, Europa Publications Ltd, London, 1981 p187-242.

existence to be accepted with patience[17]. Second, Christian teaching and theological images largely formed human ideas of purpose, hope, destiny, redemption and the desire for an exemplary death. As a religion of salvation, Christianity required physical death as the means to access eternal life[18].

How did medicine change the manner of dying and influence attitudes toward death? The answer to this question depends on the genesis of the literature consulted as the influence of medicine on society's image of death can be sought from several disciplinary approaches including sociology, anthropology and the history of medicine itself. Medical historians, however, are not always rigorously critical about how medicine challenged old notions of death and dying. Richardson, a social historian, discovered this in her research into the meaning and impact of the 19th century English Anatomy Act[19]. She observed that much of the medical history written from within the profession amounted to little more than hero-worship that documented 'one long procession of Great Men – an ever-ascending line of evolution up to the glorious and smug enlightened present'[20].

Redding's account of medicine's ongoing fight against death and dying is a fair example of the medical history. As a physician, Redding maintains that death is the doctor's enemy and the topic of death and dying one of particular interest to the profession since time immemorial[21]. In providing an historical background to the doctor-death relationship, he refers to the physician in much the same way as other medical historians such as Ferroul, namely, as

---

17 Giddens, A. *Modernity and self-identity: self and society in the late modern age,* Standford University Press, Standford, 1991 p161; and, Ballard, P. 'Intimations of mortality; some sociological considerations' in P.Badham & P.Ballard (eds), *Facing death: an interdisciplinary approach,* University of Wales Press, Cardiff, 1999 pp7-28 esp.p9.

18 Mormando, F. 'What happens to us when we die?' in E.DuBruck & B.Gusick (eds), *Death and dying in the middle ages,* Peter Lang, New York, 1999, pp109-142; and, Kellehear, A. 'The Australian way of dying: formative historical and social influences' in A.Kellehear, (ed), *Death and Dying in Australia,* Oxford University Press, South Melbourne, 2000 pp1-13.

19 The Anatomy Act 1832 (England) outlined the conditions upon which human bodies could be dissected for the purpose of medical science. See, Richardson, R. *Death, dissection and the destitute,* 2nd ed., University of Chicago Press, Chicago, 2000. Richardson's book traces the history of the Act and the effects this legislation had on paupers dying in workhouses and hospitals whose bodies were used for the purpose of medical education.

20 Richardson, 2000 pxiv. On the historiography more generally, see Hicks, N. 'Medical history and history of medicine', Chap.4 in G. Osborne and W. Mandle (eds), *New history: studying Australia today,* Allen and Unwin, 1982 pp69-81.

21 Redding, R. 'Physiology of dying' in H.Wass (ed), *Dying: facing the facts,* Hemisphere Publishing Corporation, Washington, 1979 pp76-107 esp.79&80.

the well-read scholar treating patients according to regimes of health and medications[22]. In earlier times, however, 'physicians' were few and there were a variety of carers and healers, men and women such as barber-surgeons, medieval midwives and matrons who employed practical skills in the course of their medical work. Ferroul more wisely considered all these groups in his historical study of the relationship between doctors and death in the Middle Ages and observed that the interest of early healers in death was not necessarily confined to its prevention, but also involved provoking death[23].

Illich observed that medical writers during this period recognised two opposite services that early physicians rendered. The first concerned assistance with healing and the second involved abetting the coming of an easy and speedy death. Within these boundaries the doctor's role in prolonging life improperly was unacceptable. In fact, the potential for doctors to intercede in death was strongly disputed in the leading medical schools of Europe during the 15th and 16th centuries with some physicians viewing direct intervention by doctors to prevent 'God and nature' taking its course as blasphemous[24].

According to Illich, it was the natural philosopher and statesman Francis Bacon (1561–1626) who first identified prolongation of life as a new role for English physicians[25]. Despite any initial reluctance to intervene between the patient, God and death, medicine's intensifying pursuit of knowledge steered the profession on a curative course where prolonging life became its primary goal. Human cadavers provided much of the raw material necessary to achieve this goal with early anatomists and physicians dissecting corpses to map human anatomy, study disease and attribute cause of death[26].

---

22 Ferroul, Y. 'The doctor and death in the middle ages and Renaissance' in E.DuBruck & B. Gusick (eds), *Death and dying in the middle ages*, Peter Lang, New York, 1999 pp31-50 esp.32.

23 Here Ferroul considers the early Roman and medieval physicians' use of poisons both for the purpose of euthanasia and elimination of enemies. He also notes the work of the early abortionists and the practice of midwives and others in killing malformed newborn babies. Ferroul, 1999 pp32-36.

24 Illich, 1977 p191.

25 Illich also observes that it was to be some one hundred and fifty years before the medical profession in England assumed this task. Illich, 1977 p194.

26 For a detailed account of the historical significance of human cadaver dissection to advance medical knowledge see: Singer, C. 'A study in early Renaissance anatomy' in C.Singer (ed), *Studies in the history and method of science*, Arno Press, New York, 1975 pp79-130.

During the 16th century, medicine in England faced several challenges. Increasing rivalry among various groups laying claim to medical work was met by an attempt to license practice through the establishment of professional colleges[27]. However, despite the formation in 1518 of the Royal College of Physicians in London and the Barber-Surgeon's Company of the City of London in 1540, neither the members of these organisations nor, for that matter, practitioners outside the colleges, had any real impact on disease prevention or the manner of death. By the 17th century medicine still existed under a lay-patronage system with considerable variation in the education and training of its practitioners even though inroads were made during this century in medical science[28].

Nonetheless, during the 18th century three elements of medical work, (i) assigning a prognosis, in other words predicting when death might occur (ii) establishing and pronouncing that death had occurred (iii) determining the cause of death from post-mortem examination, challenged Christian notions of death and dying. Under growing medical tutelage, death was no longer rationalised as an *act of God* or the result of *the wages of sin*, but as the outcome of disease or some identifiable cause[29]. The establishment of the modern hospital reinforced the power of the doctor's rationalisation of dying and death.

---

27 Peterson, M. *The medical profession in Mid-Victorian London,* University of California Press. 1978 pp6&9. In this work, Peterson also describes the early division of English medical work into three orders; physicians, surgeons, and apothecaries.

28 Significant medical advances during the 17th century included William Harvey's description of the circulation of blood in 1628, Sir Christopher Wren's and Robert Boyle's first intravenous injection of a drug (opium) in 1665, Richard Lower's transfusion of blood from one animal to another in 1666 and Robert Hooke's use of mechanical ventilation via a tracheostomy on a dog in 1667. Rushman, G. Davies, N. Atkinson, R. *A short history of anaesthesia; the first 150 years*, Butterworth Heinemann, Oxford, 1996, p180-181.

29 Kellehear, 2000 p4.

5.2.2 Hospitals and their impact on death and dying

In 18th century England, the 'old' hospitals as almshouses and institutions that cared for the sick poor began to give way to the rise of hospitals as medical infirmaries, established to treat disease[30]. Although these infirmaries initially served a wider social purpose,[31] their development had far-reaching consequences for medical education, the development of medical science and the elevation of the profession's overall status and authority. For example, by the commencement of the 19th century, hospitals in London had already become settings for medical training, albeit informally[32]. Other law reform, like the Medical Act of 1858, defined what constituted a qualified medical practitioner and provided for the creation of a *General Council of Medical Education and Registration* to keep a register of all qualified practitioners[33].

Nursing reforms may have been of even greater significance than medical reforms to the actual development of hospitals. Nightingale's work in the Crimea and the publication of her Notes on Nursing in 1860 helped transform old notions of nursing as disreputable, subservient and menial work to that of a vocation suitable for women of competence, compassion and education[34]. Moreover, the establishment of nurse training schools in teaching hospitals and the introduction of trained matrons and probationer nurses not only

---

30 Porter, R. 'The gift relation: philanthropy and provincial hospitals in eighteenth-century England', in L.Granshaw & R.Porter, (eds), *The hospital in history*, Routledge, London, 1989 pp149- 178.

31 Hospitals founded in 18th century England depended largely on charitable subscription to finance their expenditure. This amounted to philanthropic gifts from the rich to the poor, the rich rarely having recourse to use hospitals at this time. While donations were given for a variety of religious and humanitarian reasons, the establishment of voluntary hospitals was also in response to the recognition of the perils of naked class antagonism due to increasing capitalism and the widening gulf between rich and poor. Financial support of infirmaries by patrician patronage was one way for the affluent to pose as concerned humanitarians interested in the plight of their fellow man while providing some measure to close the rift between rich and poor. On economies of scale, the voluntary hospital also represented a highly efficient way of treating the sick poor for less outlay when compared to outdoor relief efforts. For a more complete discussion see, Porter, 1989; and, Abel-Smith, B. *The hospitals 1800-1948: a study in social administration in England and Wales*, Heinemann, London, 1964 p5.

32 It was not until the passage of the Poor Law Act later in the 19th century that hospitals were officially entitled to admit medical students. Peterson, 1978 p14; Abel-Smith, 1964 p126.

33 Peterson, 1978 p35. The significance of these medical reforms and the role that 19th century teaching hospitals played in the rise in status, privilege and standing of the medical profession is addressed in Chapter 4 at 3.3.2.

34 Nightingale, F. *Notes on Nursing: What it is, and What it is not*, Harrision, Pall Mall, 1860. See also: Daniel, A. *Medicine and the State: professional autonomy and public accountability*, Allen & Unwin, Wellington, 1990 esp.p69.

promoted improved hygiene practices and higher standards of patient care, but also provided an able workforce to assist the medical staff[35].

For doctors, the hospital afforded many advantages. The presence of skilled nurses to provide the backbone of service delivery provided opportunities for doctors to hold honorary positions in hospitals while simultaneously maintaining busy private practices. Consultant positions in hospitals were also highly prized because the status that went with such appointments enabled the 'elite' doctors to attract the wealthiest private patients[36]. Doctors were able to see far greater numbers of patients in hospitals, thus enabling them to acquire experience that they could not obtain in private practice alone. Hospitals also provided unprecedented scope for human experimentation and empirical observation, not only on the living but also the dead. In fact, demand for human cadavers escalated during the 1800s even though the public viewed necropsy practices with apparent fear and distrust as they grappled with theological understanding of death and the link between body and soul [37].

Advances in medical knowledge came at a high cost to the hospitalised sick poor. Many medical discoveries during the 19th century had direct application to the hospital setting including the administration of anaesthetics, which allowed more complex and untried surgical procedures to be performed[38]. Hospitals for paupers provided fertile ground for doctors to try out new experimental surgery which could be refined and perfected before attempting it on paying private patients[39]. As the sick poor depended on charity to remain in hospital they were virtually powerless and in no position to object to new treatments.

---

35 Abel-Smith, 1964 pp67-68.

36 Waddington, I. 'The role of the hospital in the development of modern medicine', *Sociology* Vol.7, 1973 pp211-224 esp.p215.

37 Bradbury, 1999 p10. Also see Richardson, 2000 esp. Chap.2 'The corpse as an anatomical object' pp30-51. Here a graphic account is given about doctors' use of cadavers as teaching and experimental material including an account of William Harvey's dissection of his father and sister in his pursuit of studying human circulation.

38 For example, in 1846 the English surgeon Robert Liston performed the amputation of a leg under ether anaesthetic and in the following year James Simpson introduced chloroform into clinical practice for surgery. In 1867, Joseph Lister used carbolic acid to treat a compound fracture of the leg which was the birth of antiseptic surgery. Rushman, Davies, Atkinson, 1996 pp181,184&186.

39 Richardson, 2000 p43.

Waddington identified the importance of hospitals in changing the nature of doctor - patient relations. In the hospital the doctor became the dominant figure in this relationship, a situation that had not previously existed under the old patronage system where the aristocratic and wealthy private patient determined the conditions of service[40]. Of particular benefit to the elite physicians and surgeons in this new relationship was that not only were the sick poor unlikely to object to experimental treatments performed in the hospital but, if treatment failed, there were no repercussions on the doctor's private practice[41]. It seems that the sick poor, as the early victims of hospital based medical misadventure, paved the way for the advancement of medical science and the rise of the medical professional. The significant point here being that it marked the poor as public patients, an inexhaustible pool of subjects for the objective interest of science and human experimentation within the teaching hospital. For the affluent who provided financial patronage to hospitals, experimentation on public patients also provided potential long-term health benefits, although to what extent the early 19th century gentry would make this intellectual connection is dubious. Foucault explains:

> And in accordance with a structure of reciprocity, there emerges for the rich man the utility of offering help to the hospitalised poor: by paying for them to be treated, he is, by the same token, making possible a greater knowledge of the illness with which he himself may be affected; what is benevolence toward the poor is transformed into knowledge that is applicable to the rich[42].

If medical practices were generally appalling in 19th century hospitals, why did their number increase and how were the middle classes induced to become hospitalised patients? An exploration of this question suggests that no one factor was responsible, but rather a set of social and political forces, as well as advances in medical science, pushed the public toward ultimate acceptance. Abel-Smith, proposes that the prevalence of infectious diseases in 19th century industrialised London was a major factor in placing pressure on the government of the day to increase the number of specialist public hospitals[43]. Using a variety of sources including documents from the Metropolitan Asylums' Board (which had responsibility for indigent fever and smallpox

---

40 Waddington, 1973 pp212-213.
41 Waddington, 1973 p218.
42 Foucault, 1973 p84.
43 See in particular: Abel-Smith, 1964 Chap.8 'The transition from pauper hospitals to public hospitals' pp119-132.

cases in London) and the *Royal Commission of 1881 on Smallpox and Fever Hospitals*, he outlined the serious public health concerns related to rampant infectious diseases like smallpox, which was responsible for the death of 7,912 Londoners in 1871[44]. Other infectious diseases such as tuberculosis, enteric fever, typhoid, scarlet fever, measles and diphtheria were also widespread and more importantly, not necessarily confined to any one class of the population.

In England, some hospitals were loathe to admit patients with these infectious conditions and developed formidable lists of exclusion criteria to keep them out[45]. The need for effective segregation required the establishment of specialist infectious hospitals which proliferated during the latter part of the 19th century. For example, in 1861 there were virtually no public hospitals in London for infectious diseases, but by 1891 there were some 350[46].

While the middle classes remained sceptical of hospital practices and hospital mortality rates remained high[47], as more new hospitals were built and their standards improved, there was a growing tendency for those above the pauper class to use them. While the rich still avoided hospitals, by the turn of the 20th century more of the middle classes gradually began using hospitals as an appropriate site for intensive medical and surgical treatment during an acute phase of illness[48].

---

44 Abel-Smith, 1964 p120.

45 Abel-Smith, 1964 p124; and, Woodward, J. *To do the sick no harm: a study of the British voluntary hospital system to 1875*. Routledge and Kegan Paul, London, 1974 esp.p45.

46 Abel-Smith, 1964 p153. This trend was also reflected in the US where the hundred or so hospitals that existed in the 1870s grew to around 4,000 by 1910. See: Vogel, M. 'Managing medicine: creating a profession of hospital administration in the United States, 1895-1915', in L.Granshaw & R Porter (eds), *The hospital in history*, Routledge, London, 1989 pp243- 260. In Australia, there was a similar growth in hospitals to cater for those with infectious and other diseases and by 1900 in New South Wales alone there were 120 hospitals. Daniel, 1990 p71.

47 It should be noted that while there is a tendency in the literature to suggest mortality rates in 19th century hospitals were excessive there is evidence to suggest otherwise, particularly in the English voluntary hospital system. For instance, the economic and social historian, John Woodward, provides a well investigated thesis to argue that these hospitals were not the 'gateways to death' as popularly imagined and the mortality rate was less than 10% of patients admitted. Woodward, 1974 esp.p142.

48 Daniel, 1990 p70.

Vogel, who has published on the social history of American medicine[49], claimed that the hospitalisation of the middle classes was a significant turning point that changed the nature of the traditional hospital as fundamentally as scientific medicine did[50]. He argued that, as paying patients, the middle classes expected hospitals, originally intended for the poor, to adapt practices and domestic arrangements to suit their more genteel needs. Evidence of this shift became apparent within the architecture of hospitals with the advent of the public wards for those unable or unwilling to pay for treatment and the private ward for the paying middle classes[51]. As hospitals became increasingly dependent on the fees generated from this class of patient, competition was created and hospitals were forced to improve and modernise accordingly[52]. This trend was also evident in the UK and Australia, where improved hospital standards and the medical profession's increasing recognition that hospitals provided the best setting to improve outcomes, even for paying private patients, gradually won over a more affluent clientele[53]. For governments, hospitals also made economic and social sense as centres to concentrate equipment, services and trained medical and nursing staff so that limited resources could be made available to the most people[54]. However, there was another local economic factor at work, one that was to plague hospital governors over the course of the 20th century and beyond. Rising costs in running hospitals placed pressure on administrators to seek operating revenue from the affluent working and middle-classes[55]. This was largely due to changes that had occurred in the way hospitals were organised and funded.

Governance of hospitals across Europe, the US and Australia as primarily charitable institutions for the poor and itinerant changed over the course of the 19th century. In Paris, for example, by the beginning of the 1800s

---

49 Morris J. Vogel is the Professor of History at Temple University, Philadelphia. His publications include: Vogel, M. *The invention of the modern hospital: Boston, 1870-1930,* University of Chicago Press, Chicago, 1980; Vogel, M. & Rosenberg, C. *The Therapeutic revolution: essays in the social history of American medicine,* University of Pennsylvania Press, Philadelphia, 1979; Vogel, M. 'Managing medicine: creating a profession of hospital administration in the United States, 1895-1915', in L.Granshaw & R.Porter (eds), *The hospital in history,* Routledge, London, 1989 pp243- 260; Vogel, M. *On the Administrative Frontier of Medicine,*Garland Pub, New York, 1989.

50 Vogel, 1989 p247.

51 Starr, 1982 p159.

52 Vogel, 1989 p248.

53 Abel-Smith, 1964 pp188-189; Daniel, 1990 pp71-72.

54 Ballard, 1996 p9.

55 Starr argued that the principal answer to the financial difficulties of hospitals in America proved to be greater payment by patients. Starr, 1982 p161.

hospitals were state owned and controlled under a centralised system[56]. In England, the transition from pauper hospitals to public hospitals occurred somewhat later in 19th century but by the early 20th century there was growing support for a better coordinated and funded hospital system under the National Insurance Act of 1913[57]. In the US, up until the 1870s there had been a small number of charity hospitals run by lay trustees for the sick homeless. By the turn of the 20th century, however, the increasing clinical demands of medical education, along with growing reliance on paying middle class patients to fund hospitals, changed the nature of these organisations[58].

In Australia, the earliest hospitals had been established for the colony's primarily convict and military population. In the 1840s these institutions were handed over to local bodies of trustees[59]. Like their English and American counterparts, these hospitals were essentially charitable institutions founded by philanthropic and religious associations for the indigent and labouring classes and were supported by voluntary subscribers, government subsidies and fees from patients able to contribute to the cost of their care[60]. While the Australian public were still being called upon in the early 1900s to support hospitals financially, by way of subscription or donation, government was increasingly becoming the principal subscriber in an economic environment where 'the charitable public were harder and harder to find'[61]. By the beginning of the 20th century a combination of public and private hospitals coexisted in Australia, a system that remained relatively unchanged over the course of the century[62].

---

56 Waddington, 1973 p212.

57 For a comprehensive account of the implications of the National Insurance Act of 1913 on the organisation and funding of voluntary hospitals in the UK see Abel-Smith, 1964 Chap.15 'National Insurance' pp232-251.

58 Vogel, 1989 pp243- 260.

59 Dewdney, J. *Australian health services*, John Wiley & Sons, Sydney, 1972 p13; and, Hospitals and Health Services Commission, S. Sax (Chairman) *A Report on hospitals in Australia*, presented to the then Minister for Health, The Hon. D.N. Everingham, 10 April 1974, Australian Government Publishing Service, Canberra, 1974 p14.

60 Daniel, 1990 p70-71.

61 Dickey, B. 'The Politics of Hospital Finance: The Royal Prince Alfred Hospital, 1900-1914', *Community Health Studies* Vol.IV, 1980 pp111-120 esp.p112.

62 It is beyond the scope of this thesis to provide a detailed account of the history of the Australian hospital system, however, there are a number of excellent references that outline this history including Inglis, K. *Hospital and community: a history of the Royal Melbourne Hospital*, Melbourne University Press, Carlton,1958. Dickey, B. 'The Labour Government and Health Services in New South Wales, 1910-1914' *Historical Studies Australia and New Zealand* Vol.12, 1967 pp541-555. Mitchell, A. *The hospital south of the Yarra: a history of Alfred Hospital Melbourne from foundation to the nineteen-forties*, Alfred Hospital, Melbourne 1977. Maddox, K. *Schlink of Prince Alfred: a biography of Sir Herbert*

Giddens, a respected sociologist of modernisation, asserted that the establishment of hospitals was closely aligned with the professionalisation of medicine[63]. To some extent this view is shared by the well-regarded sociologist of medical professionalisation in the US, Freidson, although he argued that the development of medicine into a fully fledged profession involved a number of distinct variables with hospitals providing only one dimension of practice over which doctors held professional authority[64]. Significantly, the parallel rise of the discipline of medicine and hospitals not only profoundly affected the public's perception of the marvels of modern medicine, but was ultimately to influence society's changing views toward death. The increasing control assumed by doctors in hospital work corresponded with a decline in direct religious involvement in patient care[65].

The doctor stepping between death and the patient was an image that was to flourish over the course of the 20th century. This was largely due to the medical profession's increased power and status that had been achieved by several means, not the least of which was its ties to positivist science[66]. Science influenced medicine during this century in two forms. Firstly, by the direct adaptation of scientific discoveries, such as radiation, to the diagnosis and treatment of disease[67]. Secondly, as a template for the creation of the biomedical model that applied reductionist principles from the physical

---

Schlink, Prince Alfred Hospital Camperdown, 1978. Dickenson, M. & Mason, C. *Hospitals and politics: the Australian Hospital Association, 1946-86*, Australian Hospital Association, Deakin, 1986.

63 Giddens, 1991 p161.

64 Freidson, E. *Profession of medicine: a study of the sociology of applied knowledge*, University of Chicago Press, Chicago, 1988 esp Chap.6 pp109-136. See also Freidson, E. 'Specialties without roots: the utilization of new services', *Human Organisation*, Vol.18, 1959 pp112-116; Freidson, E. *Professional dominance*, Aldine Press, New York, 1970; Freidson, E. 'The Changing nature of professional control', *Annual Review of Sociology*, Vol.10 1984 pp1-20; Freidson, E. *The Medical Profession in Transition*, Rutgers, New Brunswick, 1986.

65 This is not to suggest that religious organisations ceased to have any involvement in the administration of hospitals and in the case of religious nursing orders, the delivery of care to the sick and infirmed. Instead, it is suggested that as public perception of doctors' ability to intercede between death and the patient grew and doctors increasing became the dominant figure within the hospital hierarchy, the authority and intervention that the Church previously held over death subsequently diminished.

66 There have been many reasons identified for medicine's rise in status and dominance. For example, it has been argued that prestige, authority and power are derived from the social evaluation placed on the work itself, regardless of the efficacy of this work. See Peterson, 1978; and, Willis, E. *Medical dominance*, Allen & Unwin, North Sydney, 1989.

67 X-rays were discovered at the end of 1895 and radium in 1898. The widespread use of X-rays and radiation therapy for diagnostic or treatment purposes, however, did not occur until after the 1920s. Murphy, C. 'From Friedenheim to hospice: a century of cancer hospitals' in L.Granshaw & R. Porter (eds), *The hospital in history*, Routledge, London, 1989 pp221- 241.

sciences to the study of disease[68]. By the end of World War II, the biomedical model was the dominant influence in the practice and teaching of medicine leading to the expansion of specialised medical fields and an ostensible disregard for social and behavioural factors affecting illness[69]. The industrialisation of disease management increased rapidly after 1945 and the wide spread use of immunisation and antibiotics in Western countries played a significant role in controlling and, in some cases, eradicating death from infectious diseases. Medicine was gaining a foothold over at least some common causes of death.

The hospital as integral to medical work and the locus of medical education was by this time firmly established. By the 1950s, the teaching hospital, closely linked to the university medical school, was achieving central responsibility for training medical practitioners as well as being at the forefront of medical research. However, the symbolic and actual expression of medical sovereignty in the hospital did not necessarily mean that doctors maintained administrative control over the day-to-day management of these institutions. By the mid-20th century there was growing evidence of a split between clinical (medical) and administrative (trustees/administrator) authority in what were becoming highly complex and peculiar bureaucratic institutions[70].

Nonetheless, after World War II the expansion of hospitals continued for several decades. In the UK for instance, hospital bed numbers increased until 1960[71], whereas in Australia, the rate of hospital beds increased until 1980[72]. By 1971 there were 4.5 beds per 1,000 population in England and Wales, 4.8 per 1,000 in the US and 6.1 per 1,000 in Australia[73]. During the latter part of

---

68 Benoliel, 1979 p141.

69 Benoliel, 1979 p141.

70 Starr, 1982 pp177-179. For a comparable Australian account, see Williams, J. *Supervised autonomy: medical specialties and structured conflict in an Australian General Hospital* PhD Thesis, University of Adelaide, Adelaide 1992.

71 Armstrong, D. 'Decline of the hospital: reconstructing institutional dangers' *Sociology of Health & Illness*, Vol.20, 1998 pp445-457 esp.446.

72 National Health Strategy, *Hospital services in Australia: accessing and financing*, Issues paper No.2, Department of Health, Housing & Community Services, Canberra, September 1991 p38.

73 Hospitals and Health Services Commission, 1974 p34.

the 20th century, however, there was a notable reduction in the number of these hospitals and the number of beds available[74].

This decline did not signify improved health or indicate less spending on maintaining and upgrading acute hospitals. In fact the reverse was true. While the number of hospital beds declined, the actual rate of hospitalisations and patient throughput increased[75]. Old notions of the therapeutic value of enforced bed rest following surgery and illness, which had been responsible for long term hospital stays until the 1970s, was replaced with new treatment modalities. Shorter hospital stays, increased occupancy levels, specialist medical and nursing services, more technology and the advent of day-surgery and ambulatory services effectively reshaped the nature and purpose of acute hospitals. In addition, increasing evidence of the potential for patients to be exposed to iatrogenic injury in hospital challenged claims that these were safe, therapeutic environments[76].

The combined effect of these factors, along with economic constraints changed the way acute hospitals were classified. Acute hospitals were to provide critical therapeutic services for only the very sick with temporary ailments. Within this classification, cost containment became a priority because government expenditure on health was continuing to rise and the delivery of hospital services was becoming an ever increasing drain on health budgets[77]. In acute hospitals the emphasis was on curing patients in the shortest possible time, so acute hospitals became way stations, designed to receive the sick, get them well and back into society in the shortest possible time[78]. Deaths in hospital were no longer expected to be commonplace by the 1960s and dying had become problematic and difficult to manage.

---

74 In England for example, from 1959 until 1999 there was a decline of almost 50% in the number of hospital beds. Armstrong, 1998 p446. In Australia, the decline occurred later and was less severe. At its peak in 1980, there were approximately 6.5-beds/1000 population, which dropped to 5.0-beds/1000 population by the 1990s. Department of Health, Housing & Community Services, 'Hospital services in Australia: accessing and financing', *National Health Strategy*, Issues paper No.2, Canberra, 1991, p38-39.

75 Armstrong, 1998 p446.

76 Armstrong, 1998 p454.

77 For the years 1960, 1980 and 2000 OECD data show the total expenditure on health - %GDP rose in Australia from 4.3% to 7% to 8.3%; in the UK from 3.9% to 5.6% to 7.3%; and, in the US from 5.1% to 8.7% to 13%. See, Organisation for Economic Cooperation & Development, Statistics 2002. This document can be downloaded from http://www.oecd.org/std/ (Accessed 8 January 2003).

78 Carson, R. 'Euthanasia or the right to die', in H.Wass (ed), *Dying: facing the facts*, Hemisphere Publishing Corporation, Washington, 1979 pp360-374 esp. 362.

About the same time, research into death awareness and the social organisation of dying in Anglo-American society became a popular topic, particularly among sociologists. For example, in 1965 Glaser and Strauss published the first of a series of works on the human and technical aspects of awareness as people passed from life to death in hospital[79]. To understand the awareness problem, they conducted field observations and interviews with nurses and doctors working in San Francisco metropolitan hospitals about how they gave care to terminally ill patients. By 1967 Sudnow had completed a similar study into social practices related to dying in hospital from the perspective of staff members in two US hospitals, one a private and the other a charity hospital[80]. Both studies were highly critical of the social context of dying in acute hospitals and identified that the staff and the ethos of these institutions were ill-equipped to deal with the needs of dying patients.

Where then, in the context of modern understandings of hospitals, should dying take place? The hospice movement, which emerged about the same time Glaser, Strauss and Sudnow were conducting their research, provided a solution which was to gradually gain favour in Western societies.

5.2.2.1 Appropriate death in the modern hospice

While US sociologists in the 1960s were publishing their critiques of the inadequacies of acute hospitals to cater for the needs of the dying, in Britain rhetoric was being replaced by action. This was largely due to the efforts of Cicely Saunders, a pioneer of the modern hospice movement[81]. Although nurses, particularly those belonging to religious orders, had been actively involved in the care of the dying in hospice settings since the 1870s[82], the opening of London's St Christopher's Hospice in 1967, with Saunders as the medical director, brought the hospice movement global attention. In this facility the philosophy of the hospice movement was translated into practice

---

79 See: Glaser, B. & Strauss, A. *Awareness of dying*, Aldine Publishing Company, Chicago, 1965.

80 Sudnow, 1967.

81 Maddocks, I. 'Palliative medicine in Australia', in A.Kellehear, (ed), *Death and Dying in Australia*, Oxford University Press, South Melbourne, 2000 pp243-254 esp.243.

82 Aranda, S, 'Palliative nursing in Australia' in A.Kellehear, (ed), *Death and Dying in Australia*, Oxford University Press, South Melbourne, 2000 pp255-266 esp.255.

and the model of care provided to the dying was later transported to North America and Australia[83].

Several points about the modern hospice movement warrant attention, given its influence upon contemporary ways of dying. For instance, the modern hospice movement initially emerged to manage, in a more humane and holistic way, people with end-stage cancer that modern medicine had failed to cure. Saunders herself wrote that the 'management of terminal disease presupposes an informed decision that active therapy is now inappropriate'[84]. Before long, hospices extended their services beyond terminal cancer sufferers to provide a 'good' death to other patient groups that main stream acute hospitals were ill prepared to manage.

One such need arose from those with acquired immunodeficiency syndrome (AIDS). Since the first reported cases in the early 1980s of the virus responsible for AIDS[85], medicine has faced the challenge of trying to conquer this infectious disease. To date this has not eventuated, although new treatment regimes have increased survival rates. This has led to sufferers experiencing the chronic end-stage effects of the disease, leaving doctors grappling to define the point at which care for the person should move from curative to palliative[86]. Magnusson, a law lecturer who studied the experiences of health care workers in Australia and the US involved in assisted suicide and euthanasia, found that as a consequence there has been a deliberate appropriation of the control of death by AIDS sufferers and their friends[87]. Equally, medical personnel face similar challenges when caring for patients with other terminal diseases including some forms of cancer. What is clear from the evidence available, is that once death becomes inevitable, the

---

83 Corr, C. 'Living with the changing face of death', in H.Wass (ed), *Dying: facing the facts*, Hemisphere Publishing Corporation, Washington, 1979 pp44-72 esp.64; and, Aranda, 2000. p256.

84 Saunders, C. 'Appropriate treatment, appropriate death', in C.Saunders, (ed), *The management of terminal disease*, Edwards Arnold, London, 1978 pp1- 18 esp.3.

85 The virus responsible for AIDS is the human immunodeficiency virus. Kelly, B. 'HIV/AIDS' in A.Kellehear, (ed), *Death and Dying in Australia*, Oxford University Press, South Melbourne, 2000 pp145- 162 esp.145.

86 Foley, F. Flannery, J. Graydon, D. et al. 'AIDS Palliative care – challenging the palliative paradigm', *Journal of Palliative Care*, Vol.11, 1995 pp19-22. Kelly, 2000. p156.

87 See, Magnusson, R. *Angels of death, exploring the euthanasia underground*, Melbourne University Press, Melbourne, 2002.

acute hospital is unlikely to provide the ideal setting for an 'appropriate' or 'good' death[88].

So what is an appropriate or good death? Ariés suggested what we call today a good death was what used to be the accursed death that is, one in which there was no warning; 'He died tonight in his sleep: He just didn't wake up: It was the best possible way to die'[89]. Ariés went on to observe that staff in contemporary hospitals try to exact a good death for patients by forcing them to feign ignorance of their impending death. In this instance, he argued that patients' unawareness was aided by the use of sedatives that maintain their passivity during the dying process.

Weisman, on the other hand, defined a good or appropriate death as one that occurs in the absence of suffering, where important relationships were preserved and there was an interval for anticipatory grief and relief of remaining conflicts[90]. Similarly, Aranda's concept of a good death encompassed a broader definition than the patient's physical body in decay[91]. This notion of dying as more than a
physical process underpins the philosophy espoused by the modern hospice movement[92]. The hospice movement would argue that, for the terminally ill, there is a greater chance of experiencing a good death in a hospice than in an acute hospital.

While hospices now form part of the broader medical services available to the dying, their place in mainstream medicine has been tenuous. It was not until Saunders, who initially trained as a nurse and then as a social worker, became a medical practitioner that she was able to attract the sort of attention and support needed to establish St Christopher's Hospice[93]. Even then, this hospice existed outside the National Health System and relied on

---

88 For further reading on this topic see, Carson, 1979 p362, and, Pincombe, J. Brown, M. McCutcheon, H. 'No time for dying: a study of the care of dying patients in two acute care Australian hospitals', *Journal of Palliative Care*, Vol.19, 2003 pp77-86.

89 Ariés, 1981 p587.

90 Weisman, A. 'The psychiatrist and the inexorable', in H.Feifel, (ed), New meanings of death, McGraw-Hill, New York, 1977 pp107-122 esp.p119.

91 Aranda, 2000 p255.

92 Corr, 1979 p64.

93 Maddocks, 2000, p243.

philanthropic generosity to cover its costs in a manner not dissimilar to the antecedent charity hospitals.

St Christopher's Hospice, and many others that spread throughout the British Isles, were also notably different from mainstream health services in that they espoused a strong Christian tenet. This reflected Saunders' own religious convictions and belief in eternal life after death[94], and it re-established a place for religion once medicine withdrew in the face of imminent death. It was not that doctors had no role to play in the hospice, but rather that hospices stood away from mainstream medicine and were therefore not in direct competition with the curative focus of acute hospitals[95]. This also seems to have been the case when the modern hospice movement was translated to the US and Australia[96], even in situations when hospices were co-located with existing acute hospitals. While the model of care in hospices was initially nurse led, by the late 1980s medicine began to take an active interest in this field. By this stage other allied health care workers had already become involved in the hospice movement. Hospice care was now multidisciplinary in nature and this field of practice was more commonly being referred to as palliative care[97].

Once medicine became a more active participant in palliative care, the profession followed its time-tested path to formulate a new speciality on the premise that more science and clinical rigour was needed to advance palliation as a field of practice. In 1987, the first major medical journal, titled *Palliative Medicine*, was launched in the UK and in the same year palliative medicine was recognised as a speciality in that country[98]. As it was recognised as a specialty, the number of paid medical posts for palliative specialists increased,

---

94 Saunders, 1978 pp201-202.

95 Maddocks, 2000. p244.

96 Hospices as institutionalised forms of palliative care delivery were first introduced in the US in 1974. See Bendiksen, R. 'Death, dying and bioethics: current issues in the USA, in K.Charmaz, G.Howarth, A.Kellehear, (eds), *The unknown country: death in Australia, Britain and the USA*, MacMillan Press Ltd, Houndmills, 1997 pp198- 212 esp.208. In Australia, modern palliative care programs including in-patient specialised hospice units modelled on their English counterparts were well established by the early 1980s. See Maddocks, 2000 pp246-247.

97 Maddocks, 2000 p243.

98 Maddocks, 2000 p245.

postgraduate medical training programs followed and academic units were established to facilitate research[99]. Medicine's foray into this speciality, however, has not necessarily been well received, both within and outside the profession. For example, Kearney[100], a palliative medical specialist, Field[101], a sociologist and Biswas[102], a palliative care nurse, have all warned of the creeping medicalisation and focus of technology on symptom control that medicine brings to the care of the dying.

In the US, notwithstanding the formation of the Academy of Hospice Physicians in 1988, there is still some suggestion that palliative medicine is considered a 'second class' specialty[103]. There are several reasons underpinning this view. In a profession committed to evidence based practice, palliative medicine does not easily lend itself to measurable research outputs because it tends to associate effectiveness with subjective outcomes such as comfort, satisfaction, care and a dignified death. In addition, care of the dying does not bring the sort of standing and recognition that curative medicine generates. Perhaps even more fundamental to palliative medicine's failure to germinate as a specialty, however, is that care of the dying is not yet a profitable business. Maddocks[104] contends that it is unlikely that there will be any major movement by doctors into private palliative practice in Australia because this field will not attract a level of remuneration comparable to other medical specialities.

While medicine has made some incursion into the care of the dying, palliative medicine is yet to engender the professional aura that mainstream curative

---

99 In Australia, the first Chair in Palliative Care was founded in the School of Medicine, Flinders University of South Australia in 1988. The inaugural incumbent was Professor Ian Maddocks, who in 1995 received authority to establish an International Institute of Hospice Studies based at Daw House Hospice, within the grounds of the Repatriation General Hospital, Adelaide. This Institute provides a number of multidisciplinary programs in palliative care which can be viewed at http://som.flinders.edu.au/FUSA/PalliativeCare/home.htm

100 Kearney, M. 'Palliative medicine: just another specialty?, *Palliative medicine*, Vol.6, 1992. pp39-46.

101 Field, D. 'Palliative medicine and the medicalisation of death', *European Journal of Cancer Care*, Vol.3, 1994 pp58-62.

102 Biswas, B. 'The medicalisation of dying: a nurse's view' in D.Clark (ed), *The future for palliative care: issues of policy and practice*, Open University Press, Buckingham, 1993 pp132-139.

103 Maddocks, 2000 p252.

104 Maddocks, 2000 p249. However, what Maddocks' prediction does not seem to take into account is the move toward a more user pays health system in which members of an increasingly ageing population may be willing to pay large sums for a supported, sanitised death.

medicine attracts. By way of contrast, pulling the critically ill back from the brink of death is at the cutting edge of modern medicine. This specialty setting exemplifies both the hospital and medicine's great challenge in not only postponing the inevitability of death, but also its striving for secular immortality.

5.2.2.2 Death and survival under critical care

Public awareness of the miraculous curative powers of modern hospital medicine is best embodied in 'critical care'[105]. These specialised hospital units first emerged during the 1950s and were structurally and spatially organised to support life-sustaining medical technology such as renal dialysis machines, ventilators and defibrillators [106]. The purpose of these settings was the prevention of death in those patients who would have previously succumbed to disease or injury[107].

The advent of critical care settings and the interventions that comprised intensive therapy in the hospital had widespread implications. One was the rapid growth of biomedical industries to supply the mechanical and electronic gadgetry necessary to aggressively monitor and sustain life under intensive care. The demand for more and more advanced interventionist technology practice drove the cost of patient care ever higher within the acute hospital[108].

To support technology that was constantly increasing in variety, sophistication and cost, ongoing specialist training programs for doctors and nurses escalated. Many highly motivated and skilled nurses were attracted to this

---

105 Critical care is the collective term for the intensive management required by patients with morbid conditions who are at risk of death. Critical care units are the patient areas in a hospital which are staffed and equipped to manage patients who are at high risk for developing actual or potential life threatening health problems and includes intensive care units, neonatal intensive care units, coronary care units and high dependency units; Commonwealth Dept. of Health & Aging, *Hospital reference manual round 6, 2001-2002*, Commonwealth of Australia, Canberra, 2002 p93.

106 The first intensive care units were developed in specialised hospitals the 1950s to provide complex care for patients with life threatening diseases like poliomyelitis. American Association of Critical Care Nurses (AACN) http://www.aacn.org (Accessed 28th June 2002). This was followed in the early 1960s by the opening of coronary care units in the US and Canada for the resuscitation of patients post myocardial infarction. See Rushman, Davies, Atkinson, 1996, p197; and, Killip, T & Kimball, J. 'A survey of the coronary care unit: concepts and results', *Prognosis Cardiovascular Disease*, Vol.2, 1968 p45.

107 Benoliel, 1979 pp140-150.

specialty, perhaps because the knowledge required to manage the technical aspects of patient care closely followed the bio-medical model and trained intensive care nurses gained status over their counterparts in the general wards[109]. The opportunity to work at the forefront of life-saving medicine in an environment where greater collegial partnerships with the medical staff were possible, clearly elevated the standing of the intensive care nurse, at least within the hospital nursing culture.

As biotechnology became increasingly sophisticated, additional intensive care units (ICUs) were created. Supply and demand arguments circulated around a proclaimed need for specialised units to manage critical illness in specific age groups like the neonate, the child and the adult and that critical care units should be further subdivided to better manage conditions that attacked specific body systems or formed the basis of a medical specialty. Campaigns for the development of micro-speciality units proved generally successful with the advent of surgical ICUs, medical ICUs, cardiac ICUs, neuro ICUs, renal ICUs and others[110]. Medical advances may have driven the proliferation of sub-specialty critical care units but, equally, these settings were the product of community expectations that hospitals would provide the most sophisticated life-saving services. While the young and middle aged were among the first to benefit from aggressive management in these ICUs, it was not long before the aged were experiencing the 'benefits' of life-saving intensive therapy. The fact that these units consumed resources that were hard to limit did nothing to detract from perceptions that intensive care represented the pivotal point of medicine's ongoing fight with death from which everyone should benefit.

Clearly, lives have been saved under intensive care and in these situations the aggressive nature of treatments implemented and the resources consumed may be justified by the restoration of life and the return of the person to a 'normal' or near normal existence[111]. This has not deterred critics of

---

108 Taylor, R. *Medicine out of control: the anatomy of medicine out of control,* Sun Books, Melbourne, 1979 pp122-123.

109 Grech, C. Holism: its meaning and expression in critical care nursing, unpublished thesis for the degree Master of Nursing, Flinders University of South Australia, 1995 p4.

110 Grech, 1995 p3.

111 It should be noted, however, that despite the increase in the number and sophistication of intensive care units in developed countries, there has been no conclusive evidence to date that highly interventionist medicine has had any real impact on survival rates in the

interventionist medicine from questioning the ethics of aggressive, sometimes torturous, often futile practices that occur under the guise of intensive care[112]. While the ethical issues surrounding intensive care equal the complexities of the setting itself, the economic consequences for society of high tech medicine tend to overshadow the dilemma of sustaining life at all costs. In the US for example, a TIME/CNN poll suggested seven out of ten Americans want to die at home, but instead most die in medical institutions with more than a third of dying people spending at least 10 days in an ICU at a cost of around US$3,180 per day[113]. Australian evidence indicates that the mean age of patients admitted to ICU continues to rise. In the 1999-00 financial year the mean age of ICU patients was 58.39 but by 2001-02 this had increased to 60.26[114].

Significantly, intensive care caused a dilemma for the medical establishment in defining death and dying in a new technological age. In fact, life support technology triggered a re-examination of long held notions that death occurred when the heart stopped[115]. The capability to maintain a human's beating heart and thus sustain life in the ICU via machinery and/or the replacement of vital organs strengthened doctors' authority over death. The role of the ICU doctor now encompassed determining when death should occur, when to purposely provoke death by turning off life support machinery and when to harvest the organs of one person to sustain the life of another[116]. A study undertaken in a paediatric medical ICU in the UK found that in almost two-

---

critically ill. For example, Thompson et al found that despite the US having more neonatologists and neonatal ICU beds per person than the UK, Canada or Australia, the US had higher rates of low birth weight babies and death among neonates. Thompson, L. Goodman, D. Little, G. 'Is more neonatal intensive care always better? Insights from a cross-national comparison of reproductive care.' *Pediatrics*, Vol.109, 2002 pp1036-1043.

112 See for example Illich's critique of 'Death under intensive care' Illich, I. 1977 pp205-211; and, Taylor's chapter titled 'Intensive care or expensive scare? Taylor, 1979 pp119-127. For a later, extended discussion on this topic from a bioethics perspective also see, Callahan, D. *Setting Limits: Medical Goals in an Aging Society*, Simon & Schuster, New York, 1987.

113 Cloud, J. Cole, W. Sieger, M. et al 'A kinder, gentler death', *Time*, Vol.156, 18 September 2000, pp60-66.

114 Australian & New Zealand Intensive Care Society (ANZICS), *Adult Patient Database*, ANZICS, Carlton, Victoria 2002.

115 Taylor, 1979 p126. I have already raised in Chapter 4 page 115 the statutory consequences of medical advances in life support and organ transplantation.

116 It is not uncommon in the ICU for doctors to sustain a patient's life even when death is imminent. For example, death may be prolonged until family members are ready to 'accept' that death is inevitable or in situations where relatives need to travel long distances to see the patient before death takes place.

thirds of deaths in the unit there had been a deliberate decision to limit medical treatment or withdraw mechanical ventilation[117].

This is not to suggest that death is necessarily a controlled event in the ICU. Indeed, sudden, unexpected deaths are not uncommon, but in these situations the patient's arrest represents a medical crisis in which 'rescue' measures by extraordinary means can be initiated that may result in a prolonged, undignified and sometimes gruesome death from failed resuscitation. Indeed, Illich argued that at its extreme form, death under intensive care has reached the point where the human organism refuses any further input of treatment and dying becomes the ultimate form of consumer resistance[118]. Whatever the circumstances, death during a medical crisis is inevitably regarded as a bad death, one that is both unnatural and depersonalising[119].

Critical care settings have also earned a reputation as being iatrogenic nightmares where patients are equally at risk of death from highly invasive treatments as they are from their critical illness[120]. Iatrogenesis has been described as a disease comprising 'all clinical conditions for which remedies, physicians or hospitals are the pathogens, or 'sickening' agents'[121]. Of course, ICUs are not the only hospital settings where patients are at risk of experiencing what now has become more globally termed an 'adverse event'. As acuity levels of patients admitted to the so-called general hospital ward continues to rise, and complex technology and invasive practices creep more and more into the ward setting, the risk of iatrogenic harm has exponentially risen.

Clinical iatrogenesis is nothing new. In fact harm or even death due to medical intervention is as old as medicine itself and has frequently been the subject of medical studies[122]. Since the 1970s, however, particularly in developed countries, medical adverse events have gained increasing attention outside the

---

117 Balfour-Lynn, I. & Tasker, R. 'Futility and death in paediatric medical intensive care' *Journal of Medical Ethics,* Vol.22, 1996 pp279-281.
118 Illich, 1977 p210.
119 Bradbury, 1999 pp55-57.
120 Taylor, 1979 p120.
121 Illich, 1977 p36.
122 Illich, 1977 p36; Taylor, 1979 p42.

professional boundaries of medicine, in the legal literature, in the courts and of course, in the media.

Examining what is currently known about hospital related medical adverse events is explored in the following chapter. An analysis of the literature dealing with medical injuries offers a useful starting point from which to explore, in a more detailed and meaningful way, whether the coronial system ameliorates iatrogenic deaths in contemporary hospitals.

CHAPTER 6

STUDYING MEDICAL ADVERSE EVENTS: PROBLEMS, UNDERSTANDINGS AND GOVERNMENT RESPONSES

6.1 Introduction

This chapter explores the research that underpins existing empirical knowledge about adverse events. Attempts to understand the nature of hazards associated with medical intervention have indicated that iatrogenesis traverses all health care settings, but the highly complex, modern, acute hospital provides the most fertile ground for adverse events to proliferate. While there is now a substantial body of research on this topic, the quality of evidence generated as to the nature and prevalence of these events is highly questionable. Methodological inconsistencies across studies have thwarted attempts to compare results and even those studies that have shared similar design approaches have produced generally inconclusive findings.

Limitations in the quality of research undertaken to investigate medical injuries, however, has not dissuaded governments from spending public money to establish agencies to respond to clinical iatrogenesis. In this chapter, I explore how government health departments in the US, the UK and Australia have responded to suggestions that more people die each year from medical adverse events than from motor vehicle accidents. By comparing data cited in Australian research literature that estimates the number of medical fatalities occurring in hospitals annually to the actual number of these deaths reported to the South Australian Coroner's Office this chapter also illustrates the high level of underreporting of these deaths. While the role of government funded agencies established to improve quality and safety in hospitals recognise the importance of the coroner as an agent to monitor and reduce the incidence of medical injuries there is little articulation between these organisational bodies. How coroners, as active players in death surveillance and prevention, fit within the brief of these agencies still needs to be established.

6.2 Research into medical adverse events: the evidence

Hazards associated with medical intervention may occur in any health care setting. Even Hippocrates recognised the potential for medical hazards[1]. Since clinics and hospitals were first established, iatrogenic infection has been an all too common outcome of communally housing the sick. Little has changed over the centuries. Prevalence surveys in the UK, US and Australia have suggested that about 10% of patients acquire an infection while in hospital[2]. In England, a report from the National Audit Office indicated at least 100,000 cases of hospital acquired infections occur each year resulting in an estimated 5000 deaths[3].

The high-tech, intervention-focused milieu of the modern acute hospital provides a fertile ground for iatrogenesis in its various forms. Importantly, it also provides a convenient and relatively cloistered setting in which to study its occurrence. It is therefore not surprising that the majority of the research into the incidence, types and magnitude of medical adverse events has taken place in hospitals.

Concern about the actual nature and incidence of iatrogenesis, however, did not become a research topic until the latter half of the 20th century, when narratives that exposed risks associated with increasingly complex medical procedures and treatments began being published in several prestigious US medical journals. For example in 1955, the Journal of the American Medical Association (JAMA) published and article by Barr, a New York physician, who provided an outline of unfavourable responses and 'special accidents' that could arise from the increasingly complex and formidable diagnostic methods and therapeutic preparations available to modern medicine[4]. While his

---

1 Hippocrates is credited with the phrase *'Primum non nocere'- First of all, be sure you do no harm.* Notably, the admonition to do no harm was originally applied to the use of medicines at a time when the Greek's only word for drug – pharmakon - did not distinguish between the effect to cure or kill. See, Illich, 1977 p53.

2 Meets, P. Ayliffe, G. Emmerson, et al. 'Report on the national survey of infection in hospitals', *Journal of Hospital Infection,* Vol.2(suppl), 1981 pp.l-51; Haley, R. Culver, D. White, J. et.al 'The nationwide nosocomial infection rate: a new need for vital statistics', *American Journal of Epidemiology,* Vol.121, 1985 pp.159-67; McLaws, M. Gold, J. King, K. 'The prevalence of nosocomial and community acquired infections in Australian hospitals', *Medical Journal of Australia,* Vol.149, 1988 pp582-90.

3 Kmietowicz, Z 'Hospital infection rates in England out of control', *British Medical Journal,* Vol.320, 2000 p534.

4 Barr, 'Hazards of modern diagnosis and therapy - the price we pay', *JAMA,* Vol.159, 1955 pp1452- 1456. Another account of the potential risks associated with medical intervention published around this time was by Moser, R. 'Diseases of medical process', *New England Journal of Medicine,* Vol.255, 1956 p606.

considerations on the topic were more anecdotal than empirical and he declined to provide examples of errors, misconduct or malpractice, his message was nevertheless worrisome. He revealed that in at least one hospital survey, 5% of all patients experienced toxic reactions or accidents from diagnostic or therapeutic measures and he concluded that in terms of minimising patient harm, it was probably just as important for doctors to know when not to treat as when to intervene.

By the 1950s the English medical colleges and the UK Department of Health were also beginning to investigate medical mishaps. The first of these studies was a confidential enquiry into maternal deaths in England and Wales that culminated in a series of reports for the years 1952-54. What was notable about these investigations, is that while of a confidential nature, the case records of all maternal deaths were systematically reviewed by independent senior consultant obstetricians to determine factors that could have caused death and therefore should be avoided[5].

In both England and Australia, anaesthesiology was another specialty that was among the forerunners to use confidential patient mortality data to identify management problems or inappropriate clinical decisions. It is difficult to evaluate whether this internal scrutiny was related to the fact that all anaesthetic deaths had to be reported to the coroner anyway, thus providing this specialty with a motive to identify avoidable factors. Nonetheless, anaesthesiology has had a relatively long history in identifying risks and aberrations that contribute to anaesthetic deaths and feeding these data back to its practitioners[6].

Scrutinising patients' deaths as a means to 'handle' aberrant or atypical cases by analysing treatments and identifying errors is nothing new. Sometimes

---

5 Rosenthal, M. *The incompetent doctor: behind closed doors*, Open University Press, Buckingham, 1995 p110.

6 In South Australia, the Anaesthetic Mortality Committee (AMC) was formally convened in June 1969 and since that time has published several reports into anaesthetic deaths. See: Anaesthetic Mortality Committee (AMC) (SA), *A report on 232 classified cases, 1969-1974*, Adelaide, Dept Public Health, 1975. AMC (SA), *Anaesthetic deaths in South Australia 1974-1983*, Adelaide, Dept Public Health, 1985. AMC, *Deaths associated with anaesthesia in South Australia and the Northern Territory, 1992-1997*, Dept Human Services, 1998.

referred to as 'death rounds'[7], in-house case reviews conducted by doctors on patients who died unexpectedly have been common practice in most teaching hospitals. In his critique of medical errors, UK based sociologist Joel Richman described such 'rounds' as neutralisation strategies[8]. He argued that the objectification of patients' death by controlled and logically arranged case presentations during such rounds served to 'routinise' medical fatalities (and the errors that may have contributed to them) while simultaneously providing opportunities for doctors to display their superior analytical talents. Even those doctors who advocate such in-hospital reviews have suggested death rounds tend to develop into stylised performances for the purpose of ritualistic catharsis, which ultimately have no long-term effect in reducing patient morbidity and mortality[9]. Moreover, each case is most often handled separately so there is little possibility for accumulative or aggregated comparison and identification of errors. It is therefore significant that the early forays by the UK Department of Health and the Royal Colleges to investigate adverse events during the 1950s heralded a move to employ external means to investigate patient deaths as a way to identify causal patterns related to potential sub-standard medical care.

No serious attempt, however, was made to study the nature and incidence of medical adverse events until 1960, when Schimmel, a physician from the Yale University School of Medicine, commenced a prospective study in a community hospital in Connecticut[10]. Schimmel aimed to determine the type and frequency of hospital patients experiencing complications, untoward events and mishaps related to acceptable diagnoses or therapeutic measures deliberately instituted. He divided adverse events into three types; minor, if they were short and subsided without patients requiring specific treatment; moderate, if patients required specific treatment and their hospitalisation was prolonged for a day or more; and major, if the episode was life threatening or contributed to death. Over an eight month period, 1,014 patients were

---

7 Such case reviews have also been referred to as 'death and complication audits' (D's & C's) and 'morbidity and mortality meetings' (M & M's). See by way of example, Dudley, H. 'Necessity for surgical audit', *British Medical Journal,* Vol.16, 1974 pp275-277; Vincent, C. Research into medical accidents: a case of negligence?, *British Medical Journal,* Vol.299, 1989 pp1150- 1153.

8 Richman, J. *Medicine and health,* Longman, London, 1987 p167.

9 Dudley, 1974 pp275-277.

10 Schimmel, E. 'The hazards of hospitalization', *Annals of Internal Medicine,* Vol.60, 1964 pp100-110.

admitted to the study hospital with 20% of patients experiencing some form of deleterious event, 4.7% of which were in the major category. During the investigation, 154 patients died in the hospital, of which 16 deaths were believed related to 'noxious episodes whose precise causal role was difficult to evaluate'[11]. Like Barr, Schimmel also concluded that judicious selection of diagnostic and therapeutic measures should be made to minimise the 'price' doctors and their patients paid for the hazards of modern hospitalisation.

The price physicians, or at least their insurance provider, paid in compensation for adverse events provided the motive for the first large scale investigation into the incidence of iatrogenic injury and sub-standard medical care. In 1977, the California Medical Association published the results of a retrospective analysis of 20,864 medical records used as a convenience sample to estimate the percentage of patients that could be eligible for compensation arising from an adverse event. The findings of the Californian study suggested 4.6% of patients suffered a potentially compensable event[12]. Earlier in the decade, a small prospective study of 166 patients with gastrointestinal symptoms referred for X rays to the Emergency Department (ED) of a Baltimore hospital had found that only 25% of patients were judged to have received minimally adequate care and that a relatively low quality of care was being provided at considerable expense[13]. In Britain and Australia doctors were also beginning to advocate research into medical errors and adverse events. Among these was Dudley, a surgeon who had practised in both countries and proposed the use of systematic problem oriented audits as a way to more publicly account for practices, errors and mishaps[14].

By the close of the 1970s several studies into medical mishaps were underway in the US. For example, in Boston, a group of doctors led by Crouch screened all surgical patients admitted to one hospital between December 1978 and December 1979 to identify errors of care and the cost of such surgical

---

11 Schimmel, 1964 p105.

12 Mills, D. (ed), *Report of the medical insurance feasibility study,* California Medical Association, San Francisco, 1977.

13 Brook, R. Berg, M. Schechter, P. 'Effectiveness of non-emergency care via an emergency room', *Annals of Internal Medicine,* Vol.78, 1973 pp333-339.

14 Dudley, 1974 pp275-277.

mishaps[15]. They classified errors into two types, those of omission (eg failure to make a correct diagnosis despite strongly suggestive evidence) and those of commission (eg when a misdiagnosis led to misadventure such as unnecessary, defective or contraindicated surgery). They identified 36 such errors among 5,612 surgical admissions (in 23 cases it was suggested that the initial mishap occurred at another hospital) with two thirds of cases involving errors of commission. Twenty patients died in hospital and in 11 cases the death was associated with 'important contributory surgical mistakes'[16].

Around the same time, Steel and colleagues were attempting to define the type and scale of risk associated with iatrogenesis, this time in the general medical area of a university hospital[17]. By monitoring all new patients over 5 months in 1979, they found that 36% of the 815 consecutive patients admitted suffered an iatrogenic illness with 9% experiencing an event that was life threatening or produced a disability. In this study, iatrogenic illness was thought to have contributed to death in 2% of cases (15 patients)[18].

While studies conducted during the 1970s varied methodologically they reflected changes occurring both inside and outside the profession that would ultimately challenge medicine's real benefits to the health and economic well-being of society. Previously, the profession had held considerable, and largely unquestioned status in the community, albeit that the actual practice of medicine was still largely based on trial and error knowledge. During the 1970s, however, several social, economic and political factors collectively placed medicine under significant public scrutiny and contributed to the profession suffering a major crisis[19]. Although many of these factors first emerged in the US, they soon pervaded the medical profession in other developed countries where the doctor-patient relationship had primarily

---

15 Couch, N. Tilney, N. Rayner, A. Moore, F. 'The high cost of low-frequency events: the anatomy and economics of surgical mishaps', *New England Journal of Medicine*, Vol.302, 1981 pp634-637.

16 They estimated the average daily cost of those patients who died was $1,419 per day in comparison to $709 of those who survived. Couch, N. et al, 1981 pp635-636.

17 Steel, K. Gertman, P. Crescenzi, C. Anderson, J. 'Iatrogenic illness on a general medical service at a university hospital', *New England Journal of Medicine,* Vol.304, 1981 pp638-642.

18 Steel et al, 1981 p639.

19 For a detailed discussion of these factors see Starr, P. *The social transformation of American medicine,* Basic Books, New York, 1982 esp: Book Two Chap.4 'End of a mandate' pp379-419.

become a fiscal one. Slow economic growth, persistent inflation and spiralling costs of health care heralded a move to a greater regulatory approach to services and unprecedented government intervention to control medical expenditure. This occurred at a time when critics including Fuchs, Carlson and Illich[20] were fuelling public scepticism about the efficacy and value of modern medicine and the women's movement was openly challenging the power and authority of the patriarchal medical establishment[21]. Popular literature and movies like *One flew over the cuckoo's nest* captured public concern with medicine's moral values by portraying patients' nonconformity and rebellion in the face of institutional oppression and domination by a tyrannical nurse[22].

Even in the relatively cocooned Australian medical establishment there were rumblings and dissent by some members of the profession whose conscience was aroused by the need for social justice and equity of access to health care services across the social spectrum. On such group was the Australian Doctors Reform Society, formed in 1973 by a group of medical practitioners wanting to promote the introduction of a publicly funded universal health insurance system (Medibank)[23]. In 1979, Australian doctor Richard Taylor published a book that echoed Illich's warning about an increasingly technical society and *medical nemesis* unless the autonomy of individuals could be re-established[24]. Using surveys of clinical trials, official health statistics, clinical audits and other published literature to support his thesis, Taylor argued that

---

20 See: Fuchs, V. *Who shall live? Health economics and social choice*, Basic Books, New York 1974; Carlson, R. *The end of medicine*, John Wiley, New York, 1975; and, Illich, I. *Limits to medicine: medical nemesis: the expropriation of health*, Penguin Books, Harmondsworth, 1977.

21 For feminists views on medicine at the height of the women's movement see among others the work of Daly, M. *Gyn/ecology: the metaethics of radial feminism*, Beacon Press, Boston 1978; Ruzeck, S. *The women's health movement: feminist alternatives to medical control*, Praeger, New York, 1978; Raymond, J. 'Medicine as patriarchal religion' *Journal of Medicine & Philosophy*, Vol.7, 1982 pp197-216.

22 Based on the book of the same name by Ken Kensey this film, directed by Milos Forman, was the recipient of five Oscars at the 48th Academy of Motion Picture Arts and Sciences awards in 1975.

23 Doctors Reform Society of Australia (DRS) http://www.drs.org.au (Accessed 6 January 2003). The Whitlam Labour government in 1974 finally enacted Medibank after a double dissolution and a joint sitting of Parliament. The Opposition, under pressure from the powerful Australian Medical Association, the private hospitals and the insurance funds had vehemently opposed this scheme. While introduced in 1974, Medibank was nevertheless slowly dismantled by the Fraser led Coalition government which came into office in 1975. See: Swerissen, H. Duckett, S. 'Health policy and financing' in H.Gardner & S.Barraclough, (eds), *Health policy in Australia*, 2nd edn, Oxford University Press, South Melbourne, 2002 pp13-48.

24 See Illich, 1975 esp. Chap 9 'The recovery of health' pp153-169.

medicine had moved from a profession concerned with caring for human beings to one that was rapidly becoming a remote controlled, technology oriented empire that was proliferating its own intellectual and economic momentum[25]. While not optimistic about its future, Taylor's solution for the crisis medicine had reached by the late 1970s was 'to put more emphasis on total population systems of prevention and on the social and economic changes necessary so that healthy living patterns are feasible and can become the cultural norm'[26]. The notion of prevention being better than cure had been at the heart of the Whitlam Labour government's attempts to introduce a national community health program in the early 1970s[27]. The question of whether a similar preventative model could be applied to acute care was central to a number of studies undertaken to investigate adverse events over the next two decades.

The research of two American physicians, Dubois and Brook, provides an example of this trend. Their four phased study involved a review of the medical records of 182 deaths from 12 hospitals to quantify how often preventable deaths were occurring, why they occurred and whether patients who were at risk of dying from preventable causes could be identified on admission to hospital[28]. Despite considerable methodological limitations, the authors nevertheless suggested that of the 182 deaths, 180 of them were preventable, 20 definitely and 160 probably[29]. Nevertheless, Dubois and Brook could not find any clinical or demographic features that might predict at risk patients on, or soon after, admission. The notion that preventable deaths were occurring in hospitals at alarming rates, and that mortality could be reduced by studying such incidents, took hold. In the UK, psychology academic, Charles Vincent, became a notable proponent of risk identification and research into medical accidents and errors. Vincent was involved in several projects related to medical misadventure, including his work with the UK Medical Protection Society's research project on avoidable mishaps in

---

25 Taylor, R. *Medicine out of control: the anatomy of medicine out of control,* Sun Books, Melbourne, 1979.

26 Taylor, 1979 p239.

27 Swerissen & Duckett, 2002 p18.

28 Dubois, R. Brook, R. 'Preventable deaths: who, how often, and why?' *Annals of Internal Medicine,* Vol.109, 1988 pp582-589.

29 In this study only deaths involving patients with cerebral vascular accidents, myocardial infarction and pneumonia (36% of all hospital deaths) were studied. The mean age of these patients who died was 77.6 years. Dubois & Brook, 1988.

medicine[30]. Publishing extensively, Vincent strongly advocated the need for epidemiological and descriptive studies into adverse events, inclusive of investigating the medical records of patients who died in hospital[31].

Given what was occurring across the Atlantic, it was understandable that indemnity groups like the Medical Protection Society were interested in investigating the nature and incidence of adverse events as a means of alerting its members to prevention strategies. By the end of the 1980s the US medical insurance system was at crisis point due to the spiralling cost of damages being awarded by the courts for medical injuries and increasing expenditure on malpractice litigation and liability insurance[32]. As signs that this 'compensation culture'[33] was beginning to infiltrate public attitudes to loss and injury in the UK and Australia, concern was mounting within government health departments and medical establishments that they, too, might face a similar insurance crisis to the US. For example, in Britain, it was rare for patients to sue doctors during the first half of the 20th century, but payouts to patients for medical negligence increased 2,000 fold over the second half of the century[34]. In Australia, this trend was reflected in the rising cost of medical insurance. In 1975, the annual subscription to the Victorian branch of the

---

30 Vincent, 1989, p1152. The UK Medical Protection Society (MPS) was formed in 1892 and is now the largest mutual medical protection organisation operating internationally, providing indemnity insurance and assistance to its medical membership in relation to clinical negligence claims, complaints procedures, legal and ethical dilemmas arising from practice, Medical Council inquiries, disciplinary procedures, coronial inquests and fatal accident inquiries. See: MPS http://www.medicalprotection.org/medical/united_kingdom [Assessed 21 January 2003).

31 See for example: Vincent, 1989 pp1150-1153; Vincent, C. Martin, T. Ennis M. 'Obstetric accidents: the patient's perspective', *British Journal of Obstetrics & Gynaecology*, Vol.98, 1991 pp390-395; Vincent, C. Pincus, T. Scurr, J. 'Patients' experience of surgical accidents', *Quality Health Care*, Vol.2, 1993 pp77-82; Vincent, C. 'The human element of adverse events', *Medical Journal of Australia*, Vol.170, 1999 pp404-405; Vincent, C. Stanhope, N. Crowley-Murphy, M. 'Reasons for not reporting adverse incidents: an empirical study', *Journal of Evaluation in Clinical Practice*,Vol.5, 1999 pp13-21; Vincent, C. Neale, G. Woloshynowych, M. 'Adverse events in British hospitals: preliminary retrospective record review', *British Medical Journal*, Vol.322, 2001 pp.517-519; Vincent, C. Coulter, A. 'Patient safety: what about the patient?' *Quality & Safety in Health Care*, Vol.11, 2002 pp.76-80.

32 Hiatt, H. Barnes, H. Brennan, T. et al 'A study of medical injury and medical malpractice' *The New England Journal of Medicine*, Vol.321, 1989 pp480-484.

33 The term 'compensation culture' is defined as the desire of individuals to sue a party, as a result of suffering something that could have been avoided if the party had done their job properly. Broughton, J. Gravelsons, B.Hensman, C. et al *The cost of compensation culture*, Joint Report by the Institute of Actuaries, London and the Faculty of Actuaries, Edinburgh, London, 2002 p4.

34 The annual bill for medical negligence in Britain rose from £34,472 in 1952 to £78m in 2000. Meikle, J. 'Huge rise in medical negligence claims', *The Guardian Newspaper Limited*, Monday 3 June 2002, http://www.SocietyGuardian.co.uk/nhsperformance/story/ 0,8150,726761,00.html [Accessed 24 September 2002].

Medical Defence Union was ten dollars, but by 1989 this subscription had risen to $1300[35].

In the US, where in one state alone doctors were spending more than $1 billion annually on malpractice insurance, the first large scale epidemiological study into adverse events was being undertaken[36]. This study, published in the New England Journal of Medicine in 1991, remains the largest investigation to date into the rate of medical injuries in acute hospitals. Known as the Harvard Medical Practice Study (HMPS), the research originated as an enquiry into the economic cost of medical injuries and a push for a no-fault insurance plan as an alternative to the tort liability system[37]. Population level data for the study were collected from a review of 30,121 medical records of patients randomly selected from 51 acute, nonpsychiatric hospitals in New York State for 1984. Findings indicated that adverse events which prolonged admission and produced disability occurred in 3.7% of hospitalisations and that 27.6% of these events were due to negligence. Although 70.5% of the adverse events gave rise to a disability lasting less than six months, 2.6% caused permanently disabling injuries and 13.6% led to death[38].

Using weighted totals to extrapolate these findings to the number of patients discharged from New York hospitals in 1984 (2,671,863), the HMPS team estimated that there were 98,609 adverse events with 27,179 of these involving negligence. They further estimated that 2,550 patients would have suffered permanent total disability and 13,451 may have died as a result of an adverse event. Lucian Leape, a key member of the HMPS later suggested that in the US as many as 180,000 deaths may occur a year as a result of such medical injuries, the equivalent of three jumbo jet crashes every two days[39]

In terms of who were most at risk of such medical induced injury, the HMPS found that rates of adverse events rose with age and the percentage of adverse

---

35 Plueckhahn, V. Cordner, S. *Ethics, legal medicine and forensic pathology,* 2nd edn, Melbourne University Press, Melbourne, 1991 p80.

36 Hiatt, Barnes, Brennan et al, 1989 pp480-484.

37 Johnson, W. Brennan, T. Newhouse, J. et al 'The economic consequences of medical injuries: implications for a no-fault insurance plan,' *JAMA,* Vol.267, 1992 pp2487-2492.

38 Brennan, T. Leape, L. Laird, N. et al 'Incidence of adverse events and negligence in hospitalized patients: results of the Harvard Medical Practice Study I', *New England Journal of Medicine,* Vol.324, 1991 pp370-376.

39 Leape, L. Swankin, D. Yessian, M. 'A conversation on medical injury', *Public Health Reports,* Vol.114, 1999 p304.

events due to negligence was markedly higher among those older than 64 years[40]. A subsequent analysis of the same data found that 27.6% of these injuries were caused by medical negligence, and 69% by human error [41]. Conclusions drawn from the HMPS indicated that the degree of injury to patients during medical management was substantial, many adverse events were the result of substandard care and while some iatrogenic injuries, such as idiosyncratic drug reactions were neither preventable nor predictable, those caused by human error or negligence could be averted.

Alarmed by the results of the HMPS, government agencies, medical researchers and those interested in the psychology of human error quickly responded by generating their own inquiries into the prevalence of adverse events and the mechanisms behind medical misadventure. In Australia for example, a year after the HMPS results were published, a feasibility study by the Australian Institute of Health and Welfare (AIHW) concluded that, with some modifications, a similar study could be conducted in Australian hospitals[42]. This resulted in the Commonwealth Department of Human Services and Health commissioning a study under the leadership of Dr Ross Wilson, an intensive care medical specialist and Director of Quality Assurance at the Royal North Shore Hospital in Sydney, NSW. In this study, 14,179 admissions across 28 hospitals in NSW and South Australia were reviewed with adverse events found to occur in 16.6% of admissions[43]. Varying significantly from the HMPS findings, the Australian study found that 13.7% of patients exposed to an adverse event suffered a permanent disability (as opposed to 2.6% in the HMPS) and death from an adverse event occurred in 4.9% of cases (rather than 13.6% for the HMPS). Both studies concluded, however, that the proportion of permanent disability or death due to an

---

40 Brennan, Leape, Laird et al, 1991 p372.

41 Leape, L. Brennan, T. Laird, N. et al 'The nature of adverse events in hospitalized patients: results of the Harvard Medical Practice Study II', *New England Journal of Medicine*, Vol.324, 1991 pp377-384. Leape, L. 'Error in Medicine', *JAMA* Vol.272, 1994 pp1851-1857.

42 Harvey, R. & Cross, J. *Report on the feasibility study of an Australian hospitals' adverse health care incidents study,* Commonwealth Department of Health, Housing and Community Services, Canberra, 1992.

43 Wilson, R. Runciman, W. Gibberd, R. et al 'The quality in Australian health care study' Medical Journal of Australia, Vol.163 1995 pp458-471. Alongside Wilson, Runciman was Professor of Anaesthesia and Intensive Care at Royal Adelaide Hospital who had an interest in quality of care and Gibberd was a statistician from University of New Castle, NSW.

adverse event increased with age and in many cases adverse events were judged to be highly preventable[44].

How did the findings of these two studies in relation to adverse event mortality rates and preventability compare with the results of other studies that were now being conducted? An investigation by Gawande and colleagues into surgical iatrogenesis in Colorado and Utah hospitals, modelled on the two previous studies, reported a similar overall incidence of adverse events as the HMPS, in this case approximately 3% of admissions (in comparison to 3.7% in the HMPS)[45]. However, the death toll when an adverse event occurred was closer to the rate reported in the Australian study. In this case, Gawande et al found 5.6% of adverse events resulted in death, which accounted for 12.2% of all hospital deaths in these two US States and more than half of the total number of adverse events were considered preventable[46].

In the Colorado and Utah study the average age of patients was 38.9 years[47], however, as Bellomo et al demonstrated, when the incidence and nature of postoperative adverse events involve an older patient population, the mortality rate is even higher. These researchers conducted a prospective observational study of 1,125 hospitalised surgical patients in a teaching hospital in Victoria, Australia, to assess the rate of serious adverse events[48]. They found there were 414 such adverse events, which affected 190 patients (16.9%) and of these 80 patients died (7.1%). When patients were aged over 75 years and had unplanned surgery, mortality reached 20%[49]. This finding was consistent with

---

44 For the Australian study, 51% of adverse events were considered to be highly preventable. Wilson, R. Runciman, W. Gibberd, R. et al 1995 pp459.

45 Gawande, A. Thomas, E. Zinner, M. et al 'The incidence and nature of surgical adverse events in Colorado and Utah in 1992', *Surgery*, Vol.126, 1999 pp66-75.

46 Gawande, Thomas, Zinner, et al 1999, p70.

47 This compares to a mean age of 43.8 years for the NSW patient arm of the Australian study reported by Wilson, Runciman, Gibberd et al, 1995 pp464. While the HMPS reported rates of adverse events and negligence according to age, the mean age of patients was not reported.

48 A serious adverse event included acute myocardial infarction, pulmonary embolism, acute pulmonary oedema respiratory failure, cardiac arrest, stroke, severe sepsis, acute renal failure and death. Bellomo, R, Goldsmith, D. Russell, S et al 'Postoperative serious adverse events in a teaching hospital: a prospective study', *Medical Journal of Australia*, Vol.176, 2000 pp216-218.

49 Bellomo, Goldsmith, Russell et al, 2000 p217.

other studies that had also linked the elderly with increase risk of in-hospital death from adverse events[50].

Perhaps not surprisingly, research also suggested that the longer one stays in hospital, the greater the risk of death from a medical injury. For example, Garcia-Martin et al studied 524 consecutive deaths in a Spanish hospital between 1990 and 1991 and found that for hospitalisations over 48 hours, the adjusted attributable risk for an adverse event was estimated to be 51%[51]. A French study also observed that iatrogenesis accounted for 11% of admissions to ICU, half of which they found were preventable[52]. Once in ICU the mortality rate for these patients was 13% and the researchers concluded that despite 25 years experience with high tech medicine, the risk factors, causes and consequences of medical induced injuries continue to negatively impact on health and hospital resources[53].

The results of these studies and those of many smaller investigations into the incidence of medical injury do not provide a definitive account of how many patients die per year from hospital related adverse events, for several reasons. One stems from the lack of any agreed definition of what constitutes an adverse event and the broad-brush strategies that have been applied to measure variables within any given definition. For instance, the HMPS identified an adverse event as an unintended injury caused by medical management rather than the disease process[54]. Within this definition there were three key variables i) the extent of unintended injury ii) its perpetration by medical management that was, iii) separate from, and additional to, the disease sequelae. The challenge for these researchers and others has been to apply suitable methods to measure what constitutes a highly complex and potentially interrelated set of variables. To date no definitive research model has been put forward.

---

50 See for example: Brennan, Leape, Laird et al, 1991 pp370-376; Wilson, Runciman, Gibberd. et al,1995 pp458-471; and, O'Hara, D. Carson, N. 'Reporting of adverse events in hospitals in Victoria, 1994-1995', *Medical Journal of Australia*, Vol.166, 1997 pp460-463.

51 Garcia-Martin, M. Lardelli-Claret, P. Beueno-Cavanillas, A. et.al ' Proportion of hospital deaths associated with adverse events', *Journal of Clinical Epidemiology*, Vol.50, 1997 pp1319-1326.

52 Darchy, B. LeMiere, E. Figueredo, B. et al 'Iatrogenic diseases as a reason for admission to the intensive care unit: incidence, causes and consequences', *Annals of Internal Medicine*, Vol.159, 1999 pp71-78.

53 Darchy, LeMiere, Figueredo et al, 1999 p77.

54 Brennan, Leape, Laird,et al, 1991 p370.

By far the most common method employed has been retrospective analysis of medical records that have studied the frequency and effects of adverse events. Such studies typically used trained nurses and/or medical record analysts to initially review patient casenotes and if a record was found to screen positive for an adverse event, it was independently reviewed by medical personnel to substantiate the event and degree of injury[55]: This design was the basis for a pilot study by Vincent and colleagues in 2001, which found that 10.8% of hospitalised patients experience an adverse event[56]. Other researchers have used hospital separation data reported to state government health departments that contained diagnostic and procedural information coded by means of the International Classification of Diseases 9th Revision Clinical Modification (ICD_9-CM)[57]. These retrospective studies have attempted to ascertain the frequency and number of adverse surgical events by identifying ICD_9-CM supplementary classification codes for external causes of injury (E-codes) or surgical complications (996 to 999)[58].

While medical records provide a convenient means to collect descriptive data, the results of such research is dependent on the very factor that may be the root cause of the event, human failure. Medical researchers who have studied the reliability of patient case-notes have found significant problems with the accuracy of information recorded by health personnel, the completeness of records and the timeliness of documentation, concluding that medical records do not provide an accurate descriptor of diagnosis and treatment and that there are major limitations in using this source of data[59]. Vincent, who used

---

55 Among the more notable studies that have used this design include those by Mills, 1977; Brennan, Leape Laird et al, 1991; Wilson, Runciman, Gibberd et al, 1995; Gawande, Thomas, Zinner et al, 1999.

56 Vincent et al, 2001 pp517-519.

57 U.S. Department of Health and Human Services (DHHS), *International Classification of Diseases 9th Revision Clinical Modification*, DHHS, Washington, 1980. Recently there has been an update to this publication – see, Center for Disease Control (CDC) and World Health Organisation (WHO), *International Classification of Diseases 10th Revision Clinical Modification*, WHO Publications Center USA, Albany, 2001.

58 This has been a more popular method used by Australian researchers including Westbrook, J. Rushworth, R. 'Evaluating health care: what can hospital separation data tell us about the complications of hospital care? *Journal of Quality Clinical Practice,* Vol.14, 1994 pp157-166; O'Hara & Carson, 1997 pp460-463.

59 Tapp, R. 'Inhibitors and Facilitators to Documentation of Nursing Practice', *Western Journal of Nursing Research,* Vol.12, 1990 pp 229-241; Davis, B. Billings, J. Ryland, R. 'Evaluation of nursing process documentation', *Journal of Advanced Nursing,* Vol.19,1994 pp.960-969; Ehrenberg, A. & Ehnfors, M. 'The accuracy of patient records in Swedish nursing homes: congruence of record content and nurses' and patients' descriptions', *Scandinavian Journal of Caring Sciences,* Vol.15 2001 pp303-310; Fernando, K. & Siriwardena, A. 'Evidence against the reliability of the inpatient case-note record as an accurate descriptor of the process of care', *British Journal of Surgery,* Vol.88, 2001 p34.

retrospective record review to detect adverse events, acknowledged that such records are often inadequate and misleading and seldom give any clues about the cause of the event[60]. Leape, a senior member of the HMPS, also believed many medical injuries and most errors are not recorded in the medical records, either by intent or inattention[61]. Therefore, while retrospective studies into adverse events may have been a useful starting point for researchers, the results of such studies cannot be interpreted as trustworthy or truthful accounts of the incidence and nature of adverse events.

To overcome this limitation, other researchers have attempted to study adverse events prospectively, by using observational methods. In these primarily ethnographic studies researchers have screened medical and nursing rounds and case conferences to record adverse events discussed at these meetings and develop classification schemes to detect incidence and outcomes of error[62]. However, these studies have primarily been predicated on doctors and nurses candidly discussing adverse events or witnessed accounts of errors by an observer. The effect of an observer in altering the behaviour of those being studied has been well identified[63]. Leape asserts that the culture of medicine which imbues in doctors and nurses the importance for error free practice along with the threat of malpractice often leads them to cover-up their mistakes and avoid disclosure at all costs[64]. Indeed, when Wu and colleagues anonymously surveyed doctors undertaking internal medicine training programs in the US, they found only 54% discussed their mistakes with senior physicians and only 24% ever told the patients or families about errors[65]. So relying on observations of doctors and nurses to openly discuss adverse events

---

60 Vincent, 1989 pp1151; In 2001 Vincent and colleagues reported on the feasibility of detecting adverse events through record review in British hospitals to make preliminary estimates of the incidence and costs of adverse events. See Vincent, Neale & Woloshynowych, 2001 pp.517-519.

61 Leape was quoted with this comment in: Crane, M. 'Medical mistakes: must doctors take the rap?' *Medical Economics,* Vol.77, 2000 pp108-124.

62 Observational studies include: Couch, Tilney, Rayner et al, 1981 pp.634-637; Andrews, L. Stocking, C. Krizek, T. 'An alternative strategy for studying adverse events in medical care,' *The Lancet,* Vol.349, 1997 pp309-313; Taxis, K. Barber, N. 'Ethnographic study of incidence and severity of intravenous drug errors', *British Medical Journal,* Vol.326, 2003 pp684-687.

63 See for example: Mays, N. Pope, C. 'Qualitative Research: Observational methods in health care settings', *British Medical Journal,* Vol.311, 1995 pp182-184; Burns, N. Grove, S. 'Measurement and data collection in research' Chap.8 in *Understanding Nursing Research,* W.B.Saunders Comp, Philadelphia, 1995 pp.251-311 esp. p277.

64 Leape, 1994 p1852.

65 Wu, A. Folkman, S. McPhee, S. et al 'Do house officers learn from their mistakes?', *JAMA,* Vol.265, 1991 pp2089-2094.

while being observed by researchers is at best a tenuous means to identify accurately the frequency and nature of adverse events. Indeed, a fundamental problem in the existing level of evidence of hospital mortality associated with iatrogenic injury lies in the methodological variations and inconsistencies in the research, thwarting any endeavours to undertake meta-analysis or capture a factual account of the true extent of the problem. However, the fact that a true picture of adverse events remains at best, inconclusive, has not inhibited governments from using existing evidence and expressing concern publicly about the nature, frequency and cost of medical misadventure.

6.3 Governments respond to iatrogenic mortality

By the mid 1990s the US government had raised the issue of quality and safety in health care to the forefront of their national agenda. In 1996, an Advisory Commission was established to make recommendations to President Bill Clinton on how best to promote and assure consumer protection and health care quality[66]. In 1998, the Commission released its final report identifying medical errors as a major challenge to quality health care and recommended that the President establish the Quality Interagency Coordination Task Force (QuIC). The role of QuIC was to coordinate quality improvement activities in Federal health care programs and have a major focus on identifying ways to address the problem of medical errors[67].

In November 1999, the US Institute of Medicine (IOM) released another major report into quality health care. *To err is human: building a safer health system*, was based on previous mortality figures from the HMPS and Colorado/Utah studies that estimated between 44,000 to 98,000 people died in US hospitals each year as the result of medical errors[68]. By highlighting medical errors as the eighth leading cause of death in the US, this report brought to the American public's attention the fact that more people died annually in the US from medical errors than from motor vehicle accidents,

---

66 President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry: Final Report: Quality First: Better Health Care for All Americans, http://www.hcqualitycommission.gov/final/ March 12, 1998 [Accessed 26 June 2003].

67 Quality Interagency Coordination Task Force (QuIC). *Fact Sheet*, AHRQ Publication No. 00-P027, February 2001. Agency for Healthcare Research and Quality, Rockville, MD. http://www.ahrq.gov/qual/quicfact.htm (Accessed 27th June 2003).

68 Kohn, L. Corrigan, J. Donaldson, M. *To err is human: building a safer health system.* Institute of Medicine, National Academy Press, Washington, 1999.

breast cancer or AIDS and was costing the nation between $17 and $29 billion per year. Among other proposals, the IOM report called for a mandatory public reporting system and aimed for a 50% reduction in errors over the next five years. Recommendations in the report identified a four-tiered approach to achieve this goal which included:

- the establishment of a national focus to create leadership, research, tools and protocols to enhance the knowledge base about safety
- to identify and learn from errors through immediate and strong mandatory reporting efforts, as well as the encouragement of voluntary efforts, both with the aim of making sure the system continues to be made safer for patients
- to raise standards and expectations for improvements in safety through the actions of oversight organizations, group purchasers, and professional groups
- the creation of safety systems inside health care organizations through the implementation of safe practices at the delivery level[69].

Using language that was to be repeated in a similar Australian government paper two years later[70], the IOM report indicated that there was no magic bullet to solve the complexities of medical errors. This proved somewhat prophetic as despite two subsequent reports from the IOM[71], occurrences of death from medical misadventure in the US show little signs of abating.

Across the Atlantic, the UK Department of Public Health was equally concerned about quality and safety in health care, particularly in the late 1990s when a number of serious failures in the National Health Service (NHS) received considerable media attention[72]. This sparked an inquiry into the NHS chaired by the Chief Medical Officer and the establishment of an expert group to advise the Government on steps that should be adopted to ensure that the NHS learnt from these failures and reduced the risk of avoidable harm to patients.

---

69 Kohn et al, 1999 p6.

70 See: Commonwealth Department of Health & Aged Care 'Australian Health Ministers Endorse Report into Health Care Safety' *Media Release: Australian Health Ministers Conference* – Adelaide 1st August 2001. A copy of this document can be accessed at http://www.health.gov.au/mediarel/yr2001/mw/ahmc1.htm

71 The IOM released another report in 2000 titled *Crossing the Quality Chasm: a new health system for the 21st century*' (A copy of this report can be downloaded at http://www.nap.edu). In 2002 a further IOM report was published, See: Corrigan, J. Eden, J. Smith, M. *Leadership by example: coordinating government roles in improving health care quality.* IOM, National Academy Press, Washington, 2002.

72 I pointed out in Chapter 2 (pages 36-37) that several high profile cases received immense public exposure in the UK. These included the trial and subsequent public inquiry into Dr Harold Shipman; the inquiry into the illegal procurement and retention of human organs at the Alder Hey Hospital in Liverpool; and the public inquiry into paediatric cardiac surgical services at the Bristol Royal Infirmary.

The NHS Report was released in 2000. While conceding that existing NHS reporting and information systems provided a patchy and incomplete picture of the scale and nature of medial misadventure, it indicated that every year:

- medical adverse events occur in around 10% of UK hospital admissions at a rate in excess of 850,000
- 400 people die or are seriously injured in adverse events involving medical devices alone
- around 1,150 people who have been in recent contact with mental health services commit suicide
- nearly 28,000 written complaints are made about aspects of clinical treatment in hospitals
- hospital acquired infections - around 15% of which may be avoidable – are estimated to cost the NHS nearly £1 billion
- the NHS pays out around £400 million a year settlement of clinical negligence claims, and has a potential liability of around £2.4 billion for existing and expected claims
- cost the service an estimated £2 billion a year in additional hospital stays alone, without taking any account of human or wider economic costs[73].

Areas highlighted for improvement in the NHS Report included reducing by 2001 the number of patients dying or being paralysed by maladministered spinal injections (at least 13 such cases had occurred over 15 years). In addition, 2005 targets were set to decrease by 25% the number of instances of negligent harm in the field of obstetrics and gynaecology and to reduce by 40% the number of serious errors in the use of prescribed drugs[74]. In response, the UK Government set up a National Patient Safety Agency (NPSA) with the mandate to manage a national reporting system and to coordinate a program so that all those involved in health care service delivery could learn from adverse events. Since its inception the NPSA has piloted a reporting system in 28 hospitals and primary care units and in July 2003 launched its first Patient Safety Alert[75].

---

73 Department of Public Health, *An organisation with a memory: report of an expert group on learning from adverse events in the National Health Service,* The Stationery Office, London 2000 [NHS Report].

74 Department of Public Health, NHS Report, 2000 p86.

75 The National Patient Safety Agency website suggests that while there were a number of difficulties associated with the completeness of data stemming from the reporting system piloted in 2001, it demonstrated that it was technically possible to link up the many existing data collection systems across the NHS and that staff were willing to report to the NPSA. The NPSA also plan to publish a number of alerts, which set out plans for addressing and overcoming risks identified from reports of adverse events. http://www.doh.gov.uk/cmo/_progress/patientsafety/patientsafety6.htm [Accessed 27 June 2003]

Like their US and UK counterparts, Australian state and federal governments had initially adopted a back seat approach to the problem of patient safety until the late 1990s. Until then government health agencies had been content to fund selected initiatives such as the Australian Patient Safety Foundation, a not-for-profit, independent organisation formed in 1988 to monitor adverse events through the development of a national incident monitoring system[76]. This changed in 1995 with the national release of the Quality in Australian Health Care Study. This project found that 16.6% of hospital patients suffered an adverse event and in 4.9% of these cases contributed to death[77], and prompted strong reaction from government, health care professionals and the public.

Following the US lead, Health Ministers in Australia responded by establishing a taskforce to examine the issue of quality in health care services. On the basis of this taskforce's report, which was released in 1996, the Ministers agreed to convene the National Expert Advisory Group on Safety and Quality in Australian Health Care[78]. This Expert Advisory Group presented their final report in August 1999 at a joint meeting of Health Ministers in Canberra. They identified several recommendations including the establishment of the Australian Council for Safety and Quality in Health Care (ACSQHC) and that A$17.4 million be provided over four years to support the Council and its implementation of national actions to provide safer health care services. The formation of the ACSQHC received wide support and the federal Health Minister, Dr Michael Wooldridge, said:

> The new Council will set the agenda for health care safety and quality in Australia and provide national leadership to reduce the risk of adverse events occurring in the health system...and reduce the enormous costs of managing mistakes[79].

---

76 Runciman, W. Moller, J. 'Iatrogenic injury in Australia: a report prepared by the Australian Patient Safety Foundation' Australian Patient Safety, Adelaide 2001. This report can be downloaded from http://www.apsf.net.au

77 Wilson, Runciman, Gibberd et al, 1995 pp458-471.

78 Commonwealth Department of Health and Aged Care 'Implementing actions to support quality and safety improvement in Australian health care' *Final report to Health Ministers from the National Expert Advisory Group on Safety and Quality in Australian Health Care,* Canberra, July 1999. This report can be accessed at http://www.health.gov.au/hsdd/nhpq/pubs.htm

79 Commonwealth Department of Health & Aged Care 'New national council will oversee safety and quality in Australia's health care system,' *Media Release: Australian Health Ministers Conference,* Canberra, 4th August 1999. The report can be accessed at http://www.health.gov.au/mediarel/yr1999/mw/hmc2.htm

The ACSQHC was formed in January 2000 with initial core funding of A$5 million and its primary role was to:

- develop a national strategy for improving safety and quality to reduce the risk of adverse events occurring in all health care settings
- form partnerships, by working with health care professionals, the Commonwealth, States and Territories, professional associations, private, non-government, and consumer organisations
- coordinate existing activity to better achieve action in priority areas
- place consumers first, by making sure that safety and quality measures are practical and will make a real difference
- encourage public understanding and increase the community's confidence in the steps being taken to improve the safety of health care
- promote monitoring and research to address the many issues and challenges in relation to providing a safer health care system[80].

The Council released its first report 'Safety First' at the next Australian Health Ministers Conference in July 2000, followed in February 2001 with a National Action Plan[81]. At the next Health Ministers meeting in August 2001 in Adelaide, the Council released its second report 'Safety in Practice – Making Health Care Safer' and at this forum the Ministers agreed that ACSQHC reports be made publicly available and widely distributed for broad consultation[82]. It was an attachment to this annual report, however, that provided a more illuminating account of the extent of adverse events in hospital services and the inadequacy of existing reporting mechanisms into how many Australians die as a direct result of iatrogenic injury.

Titled 'Safety in Numbers', this paper reported that in two years (1997/98) more than 5,500 Australians died from medical misadventure, complications and drug reactions[83]. Hospital separation data for the same two year period indicated almost 5% of all hospital admissions suffered an adverse event and for a total of 264,347 hospital separations there were 4,877 misadventures, 190,739 complications and 53,388 drug adverse events. This report also

---

80 Australian Council for Safety and Quality in Health Care, 2001 [Publication content last modified by ACSQHC on 23rd June 2003. See http://www.safetyandquality.org/ [Accessed 29 June 2003].

81 These documents can be downloaded at http://www.safetyandquality.org/index.cfm

82 Commonwealth Department of Health & Aged Care 'Australian Health Ministers Endorse Report into Health Care Safety' *Media Release: Australian Health Ministers Conference,* Adelaide, 1st August 2001. The report can be accessed at http://www.health.gov.au/mediarel/yr2001/mw/ahmc1.htm

83 Australian Council for Safety and Quality in Health Care 'Safety in numbers: a technical options paper for a national approach to the use of data for safer health care', August 2001. See http://www.safetyandquality.org/ [Accessed 29th June 2003].

identified that, in an increasingly high-tech and complex health care system, the problem may be worsening in that between 1993/94 and 1997/98 medical misadventure had increased by 68%, complications by 43% and drug reactions by a staggering 85%. While these increased rates may have had more to do with improved data recording and coding methods, rather than necessarily reflecting a more dangerous health care system, this report acknowledged that determining exactly how many patients suffer an adverse event or die as the direct result of such an occurrence is extremely difficult to calculate from existing data sources[84].

Limitations in the design and collection methods used in Australia to compile mortality data were acknowledged in the ACSQHC third report to the Health Ministers 'Safety Through Action'[85]. The Council announced that it would begin work to improve the quality and reliability of national morbidity and mortality databases including liaising with the AIHW and the Clinical Casemix Committee Australia.

Like the UK experience, adverse events in Australian hospitals have also been the subject of independent inquiries. In 1999 the chief executive at King Edward Memorial Hospital was called to give evidence to the Western Australian Metropolitan Health Services Board about poor management and clinical performance at the hospital. This teaching hospital was the major tertiary referral service for obstetrics and gynaecology in Western Australia and public concern with higher rates of mortality and morbidly in the hospital resulted in three inquiries[86]. The largest of these inquiries was conducted between May 2000 and November 2001 and the three person inquiry team reviewed 1,600 patient case files (from 1990-2000), conducted extensive interviews with staff and former patients and received submissions from relevant stakeholders[87]. The inquiry found that one or more clinical errors occurred in 47% of cases and 50% of these were of a very serious nature.

---

84 ACSQHC August 2001. http://www.safetyandquality.org/ pp20-22.

85 Australian Council for Safety and Quality in Health Care 'Safety through action: improving patient safety in Australia' July 2002. This report can be downloaded from: http://www.safetyandquality.org/

86 Douglas, N. *Inquiry into obstetrics and gynaecology services at King Edward Memorial Hospital,* Paper presented at the Safety and Quality in Action Conference, Perth, 14th-16th July 2003.

87 Douglas, N. Robinson, J. Fahy, K. *Inquiry into obstetrics and gynaecology services at King Edward Memorial Hospital,* Metropolitan Health Service Board, Perth, 2001.

Errors were most common in high risk obstetric cases with junior residents making errors in 76% of cases, junior registrars in 65%, midwives in 60%, senior registrars in 34% and consultants in 28% of cases[88]. The report also found widespread failure to report deaths to the coroner. In addition, of the 2,476 identified perinatal and infant deaths in Western Australia from 1990-1999, only 150 were investigated and reviewed by the Perinatal and Infant Mortality Committee which had been formed to monitor such fatalities[89].

More recently, the NSW Health Care Complaints Commission, an independent statutory body under the NSW Department of Health, released their report into medical misadventure at two public hospitals in South West Sydney, the Campbelltown and Camden Hospitals[90]. The inquiry followed a meeting between four nurse whistleblowers from these hospitals and the NSW Minister of Health in November 2002. The nurses outlined to the Minister unsafe practices at the hospital and a range of patient-care incidents that contributed to the death of 19 patients. The four nurses had initially reported their concerns to the Macarthur Health Service (MHS) management (the administrative body for the two hospitals) but were subjected to disciplinary proceedings for raising allegations and subsequently took their concerns further.

Similar to the King Edward Memorial Hospital inquiry, the Campbelltown and Camden Hospitals inquiry team reviewed relevant clinical documents and interviewed a range of informants. The inquiry found that there was a lack of specialist doctors in key departments like ED and ICU, junior doctors were poorly supervised, documentation of care was poor in almost half the cases reviewed and in many cases the management of patients was inadequate. Of particular concern, the Commission found:

> The quality and safety system failed to ensure that all adverse events (incidents where patients suffered harm as a result of health care) were investigated, lessons learned, actions taken and outcomes evaluated. Staff were not encouraged to report safety concerns and in some cases were actively discouraged [91].

---

88 Douglas, 2003 p3.
89 Douglas, 2003 p4.
90 Health Care Complaints Commission (HCCC), *Investigation report: Campbelltown and Camden Hospitals Macarthur Health Service*, HCCC, Sydney, December 2003.
91 HCCC, 2003 p5.

On the matter of the four nurse whistleblowers who had been disciplined by MHS for raising allegations against the hospitals the Commission concluded:

> the approach adopted by MHS in dealing with the four nurses did not reflect a patient care focus because it did not promote a culture of learning or a willingness to share information about error and system failure. The likely consequence of management's actions, which in the case of the operating theatre nurses became widely known at the hospital, was to discourage other staff from openly and actively raising concerns about clinical care[92].

The Commission also found that deaths from medical misadventure had not been adequately reported to the NSW Coroner and recommended that in future an independent senior clinician review the circumstances of deaths and the possible need for referral to the coroner before the release of a deceased person. The report also recommended that all clinical staff have their attention drawn to the requirements of the NSW Coroners Act 1980 in relation to reporting deaths.

While there are now national systems in place across Australia to better monitor adverse events, there are still many who remain sceptical that such methods will provide a platform for capturing the full extent of iatrogenic injury. For example, Weingart and colleagues stressed that universal underreporting of such events will always undermine the ability to measure misadventures accurately[93]. Others like Andrews et al, have suggested that, even with mounting empirical evidence on adverse events, the actual incidence of medical misadventure is highly likely to be underestimated[94]. Table 5 on the following page, which I have compiled from several sources, outlines estimated mortality statistics from iatrogenic injury in Australia. This table serves to demonstrate the level of disparity among relatively reliable statistical sources when it comes to mortality data related to adverse events.

---

92 HCCC, 2003 p5.

93 Weingart, S. Wilson, R. Gibberd, R. et al 'Epidemiology of medical error', *British Medical Journal*, Vol.320, 2000 p774-777.

94 Andrews et al, 1997 pp309-313.

Table 5. Australian mortality data and number of deaths attributed to medical adverse events in Australia

Source	Estimates of number of deaths/year
Australian Bureau of Statistics	88.5 directly causing death 2,678 contributing to death
Australian and New Zealand College of Anaesthetists: *Anaesthesia related mortality in Australia 1994 – 1996*	1 in 150,000 anaesthetic deaths/year = 135
Monash University National Centre for Coronial Information	700 coronial cases may identify health care related factors contributed to death
Quality in Australian Health Care Study Wilson, R. et al 1995 pp458-471.	18,000 (either directly caused death or potentially contributed to death)
Re-analysis of Quality in Australian Health Care Study[95]	8,600 (either directly caused death or potentially contributed to death)

A pertinent, albeit divergent, view of why calculating hospital adverse event mortality rates is at best problematic, has come from pathologists concerned about the falling number of autopsies preformed in acute hospitals. Lundberg, an American physician, is one who has editorialised extensively on the topic[96]. He pointed out that since the 1960s there has been a significant decline in post-mortem examination and in the US autopsy rates in non-teaching hospitals average below 9% with many hospitals having rates at or near 0% despite the occurrence of many in-hospital deaths[97]. Those advocates of post-mortem examination purport that this is the only definitive way to establish cause of death and that the falling autopsy rate seems incongruous when measured against the ostensible interest of medical researchers in

---

95 Thomas, E. Studdert, D. Runciman, W. et al 'A comparison of iatrogenic injury studies in Australia and the United States I: context, methods, casemix, population, patient and hospital characteristics', *International Journal for Quality in Health Care,* Vol.12, 2000 pp371-378; Runciman, W. Webb, R. Helps, S. et al 'A comparison of iatrogenic injury studies in Australian and America II: reviewer behaviour and quality of care', *International Journal for Quality in Health Care,* Vol.12, 2000 pp379-388.

96 See for example: Lundberg, G. 'Medical students, truth, and autopsies', *JAMA,* Vol.250, 1984 pp390-392. Lundberg, G. 'The archives of pathology and laboratory medicine and the autopsy', *JAMA,* Vol.258, 1987 pp364-369. Lundberg, G. 'Now is the time to emphasize the autopsy in quality assurance', *JAMA,* Vol.260, 1988 pp3488.

97 Lundberg, G. 'Low-tech autopsies in the era of high-tech medicine', *JAMA,* Vol.280, 19981273-1274. A full discussion on the reasons for this decline is beyond the scope of this thesis, however, the causes are multifaceted and include adverse publicity arising from the practice of obtaining and retaining organs without consent which came to the public attention in the UK during the inquiry into paediatric cardiac surgery at Bristol Royal Infirmary, followed by the Royal Liverpool Children's' Inquiry and in Australia as a result of the Walker inquiry into the retention of organs in NSW and the Selway Report in South Australia in 2001. Costs associated with performing post-mortem examinations and reluctance on behalf of doctors concerned about potential litigation have also been cited as reasons for this decline.

calculating the incidence of hospital deaths from medical misadventure. This position is supported by research evidence that indicates a high level of disparity between patient diagnoses antemortem to that identified at post-mortem. For example, in 1996 Nichols and colleagues reported a discordance rate of almost 45% between what doctors had identified as the cause of death to that which was identified at autopsy[98]. This compared to similar discordance rates reported by others including Zarling et al 47% in 1983[99] and Burton et al 44% in 1998[100]. Similar differences have been found in Australian studies[101] and in about 10% of hospital deaths these errors were thought to have inhibited correct treatment that may have altered outcomes[102].

While pathologists have noted that when a post-mortem is undertaken on a patient suspected of suffering an adverse event, it may still be difficult to determine if the death was directly attributable to a misadventure unless certain features are present (eg vital organs have been punctured; tubes inserted in the wrong place - noting that displacement may occur during vigorous resuscitation; or, toxic drug levels etc are found). On the other hand, a post-mortem provides the only reliable way to establish cause of death and without an autopsy what might be identified on the death certificate equates to a best guess[103].

It is worth noting at this juncture that a post-mortem will usually be conducted when a death from a suspected adverse event is reported to a state coroner. In South Australia for example, where annually there are about

---

98 Nichols, L. Aronica, P. Babe, C. 'Are autopsies obsolete?' *American Journal of Clinical Pathology*, Vol.110, 1996 pp210-218.

99 Zarling, E. Sexton, H. Milnor, P. 'Failure to diagnose acute myocardial infarction', *JAMA*, Vol.250, 1983 pp.1177-1181.

100 Burton, F. Troxclair, D. Newman, W. 'Autopsy diagnoses and malignant neoplasms: how often are clinical diagnosis incorrect? JAMA, Vol.280, 1998 pp1245-1248.

101 McKelvie, P. Rode, J. 'Autopsy rate and a clinicopathological audit in Australian metropolitan hospital: cause for concern', *Medical Journal of Australia*, Vol.156, 1992 pp456-462. MacLaine, G. MacCather, E. Heathcote, C. 'A comparison of death certificates and autopsies in the Australian Capital Territory', *Medical Journal of Australia*, Vol.156, 1992 pp462-468.

102 Cordner, S. 'The autopsy in decline' Editorial *Medical Journal of Australia* Vol.156 1992 p448.

103 Notes from interview with Dr Ross James (Head Pathologist with the South Australian Forensic Science Centre) Thursday 7 March 2002.

12,000 deaths per year[104], in the year 2001, 3,449 deaths were reported to the Coroner[105] and of these, 1,008 deaths were classed as 'coroners cases' for further investigation. Of these, 90% had autopsies preformed by the South Australian Forensic Science Centre with a small number of post-mortems performed in country centres. When interviewed in 2002 the then Head Pathologist, Dr. Ross James, noted that because of the way deaths were currently categorised there was no way to extract from the Centre's databases how many of these deaths were from medical misadventure[106].

6.4 Coroners as agents to reduce hospital mortality from adverse events

As I described in Chapter 4, coroners in Australia have a legal responsibility to investigate unnatural or suspicious deaths and draw public attention to the existence of circumstances which, if unremedied, might lead to further deaths. In all jurisdictions, deaths related to medical misadventure clearly fit within the criterion of reportable deaths. In 2000, the ACSQHC recognized the importance of coroners as active players in death surveillance and prevention, while simultaneously expressing doubt about the value of existing coroners' records to serve this function due to incomplete information, problems in accessing the data, and the extent to which coronial processes inhibited appropriate recommendations being implemented in practice[107]. To this end, the advent of the National Coroners Information System (NCIS) was cautiously welcomed by the ACSQHC, which noted that while highly dependent on the skills and precision of coders, the national collection and coding of coronial information in the NCIS database should provide an improved understanding about deaths involving adverse events.

As a mechanism to identify the mortality rate from medical adverse events, NCIS data has been of more interest in revealing the high probability that such deaths are under reported to the coroner. South Australia, for example, has

---

104 For example the years 2000/01 there were 11,988 deaths registered in South Australia and in 2001/02 11,784 deaths were registered. Commissioner for Consumer Affairs: Annual Report 2001/2002 South Australian Government, October 2002. This compares with Australian Bureau of Statistics figures which show there were 11,606 deaths registered in 1996: [See ABS 'South Australia - What a state we're in!' 2000 http://www.abs.gov.au/ausstats/ [Accessed 28 June 2003]

105 MUNCCI, SA death data from NCIS: 1 July 2002 to 25 March 2003. Monash University/Victorian Institute of Forensic Medicine, Melbourne. 2003.

106 Notes from interview with Dr Ross James, 2002.

107 ACSQHC, 'Safety in Numbers', 2001 pp16-17.

about 500,000 hospital admissions each year[108]. If the generally conservative estimates of the ACSQHC were applied to this total population, one would expect about 25,000 (5%) adverse events. On the other hand, if the results of the Quality in Australian Health Care Study, which found 16.6% of patients suffer an adverse event and in 4.9% of cases contribute to death[109], were applied to hospital admission figures, then there would be potentially 83,000 adverse events and 4,067 hospital deaths annually in South Australia.

A crucial limitation, however, in using hospital separation data to estimate mortality rates associated with adverse events is that these statistics do not count actual individuals. Therefore, a person may have had several admissions to hospital over the course of a year and be captured on separation data each time they were discharged. If these same estimates are instead applied to the number of patients who actually died in hospital, a different picture emerges. For example, in 2000-01 6,384 patients died in the State's 131 acute hospitals[110]. Again, applying figures from the Quality in Australian Health Care Study, it would be anticipated that 1,060 of these patients (16.6%) experienced an adverse event and in at least 52 patients (4.9%) an adverse event would have either directly caused, or potentially contributed to, their death.

How does this fit with the number of hospital deaths reported to the South Australian Coroners Office? Figures obtained from the NCIS for the years 2000 to 2003 and outlined in Table 6 on the next page, indicate that only a small proportion of the 6,000 or more hospital deaths are reported each year.

---

108 The figures include all public and private acute hospitals and as an example, in the year 2000-01 a total of 538,173 patients were admitted to hospitals in this State. Australian Institute of Health and Welfare (AIHW), *Australian hospital statistics 2000/01*, AIHW, Canberra, 2000 (Health Service Report No.19) p20. It should be noted that these figures are not representative of actual individuals and may include multiple admissions by the same person, and a substantial proportion of quasi-general practice/primary care admissions.

109 Wilson, Runciman, Gibberd et al, 1995 pp458-471.

110 AIHW, 2000 p105.

Table 6. Comparisons of total number of deaths reported to the SA Coroner, number of deaths reported by hospitals and number reported as being associated with an adverse event

Year	Total number of deaths reported to SA Coroner	Number of hospital deaths reported and percentage of all deaths reported	Number of hospital deaths reported as being associated with an adverse event and percentage of all hospital deaths reported
*2000	1739	379 (22%)	10 (3%)
2001	3450	728 (21%)	20 (3%)
2002	3620	825 (22%)	14 (2%)
2003	3737	855 (22%)	**3 (**%)

* These figures are only from 1 July 2000 when NCIS data commences[111]

** As there are still a number of hospital related deaths under investigation by the Coroner (> 12) the number of hospital associated fatalities are under represented for this year.

In reviewing the data reported in Table 6 it should be noted that a number of the hospital deaths reported would include those who died from causes such as motor vehicle and other accidents, fire, drug overdose or drowning that also come under the ambit of the Coroner. The figures showing the actual number of deaths reported as being associated with a medical misadventure are clearly less than what might be expected based on current estimates.

There is a general consensus from those who work in the coronial system that there is under reporting of hospital deaths and that medical practitioners inappropriately issue death certificates. In Victoria for example, where a clinical liaison unit based at the Coroner's Office was established in late 2002 to investigate suspected hospital related medical fatalities, the unit's acting director, Associate Professor David Ranson, commented that even though by law hospitals must report such deaths, 'We know there is a level of underreporting to the Coroner as well'[112]. Using data from the Victorian Health Department, Noble, Health Editor for *The Age* newspaper in Melbourne, reported that for the year 1 July 2002 to 30 June 2003, hospitals in Victoria

111 It should also be noted that because coronial clerks, who are not expert coders, perform data entry for NCIS and what constitutes a medical adverse event is not well defined, the figures listed in column 4 should be view with caution.

112 Ranson, D. quoted by Noble, T. 'More deaths blamed on medical error' *The Age* Melbourne, Tuesday, August 12, 2003 p1.

reported 16 deaths from medical mistakes to the Department, which medical experts regarded as only a small proportion of the actual number of cases[113].

In South Australia, the manager of the Coroner's Office (who is an administrative Coroner) suggested that one reason for under reporting of medical related fatalities is because hospital doctors are the ones responsible for interpreting the Coroners Act in relation to what constitutes a reportable death. What many doctors also fail to appreciate is that while they are responsible for reporting deaths, establishing the cause and circumstances of the death is the Coroner's responsibility. As the Coroner's Office relies on doctors to report such deaths, there is currently no reliable method from this initial source of data collection to quantify accurately the number of hospital deaths from medical misadventure. On the other hand, the advent of new external death data sources that can be cross referenced with existing coronial data has made it clear that many hospital deaths from adverse events are not being reported to the Coroner[114].

The lack of understanding by doctors to comprehend their obligation under the Act does, however, provoke questions about the usefulness of the coronial system as a means to comprehend the extent of fatalities from medical adverse events. If significant numbers of deaths are going unreported, then opportunities for the coroner to inquire into such deaths independent of the bureaucracy which delivers health care is lost, as is the chance to learn from these events as a means to improve patient safety.

This is not the only obstacle to the coronial system becoming a significant part of the safety and quality healthcare agenda. As I established in Chapter 4, even when a death is reported to a coroner, it may not be investigated and, even if investigated, may not proceed to inquest. Nonetheless, the role of the coronial system as a reporting agency with wide ranging powers to explore such incidents provides an important public health service by investigating why adverse events happen and what might need to be introduced or changed to prevent such incidents recurring. The fact that not all hospital related deaths from medical misadventure are reported should provoke increased

113 Noble, T. (reporter), August 12, 2003 p1.
114 Notes from interview with the Manager of the Coroner's Office, 21 March 2003.

interest in the cases that are investigated. Government and health care services carry a heavy responsibility to carefully consider coronial findings with a view to implementing any recommendations arising from such an inquiry.

In the following chapters, I examine the extent to which coronial recommendations are being implemented in South Australia and explore whether the coroner system is of any real value in preventing medical misadventure in acute hospitals in this state.

CHAPTER 7

CORONIAL INQUIRIES AS A MEANS TO MITIGATE MEDICAL FATALITIES

7.1 Introduction

The now sizable body of literature describing the causes of medical adverse events implies that the phenomenon is well understood. There is, however, a considerable nexus between understanding the root causes of iatrogenesis and translating this knowledge into practical policies that serve to mitigate hospital related death and injury. The coronial system is one instrumentality of the Crown that seeks to close this nexus through neutral fact finding inquiry and recommendatory processes. To date, there has been a paucity of research evidence that supports or refutes this claim. Indeed, for centuries societies with a coronial system in place have taken for granted that this office benefits them by providing justice and rectitude for victims and their families and offering solutions to avert similar deaths. The arguments presented in this chapter challenge these assumptions in the context of hospital related fatalities.

In Chapter 4, I outlined where legislative differences exist across Australian coronial jurisdictions and explained that there are some variations in how individual coroners approach death investigation. The basic procedures adopted in South Australia to examine iatrogenic deaths, however, reflect general measures implemented across all jurisdictions. These processes can be divided into five stages; (i) the report of death (ii) the investigation (iii) the inquest (iv) the dissemination of findings, and more recently (v) the collation of responses and actions to such recommendations. For the most part, the work undertaken by this office is of a routine nature with the majority of reported deaths never moving through all five stages. In these cases the process either concludes when the death is reported and certified, or after a preliminary

investigation. In South Australia, deaths not proceeding to inquest have no finding recorded other than the medical cause of death[1].

This chapter is structured around each stage of the coronial process and uses a multiple case study approach to explain each phase. The cases were subject to inquest between 1990 and 2003 and in most sections they have been presented chronologically. Hospitals and health professionals have been de-identified and victims' names have been replaced by pseudonyms, but their age and diagnosis reflect what has been recorded in the inquest findings. As I explained in Chapter 1, these findings are public documents and freely accessible. Therefore, while remaining sensitive to victims, their family and other players in the coroner's court, factual accounts of hospital deaths are presented. This approach has been adopted in order to analyse whether recommendations have been translated into practice and if not, why not.

7.2 The death is reported

From the perspective of the Coroner's Office, the first stage of the coronial process commences when a medical practitioner contacts the office to report a death[2]. In South Australia, the first point of contact for doctors is with a coronial service officer. These coronial service administrative staff have no medical background and at this point the onus lies fully with the doctor to determine that the death is reportable[3]. Once this is established, the doctor is required to complete a death report and fax it to the Coroner's Office.

As I pointed out in Chapter 6, not all doctors comprehend their obligation to report such deaths and when this occurs the misadventure may go undetected unless someone else brings the matter to the Coroner's attention. It is not uncommon for the deceased's family to assume this role, as was the case in

---

1 It should be noted, however, that since the establishment of the National Coronial Information System (NCIS) in 1998, administrative staff within the South Australian Coroner's Office input medical related death data that may have been gathered as part of the initial investigation ie. post-mortem results, toxicology reports and manner of death (eg. from motor vehicle accident, suicide, drowning, building accident, medical misadventure etc).

2 Nurses, hospital administrators, a member of the deceased's family, police officers and funeral directors may also report a suspicious hospital related death, however, the statutory role of doctors to report sudden or suspicious deaths is common across all jurisdictions under various coronial legislation.

3 Notes of interview with the coordinator operations, State Coroner's Office, 16 January 2002.

1995 when a medical practitioner at a rural hospital failed to report the death of an elderly woman. The woman died after hospital staff withdrew care and her son, who was concerned about the treatment afforded his mother, notified the Coroner. When the case reached inquest, the doctor told the Coroner that he had not reported the death because the woman was an emaciated invalid who had been virtually confined to bed for over a decade and in his opinion her death was a culmination of gradually advancing ill health, malnutrition and possibly infection from injection sites where her husband had been administering intramuscular medication. Prior to her admission, the woman had been under the care of her husband with some support services provided by the local hospital. While the Coroner accepted that the doctor formed his conclusions in good faith, he found it surprising that if her death was indeed due to many years of general neglect, malnutrition and maladministration of injections, that these were not construed as sufficiently unusual circumstances within the intent of the Coroners Act to justify reporting the death.

The woman's son wrote an extensive submission to the Coroner about the lack of care provided to his mother and the failure of health professionals in the wider community to value the elderly. The Coroner was clearly moved by the issues raised by the victim's son and he concluded that, left to the medical officer, the death may never have come to the attention of the Court. He recommended that the Attorney-General consider whether the criteria for reporting cases to coroners might be clarified to assist doctors to better understand their obligation under Section 31(1) of the Coroners Act[4].

The section of the Act to which the Attorney-General was referred remained unchanged and the Coroner broached the same issue again two years later during the inquest into the death of 60 year old Anna at a private metropolitan hospital. This inquest was noteworthy because it not only exposed why some doctors might overlook reporting an adverse event, but also highlighted lacunae inefficiencies within the coronial system that inhibited the Coroner's ability to expeditiously respond to a public health threat.

---

4 Chivell, W. Finding of Inquest, 24/96.

Anna's treating doctor at the time of her death was an eminent liver specialist who, additional to his private medical practice, held senior posts at two public hospitals. While it might be argued that junior doctors or those working in rural or remote settings have less exposure to coronial processes and therefore lack experience in complying with their obligation to report deaths under the Act, it is much harder to apply this line of reasoning to senior medical staff practising in metropolitan teaching hospitals. Nevertheless, the doctor did not report the death nor did he arrange a post-mortem. On the death certificate he recorded Anna's cause of death as liver failure, with a history of carcinoma of the breast. At inquest, the doctor told the Coroner that it was clear from Anna's liver biopsy that she died from hepatic failure and based on his experience as a hepatic specialist this death was not 'unusual'.

The Coroner was of a different opinion. He held that Anna's death was indeed unusual, because her liver failure was not the result of any common cause associated with this disease, but was instead due to toxicity of the liver caused by the drug, Coumarin[5]. The Coroner argued that even allowing for the vagueness of the term 'unusual' in the Coroners Act, the doctor was in error in that:

> a case involving a drug available on prescription, registered under the Therapeutic Goods Act, causing a fatal liver toxicity, was sufficiently out of the ordinary to justify reporting it[6].

The family reported Anna's death to the Coroner when they became aware that a drug might have been to blame. This was drawn to their attention when the doctor completed an insurance company claim, in this case recording the cause of death as necrosis of the liver secondary to drug toxicity. The inquest heard that the doctor (who had not prescribed the drug) had always been suspicious that Coumarin was the cause of Anna's liver failure when tests had excluded any other hepatic pathology. He testified that he was aware of two other cases in the previous twelve months where the drug had caused liver toxicity. Indeed, by mid 1995 (a year before this woman's death) the Therapeutic Goods Administration (TGA) through their Adverse Drug

---

5 Coumarin was a drug used for the treatment of high protein oedema (especially lymphoedema) and in 1993 became generally available under prescription in Australia. See, Therapeutic Goods Administration (TGA), *Australian Adverse Drug Reactions Bulletin*, Vol.14, August 1995.

6 Chivell, W. Finding of Inquest, 29/98 p6.

Reactions Advisory Committee (ADRAC) already knew of ten cases where an adverse reaction to Coumarin had been reported, one of which was fatal[7]. The doctor also testified that soon after Anna's death he had reported the matter to the ADRAC in the belief that this was the pivotal public health agency to deal with such cases. His report to this agency added to mounting evidence about Coumarin's adverse effects and the TGA responded quickly by issuing a 'Medical Media Release' alerting all medical practitioners in Australia that the drug was considered dangerous. The registration of Coumarin was officially cancelled on 12 August 1996, five months after Anna's death.

The TGA's prompt response in this case can be contrasted against the rather ponderous processes adopted by the South Australian coronial system in dealing with such matters. In Anna's case for example, the inquest began in 1998, two years after her death, and after three days of testimony was postponed for another two years, resuming in May 2000[8]. By this time the drug had been withdrawn from distribution for four years and various warnings issued to the medical community including a notice in the 1997 edition of MIMS[9]. The role Anna's doctor played (along with other medical practitioners) in alerting the appropriate drug agency about Coumarin meant that similar fatalities were avoided. At the conclusion of the inquest, the Coroner was left with little option but to note that in view of the actions taken by the TGA there was no need for any further public warning and made no recommendations.

Having regard to this, it is reasonable to speculate on why the inquest was conducted at all given the Coroner would have been aware of the drug's withdrawal well prior to 1998 when the inquest commenced. There are several plausible explanations, one being that Coumarin was developed and manufactured in Adelaide. Much of the inquest was taken up with explaining how the drug was registered, what product information was made available and the various communiqués between drug agencies and manufacturers once

---

7 TGA, August 1995.

8 The reasons for the long postponement were not outlined in the Findings. Instead, the Coroner acknowledged the delay was due to a variety of reasons too convoluted to outline for which he expressed regret to the participants concerned. Chivell, W. Finding of Inquest, 29/98.

9 *The MIMS Annual*, Australian edn, Intercontinental Medical Statistics (Australasia), Crows Nest, 1997.

issues of efficacy came to light. The Coroner may have felt compelled to investigate local practices against national standards and publicly demonstrate that no favour was to be shown toward local pharmaceutical establishments.

Another explanation may be that the family petitioned the Coroner to hold an inquest. Although impartial fact finding to prevent or minimise other deaths is a well solicited precept of coronial inquests, the role of the Coroner as moral arbiter remains equally well entrenched[10]. In Anna's case the Coroner's concern about the doctor failing to report the death seems to have stemmed not so much from unease that further deaths might have occurred, but that:

> ...it could well have denied the family of the deceased the opportunity to have her death fully investigated[11].

Whatever the reason, Anna's inquest provided yet another opportunity for the Coroner to petition the Attorney-General to clarify the criteria for doctors to report deaths under Section 31(1) of Act. The recommendation was again ignored.

The Coroner responded to this impasse on three main fronts. One was to test the existing legislation and when two more doctors came to the Coroner's attention for not notifying the Office of their patients' death he responded by reporting them to the Police Prosecution Service. It was then up to this arm of the justice portfolio to decide on whether these doctors' failure to comply with the Act should proceed to prosecution or be determined a minor matter, in which case the outcome would be an official caution or nothing[12]. Ostensibly, if the Police Prosecution Service deemed this breach a minor matter, the Coroner would have the opportunity to again petition the Attorney-General for an official ruling under Section 31 of the 1975 Coroner's Act.

Another way the Coroner sought to address this situation was by changing the Coroners Act 1975. It was pointed out in Chapter 4, that in 2001 an attempt

---

10 For a highly articulate account about the modern English coroner's role in balancing neutral fact finding for the State with that of moral amelioration see Green, J. 'The medico-legal production of fatal accidents' *Sociology of Health & Illness* Vol.14, 1992 pp373-389.

11 Chivell, W. 29/98 p6.

12 This was raised when I interviewed one of the police officers attached to the Coronial Investigative Service Unit on 6 February 2002. The decision of the Police Prosecution Service was unknown at the time this thesis was submitted

had been made to remove ambiguities in the existing legislation through the introduction of the Coroners Bill of 2001. This Bill was later re-drafted as the Coroners Bill of 2003, which was assented to in July 2003, but is yet to be proclaimed. However, the prospect of new legislation that clarified the criteria for doctors to report death and increased the penalty for failing to comply[13] did not prevent the Coroner from going public with his concerns. In May 2004, he was quoted by *The Advertiser* newspaper as saying that having hospital staff deciding on whether or not to report a death 'creates all sorts of dilemmas'[14]. He called for South Australia to follow the British Government and make all deaths reportable so that death certificates issued by doctors could be scrutinised by a medical examiner[15].

While the Coroner continued to call for better reporting mechanisms, the South Australian Health Commission/Department of Human Services (DHS) had been well aware for many years that State Coroner Chivell was increasingly intolerant of doctors who failed to meet their obligations under the Act[16]. In an attempt to address this situation, the DHS disseminated to all public and private hospitals in the State, a protocol for notifying hospital deaths to the Coroner's Office[17]. The protocol was developed by the Insurance Services Unit, which dealt with insurance matters in the DHS's portfolio. In

---

13 Under Section 31(1) of the Coroners Act 1975, the penalty for failing to report a death was a Division 6 fine to the maximum of $4,000. Under Section 28(1) of the new Coroners Act 2003 the maximum penalty was increased to $10,000 or 2 years imprisonment.

14 Chivell, W. quoted by Bildstien, C. (reporter) 'Coroner rings deadly alarm bell', *The Advertiser,* Saturday 1 May 2004 pp1-2.

15 As I pointed out in Chapter 2 (page 37), this was among the recommendations of the Luce Report that called for all hospital deaths in England, Wales and Northern Ireland to be reported to the coroner and the appointment of statutory medical assessors in each coronial area to work along side coroners to determine the need for further investigation. Luce Committee Report, *Report of the fundamental review 2003: Death certification & investigation in England, Wales & Northern Ireland,* Presented to Parliament by the Secretary of State for the Home Department, June 2003, p3.

16 The South Australian Health Commission (SAHC) had been formed in the mid 1970s under the South Australian Health Commission Act 1976. In October 1997 the SAHC was integrated into the Department of Human Services (DHS) as part of a general public sector restructure in the state. Apart from the overall governance of public hospitals throughout the state, the newly created DHS had responsibility for a number of services including disability, primary and aged care, housing and community services and Aboriginal services. See South Australian Health Commission and Department of Human Services, *Annual Report 1998-1999,* DHS, Adelaide, 1999. When the DHS was established the 1976 Act required separate accounts to be reported for both the SAHC and DHS. As this was administratively inefficient, two Acts were passed in 2000, the South Australian Health Commission (Administrative Arrangements) Amendment Act 2000 and the South Australian Health Commission (Direction of Hospitals and Health Centres) Amendment Act 2000 to reflect in legislation what was occurring in practice.

17 Department of Human Services (DHS), *Protocol for notifying deaths to the State Coroner's Office,* DHS Insurance Services Unit, Adelaide, February 1999.

particular, this Unit managed the professional indemnity (medical malpractice) program and was responsible for clinical risk management and cost containment associated with malpractice claims that involved DHS employees and facilities[18].

The protocol provided examples of reportable deaths and outlined the process doctors needed to follow when reporting deaths to the coroner. While the purpose of the protocol was ostensibly to improve reporting rates of hospital deaths to the Coroner, it was also a document aimed at managing risk. For example, the protocol described the procedure for releasing medical records to the Coroner's Office, indicating that they were only to be released on the production of a warrant. Guidelines for notifying the deceased's relatives were also outlined and doctors were advised that if uncertain about the nature of a death, or if they identified a potential litigious issue, they were to immediately notify the hospital's clinical risk manager or chief executive who, in the case of a public hospital, was to notify the DHS Professional Indemnity (Medical Malpractice) Programs Claims Manager[19].

It is perhaps not surprising that in developing this protocol the DHS not only took the initiative to assist staff comply with their reporting responsibilities, but also seized an opportunity to ensure staff were aware of internal processes aimed at managing risk. Cooperating with the Coroner's Office, while at the same time protecting the interest of government, its health system and those within its precincts had become increasing problematic. For the DHS, the benefit of minimising future harm to healthcare consumers by exposing medical mishaps in the public forum of the Coroner's Court needed to be calculated against the potential for public and political backlash when such misfortunes were exposed by the media.

It is worthwhile at this point to establish that since 1992[20], South Australia has only one daily locally produced newspaper, *The Advertiser,* whose tone might be described as populist. In this publication, public attention to failures in the healthcare system are often deduced from headlines like 'Criticism over

---

18 Department of Human Services, *Annual Report 1999-2000,* DHS, Adelaide, 2000 p57. According to this report, as of 30 June 2000, there were 420 open files and it was estimated that settlement of these cases would cost around $136.0 million.

19 DHS, February 1999 (updated July 2002) p7.

patient's death"[21]; 'Claims against hospitals soar"[22]; 'The escalating costs of shortfall in hospital funds"[23]; 'Hospital's fatal delay: Coroner accuses doctors in death of patient"[24]; 'What a mess: Health department crisis deepens"[25]. The Coroner's Court is a forum where players and officials act out the circumstances in which medical failures occur and thus provide 'newsworthy' subject matter for public consumption. The media has a valid function to draw attention to various social ills and coronial findings as factual case studies are often used to discomfit those responsible for the health system, in particular the Minister for Human Services. Hence, when a medical fatality is reported to the Coroner and the decision made to examine the event, it is not unreasonable to expect that each additional stage of the inquiry becomes a carefully managed process, starting with the investigation.

7.3 The death is investigated

The investigative phase is the longest stage of the coronial process. Collecting medical records and taking statements from health professionals involved in the event, gathering expert witness opinion and any other information deemed relevant by the Coroner can take months and sometimes years. Limited resources and the need for the Coroner's Office to work within a budget allocation may also have a bearing on the swiftness with which an investigation can be conducted. Allowing for this, it is not uncommon for two or three years to lapse between the death and the inquest.

The investigation starts when the Coroner reads the death report and determines if a post-mortem is required to establish the cause of death. The principle here is that the body remains at the hospital until the Coroner has read the report. This is, of course, premised on the doctor reporting the death immediately in accordance with the Act[26] but, as previously outlined, this does not always happen in practice. If the death occurs in a metropolitan hospital

---

20 Prest, W. [ed] 'Newspapers', in *Wakefield Companion to SA History,* Adelaide, 2002.
21 *The Advertiser* 24 December 1996 p4.
22 *The Advertiser* 3 August 1998 p13.
23 *The Advertiser* 27 August 1999 p3.
24 *The Advertiser* 19 February 2002 p1.
25 *The Advertiser* 20 December 2003 p1.
26 The Coroners Act 1975 s31(1) indicates that a person on becoming aware of a death by violent or unusual cause, must immediately notify the coroner or police officer.

and the body is retained, a member of the Coronial Investigation Service Unit (CISU) will usually go to the hospital and transport the deceased to the Forensic Science Centre where the city morgue is located. If the death occurs in a regional or rural hospital, the body will be held at the hospital mortuary (or local funeral directors if a mortuary is unavailable) until directions are received from the Coroner's Office.

The forensic pathologist who conducts the post-mortem provides the initial medical expert advice about the cause of death[27]. As part of the investigative practices adopted in South Australia, post-mortem reports are forwarded to Counsel Assisting the Coroner. There follows a 'file meeting' between Counsel Assisting, the police officer in charge of the CISU, the Manager of the Coroner's Office (Administrative Coroner) and file managers. The State Coroner does not usually have any direct involvement in these meetings and at this point the pathologist's judgment as to the likelihood that an adverse event contributed to, or indeed caused, the death is heavily relied upon to determine if further investigation is required. The report provided by the pathologist might also reveal factors that were overlooked or missed by hospital medical staff and therefore may offer additional information for scrutiny.

While the forensic pathologist can sway the decision and direction of a coronial investigation, pathology like other forms of medicine is not necessarily the exact science that popular television crime investigation programs suggest to the public. In fact over the last decade, one of the most publicized controversies to involve the South Australian Coroner's Office stemmed from questions about the reliability of several post-mortem findings. The post-mortems in question were conducted by Dr Colin Manock, the Head of Forensic Pathology at the South Australian Institute of Medical and Veterinary Science from 1968 until 1995. During this period he performed more than nine thousand autopsies and was noted to be a compelling expert witness in hundreds of cases in both the criminal and coroner's courts[28]. While

---

27 Notes from interview with Dr Ross James (Head Pathologist with the South Australian Forensic Science Centre), 7 March 2002.

28 Australian Broadcasting Corporation, 'Expert Witness', *Four Corners*, ABC Television Program Transcript, 22 October 2001 http://www.abc.net.au/4corners/stories/s397448.htm, (Accessed 25 October 2001).

questions had surfaced early in his tenure about his qualifications as a forensic pathologist, particularly his lack of training in the field of histology, he continued to be used as an expert witness. Concerns about his competence increased in 1992 when he concluded that a man had died from a brain haemorrhage following a fall, when in fact the victim was later discovered to have a bullet lodged in his brain[29].

In 1993 disquiet about a possible miscarriage of justice was expressed to the newly appointed State Coroner, Wayne Chivell, by police investigators and eminent paediatric medical practitioners concerned about the death of three infants in the early 1990s. In each separate case these infants were suspected of being 'battered babies', however, Dr Manock's post-mortem reports concluded that the principle cause of death was broncho-pneumonia. In August 1994, the Coroner began a simultaneous inquest into these three infants' deaths and found that Dr Manock's post-mortem examinations and reports fell a long way short of achieving the aims set by the Royal College of Pathologists of Australia for conducting forensic autopsies[30]. Dr Manock resigned from his position in 1995, the same year the inquest findings were released[31].

The forensic pathologist is assisted in the post-mortem examination by access to the deceased's medical records. Indeed, these records are crucial to the whole investigative process as they provide documented evidence about diagnosis, clinical decisions, treatments and responses to medical care. To obtain these records from the hospital a warrant is issued on behalf of the Coroner[32]. It is apparent, however, that the warrant does not always result in the Coroner procuring the full extent of medical records necessary to comprehensively investigate the death. This can be consequential upon a number of factors ranging from overt non-compliance to inadvertent mislaying of evidence. It is also compounded by having non-medical investigators

---

29 Haran, P. (reporter) 'Why key forensic findings are under a cloud', *Sunday Mail* 5 November 2000.

30 Chivell, W. Finding of Inquest, 34/94.

31 The fallout from this controversy has continued to garner media attention well after his resignation, raising questions about the administration of justice in those cases reliant on Dr Manock's forensic evidence. Australian Broadcasting Corporation, 22 October 2001; Haran, P. (reporter) 'Forensic evidence on trial', *Sunday Mail* Sunday 16 December 2001 pp2-3.

32 In South Australia an Administrative Coroner signs this warrant. (Notes from interview with the manager of the Coroner's Office, 21 March 2003).

determine the sum of medical records available and their relevance to each inquiry[33]. The following cases illustrate how this problem can potentially impede the Coroner's ability to fully investigate a medical fatality.

In 1992 for example, State Coroner Ahern noted during an inquest into the death of an elderly man following prostate surgery that a key piece of evidence was missing. The fluid balance chart was not with the deceased's casenotes provided by the hospital, which was potentially problematic in that the patient's cause of death, heart failure, was thought to be consequent upon fluid overload. Without this record a determination as to the adverse nature of this death could not have been determined. However, for reasons not clear, but in the Coroner's estimation 'fortuous' [sic], the consultant medical officer had photocopied the document, which in this case allowed the investigation and inquest to proceed unhindered [34].

Later the same year, at an inquest into the death of a 22 year old woman at another teaching hospital, the fluid balance and special observation charts were also noted to be missing from the medical records provided to the Coroner. In this case the charts were never produced, causing the Coroner to observe that while it was difficult to speculate on what course the proceedings might have taken if this evidence was available:

> it reflected no credit on the hospital administrators that such records were lost or misplaced [35].

How seriously the hospital administrators took this criticism is difficult to evaluate, but two years later at an inquest into another fatality at the same hospital, vital records were again noted to be missing. John, who was 43 years old at the time of his death had, among other conditions, been diagnosed with a bowel obstruction. An abdominal X-ray evidently confirmed this diagnosis, but it could not be substantiated by outside expert medical opinion as none of John's X rays were produced by the hospital. It seems that because no specific request had been made by the Coroner's Office to seize the

---

33 In South Australia, a police officer attached to the Coronial Investigative Service Unit usually seizes medical records on behalf of the Coroner. [Notes from interview with Coronial Investigation Services Unit officer, 6 February 2002].

34 Ahern, K. Finding of Inquest, 4/92.

35 Thompson, G. Finding of Inquest, 28/92.

X-rays with the other medical records, they were destroyed 6 months later in accordance with routine hospital practices at that time.

Much of the evidence presented to this inquest centred on whether the medical staff directly involved in John's treatment had the appropriate degree of specialist training to manage his complaints competently. The absence of diagnostic evidence made the task for State Coroner Chivell, who had been in office for just over a year, somewhat more testing. Counsel representing John's family also raised additional concerns about the poor quality of the medical records generally. While the Coroner appeared comfortable in admonishing the hospital over the missing X-rays, he was less inclined to make a ruling on the general record keeping practices of hospital staff, observing that this was difficult to assess:

> because hospital note keeping is a rather esoteric and mystical skill to the uninitiated and on each occasion where witnesses were cross-examined on this topic they gave answers which seemed satisfactory[36].

Once State Coroner Chivell began to settle into the role, his skills in evaluating hospital record keeping rapidly enhanced. By the mid 1990s, hospital administrators were clearly getting the message from his office that discarding patient charts and radiological examinations was inappropriate, resulting in hospitals retaining more patient information, which previously they may have discarded. Nevertheless, certain medical information was still not being readily handed over to the Coroner during the investigation.

For example, at the inquest into the death of 44 year old Katherine it was discovered that the hospital medical director had taken statements from key medical staff involved in her treatment, but had failed to pass these on to the Coroner during the investigation. Katherine died from complications of tetanus following a hysterectomy and realising her death would be a 'coroner's case', hospital administrators set about their own internal inquiry soon after her death. At inquest, there was disagreement between medical staff as to whether or not the doctor responsible for Katherine's management had requested a consult from a doctor working in the ICU. On the last day of the inquest (which involved 7 days of testimony spread over two years), the

---

36 Chivell, W. Finding of Inquest, 39/94.

hospital produced a bundle of documents. Among these documents were the statements taken by the medical director from staff, which contradicted oral testimony provided to the Court by two of the doctors. The Coroner was of the opinion that at this belated stage of the proceedings it was now too late to explore this issue with either doctor. As to the hospital holding back this evidence he observed:

> This is of particular concern, since a warrant to enter the hospital and obtain and remove "hospital casenotes, X-rays and any other documents pertaining to the above deceased person" was executed on.... (3 days after Katherine's death)[37].

Katherine's death was by no means an aberrant case when it came to missing evidence complicating the investigative process. In 1999, a deputy coroner held a simultaneous inquest into two hospital deaths which, while unrelated, occurred under similar circumstances. These cases involved self-poisonings, one in 1997 from an injection of what was thought to be heroin, the other in 1998 from an ingestion of a toxic substance. In the first case, ambulance officers called to the scene conveyed the patient to hospital together with a syringe containing pale amber fluid found in the victim's thigh. Shortly after arrival at the hospital's ED it appeared that staff disposed of the syringe without any test being carried out on the substance it contained. In the second case, ambulance officers called to the victim's home collected a plastic container the man was observed to drink from, taking it to the hospital with the patient so that staff could identify the poison. The deceased's case notes indicated that the container reached the hospital, but it was again disposed of shortly after his admission. Again, no sample of the substance was taken, which in this case considerably delayed the identification of the poison and subsequent treatment.

The Coroner held that both these pieces of evidence should have been preserved and recommended that the DHS give consideration to amending its existing protocol dealing with investigations into suspicious hospital deaths, to make it plain that when a police or coronial investigation is likely, exhibits must be preserved[38]. The protocol this coroner was referring to had been

---

37 Chivell, W. Finding of Inquest, 26/96.
38 Boucaut, W. Finding of Inquest, 9/99 and 10/99.

developed between the DHS and the South Australian Police (SAPOL) in 1998 and explained procedures staff needed to follow in relation to suspicious deaths or injuries in public healthcare facilities[39].

This protocol, which is meant to be accessible to all hospital ward staff for reference, identifies that until such time as the police investigation at the site is concluded, the most senior registered nurse on duty is the person responsible for ensuring:

- the patient and all evidence, e.g. clothing, medical equipment, instruments, disposable material, bedding, and any other relevant items should remain undisturbed insofar as it is possible without detrimentally interfering with the administration of treatment which is essential to preserve life or health
- the body of the deceased person remains undisturbed
- there is no attempt to remove from the patient's body any insitu drain, tubes, catheters, or other medical equipment including respiratory ventilator, pumps, cannulas, needles, gastric suction apparatus, oxygen supply, whether or not such equipment is attached to the body
- that staff refrain from carrying out last offices including washing any part of the body, marking any part of the body with a permanent marker or packing orifices until after discussion with the Police Liaison Officer.[40]

The development of this protocol followed the findings of a 1996 inquest into the death of an elderly man who, while in the palliative care phase of his illness, had his death hastened when he received a bolus (mass) dose of morphine via an infusion pump[41]. In this instance, all evidence had been disposed of and the patient area and equipment thoroughly cleaned before the death was reported to the Coroner. In his findings, the Coroner suggested that a procedure be developed by relevant parties (ie. the DHS and SAPOL) to ensure that in the future, potential hospital crime scenes be preserved until the police had attended to investigate the matter.

---

39 South Australian Health Commission & S.A. Police *Protocol for Police Investigation into Unnatural or Suspicious Deaths and Injuries and/or Major Criminal Activities in Public Health Care Facilities.* SAHC & SAPOL, Adelaide, 1998.

40 SAHC & SAPOL, Adelaide, 1998 p3

41 See Chivell, W. Finding of Inquest, 15/96.

Of course having a protocol in place does not guarantee that it will be followed. And, for those like Helmreich[42], who have studied adverse events and human error, intentional or unintentional violation of mandated policies or procedures are factors common to many adverse events. This fact was brought to the Coroner's attention in 1998 when he inquired into the death of 80 year old Colin who died under similar circumstances and in the same hospital as the patient whose death had originally precipitated the protocol between the DHS and SAPOL.

Colin was admitted to the hospital suffering from a terminal condition and in the course of his palliative care was ordered a continuous infusion of intravenous morphine. The nurse who set up the infusion pump was unfamiliar with the device and Colin received in 30 minutes the dose he should have received over 10 hours. He died four hours later. On being informed of his death, the senior nurse on duty (in what the Coroner described as "extraordinary" behaviour) provided a copy of the protocol dealing with suspicious deaths to nursing staff, but failed to act on it. The nursing staff prepared Colin's body, disposed of all needles and syringes, cleared the patient area and removed the infusion pump from the scene.

The Coroner observed that because the policy was not implemented, this investigation was made more difficult. Indeed the events that took place soon after Colin's death mired the evidence trail making it hard for the Coroner to determine whether the deceased had died as a consequence of his terminal illness or from morphine toxicity. Complicating the investigation even further, the day after Colin's death when a doctor asked to examine the pump, it had already been returned to the ward from where it had been borrowed. When a nurse was sent to retrieve it, she was given the wrong one which, over the course of the coronial investigation, resulted in both devices being examined by an independent biomedical engineer. The engineer informed the Coroner that not only were both pumps faulty, they had not undergone annual routine

---

42 Robert (Bob) Helmreich is Professor of Psychology at the University of Texas, Austin, who has a background in studying aviation errors. More recently he has began to examine medical errors and noted similarities in the causes of aviation accidents and medical mishaps leading to death or injury. See for example: Helmreich, R. 'On error management: lessons from aviation', *British Medical Journal*, Vol.320, 2000 pp781-785. Sexton, J. Thomas, E. Helmreich, R. 'Error, stress, and teamwork in medicine and aviation: cross sectional surveys', *British Medical Journal*, Vol.320, 2000 pp745-749.

inspections and in his opinion they both should have been removed from service[43].

In drawing to the attention of hospital management the failure of its staff to follow policy, the Coroner noted that it was of concern that even after the previous 1996 inquest, and the development of a detailed and clearly set-out protocol between the DHS and SAPOL, staff still did not understand and accept their responsibilities in relation to the issues dealt therein[44].

It is not uncommon during a coronial investigation, for the hospital to be asked to produce its policies and procedures relevant to the inquiry. In addition, affidavits will be taken from hospital staff involved in the event by a member of the CISU[45]. These interviews are often conducted weeks or months after the death and it is likely that the hospital will already have taken several actions before the CISU officer gets around to taking statements from staff.

One of the more immediate actions will be directed toward minimising legal implications that can lead to large compensation claims. For example, when an adverse medical death occurs in a South Australian public hospital, the Clinical Risk Manager (where appointed) or Chief Executive (or delegate) will conduct an internal review of the circumstances surrounding the death. The Professional Indemnity Service used by the DHS will be appraised of the situation and notify the Coroner of a shared interest in the matter[46]. A lawyer with expertise in medical malpractice will be appointed by the DHS from a panel of solicitors used for such cases. According to documentation provided by the DHS (and available to all hospital staff) this solicitor is appointed to represent both 'the health unit and its employees' interests'[47].

---

43 Chivell, W. Finding of Inquest, 11/00. A recent audit of hospital assets (4 years after this finding) found 58% of the biomedical equipment in Adelaide's public hospitals had long past their use-by dates and, at a cost of $172 million, should be replaced. Briefing papers obtained by The Advertiser under freedom of information found that the Department of Health was particularly worried about the continuing deterioration of equipment at the hospital where these incidents had occurred. Bildstien, C. (reporter) 'Medical gear that can put patients and staff at risk', *The Advertiser*, 20 October 2004 p5.

44 Chivell, W. Finding of Inquest, 11/00 at 3.5.

45 An affidavit is a voluntary declaration of facts written down and sworn to by the declarant before an officer authorised to administer such oaths. Gardner, B. *A dictionary of modern legal usage*, 2nd edn, Oxford University Press, New York, 1995 p35.

46 Currently, Aon Risk Services is the company used by the DHS.

47 Department of Human Services (DHS), *Process – coronial matters*, DHS Insurance Services Unit, Adelaide, (no date of publication) p1.

Whether both party's interests are equally served is uncertain. When I interviewed one of the CISU police officers responsible for taking statements from staff, I asked him whom he believed this solicitor represented, the hospital, the staff or both? He responded:

> It is interesting that you should ask this question, because I discussed this very issue with the Coroner this morning. I have had several cases where counsel representing the hospital is present during the first interview and I felt that the doctor or nurse believed that they were there to represent them rather than the hospital, which was not the case. The astute ones ask. ..... Like this current inquest, you probably heard yesterday, Counsel for the hospital listed all the policies they had in place (to prevent such a death) and he (hospital appointed lawyer) basically tossed the midwife to the wolves once she'd finished testifying.[48]

It is not only the hospital staff involved in the event that become key players in the Coroner's Court. During a coronial investigation, written opinion will be sought from an *outside* medical practitioner with expertise in a field of practice relevant to the event. In South Australia, the medical practitioner will usually be drawn from a core pool of doctors willing to assist in coronial investigations and likely to be available should the case proceed to inquest[49]. The report from the medical expert, along with any other evidence is then considered at a higher level 'file meeting' and a decision made whether to recommend an inquest. This recommendation goes to the Coroner, who makes the final decision as to whether to hold a public inquest to ascertain further information and clarify any issues or questions that arose during the course of the investigation.

7.4 The death comes to inquest

In South Australia, inquests held into hospital related fatalities are usually conducted over two or three days and follow a similar format. Like other courts, witnesses are required to testify under oath or affirmation and perjury is subject to penalties. Witnesses' testimony is usually framed around the evidence provided in their affidavit[50]. Counsel Assisting the Coroner begins the inquest with a summary of events and calls upon key witnesses to provide

---

48 Interview with Coronial Investigative Service Unit Officer, 6 February 2002.

49 It is uncommon in South Australia for a nurse to appear as an expert witness to provide clinical testimony, even in cases primarily involving a nurse initiated adverse event.

50 The Coroners Act 1975, s23 (1) (2), stipulates that a coroner holding an inquest may accept into evidence the affidavit of any person, and may require that the person also attend the inquest to provide oral testimony.

direct testimony before the Coroner. If represented, witnesses are led through their evidence by professional counsel. Counsel representing other parties have the opportunity to cross-examine, and with the permission of the Coroner, call upon their own witnesses to provide testimony. The Coroner frequently intervenes during proceedings to question witnesses and to clarify any issues that representing counsel may have overlooked, or conceivably, preferred not to explore. State Coroner Chivell is very clear about the inquisitorial nature of his court:

> When you are in law school you are taught about not asking that one question too many. Once you have got your witness to make the point you want, stop there. If you ask another question they could contradict what they previously said, and then you are buggered. In the adversarial courts, the lawyers determine the specifics of what is being argued and the judge is asked to decide within strict parameters, and he or she is generally impassive in which way the case leads.
>
> In the Coroner's Court, where there are no rules of evidence, I can ask any question I want. I can steer the case in any direction I believe necessary. I can ask that one more question and determine more fully the evidence to make an informed finding[51].

Unlike the adversarial courts where rules of evidence are in place and the lawyers generally decide the specifics of what will be argued, in the Coroner's Court it is the Coroner who determines the line of inquiry. From my observations it was apparent that when a lawyer attempted to guide proceedings, the Coroner was quick to remind him/her who was in charge. For example, on the first day of an inquest into the death of a woman who had been misdiagnosed by her local doctor, Counsel for the doctor informed the Coroner that he planned to call a general practitioner as an expert witness:

> Coroner: Has a statement from this doctor been submitted?
> Counsel: No.
> Coroner: Well I would like to see this first as this is an inquiry and I call the witnesses!
> Counsel: My apologies your honour, I understand and I will obtain a statement and pass it on for your decision[52].

Lawyers with experience in the Coroners Court seem to recognise that there are some variations in conventions between this forum and those held in the adversarial courts. A lawyer with considerable experience in the Coroner's

---

51 Interview with Wayne Chivell, South Australian State Coroner, 30 January 2002.

52 As it turned out this expert witness did not appear, however, his sworn statement and curriculum vitae were submitted to the Coroner and referenced in the findings: Notes of Coroner's Inquest 28/01, 10 December 2001

Court told me:

> I'll argue with a judge, but I won't argue with the Coroner....it's no use in his court[53].

The Coroner has wide power to direct evidence during the inquest and has the authority to subpoena witnesses to appear before the court. In cases related to medical adverse events, however, this seldom seems to occur. Additionally, it is not uncommon for medical staff involved in the event to not appear at the inquest to provide oral testimony in support of their affidavit if they have moved interstate or overseas.

For instance, at the 1994 inquest into the death of John at a metropolitan hospital in 1992, a doctor with a primary role in his treatment was not called to testify as she had returned to the UK. The Coroner was critical of this doctor's failure to attend John at a crucial point of his illness where intervention could have prevented his deterioration and subsequent death. During the inquest the Coroner raised with counsel for the hospital whether an adverse finding against this doctor would breach the rules of natural justice, given her non-attendance denied an opportunity to provide her version of events. Counsel responded for the hospital that any criticism of the doctor was a criticism of the hospital as a whole and therefore it was unnecessary to call her as a witness.

Similarly, two doctors involved in the care of 33 year old Stacy did not appear at her 2003 inquest as they too had left Australia. Stacy had a condition know as central venous thrombosis and the Coroner heard that she might not have died if doctors were quicker to diagnose her condition when she was admitted to hospital with acute headaches and slurred speech. The Coroner was critical of the lack of urgency and general disorganisation of her treatment at the hospital. He was particularly critical of one of the 'absent' doctor's failure to read and act on Stacy's radiology reports and to fully brief the consultant about the extent of her medical issues. In his findings, the Coroner recommended that the hospital seek to improve communication between staff and departments and review record keeping practices[54].

---

53 Interview notes with Counsel (name deleted to protect anonymity) 15 February 2002.
54 Chivell, W. Finding of Inquest, 18/03.

It is difficult to know whether the 'absent' doctor was ever informed about these findings. However, notwithstanding the loss of a potential learning opportunity, when an important witness does not appear at inquest an element of doubt is introduced about the degree to which a coronial inquest actually seeks out all versions of the facts surrounding a death. Ultimately, it is the Coroner who makes a judgment about whether the economic and logistical factors associated with calling such witnesses would necessarily change the outcome of the finding. But if coronial findings and recommendations are to be used as learning tools to prevent similar deaths or injuries, then the testimony of those directly involved in the event might reveal workplace failures that should be measured alongside all other testimony. On the one hand, a hospital's willingness to acknowledge fault without recourse to oral testimony from those involved in an adverse event might signal a readiness to accept responsibility for its employees' actions. On the other hand, it might also be construed as a way of avoiding closer scrutiny into deep seated anomalies within the organisation itself[55].

A wide range of adverse events can lead to a medical fatality. By far the most vulnerable group are those with mental health disorders and these cases are dealt with separately in Chapter 8. What is particularly striking when conducting a retrospective review of inquest findings over a decade or more is the commonality of features that underpin iatrogenic deaths.

I have already mentioned failure to follow mandated policies or procedures as a factor identified by Helmreich as being common to adverse events[56]. This was a root cause in the death of a 71 year old woman from massive acute haemolysis and multi-system failure due to an incompatible blood transfusion. At inquest it was found that the nurse who collected the patient's blood samples did not follow the procedure for specimen collection outlined in the nursing procedure manual. The nurse mislabelled the containers, culminating in the woman receiving the wrong blood group during a

---

55 It should also be noted, however, that while the coroner is restricted under the Coroners Act 197 s 26(3) to make any finding of criminal or civil liability, under section 27 of the Act, on completion of the inquest he must provide a copy of the findings to the Attorney-General who may direct the DPP to review the papers with a view to proceeding against a party in the criminal courts.

56 Helmreich, 2000 pp782.

postoperative blood transfusion[57]. In his findings, the Coroner made note of three similar deaths that were the subject of coronial inquests in New South Wales during 2000/01. While in these cases the error resulting in the wrong blood being administered occurred during the transfusion phase, rather than at the sampling stage, it seems the underlying cause in all these adverse events was that staff did not follow agreed procedure.

Helmreich has also identified other causes of adverse events including errors of proficiency due to poor knowledge or skill; poor decision making that unnecessarily increases risk; and, communication failure such as missing or wrong information exchange, or misinterpretation of information [58]. Certainly, failure of staff to communicate important clinical information has repeatedly been raised as an issue at numerous inquests.

For example, at baby Alex's inquest in 1995 before an acting coroner, inadequate communication between staff was found to have played a very serious role in the child's death. Questions were raised at inquest as to whether the intensive care registrar on duty was fully informed that the child was experiencing excessive bleeding. The surgeon who performed the procedure conceded there were endemic communication issues in hospitals. As he saw it, doctors tend to discuss issues among themselves in departments:

> In other words, surgeons only speak with surgeons, ICU intensivists only talk to ICU intensivists, nurses only speak to nurses, which is a problem[59].

While the Coroner was asked by counsel to make a recommendation about this issue, he was of the opinion this was so patently axiomatic that is was not necessary. However, this was not the view of another coroner, who conducted an inquest in the same year into the death of 59 year old Gillian.

Gillian suffered a fatal pulmonary embolism when she attended the outpatient department of a public hospital to have a plaster cast on her leg changed. On the night previous to her death, she had suffered an unexplained loss of

---

57 Chivell, W. Finding of Inquest, 1/03.
58 Helmreich, 2000 pp781-785.
59 Prescott, K. Finding of Inquest, 6/95.

consciousness and was taken to the ED of another hospital where she was diagnosed with postural hypotension (low blood pressure on standing) and discharged soon after. This episode was not communicated to her treating doctor in the hospital where she collapsed and died shortly after the cast was removed. The Coroner made three recommendations, two of which related to the need for clinical information to be promptly communicated to treating doctors. The third was directed to hospital emergency departments requesting that they not discharge patients who suffer unexplained loss of consciousness until diagnostic tests had been conducted, the results known and requisite treatments implemented[60].

The need for better communication of information vital to good clinical decision making in the ED has been a recurring, but largely ignored, topic in numerous inquests. It was again raised in 1996 when the Coroner inquired into the death of 74 year old Darrell and heard disputing evidence between a doctor who assessed Darrell in the ED and the ambulance officers who attended him shortly after his discharge.

Darrell had presented to the hospital in the early hours of the morning with chest pain and the ED doctor subsequently undertook a number of cardiac tests. The results of these investigations were generally inconclusive and he discharged Darrell about 2.00am with a diagnosis of gastric reflux (indigestion). On arrival home, Darrell's chest pain returned and an ambulance was called. The ambulance officers were informed of Darrell's recent discharge and telephoned the hospital to clarify with the doctor the course of action they should take in the circumstances. The inquest heard different accounts of this conversation from the doctor and ambulance officers, the former denying that he discouraged the ambulance officers from returning Darrell to hospital. The doctor explained to the Court that one reason he thought the ambulance officers had telephoned him was to get out of bringing Darrell back to hospital.

The Coroner disagreed, noting the ambulance officers had arranged for a locum doctor to visit the patient as they were concerned about his condition. Darrell died at home about 5.00am and on post-mortem his cause of death

60 Rogerson, A. Finding of Inquest, 27/95.

was myocardial infarction. While the Coroner did not made a formal recommendation, he suggested the doctor review his communication skills when dealing with paramedical staff so that similar misunderstandings might be avoided in the future[61].

Poor communication was also found to be a contributing factor in the death of a 63 year old man who attended a regional hospital after a fall. Similar to Darrell's case, the ED doctor failed to make a correct diagnosis and discharged the patient. In this case, the Coroner was particularly critical of the doctor, recommending that he undertake further training in emergency medicine, record-keeping and the adequacy of information he made available to other staff when referring patients[62].

During the course of this study I attended a number of such inquests where poor communication was identified as a contributory factor to iatrogenic deaths. However, my field observations led me to conclude that inquests do not necessarily examine all facets behind an adverse event. In addition, when the *Findings of Inquest* are published not all the information presented to the Coroner is articulated and, conversely, information not openly discussed in court may be annotated in the *Findings*. Evidently a filtering process occurs whereby the Coroner makes a decision about what to include in the findings and what is best left out. Alice's inquest serves to demonstrate these points.

Alice was 30 years old when she was admitted to hospital for the birth of her second child. Toward the end of labour, Alice collapsed, was resuscitated, intubated and ventilated and underwent an emergency vaginal delivery with the aid of forceps. The baby survived, however Alice's condition worsened, she suffered a cardiac arrest, was again successfully resuscitated, haemorrhaged and later that day underwent a sub-total hysterectomy, at which time a small rupture was found in her uterus. She was transferred to the ICU where it became apparent that she had suffered extensive hypoxic brain injury, She died several months later from pneumonia.

---

61 Chivell, W. Finding of Inquest, 4/96.
62 Chivell, W. Finding of Inquest, 11/97.

Alice's previous delivery had been via a caesarean section, but the plan for this birth was to conduct a 'trial of scar' meaning that a vaginal delivery would be carried out if the labour proceeded normally. A well documented complication of 'trial of scar' is that the uterus can rupture during labour at the site where it has previously been opened. Alice's labour did not progress as rapidly as expected and Syntocinon (a synthetic hormone to augment uterine contractions) was commenced. A per vaginal examination (referred to as a PV) is normally performed prior to commencing this treatment to ascertain if the labour is progressing or not[63]. In Alice's case the last PV performed was five hours before the infusion commenced. The Coroner heard contradictory evidence from the obstetric registrar and midwife on duty as to who should have undertaken this examination and whether the midwife communicated the fact that it had not been performed to the registrar. While it was clear there were problems with communication from both parties, my notes from the inquest suggest the Coroner was more sympathetic to the doctor than the midwife. Note here that indented passages are my impressions, whereas dialogue presented in small font represents almost verbatim accounts (slight changes have been made to protect anonymity).

The midwife seems very much from the 'old school' of nurses, stoic and unyielding. She answers questions in a very abrupt manner and often interrupts proceedings....I can see she is not endearing herself to the Coroner. While some of her answers have merit, she keeps denying that she had any real duty toward Alice and is pushing the blame onto the doctor.

Midwife:	A PV was not my responsibility in this case. It was either the team leader or the registrar's role:
Coroner:	Can you show me where it says in the guidelines that the team leader is to do PVs?
Midwife:	It's not there, but these are guidelines not policies.
Coroner:	I think we will differ on that.

In contrast:

The doctor looks nervous and frightened; speaks in a soft voice but answers questions clearly. Pressed hard and repeatedly by Counsel if it was the doctor's responsibility to perform a PV before starting Syntocinon, the doctor broke down and began to cry.

---

63 The hospital obstetric and midwifery procedure manual, tendered as an exhibit during the inquest, outlined that women having 'trial of scar' with a Syntocinon infusion must have continuous electronic foetal heat monitoring and 4 hourly PVs. In Alice's case, continuous foetal heart monitoring was first commenced about 90 minutes after Syntocinon was started and a PV examination was not performed again until the patient collapsed.

Coroner: I think this is unnecessary (badgering by Counsel). Either the doctor is unclear if it had been done, or was in error in not doing it. I don't think we can take it any further.

During a break in Alice's inquest I had occasion to speak with Counsel representing the deceased's family[64]. He pointed out that the family was most unhappy about the direction of the inquest as their concerns were primarily related to Alice's resuscitation and not the line of investigation as it was unfolding in the court. The family, though counsel, had urged the Coroner to address this matter at inquest, but it was never formally raised and over the course of the three-day hearing and it became increasing apparent that the family were generally unhappy with the overall proceedings.

Like many medical fatalities, Alice's death was not subject to an inquest until three years later. During submissions, counsel for the hospital outlined to the Coroner changes made to obstetric protocols since Alice's death, some of which had been introduced a month before the inquest. When the findings were released the Coroner accepted that the changes introduced by the hospital rendered it unnecessary for him to make further provision about hospital policies, but he did express concern about communication between staff and the attitude of the midwife in particular. He recommended that the hospital consider issuing guidelines or initiating further training so that such misunderstandings might be avoided in future[65].

On release of the findings, it also became obvious why the Coroner did not pursue the matter about Alice's resuscitation. He had sought opinion from an external intensive care specialist and while this expert witness was not called to provide oral testimony, on review of Alice's casenotes he had advised the Coroner that there were no matters warranting criticism in the conduct of the resuscitation[66]. The family was aware of this decision during the inquest, but remained unhappy about the direction of the whole inquiry.

---

64 The Coroners Court is relatively small and in the majority of inquests there are few observers outside the deceased's family and members of the media (who are usually known to the family). Counsel representing various parties or a member of the deceased's family occasionally approached me to inquire as to my 'role' in this court. My response was to briefly explain I was undertaking research.

65 Chivell, W. Finding of Inquest, 4/02.

66 Chivell, W. Finding of Inquest, 4/02 at 5.13.

While it was well beyond the boundaries of this study to investigate how families felt about the outcome of an inquest, from observation of how most family members responded to the proceedings I was left the impression that the majority were not particularly satisfied with the process[67]. It was obvious that for victims' families, confronting those involved in their loved-one's death and hearing first-hand accounts of the events surrounding the fatality, was a harrowing and stressful experience. The inquest also re-opened the death often two or three years after the event and for the bereaved, who may have passed through the acute grieving process, revisiting the death rekindled the grief.

The Coroner is acutely aware of the stress that an inquest can have on the family:

> There are a lot of considerations to holding an inquest...(and) ...it is often easy to talk people out of it. It may be that the family doesn't want the attention of the media or the publicity, but on the other hand the family may be aggrieved by the standard of care given and want a forum to vent this publicly[68].

Being sensitive to the concerns of the family while at the same time remaining a neutral inquisitor can obviously present challenges for the Coroner and his counsel. During the inquest into the death of 56 year old Angela, I witnessed how counsel assisting the Coroner managed this conundrum. Angela had visited several doctors and presented to a hospital ED complaining of neck pain and headaches, but was misdiagnosed on each occasion. She later collapsed at home and on post-mortem was found to have died from an extensive subarachnoid (brain) haemorrhage. When cross-examining the doctor who assessed Angela in the hospital ED, counsel assisting turned to the deceased's family and asked if they had any specific questions they wanted asked of the witness. The family responded in the affirmative and counsel conveyed their question to the doctor. Toward the end of the inquest the Coroner also addressed the family and invited Angela's husband to make an

---

67 This view is not shared by former NSW State Coroner Hand, who recently wrote that the main thing families are looking for from an inquest is that the matter was thoroughly investigated, and in his opinion 99.9% of the time families leave an inquest feeling satisfied. See, Hand, D. & Fife-Yeomans, J. *The Coroner: investigation sudden death*, ABC Books, Sydney, 2004 p59. As indicated, however, as an observer of the court, rather than a player or official, I would suggest otherwise. This issue is certainly a worthy topic of further study.

68 Notes from interview with Wayne Chivell, South Australian State Coroner, 30 January 2002.

oral statement to the court. I wondered if the fact that Angela's family were not represented might explain this, particularly since all the doctors had retained solicitors. I asked counsel assisting when I interviewed her two days later.

CG: I noticed during inquests that you occasionally interact with the family, especially when they don't have counsel representing them – do you see yourself as their advocate?

Counsel No, not as an advocate. But I do fell sorry for them and I care about them. Like you would have heard the other day when I asked ...(Angela's daughter) if she wanted to ask any specific questions of the doctor and she said about the Kernig's sign. And I thought, he has already answered that, but then I thought, well, if that's what she wants to know and that sets her mind at rest, then I will ask. His lawyer got huffy and the doctor just said no. But at least I asked, and her question was answered, and hopefully she feels she now has the answer.

Most medical personnel appearing before the Coroner have legal representation. This may be by way of the hospital/DHS appointed solicitor or one they, or their professional body, has retained. One of the experienced lawyers I spoke with suggested protecting the interest of clients in the Coroner's Court extended to several areas, one of which involved instructing witnesses on the approach they should adopt when giving evidence. The lawyer indicated that in cases where the doctor's or nurse's act or omission was clearly problematic they were best advised to admit this rather than trying to 'argue the point' with the Coroner:

> I've seen it happen, and it gets him off-side, and this leads to an adverse individual finding, which, had they accepted or admitted their transgression, then it may not have been included, or so harshly noted in the findings[69].

It is clear that the Coroner is able to discern at inquest attempts to cover acts or omission and is not averse to applying pressure on witnesses to acknowledge their failings. During Angela's inquest, it was brought to one of the doctor's attention that the very brief consultation note he had made about her presenting complaint and examination was unacceptable. While the doctor indicated that he had no independent recollection of the specific

---

69 Notes from interview with Counsel (name omitted to protect anonymity) 8 November 2001.

consultation he spent a long time explaining to the Coroner the protocol he would have followed to justify his diagnostic note, 'neck ache problem'.

> Coroner: So you think neck ache and temporal pain were the same problem?
> Doctor: Yes.
> Coroner: You are drawing all these conclusions from a brief note in your case note – neck ache problem? Your notes have no indication of length and severity of her symptoms. What are we to conclude from that?

At this point there was a very long pause during which time the Coroner engaged the doctor in continuous eye contact.

> Doctor: The conclusion is that the notes have not been well kept, Sir.[70]

In this case the doctor did not 'escape' an unfavourable comment in the findings, the Coroner noting:

> I must say that I find this approach to medical investigation to be less than satisfactory.... I have commented repeatedly over the years in other inquests that this approach reveals a general lack of medical professionalism...In relation to this particular case, I am not prepared to make a positive findings that Doctor.... carried out the detailed investigation that he alleges.

Health professionals' deficient note keeping practices are a topic that repeatedly comes under trenchant criticism from the Coroner. However, when it comes to adjudicating over areas that involve the exercise of clinical judgements, the Coroner is less inclined to be overtly critical. This is particularly the case when medical specialists, who appear equally qualified, disagree about clinical decisions. For example, at the inquest into 39 year old Patrick's death, two eminent cardiologists disagreed about the appropriateness of an investigative procedure that the patient underwent shortly before his death. Patrick was hospitalised with a myocardial infarction (MI) and prior to his release underwent a 'symptom-limited' maximal exercise stress test (an investigation to evaluate myocardial circulatory response to physical exsertion). During the procedure he collapsed and died. The post-mortem indicated the cause of death was ruptured infarction with haemopericardium and cardiac tamponade (from haemorrhage at the site of the infarction).

The Coroner heard conflicting evidence between the senior treating cardiologist at the hospital and a senior cardiologist from another hospital, called as an

---

70 Notes of Coroner's Inquest 28/01, 10 December 2001

expert witness. The treating cardiologist, while acknowledging the procedure was not completely safe to perform five to seven days after an MI, strongly believed that the value of the test outweighed the risks involved and that a maximal stress test was of better diagnostic significance than a sub-maximal stress test. The expert witness took the contrary view and was critical of the intensity and duration of the stress test performed on Patrick. He testified that a more conservative and cautious approach was warranted, either by conducting a sub-maximal stress test or discharging the patient and performing the maximal test several weeks later.

The Coroner observed that these differences in approach were no doubt repeated in many areas of medicine and the final arbitrator in this matter rested with the patient.

> If he or she makes an informed decision about undertaking such a test in those circumstances, then it is not for me to criticise his medical advisors for the outcome[71].

The Coroner did, however, recommend that cardiologists conducting maximal stress testing on patients who recently had an MI should reconsider their practice in view of the evidence submitted by the expert witness[72].

More recently, the Coroner was even less persuaded to draw conclusions from the opinions of two expert witnesses. During the inquest into 34 year old Emily's death, two senior intensivists resolutely disagreed about a range of clinical presentation and treatment protocols. Emily was admitted to the intensive care unit of a metropolitan hospital with severe respiratory failure. The Coroner heard that Emily's death was caused by the insertion of a thoracostomy (chest) tube that inadvertently punctured her lung causing a massive haemorrhage[73]. The main issues examined during this inquest concerned whether the tube needed to be inserted; were alternative treatments available; and, was the doctor who inserted the tube appropriately skilled to do so? Dr A, the consultant intensivist from the hospital told the Coroner that ultrasound evidence of pleural effusion confirmed the need for Emily to have the tube inserted and Dr B was technically competent to perform the

---

71 Chivell, W. Finding of Inquest, 14/97.

72 Stress testing continued to be preformed under the same protocol in the hospital where Patrick died. (Personal observation and discussion with nursing colleagues employed in the hospital cardiac area 1997 to 1999).

73 Chivell, W. Finding of Inquest, 14/03.

procedure. An outside consultant intensivist from another hospital, Dr C, was called by the Coroner to assess the quality of the treatment provided to Emily. Dr C presented conflicting testimony to that of Dr A. He told the Coroner that instead of inserting the chest tube, administration of an intrapleural fibrinolytic drug was an alternative treatment approach. Dr C also testified that if the procedure was to go ahead, coagulation studies should have been performed prior to the insertion and that given the patient's complex medical condition, Dr B, a trainee intensivist, should have been under the supervision of a consultant.

The Coroner remarked that this was a very difficult and troubling inquest. He had before him the opposing opinions of two highly respected and experienced senior intensive care specialists. On this occasion, the Coroner chose not to concur with the opinions put forward by the outside expert and in doing so rejected any criticisms of Dr A and Dr B, making no recommendations. Emily's family were of a contrary view and have since lodged a statement of claim in the civil court seeking to sue the hospital and Dr B for negligence and breach of duty of care[74].

When I met with the Coroner I asked him how he resolved conflicting evidence between the testimonies of two expert medical witnesses. He responded that while it does not happen all that often, on a least one occasion he had instructed the two doctors to meet and discuss their differences[75]. In discerning the correctness of one set of opinions above another, the Coroner also indicated that he looked for grounds to distinguish between different views including the factual basis upon which the opinion was formed (empirical data) and the doctor's level of expertise.

While I did not discuss Emily's case with the Coroner, the lack of scientific evidence to support at least one of the conflicting practice points, the use of intrapleural fibrinolytic drugs, was likely to have persuaded the Coroner against making an adverse finding. Samuels, a former barrister and judge, points to several empirical indicators that can be employed to test the

---

74 Clemow, M. (reporter) 'Sons sue over hospital death', *The Advertiser*, 29 February 2004 p29.

75 Notes of interview with State Coroner Chivell, 21 March 2003.

reliability of expert testimony including whether the proposed technique or theory has been subjected to peer review and publication, the known or potential rate of error and whether there has been general acceptance among the relevant professional community[76]. In Emily's case, Dr A, the hospital intensivist, was able to convince the Coroner that, based on the patient's presentation, the insertion of the chest tube was in accordance with mainstream medical opinion and the Coroner observed:

> ... for that reason alone, even if ...(Dr C's)... suggestions do have scientific merit which is not yet proven in the scientific literature, there is no reason for me to criticise the clinicians at the ..(hospital)...for failure to use fibrinolytics in this situation[77].

The legal literature dealing with expert opinion in the adversarial system is substantial and beyond the breadth of this study to present in detail. Much of this literature is concerned with admissibility and reliability issues when an expert in a particular field is called upon to inform a judge or jury on matters requiring specialist knowledge. Freckelton, contends that it is important for coroners to choose wisely when calling for expert opinion and even then experts can be wrong[78].

While the number of medical practitioners in Adelaide has grown significantly since the latter part of the 19th century when Dr's Wyatt, Mayo and Woodforde featured among the medical elite, South Australia still has a relatively small medical club[79]. This obviously raises partiality concerns when selecting professional witnesses to testify in cases of medical misadventure. State Coroner Chivell tends to draw expert medical witnesses from a core pool of local doctors, but on occasion he will go outside the State for an expert opinion[80]. When I asked what qualities he looks for in an expert witness he indicated that the capacity to present the facts in a clear and unbiased way was an important factor. He also pointed out that selecting expert medical

---

76 Samuels, G. 'Medical truth and legal proof: changing expectations of the expert witness', *Medical Journal of Australia,* Vol.168, 1998 pp84-87.

77 Chivell, W. Finding of Inquest, 14/03 at 4.10.

78 Freckelton, I. 'Expert proof in the coroner's jurisdiction', in H.Selby (ed), *The aftermath of death,* The Federation Press, Sydney, 1992 pp37-68 esp.p55.

79 In Chapter 3 I indicated that these three doctors were among an elite group of professional men who held a number of prominent appointments in the colony and acted as expert witnesses in coronial cases and also served as coroner. See 3.3.3 and 3.4.

80 For example, during the inquiry into factors relating to the 'trial of scar' in Alice's death, the Coroner sought opinion from a Victorian Professor of Obstetrics and Gynaecology. Chivell, W. Finding of Inquest, 4/02.

witnesses could be contentious:

> A few years ago the local AMA (Australian Medical Association) got upset about using non-GP doctors to give expert evidence on decisions made by GP's during inquests. Their argument was that GPs should provide expert opinion on other GPs and in the case of a rural doctor, another rural doctor should provide expert evidence. I accepted this argument and the College of General Practitioners has drawn up a list of doctors willing to provide such opinion[81].

It is not surprising that the Coroner is cautious when it comes to appointing an expert medical witness. I described on page 191 the controversy that surrounded the 'battered babies' case and the subsequent coronial investigation that found the forensic pathologist's expertise fell well short of the standards set by the professional college. There have been other cases where evidence tendered by experts has been found wanting on closer examination. Hindsight bias is a well described product of retrospective peer review and the potential for such bias is thought to increase when experts know there has been an adverse event[82]. The inquest into Jean's death is a case in point and one that resulted in the inquest being re-opened.

In 1995, 36 year old Jean underwent a laparoscopically assisted vaginal hysterectomy (LAVH) in a small South Australian regional hospital. During the procedure the surgeon punctured the right iliac artery causing massive haemorrhage and death. At the first inquest in 1998, the Coroner heard a preponderance of medical opinion that the instrument that punctured the artery was a Veress needle[83]. Based on this evidence, the Coroner made a recommendation about the use of the Veress needle, which resulted in the Medical Board of South Australia issuing a general warning to the profession.

---

81 Notes of interview with State Coroner Chivell, 21 March 2003.

82 See for example: LaBine, S. LaBine, G. 'Determinations of negligence and the hindsight bias', *Law and Human Behaviour,* Vol.20, 1996 pp501-516; and, Berlin, L. 'Malpractice issues in radiology – hindsight bias', *American Journal of Radiology,* Vol.175, 2000 pp597-601; and, Hugh, T.& Tracy, G. 'Hindsight bias in medicolegal expert reports', *Medical Journal of Australia,* Vol.176, 2002 pp277-278.

83 In laparoscopic surgery, the Verres needle is an instrument used to enter the peritoneal cavity and is later withdrawn and a trocar (another piercing instrument) and cannula are then introduced. Once in position the trocar is withdrawn and the laparoscope is then introduced though the cannula. There appear to be two forms of spelling the name of this instrument ie Verres or Veress, both of which were used in coronial findings related to this instrument. I have selected the spelling Veress as the needle was named for its inventor, Janos Veress, a Hungarian physician. See, The Royal Australian and New Zealand College of Obstetricians and Gynaecologists, http://www.ranzcog.edu.au/Open/historical-collections/museum.htm

When I meet with the Coroner, he told me that once his finding was made public, he was inundated with letters of concern from the medical profession[84]. One of the letters was from a professor of endogynaecology in Sydney who had been retained by the legal firm representing Jean's family in civil proceedings. The professor advised the Coroner that in his opinion the evidence overwhelmingly pointed toward the trocar and not the Veress needle causing the vascular injury. The medical specialists on whose evidence the Coroner had originally based his findings did not dispute this view. In consideration of the concern the professor and other experts in the field were now expressing, and in case the medical profession had been misled by the earlier ruling, the Coroner set aside the original findings and reopened the inquest in 2000[85].

The outcome of Jean's inquest seemed to further dissuade the Coroner from making specific recommendations about aspects of clinical practice, particularly when there was conflicting medical evidence.

> In these types of cases (*medical adverse events*) I am wary about making specific recommendations. It is difficult, I never feel really confident that I have received enough information into the general running or operation of the hospital as the case is often about a specific set of circumstances. .....So what I tend to do now is make recommendations which address general aspects, such as that the medical staff review their practices, or that education on certain aspects be undertaken, or that the organisation looks to reviewing their policy or develop a policy on a certain aspect[86].

This was evident in the concluding findings into Jean's death. He recommended that properly conducted prospective comparative studies should be undertaken to examine whether blind insertion techniques in laparoscopic surgery performed outside major teaching hospitals (without ready access to vascular surgeons), carried a greater risk of harm. Of interest, the same year Jean died another woman who underwent a laparoscopic gynaecological procedure also died from an intraoperative haemorrhage when a major blood vessel was perforated. In this case, however, the surgery was conducted at a major metropolitan teaching hospital and the Coroner made no recommendation except to suggest that those involved in the surgery should re-examine their respective roles in view of the evidence presented.

---

84 Notes of interview with State Coroner Chivell, 30 January 2002.

85 Under Section 28(1) of the Coroner's Act, 1975 a coroner has discretion to re-open an inquest at any time.

86 Notes of interview with State Coroner Chivell, 30 January 2002.

Nevertheless, fatal complications arising from laparoscopic procedures conducted outside city teaching hospitals continued. Three years after Jean's death, 43 year old Sally died from a small bowel perforation that occurred during laparoscopic gynaecological surgery at a small rural hospital. Once again the Coroner was told by the surgeon (a different doctor to the one involved in Jean's case) that the Veress needle had caused the perforation. The expert witness, who was also called to provide opinion in Jean's death, disagreed indicating that given the size of the perforation it could only have been done by the trocar[87]. The Coroner concurred and made several recommendations aimed at again reminding gynaecologists of the small but appreciable risk of damage to the bowel and/or major blood vessels associated with laparoscopic surgery and the need to be observant to detecting such complications.

As to whether these recommendations were implemented, the Coroner had no real way of knowing, and in any event, under the Coroners Act 1975 his legislated responsibilities finished once the findings were delivered.

7.5 The findings are disseminated for consumption

At the conclusion of the inquest counsel representing the various parties summarize their version of events and submissions. On consideration of all the evidence provided, the Coroner prepares the findings. Depending on the complexity of the case, and whether the Coroner needs to take additional advice, the findings are usually handed down a few months later. The published findings summarize the facts relevant to the inquiry including the name of the deceased, medical cause of death, background information, circumstances surrounding the event, key personnel involved, expert witness testimony, findings and recommendations. This takes the form of the Coroner making a brief appearance in court where the findings are 'tabled' and thereafter become publicly accessible[88].

In accordance with Coroners Act, findings in the prescribed form are forwarded to the Attorney-General[89]. Representing counsel and the family are

---

87 Chivell, W. Finding of Inquest, 14/03 at 4.10.
88 The date of this appearance is notated in the findings to be part of the inquest.
89 Coroner's Act 1975 (SA) s27.

also provided with a copy and from 2000 they have been posted on the court website. The Coroner also disseminates individual copies, with an accompanying letter, to agencies or individuals in a position to take remedial action to prevent future deaths and injury. In cases involving a medical adverse event this would normally include chief executives within the DHS, the Medical Board of South Australia and the Nurses Board of South Australia.

Although the Coroner is restrained by the Act from making any finding or suggestion of criminal or civil liability[90], the findings are often crafted in a way that leaves little doubt that an individual or agency was amiss. In Jean's case for example, on the issue of the surgical error, the Coroner observed:

> I should not enter the question of whether there has been a departure from the standard of care expected of Dr...[the surgeon]. To do so would be to risk contravening Section 26(2) [sic] of the Coroners Act. Dr..... acknowledges that an error has occurred. It is perhaps pointless in view of the limitations placed upon me by that section to embark upon an analysis of the extent of that error. However, I think it is appropriate for me to say that I think the error goes beyond mere misadventure[91].

It is the prerogative of the relevant Board to investigate the conduct of one or more of their members under their own legislative guidelines. In South Australia, provision is made in both the Medical Practitioners Act and the Nurses Act for evidence taken in proceedings before the Coroner's Court to be considered during disciplinary hearings and these Boards can adopt any findings or decisions made by the Coroner it considers proper[92]. In 1995, an inquest into the death of a man during neck surgery found the surgeon had mistaken the internal carotid artery for a much smaller pharyngeal artery, clamped and ligated it causing the patient to suffer a fatal stroke[93]. The Coroner heard evidence about deficiencies in the surgeon's decision making during the operation and a subsequent Medical Practitioner's Tribunal found the surgeon had been "grossly negligent" and suspended him for six months[94].

---

90 Coroner's Act 1975 (SA) s26(3).
91 Chivell, W. Finding of Inquest, 14/98 at 4.1.
92 Medical Practitioners Act 1983 (SA) s57(3)(a)(b); Nurses Act 1999 (SA)s46 (9)(a)(b).
93 Rogerson, A. Finding of Inquest, 14/95.
94 Pengelley, J. (reporter) 'Tragic Christmas Eve', *The Advertiser*, 24 January 2000.

The media play an important role in the dissemination of findings and are the primary means by which the public is informed about coronial recommendations. How accurately and well informed, however, is open to speculation. The Coroner's Office furnishes the media with a brief press release about individual inquests and information is published under the 'Cause List' in *The Advertiser* newspaper informing the public about when inquests are to be conducted and findings released. The media report sporadically on coronial findings and in their pursuit of 'newsworthy' stories the cases reported are often the more 'sensational' ones. One of the lawyers I spoke with expressed frustration with members of the press who often spend only a short time in the court and do not gain a sense of all the evidence[95]. They then recount, often out of context, a 'sensational' aspect of the case that can undeservedly harm the reputation of individuals and organisations. Counsel assisting the coroner also suggested that at times there was a difference of opinion between what they believed to be of public interest and what the media were prepared to report:

> What the media are interested in, we in the Coroner's Office often think trivial, what we think is important they are often not interested in[96].

State Coroner Chivell, like other members of the judiciary, does not participate in media interviews about individual cases and does not publicly respond to questions or criticisms from the media about findings he has delivered. From time-to-time the Coroner may issue a press release related to a public health issue, however, all information divulged from this office is by approval of the Coroner or counsel assisting[97].

Like all other Australian jurisdictions, coronial findings in South Australia have no lawful power and there is no legal obligation on the part of any individual or agency to act on recommendations. However, increasing demands on government and health administrators to manage and reduce risks associated with hospitalisation and the rising annual cost of medical negligence claims, have led to greater interest in coronial findings. I outlined in Chapter 4 that State Coroner Chivell instigated significant changes to the

---

95 Interview notes with Counsel (name deleted to protect anonymity) 8 November 2001.
96 Interview with Kate Hodder (Counsel Assisting the Coroner) Wednesday 12 December 2001
97 Interview notes with member of Coroner's Office, Wednesday 6th February 2002.

office, and death investigation has become a very thorough process of inquiry under his leadership. By and large, coronial findings comprise detailed, and oft times deprecating, accounts of issues found to have contributed to fatalities.

As part of its protocol to manage coronial matters, the DHS has also articulated a procedure to deal with the findings. The Department's Insurance Services Unit (ISU) receives advice from the Coroner's Office 24 hours prior to the release of a finding and an electronic copy of the findings is emailed to the ISU Manager at the time the Coroner is delivering his findings in court. Once the finding reaches the ISU a copy is provided to the:

- Office of the Minister of Human Services
- Executive Director and senior staff responsible for the health unit (hospital) and the Mental Health Unit (where applicable)
- DHS Legal Unit
- Manager, Risk Management Services; Director, Corporate Services
- Health unit's Clinical Risk Manager (where applicable)
- Public Relations and Communications Unit
- The Executive Director, Clinical Systems.[98]

On the same day the findings are released, the ISU is required to prepare a briefing paper for the Minister of Human Services that incorporates comments from the solicitor representing the hospital(s) during the inquest. This briefing outlines actions taken by the health unit or DHS in addressing the Coroner's recommendations and must be submitted for signature to the Chief Executive of the DHS by 2:00pm the same day[99]. The briefing paper not only keeps the Minister informed, but also provides the Minister's office with intelligence to respond to unfavourable media attention that an adverse finding may generate.

A point worth noting is that the Coroner hands down his findings in the morning (usually at 10am) and the ministerial briefing is expected by 2pm that afternoon. While this seems somewhat premature, in reality by the time the inquest has concluded and submissions made by counsel, the solicitor representing the hospital and DHS would have gauged the likelihood and

98 Department of Human Services (DHS), *Process – coronial matters*, DHS Insurance Services Unit, Adelaide, (date not cited).

99 DHS, (date not cited) pp2-3.

nature of any adverse finding and recommendations. The long delay between the death and the inquest would also have provided ample opportunity for remedial actions to be taken by the hospital and these would likely form the basis of any responses by the DHS.

7.6 Recipients respond

The value of coronial findings to public health comes down to whether recommendations are translated into policy and practice to prevent future death or injury. Selby[100], among other commentators on coronial law[101], indicates a very real potential for recommendations to be ignored, thus denying any opportunity for their use as a basis to address failures. In effect, once the findings have been handed down there are three main ways recommendations can be dealt with by the intended recipients. First, as Selby warned, they can be discounted or ignored. Second, they can be noted and lessons extracted at a superficial level not translated into practice. Third, they can be seriously analysed and used to inform practical policies that are translated into practice.

My research indicates that even if the third option is being realised on some fronts, although the evidence in South Australia suggests not, lessons are not being learned. Therefore, the same or similar types of incidents that were the subject of coronial findings and recommendations are being repeated, some with fatal consequences.

In Chapter 6, I examined what has become an extensive collection of literature about adverse medical events and noted that the Harvard Medical Practice Study was among the more notable epidemiological research into causes behind such events. Leape and colleagues categorized errors under four main types:

(i) diagnostic errors or delays in making a correct diagnosis from such factors as poor patient assessment, failure to implement appropriate tests, inaccurate interpretation of test results and/or failure to act on the results of assessment findings

---

100 Selby, H. (ed) *The inquest handbook,* The Federation Press, Sydney, 1998 pp.xvii-xxiii.

101 See for example: Johnstone, G. 'An avenue for death and injury prevention' in H.Selby (ed), *The aftermath of death,* The Federation Press, Sydney, 1992 pp140-184; Halstead, B. 'Coroners' recommendations following deaths in custody,' in H.Selby (ed), *The inquest handbook,* The Federation Press, Sydney, 1998 pp186-207.

(ii) treatment errors or avoidable delays in the actual execution of a procedure, operation or task
(iii) preventive failures due to inadequate monitoring and follow-up treatment or failure to provide appropriate prophylactic measures
(iv) other causes like equipment failures, poor communication and system inadequacies including lack of non-specialist staff and inadequate resources [102].

Such errors persistently resurface in coronial findings. I have highlighted cases already where the Coroner repeatedly identified imprecise or ineffective communication, poor record keeping and failure to follow mandated policy as issues contributing to adverse events. Similarly, errors of proficiency and lack of specialist skills have been recurring themes. This point can be further illustrated by chronologically examining surgical deaths in rural South Australian hospitals.

In 1993, 49 year old Helen underwent abdominal surgery for the removal of an ovarian cyst at a small rural hospital. While a visiting specialist performed the procedure, Helen's postoperative hospital management was left with two local general practitioners. Unbeknown at the time, Helen's small bowel had been perforated during surgery and she developed peritonitis. Despite showing symptoms of this condition, the local doctor failed to recognise the gravity of her illness until too late and she died six days later while being transferred to a city hospital. In view of the circumstances leading to Helen's death, the Coroner recommended that the hospital board, and indeed the boards of all rural hospitals, review whether elective abdominal pelvic surgery should be performed if postoperative care was to be carried out by busy general practitioners without surgical qualifications and quick access to investigative facilities[103].

Later the same year, Ted, an elderly man with multiple co-morbidities underwent a colonoscopy at another small rural hospital. In this case the local GP acted as the anaesthetist. The Coroner heard that the GP noticed soon after he administered the anaesthetic that Ted stop breathing. The GP proceeded to resuscitate him, but was somewhat hindered in his assessment of Ted's response by the lack of functional equipment (the pulse oximeter was

---

102 Leape, L. Lawthers, A. Brennan, T. et al 'Preventing medical injury', *Quality Review Bulletin*, Vol.19, 1993 pp144-149.
103 Thompson, G. Finding of Inquest, 23/93.

not working and no automatic blood pressure monitoring was available to monitor trends). However, the GP considered the resuscitation measures taken had worked and the surgeon proceeded to complete the colonoscopy. The patient died postoperatively from cerebral anoxia (lack of oxygen to the brain) suffered during his collapse. The Coroner was of the opinion that this surgery should not have been conducted at this hospital on such a high risk patient and while he made no specific recommendations, he indicated that medical practitioners needed to carefully consider whether the provision of such services would better be conducted at a regional or city hospital[104].

Still, having surgery in a larger regional hospital did not guarantee that doctors with specialist skills would necessarily be in attendance. In 1996 the Coroner inquired into the death of a 51 year old man at a large regional hospital who died as the result of a rare but well known anaesthetic complication, malignant hyperpyrexia. The doctor who administered the anaesthetic was again a local GP and the Coroner heard evidence critical of the doctor's assessment and management of the patient during the anaesthetic and subsequent emergency. The Coroner referred back to a previous inquest held in 1994 where he had made recommendations to the Minster to address the difficulties experienced by GPs in country South Australia. He repeated exactly the same recommendation calling for the Minister to consider ways in which isolation and lack of professional support for doctors outside the metropolitan area could be alleviated.

> In my opinion the case illustrates that there is an ongoing need for such action on the part of the Minister of Health, since I am aware that there are other rural centres which do not have the services of a full-time professional anaesthetist[105].

The situation did not improve at this hospital. In 2004 an independent review of patient safety found patients were dangerously exposed to serious adverse events and the poor standard of anaesthetic services was the most serious clinical deficiency at the hospital[106].

While a number of small rural hospitals were closed or turned into nursing homes during the 1990s, surgery continued to be performed at those that

---

104 Prescott, K. Finding of Inquest, 3/95.
105 Chivell, W. Finding of Inquest, 1/96.
106 Bildstien, C. (reporter) 'Report damns .....Hospital', *The Advertiser*, 19 May 2004 pp1-4.

maintained their acute bed status. This surgery included elective endoscopy procedures of the same or similar nature as Jean and Sally underwent at rural hospitals (described previously on pages 213 to 215). In 2000 another woman died from complications of such surgery, this time following an endoscopy conducted at a rural hospital north of Adelaide to investigate gastric reflux. During the procedure her oesophagus was perforated by the endoscope, although this was not observed at the time by the surgeon. The surgeon returned to Adelaide. Later that evening she was assessed by the local GP who failed to recognise the gravity of her symptoms and act accordingly. By the time she was transferred to a public hospital in Adelaide her condition was critical and she died five days later. State Coroner Chivell found the facts of this case remarkably similar to those surrounding Helen's death in 1993, which was the subject of a recommendation to all rural hospital boards to review whether this type of surgery should be performed if postoperative care was to be carried out by GPs. In an attempt to prevent any more of these deaths, the Coroner outlined in 2003 specific recommendations including:

> That where medical specialists perform invasive surgical procedures in rural and remote areas, they should develop appropriate arrangements with a major teaching hospital for emergency evacuation and transfer to that hospital in the event of an emergency[107].

Reports into adverse events such as the one conducted by the UK Department of Public Health, emphasise the importance of implementing recommendations from appropriately conducted inquiries to address failures in the health system[108]. Such reports also outline obstacles that prevent recommendations being embedded in practice, particularly those requiring system changes related to supervision and training programs for staff, hospital funding arrangements, bed pressures and staff shortages. Fatal adverse events are rarely attributed to one isolated cause and many of the recommendations proposed by the South Australian Coroner advise the Minister responsible for healthcare services to review hospital systems. Calls to address system changes, however, appear to be the most difficult and intractable to enforce,

---

107 Chivell, W. Finding of Inquest, 1/96.

108 Department of Public Health, 'An organisation with a memory: report of an expert group on learning from adverse events in the National Health System', The Stationery Office, London, 2000 [NHS Report].

as the following cases demonstrate.

At an inquest in 1998 the Coroner heard that 77 year old Henry died at a metropolitan public hospital because non-specialist medical staff missed significant warning signs that indicated he was suffering from biliary peritonitis related to traumatic preformation of his gall bladder. The expert witness called by the Coroner was scathing of the treatment Henry received at the hospital, observing:

> I believe this patient died from inadequate medical and surgical management particularly surgical. .....to those trained in the management of acute abdominal emergencies, there were many symptoms and signs which should have led to a consideration of an intra-abdominal catastrophe. The events were compounded by inadequate administration (loss of notes), inadequate documentation, possibly superficial examination, failure to review investigations in their entirety and probably lack of knowledge as the condition of biliary peritonitis and how it presents. It appears there was no consultant input for two working days and until such time as it was too late to save the patient. In fact I can see no documentation that the patient was seen by any consultant until a few minutes before his death[109].

This testimony was not seriously contested by the hospital. The Coroner made two recommendations: (i) that all doctors involved in Henry's management should review their practices and, (ii) that hospital and medical administrators reconsider systems that would allow such patients to be treated at an early stage of their illness by appropriately trained and preferably consultant medical practitioners.

No distinguishable changes to practice occurred following the release of these findings and my observation of junior doctors in this and other public hospitals indicate that they continue to manage highly complex and specialised cases[110]. This issue again emerged in 2002 during the inquest into the death of 45 year old Beth.

Beth attended a public hospital for treatment of bowel cancer, which included the removal of a section of her bowel. An anastomotic leak developed following

---

109 Chivell, W. Finding of Inquest, 18/98 at 8.1.1&2.

110 My role as an academic and clinical facilitator in a Division of Health Sciences and, until relatively recently an RN in a critical care unit, provided opportunity to observe and engage with junior doctors in a variety of metropolitan hospitals.

the initial surgery and she returned to the hospital where her condition deteriorated necessitating further surgery and the formation of a colostomy.

The Coroner heard that this second operation was performed in a less than satisfactory manner. Ruth's colostomy stoma showed signs of failure from an early stage putting her at risk for spillage of bowel contents into her abdominal cavity, a life-threatening complication. Nevertheless, she was discharged from hospital 6 days later by a registrar. She was readmitted the following day, but her condition continued to deteriorate and she died two weeks later in the ICU from multi-organ failure due to septicaemia and peritonitis from faecal leakage into her abdomen.

The Coroner concluded that Ruth's discharge was completely inappropriate and the surgical care she received after the colostomy operation was deficient. This was a complex inquest that examined many facets of Ruth's care and having regard to the facts that emerged, the Coroner recommended that the Minister review clinical practices at the hospital with a view to ascertaining whether changes need to be made in the following areas:

- the standard of surgical practice performed at the hospital
- the degree of supervision given to surgical trainees
- discharge practices; and whether 'bed pressure' was affecting these
- handovers and exchanges of information
- medical staffing levels.[111]

Yet another inquest held in the same year into a death at the same hospital involving a 59 year old woman indicated that no systematic changes were being introduced to mitigate deficiencies. She had presented to the hospital's ED and experienced delays in being assessed and when finally seen was misdiagnosed. The findings of this inquest, conducted by a deputy coroner, covered three key areas: (i) why her condition was not diagnosed earlier (ii) whether an early diagnosis and treatment would have prevented her death and, (iii) whether working conditions at the hospital may have contributed to her death.

111 Chivell, W. Finding of Inquest, 5/01 at 5.3.

During the inquest, the Coroner heard from several doctors who described the conditions under which they worked when this woman was admitted to the ED. All described a hospital under crisis conditions with staff shortages, a lack of hospital beds, a backlog of patients in the ED, some of whom had been there for three days waiting for ward admission. Of particular concern, the doctors told the Coroner that conditions under which they were working when this woman was admitted, if anything, were now two years later even worse.

As to the issue of what was being done to rectify the situation, the Coroner heard from the Director of Acute Care and Clinical Services within the Metropolitan Health Division of the DHS. The Director described in detail a range of plans to redevelop the ED and recruit more nursing staff, but on the other hand admitted that 50 beds had been closed at the hospital several weeks prior to the inquest. When the Coroner inquired whether the closure of those beds had any impact on bed access from the ED, the Director suggested that the number of patients waiting greater than 12 hours for admission into the ED had increased and that there were concerns that on some days of the week there would not be enough beds to support the emergency admission process[112].

The Coroner concluded that systemic difficulties at the hospital were causing undue stress on staff such that the risk of professional error was significant:

> There is obviously no quick-fix solution to these difficulties, and unfortunately, I was not especially reassured by the evidence of ...(DHS Director)... that a solution to all of these problems is imminent. The situation is little better than what it was in October 2000. If anything, a deterioration has occurred, leaving the possibility open that overcrowding and the resulting stress and pressure on medical staff might lead to the risk of a tragedy occurring at the hands of an otherwise competent medical practitioner[113].

In a relatively recent initiative, the South Australia State Coroner has began to receive information about the outcome of recommendations into medical related fatalities. Around 2001, the Chief Executive of the DHS started to formally respond to coronial recommendations directed to the Department or one of the health units it governed. The process developed by the DHS for

---

112 Schapel, A. Finding of Inquest, 28/02 at 6.10.
113 Schapel, A. Finding of Inquest, 28/02 at 6.13.

dealing with coronial findings currently specifies that a report must be forwarded to the Coroner within two months of the findings being handed down, advising him on the implementation or otherwise of any recommendations[114]. The Coroners Act 2003, also includes statutory provision that a Minister or other agency or instrumentality of the Crown that has been the subject of a coronial recommendation must provide a report to each House of Parliament within 6 months of receiving the findings. This report must provide details of any actions taken or proposed in response to recommendations and a copy forwarded to the State Coroner[115].

It is impossible to forecast whether this reporting mechanism will motivate intended recipients to make the sort of system changes needed to address endemic problems within hospitals that contribute to adverse events. Given the complexity and enormity of problems currently facing the healthcare system, the signs for positive change do not look particularly hopeful. The case that supports this argument is best exemplified by examining an area of practice where a raft of policy changes aimed at addressing system weaknesses has been attempted and generally failed to stem adverse events. Dealing with mental health illness has been a significant public health issue and one that has been the subject of repeated reforms. A sizable portion of the Coroner's role is taken up by investigating deaths of those with mental illness. In the next chapter, I examine deaths under the State's mental health services and further build the thesis that coronial recommendations in South Australia are by and large not translated into practice and the system is largely ineffectual in forestalling medical fatalities.

---

114 Department of Human Services (DHS), *Process – coronial matters*, DHS Insurance Services Unit, Adelaide, (date not cited).

115 Coroners Act 2003 (SA) s25.

CHAPTER 8

FATAL ADVERSE EVENTS AND STATE MENTAL HEALTH SERVICES

8.1 Introduction

The prevalence of mental illness is a significant public health issue for the global community. According to the World Health Organisation (WHO), mental and behavioural disorders are common, affecting between 20-25% of all people at some time during their lives[1]. The types and severity of these disorders vary greatly and, like physical diseases, it is not uncommon for two or more forms of mental illness to occur together in an individual. This chapter considers those with chronic severe forms of mental illness. Individuals with schizophrenia, major affective (mood) disorders or organic brain disease may experience persistent disability and functional impairment necessitating ongoing assessment and treatment that raises their risk of an adverse medical event. In addition, people with severe forms of mental illness are often marginalised members of society open to infringement of their civil rights[2]. For this reason, the coronial system is an important means by which to ensure that those who suffer a fatal adverse event do not have their death overlooked or ignored under a mental health system that, over the last 50 years, has been subjected to rolling reforms and growing criticism about provision of services, quality and safety.

While it is evident that some improvements have been made in the treatment of mental illness over this period, institutional change has often been slow. A shift away from the custodial model of care that had existed in Europe, North America and Australia for well over a century, did not begin to gain momentum until the mid 1950s. The move away from isolating the mentally ill within large specialist psychiatric hospitals to a model of community managed care was made possible because of advances in psychopharmacology and associated changes in social

---

1 World Health Organisation (WHO), 'Burden of mental and behavioural disorders' Chap.2 in *The World Health Report 2001 Mental health: new understanding, new hope,* WHO, Geneva, 2001 pp19-45.

2 Australian Health Ministers, *National mental health policy,* Department of Health & Family Services, Australian Government Publishing Service, Canberra, 1992.

attitudes toward mental illness[3]. To some extent at least, the way a society views mental illness determines the model of care provided. In the Western world, calls for deinstitutionalisation of the mentally ill have been driven by a mixture of philosophical viewpoints (human rights and civil liberty), medical influences (psychopharmaceutical) and fiscal controls (relative net costs of carers verses drugs). Sometimes the liberty has been less than civil. While deinstitutionalisation has generally been welcomed, replacement models of care provide no guarantees that the safety and welfare of the severely mentally ill are assured.

For those who die unexpectedly while under the care of mental health services, the Coroner has an important role in drawing attention to inadequacies within the health system. In Chapter 7 I established constraints and weaknesses in each stage of the coronial process in a highly structured way. While this chapter is somewhat less process ordered, inquest findings and recommendations are examined in detailed ways that clearly signpost why the coronial system has little or no impact on averting medical fatalities. At times it reads like a continuing parade of very grim stories with the bleak conclusion that nothing seems to have improved. This is the reality for many of those with severe mental illness.

The deaths presented in this chapter occurred between 1990 and 2003 and are divided into three main groups: deaths under the Metropolitan Mental Health Services; under Rural and Remote Mental Health Services; and, under Intellectual Disability Services. On an annual basis, such inquests comprise about 20% of all the cases heard by the Coroner. Since a significant number of inquests took place over this period, the cases discussed were selected on the basis that they exemplified common patterns of events evident in the majority of deaths. In most instances, the inquest findings are presented chronologically to demonstrate how coronial recommendations were mapped and multiple data sources applied, to analyse whether recommendations were implemented and similar deaths prevented.

---

3 WHO, Geneva, 2001 p49.

In the main, these deaths involve young adults, particularly males, and sustain mortality statistics that indicate those with chronic severe mental illness are at higher risk of premature death than those with no history of this disorder. In the vast majority of inquests, the findings clearly suggest that deaths could have been avoided. They also reflect the Coroner's frustration with the mental health system and his awareness of the wider issues that impact on the capacity of coronial investigations to make changes in areas where problems are greatest and resources mostly limited.

8.2 Severe chronic mental illness: major disorders, incidence and social impact

Deaths of the mentally ill comprise a significant sub-set of the Coroner's bailiwick. However, to appreciate how such deaths fit within the nature of an adverse medical event, it is important to have some understanding of the aetiology behind common forms of psychiatric illnesses. The detail provided in this section serves to establish the context and significance of deaths described later in the chapter.

Mental disorders are clinically significant conditions characterised by alterations in thinking, mood (emotions) or behaviour associated with personal distress and/or impaired functioning[4]. They are common conditions that may be present at any point of time in about 10-18% of the adult population and one in five families are likely to have at least one member with a mental illness[5]. Mental illness causes massive disruption to the lives of those who are affected and has significant, wide ranging, long lasting economic impact on society. While the severity and duration of different forms of mental illness vary substantially, those with severe chronic mental disorders are susceptible to long-term disability and, in some cases, premature death.

Chronic, severe mental disorders are highly complex illnesses that present significant challenges for sufferers, carers, health professionals and the health

4 WHO, Geneva, 2001 p21.
5 Australian Institute of Health and Welfare (AIHW), *Mental health services in Australia 2000-01*, AIHW, Canberra, 2003.

system as a whole. Mental disorders associated with chronic severe mental illness include schizophrenia, major affective (mood) disorders and organic brain diseases that affect mental function. These forms of mental illness can manifest as acute episodes, followed by residual deficits of a chronic nature.

Schizophrenia for example, is a particularly severe and potentially debilitating mental illness of unknown cause(s) that typically begins in late adolescence or early adulthood and is characterised by fundamental distortions in thinking, perception and by inappropriate emotions[6]. It affects men and women about equally, although the onset in females often occurs later than in males and women tend to have better outcomes. A diagnosis of schizophrenia is usually made on the basis of bizarre behaviour including inappropriate verbalisations and distortions of interpersonal perception[7]. While there remains considerable professional disagreement about the nature and treatment of this condition, the biomedical orientation of psychiatry and the increasing influence of evidence based medicine over the latter stages of the 20th century, have resulted in the development of distinct diagnostic criteria. For example, the widely used American Psychiatric Association's Diagnostic and Statistical Manual identifies the essential features of schizophrenia as being comprised of a mixture of characteristic signs and symptoms[8]. Symptoms of schizophrenia include delusions, hallucinations, disorganised speech, gross disorganised or catatonic behaviour and negative symptoms such as affective flattening. On average, having schizophrenia is thought to reduce an individual's lifespan by at least 10 years[9].

Another category of psychiatric illness that can lead to severe, persistent mental disability is major affective (mood) disorders. Mood disorders are highly prevalent mental illnesses, characterised by periods of depression and/or elation[10]. Major depression, the more apparent of the two forms, involves an individual

---

6 WHO, Geneva, 2001 p33.
7 Mechanic, D. *Mental health and social policy*, 4th Ed. Allyn and Bacon, Boston, 1999 esp.p24.
8 American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders*: 4th edn, Text Revision. (DSM-IV), American Psychiatric Association, Washington 2000. p298.
9 WHO, Geneva, 2001 p34.
10 Mechanic, 1999 p22.

experiencing a sustained period of sadness that can be manifested in a variety of symptoms such as loss of interest in activities, decreased energy, loss of confidence and self-esteem, diminished concentration, sleep and appetite disturbances, inappropriate guilt, thoughts of death and suicide[11]. Depression is more common in women than men and can affect individuals at any stage of life, although the incidence seems to be higher in middle age. There is some evidence, however, that depression is being found increasingly in both adolescents and the elderly[12].

Bipolar disorders are another form of mood disorder, but are distinct from major depression in epidemiology and treatment[13]. These disorders (in the past referred to as manic-depressive psychosis) are depressive illnesses in which manic episodes are evident, characterised by elated mood, increased activity, over-confidence and impaired concentration[14]. Less prevalent than major depression, bipolar disorders have about a 1% incidence, similar to that of schizophrenia[15]. According to medical researchers Tohen and Grundy, however, the number of people diagnosed with bipolar affective disorders is increasing and 90% of patients with this lifelong illness experience multiple episodes of mania or hypo-mania and depressive relapses[16].

Severe chronic mental disability can also be due to organic brain disease. Multiple forms of exogenous or endogenous brain pathology can lead to organic mental illness that results in impairment of cognitive, affective and/or motor

---

11 WHO, Geneva, 2001 pp29-30.

12 For example, the results of a US study involving 1,710 randomly selected high school students in Oregon indicated that while there was no correlation between age, prevalence and incidence of depression in adolescents and young adults, depression was increasingly being diagnosed in this age group. See: Lewinsohn, P. Hops, H. Roberts, R. et al 'Adolescent psychopathology: I. Prevalence and incidence of depression and other DSM-III-R disorders in high school students', *Journal of Abnormal Psychology*, Vol.102, 1993 pp133-144.
At the other end of the life span, a major Australian government report on depression noted that depressive disorders could manifest for the first time in later life, particularly in the elderly living in residential care and nursing homes. Commonwealth Department of Health and Aged Care & the Australian Institute of Health and Welfare, *National health priority areas report: Mental health 1998 – summary*, AIHW Canberra 1998. [This report can be accessed from the AIHW website http://www.aihw.gov.au].

13 Mechanic, 1999 p23; and, Baker, J. 'Bipolar disorders: an overview of current literature', *Journal of Psychiatric and Mental Health Nursing*, Vol.8, 2001 pp437-441.

14 WHO, Geneva, 2001 p30.

15 George, S. (1998) 'Towards an integrated treatment approach for manic depression', *Journal of Mental Health*, Vol.7, 1998 pp145–156; and, Tohen, M. & Grundy, S. 'Management of acute mania', *Journal of Clinical Psychiatry*, Vol.60, 1999 pp31-34.

16 Tohen & Grundy, 1999 pp31–34.

function and social abilities. For example, cerebral palsy is a condition manifested by persistent motor (muscle) disorders, but in severe forms can involve sensory deficits, intellectual impairment and mental retardation[17]. While not all cerebral palsy sufferers have cognitive or intellectual impairment, those with the severe form are particularly vulnerable to accidents and injury. Other conditions leading to intellectual disability include autism, Downs Syndrome and Asperger Syndrome. About 77% of people with intellectual disability have other disorders including mental illness, challenging behaviour, sensory impairment and physical disability[18]. They are high consumers of heath care, which increases their risk of an adverse medical event and, because many of those with severe intellectual disabilities reside in some level of institutional care, a fatal adverse event will come under coronial jurisdiction in the same way as similar institutionalised deaths in the mentally ill[19]. Therefore, this category of illness has been grouped under the broad criteria of organic brain disease and such case examples are dealt with in this chapter.

Other chronic forms of organic brain disease associated with severe chronic mental disorders may result from a serious head trauma or may be associated with long term psychoactive substance abuse from alcohol and/or use of illicit drugs such as opioids[20]. Dementia associated with Alzheimer's disease is another form of mental illness involving an organic brain disease that affects about 5% of males and 6% of females in the over 60 population[21]. Like those who suffer from other severe forms of psychiatric disorders, individuals with organic brain disease

---

17 Rosenbaum, P. 'Cerebral palsy: what parents and doctors want to know', *British Medical Journal*, Vol.326, 2003 pp970-974.

18 Intellectual Disability Services Council, *Development priorities for people with intellectual disability 2002*, Government of South Australia, Adelaide, 2001.

19 For example in South Australia the death of anyone accommodated in an institution with mental illness or intellectual retardation or impairment must be reported to the Coroner. See: Coroners Act 1975 S.12(1)(db).

20 Several studies have found that substance use disorders (eg alcohol, cannabis and non prescription drug dependence) were found to be more prevalent among individuals with mental illness than among the general population. See for example: Regier, D. Farmer, M. Rae, D et al 'Comorbidity of mental disorders with alcohol and other drug abuse', *JAMA*, Vol.264, 1990 pp2511-2518; and, Menezes, P. Johnson, S. Thornicroft, G. et al 'Drug and alcohol problems among individuals with severe mental illness in South London', *British Journal of Psychiatry*, Vol.168, 1996 pp612-619.

21 According to WHO, because of increasing longevity in Western populations the prevalence of Alzheimer's disease is exponentially escalating. See: WHO, *ICD-10 classification of mental and behavioural disorders: clinical descriptions and diagnostic guidelines*, WHO, Geneva, 1992b.

experience persistent disabilities and functional impairment, which require ongoing assessment, rehabilitative and social services.

There is significant evidence that those with severe chronic mental illness are a particularly disadvantaged group in society with a higher risk of premature death than their mentally healthy counterparts. In Australia, mental disorders are the second leading cause of death in males aged 15-24 (behind injury and poisoning) and the third major cause of death in females in this age group[22]. Many of these young deaths are associated with suicide, the result of a person deliberately initiating and performing an act in the full knowledge or expectation of its fatal outcome. In Western society, suicide is the third leading cause of death in those under 44 years[23].

There is a distinction, however, between those who suicide as the outcome of a psychosis and those who choose to take their own life as a response to personal circumstances while lucid and rational. Therefore, precise explanations for suicide rates need to be considered within the context of local epidemiological surveillance. The risk of suicide in individuals with psychiatric illnesses such as affective disorders and schizophrenia is substantially higher than in comparison to the 'rational' general population[24].

For example, it has been estimated that between 15-20% of those patients with severe affective disorders end their lives by suicide[25]. In the case of schizophrenia, a study by Radomsky and Haas found that 30% of patients with

---

22 Australian Institute of Health and Welfare (AIHW), 'Mortality data,' Canberra, 2002 http://www.aihw.gov.au/mortality/faqs.html [Accessed 5th September 2003].

23 WHO, *Mental health: prevention of suicidal behaviours: a task for all,*. 5 April 2002: http://www5.who.int/mental_ health/main.cfm?p=0000000140 [Accessed September 30, 2003].

24 Martin, B 'The Clarke Institute experience with completed suicide: 1966 to 1997,' *Canadian Journal of Psychiatry,* Vol.45, 2000 pp630-638; and, Möller, H. 'Suicide, suicidality and suicide prevention in affective disorders', *Acta Psychiatrica Scandinavica,* Vol.108, (Suppl.418) 2003 pp73-80.

25 Berglund M, Nilsson K. 'Mortality in severe depression: a prospective study including 103 suicides', *Acta Psychiatrica Scandinavica* ,Vol.76, 1987 pp372-80; and, Goodwin, F. & Jamison, K. *Suicide in manic-depressive illness,* Oxford University Press, New York, 1990 esp.227-244; and, WHO, Geneva, April 2002.

this disorder attempted suicide at least once in their lifetime[26]. Other researchers indicate that about 10% of patients with schizophrenia actually complete suicide[27]. Mood disorders and schizophrenia are not the only forms of chronic severe mental illness associated with a heightened risk of suicide. Almost every instance of substance abuse and severe mental disorder carries an increased risk of suicide, including organic mental illness from a traumatic brain injury[28].

While there may be an increased risk of suicide in the mentally ill, it is important to highlight that this is one outcome of a psychiatric disorder that can be avoided, given an effective and accessible health system that provides integrated primary and tertiary levels of care inclusive of ongoing mental health assessment, early intervention when required and supportive outreach management programs[29]. While the overall rate of those completing suicide in Australia and the UK seems to be declining slightly, as a public health issue the number remains unacceptably high[30]. In Britain suicide is still the second highest cause of death for those under 35 years and, according to the UK Department of Health, every year over 1,000 people who have contact with mental health services commit suicide[31]. Like other preventable adverse events, it stands to reason, that by tracing such encounters, constructive discoveries might be made to inform health authorities on how to avert similar deaths.

---

26 Radomsky, E. & Haas G. 'Suicidal behavior in patients with schizophrenia and other psychotic disorders', *American Journal of Psychiatry,* Vol.156, 1999 pp1590-1595.

27 See for example: Cohen, L. Test, M. Brown, R. 'Suicide and schizophrenia: data from a prospective community treatment study', *American Journal of Psychiatry,* Vol.1, 1990 pp.602-607; and, Caldwell, C. & Gottesman I. 'Schizophrenics kill themselves too: a review of risk factors for suicide', *Schizophrenics Bulletin,* Vol.16, 1990 pp571-589.

28 Aharonovich, E. Liu, X. Nunes, E. Hasin, D. 'Suicide attempts in substance abusers: Effects of major depression in relation to substance use disorders', *American Journal of Psychiatry;* Vol.159, 2002 pp.1600-1602; and, Baxter, D. & Appleby, L. 'Case register study of suicide risk in mental disorders', *British Journal of Psychiatry,* Vol.175, 1999 pp322-326; and, Silver, J. Kramer, R. Greenwalds, S. Weissman, M. 'The association between head injuries and psychiatric disorders: findings from the New Haven NIMH Epidemiologic Catchments Area Study', *Brain Injury,* Vol.15, 2001 pp935-943.

29 UK Department of Health, *Safety first, five year report of the National confidential Inquiry into suicide and homicide by people with mental illness,* Stationery Office, London, 2001. This report can also be downloaded at www.doh.gov.uk/mentalhealth/safetyfirst

30 Department of Public Health, *Modernising mental health services: safe, sound and supportive'* http://www.doh.gov.uk/nsf/mentalh.htm [Accessed: 14 April 2003], Australian Institute of Health & Welfare, *Mortality data,* http://www.aihw.gov.au/mortality/faqs.html [Accessed: 5 September 2003].

31 UK Department of Health, *Safety first, five year report of the National confidential inquiry into suicide and homicide by people with mental illness,* Stationery Office, London, 2001.

Coroners, through legislative guidelines that require them to investigate such deaths, provide a valuable resource to identify serious failures in mental health services. How successful has this office been in stemming the number of mental health patients who die while under the care of the public health system South Australia? To address this question it is necessary to begin at the policy level in order to evaluate whether mental health discourse has been translated into sound, safe service provision for consumers. Understanding the context in which mental health services were operating, particularly during the period 1990 to 2002 when the inquests covered in this chapter were conducted, also provides the required background from which to explore how effective the coronial system as been at preventing fatalities in the mentally ill reliant on these services.

8.3 Mental health services: does reform mean improvement?

Changes to mental health services in Australia have largely followed US and UK trends, therefore it is not surprising that issues that have surfaced in these countries have been replicated here. The reasoning behind changes to these services can be traced to a major paradigmatic shift in mental healthcare during the second half of the 20th century. Before 1955, individuals with chronic severe psychiatric disorders were most often institutionalised in public psychiatric hospitals that managed and controlled patients' daily lives through the provision of shelter, nutrition and medical treatment[32]. Thereafter, a number of independent factors shifted the model of psychiatric services away from its custodial traditions to more community based services. Medical discoveries promoted the use of neuroleptic drugs to control the more bizarre manifestations of psychotic symptoms and later the development of more sophisticated anti-depressant medications to treat mood disorders. Psychopharmacology, along with new forms of psychosocial intervention, provided the opportunity for those with severe forms of mental illness to reside outside large mental hospitals, a trend which has continued into this century[33]. In addition, the human rights

---

32 Mechanic, D. Aiken, L. 'Improving the care of patients with chronic mental illness', *The New England Journal of Medicine,* Vol.317, 1987 pp1634-1638.

33 The closure of large specialised psychiatric hospitals has generally been a contentious and divisive issue in mental health services and will be addressed later in this chapter in the context of coronial recommendations. While it is beyond the scope of this thesis to provide an

movement that advanced civil-liberties for oppressed groups widened their agenda to empower the mentally ill, a theme supported by WHO in promoting international acceptance of mental well-being as being integral to definitions of health[34].

Similar to the US and UK experience, from the 1960s onward successive Australian governments began deinstitutionalising the mentally ill and patient populations in specialist psychiatric hospitals (asylums) declined. By the end of the 1980s, in a worsening economic climate and a tightening housing market (particularly in inner cities) the complexities of deinstitutionalisation became increasingly evident[35]. Many of the chronic mentally ill in the community were impoverished and lacked life skills necessary to access social services and housing. Outside the regulated environment of the mental hospital, many also experienced difficulties remaining compliant with treatment regimes including accessing services to support regular monitoring of therapeutic medication levels[36]. Many of the dilemmas health departments were experiencing in shifting the locus of care to the community were due to poor planning and economic mismanagement. While deinstitutionalisation was implemented, funding allocated to manage the chronic mentally ill in the community, along with the specialist staff needed to care for them, remained largely with the hospitals and attempts by bureaucracies to reallocate funding met with little success[37].
By the beginning of the 1990s, the situation in Australia had reached crisis point, prompting state and federal governments to act. In 1992 the Australian Health Ministers committed their respective governments to major reforms with the announcement of a five year national mental health plan and the release of the

---

historical account of the closure of mental hospitals and the debates surrounding this issue, there are a number of excellent texts which deal with this subject. See for example: Greenblatt, M. York, R. Brown, L. *From custodial to therapeutic patient care in mental hospitals,* Russell Sage Foundation, New York 1955; and, Goffman, E. *Asylums: essays on the social situation of mental patients and other inmates,* Penguin, Harmondsworth 1968; and, Hall, P. Brockington, I. *The closure of mental hospitals,* Gaskell, London, 1991; and, Ramon, S. *Psychiatric hospital closure: myths and realities,* Singular Publishing Group, San Diego, 1992.

34 WHO, Geneva, 2001 pxv.

35 Hoult, J.Burchmore, H. *Care of the seriously mentally ill in Australia: a rating of state and regional programs,* Schizophrenia Australia Foundation, Melbourne 1994.

36 Mechanic & Aiken, 1987 pp1634-1638.

37 Hoult & Burchmore, 1994; and, Mechanic, 1999 pp1-18.

National Mental Health Policy[38]. This broad based policy outlined mechanisms to boost Commonwealth and State expenditure, reduce the stigma attached to mental disorders, decentralise care from hospitals to the community and improve the quality of mental health services within the mainstream of Australian health and welfare services.

Pre-empting these reforms, in 1991 the South Australian Government announced a mental health policy framework and in August that year established a statutory authority, the South Australian Mental Health Services (SAMHS), to implement changes described in the policy and assume responsibility for the administration of all mental health services. This reform was introduced at a time when mental health services in South Australia were regarded as the best in the country[39]. In line with national policy, South Australian reform continued to support the move from a psychiatric hospital based system to a community based mental health service. At this time the State operated two specialist mental health facilities, Glenside Hospital on the eastern side of Adelaide and Hillcrest Hospital on the northern side of the city. The policy outlined a strategy for maintaining the same number of acute psychiatric beds, but Hillcrest Hospital was to be closed and the beds redistributed to general hospitals in keeping with the ideology that acute episodes of mental illness were equivalent to other forms of acute disease and should therefore be managed in mainstream hospitals.

The South Australian medical community met the closure of Hillcrest Hospital with astonishment and anger as this hospital was regarded as one of the best, if not the best psychiatric hospital in the country[40]. Also clearly unpopular was the establishment of the SAMHS Board of Management, particularly the decision to appoint a non-medically qualified CEO. By December 1992, SAMHS was in crisis

---

38 Australian Health Ministers, Canberra 1992.

39 According to an independent review of mental health services, the State enjoyed an enviable reputation for its mental health services and people came to see how it was done. See: Brennan, P. *A new millennium: a new beginning: MCSPS the mental health services review.* South Perth, 2000 p3.

40 Hillcrest Hospital was the first psychiatric facility in Australia to be accredited by the Australian Council for Hospital Standards in 1983, its staff morale was said to be high, there was strong consumer representation on its Board and it had developed an outreach service to overcome serious deficits in the community. O'Brien, K. 'Carers at risk – some forensic implications of the devolution of mental health services' *Psychiatry, Psychology and Law,* Vol.5, 1998 pp167-176; and, Hoult & Burchmore, 1994 pp108-109.

following the death of a psychiatrist at the hand of her patient[41]. The Minister of Health responded by sacking the SAMHS CEO and the Board of Management and appointing an administrator pending a ministerial review of mental health services in the State.

The review committee released their report in 1993[42] to a generally lukewarm response and there was no concerted effort on the part of government to implement its recommendations. Also in 1993, the findings of another review of mental health services, in this case the result of a national inquiry by the Human Rights and Equal Opportunity Commission (*The Burdekin Report*)[43] was met with considerably more interest from government, stakeholders and consumers. For the Commonwealth government, the Inquiry's findings of overt abuse of the mentally ill within institutions and covert neglect in the wider community were a clear indicator that mental health strategies were having little effect. The Inquiry pointed out that the new policy of mainstreaming mental health services would not work without substantial increases in resources and greatly improved coordination between all government and non-government service providers.

There followed another series of national reviews in an attempt to fix the mental health system. In 1998, the Australian Health Ministers endorsed a second national mental health plan, which primarily focused on consolidating reforms outlined in the National Mental Health Policy. The second plan acknowledged that the main challenge to mental health reform was the need to achieve a multi-sectorial system of care to meet the needs of consumers across the entire course of their illness[44]. A recent evaluation of this five year plan indicates that national reforms have not been fully translated into expected benefits for consumers,

---

41 The murder of this psychiatrist was met with public outrage and her death became one in a series of inquests into fatal adverse events in mental health that is discussed later in this chapter.

42 See: Beltchev, G. Cramond, W. Sutton, F. *Review of the South Australian Mental Health Service*, Report to the honourable Martyn Evans, Minister of Health, SAMHS, Adelaide, 1993.

43 Burdekin, B. Guilgoyle, M. Hall, D. *Human rights and mental illness: Report of the national inquiry into human rights of people with mental illness*, Vol.1 & 2, Australian Government Publishing Service, Canberra, 1993.

44 Australian Health Ministers, *Second national mental health plan 1998-2003*, Department of Health & Family Services, Australian Government Publishing Service, Canberra, 1998.

carers or the general public and those with mental illness still cannot readily access treatment and care until their illness is advanced or they are in crisis[45].

Likewise, in South Australia, the organisation of mental health services was the subject of rolling reviews. In 1995 a project was commenced to realign mental health services clinically, financially and administratively within a regional service model similar to mainstream health services. This would occur, however, within an organisational structure where the central office of the Health Commission would oversee the funder, owner, purchaser and provider roles[46]. In hindsight, this project was yet another in a series of compromises that resulted in a fragmented system without clear strategic direction[47].

Providing adequate care in the community, particularly for those experiencing acute exacerbation of symptoms, continued to be a major thorn for the government and health administrators. In late 1996, the Community Mental Health Services in South Australia (which had replaced SAMHS) established an Assessment and Crisis Intervention Service (ACIS) in metropolitan regions. ACIS was to cater for those in crisis in the community by providing immediate assessment, intervention and hospital admission if required, as well as referral to private psychiatrists and counsellors. For those outside Adelaide, the rural and remote arm of mental health services established a single point of contact, Triage Liaison Service, which was still metropolitan based[48]. These community based teams were multi-disciplinary in nature comprising medical practitioners, psychiatrists, mental health nurses and social workers. For ACIS, a team leader was appointed to each team who was responsible for co-ordinating resources. Glenside Hospital closed its casualty department and ACIS became, and remains, the single contact point for entry into the public adult mental health system.

---

45 Whiteford, H. Gregory, P. *Evaluation of the second national mental health plan prepared for the Australian Health Ministers' Advisory Council*, Department of Health & Aging, Australian Government Publishing Service, Canberra, 2003.

46 Beltchev, G. *Mental health realignment report: a consumer focus*, South Australian Health Commission, Adelaide, 1995.

47 Brennan, 2000 p4.

48 Meredith, F. Elzinga, R. *The South Australian Assessment and Crisis Intervention Service (ACIS) information management; A report to the South Australian Health Commission*, Centre for Allied Research in Mental Health, Adelaide, 1995.

For those requiring hospital services as an in-patient, approved psychiatric treatment centres were set up in major metropolitan public hospitals. Glenside Hospital remained a specialist psychiatric facility providing the main closed ward facilities for patients detained pursuant to the Mental Health Act. These closed wards were secured areas where doors and windows were locked and patients confined for their own safety under the observation of trained mental health nurses[49]. By early 2000 most general public hospitals had a purpose built psychiatric in-patient facility. For the most part, these units had open wards, where patients were free to move about and the majority of admissions were on a voluntary basis. When a closed ward was needed in these hospitals, the patient could either be transferred to Glenside Hospital or an area in the ward converted/adapted to become a closed ward/high dependency area. When this occurred, a security guard may have been assigned at the doorway of the area to ensure the patient could not abscond and a nurse assigned to 'special' the patient[50].

Aside from the public hospitals, there were several private mental hospitals in the metropolitan area. For the most part these facilities remained privately funded and patients required health insurance to cover costs associated with admission. While it is difficult to evaluate whether there were differences in the level of patient services in these hospitals, two Australian based studies suggest there may have been. Trauer et al[51] and Hugo[52] both examined clinical outcomes and efficiency ratings between public and private psychiatric hospitals and found that admission severities for patients with schizophrenia and major affective disorder tended to be higher in public hospitals, but length of stay was shorter than in the

---

49 Occasionally, voluntary patients can also be accommodated in a closed ward on an understanding between themselves and their treating doctor that they are 'safer' in a secure environment.

50 Much of the detail presented in this section arose from discussion with two eminent colleagues from the University of South Australia, Associate Professor Eimear Muir-Cochrane and Associate Professor Nicholas Procter. During the course of this study I conferred with them about a number of issues related to mental health. Both are internationally recognised mental health nurses with extensive practice experience in acute psychiatric hospitals who have researched and published widely in this field.

51 Trauer, T. Callaly, T Hantz, P. 'The measurement of improvement during hospitalisation for acute psychiatric illness', *Australian and New Zealand Journal of Psychiatry,* Vol.33, 1999 pp379-384.

52 Hugo, M. 'Comparative efficiency ratings between public and private acute patient facilities', *Book of Proceedings: 10th Annual Mental Health Conference Inc. of Australia and New Zealand,* Adelaide, 2000 pp179-186.

private settings. This may account for why coronial records reviewed over the course of this study (from 1990 to 2002) indicated no inquests were heard into fatal adverse events involving private mental facilities. These records show that the more disadvantaged, severe mentally ill were particularly vulnerable to a deleterious outcome and that shorter stay, due to bed pressures in the public hospital system, may have been contributing to a fatal adverse event.

Although mental health services more than most government departments, were well aware that they served a high risk patient group, remarkably little research has been conducted into the incidence and prevalence of hospital adverse events in this population. Of the surveys conducted, most deal with the incidence of suicide in the mentally ill, but even this research does not provide sufficient data to identify key in-hospital factors related to these events. A recent UK inquiry into suicide and homicide in the mentally ill, however, provides some noteworthy data relevant to the issue of fatal adverse events in this population. To investigate cases of self harm, the inquiry made use of coronial inquests where a verdict of suicide or probable suicide was recorded[53]. This National inquiry found:

- in-patient suicides, particularly those occurring on a ward, were most likely to be by hanging
- around one quarter of in-patient suicides died during the first week of admission
- in around one-fifth of cases, the patient completed suicide while under constant or intermittent observation (ie close observation)
- around one-third of in-patient suicides were on agreed leave at the time of death
- post-discharge suicides were at a peak in the first 1-2 weeks following discharge
- 45% of post-discharge suicides in England and Wales, 35% in Scotland and 66% in Northern Ireland, occurred before the first follow-up appointment
- mental health teams more often regarded in-patient suicides as preventable[54].

53 In the case of Scotland, which does not have a coronial system, Procurator Fiscal investigation reports were used.

54 UK Department of Health, 2001.

Equally, coroner's inquest findings in South Australia provide useful information about the nature of fatal adverse events in those who come into contact with the State's mental health system. Discourses within coronial findings provide insight into system weaknesses and, more often than not, suggest the deaths were predictable and therefore preventable.

8.4 Coronial inquests into fatal adverse events involving the state's mental health services

The South Australian Coroners Act stipulates that an inquest may be held into the death of any person by violent or unusual causes or when detained in custody within the State pursuant to an Act or law of the State, and/or where the deceased was accommodated in an institution while suffering from a mental illness, intellectual retardation or impairment, or was dependent on the non-therapeutic use of drugs[55]. The Mental Health Act in South Australia makes provision for the treatment and protection of persons with a mental illness and outlines the law governing admission and detention of patients in approved psychiatric treatment centres[56]. In the case of the death of a person detained under the Act, a coronial inquest is mandatory, not discretionary.

Death by suicide falls under the category of a violent or unusual cause and must be reported to the Coroner, but unless the deceased was institutionalised under a detention order or had recently come into contact with a health service, the case may not come to inquest. Therefore, all cases that actually reach inquest are important and provide an opportunity to analyse how individuals with severe forms of mental illness come to complete suicide under the mental health system and identify whether coronial process have any impact on preventing similar fatalities. In the following pages I consider such fatalities under the three main service providers: Metropolitan Mental Health Services, Rural and Remote Mental Health Services and, Intellectual Disability Services. This approach has been

55 Coroners Act 1975 (SA) See: s12 (1) (a)(da)(db) and s14(1)(a).

56 The Mental Health Act 1993 was assented to on 27th May 1993 and came into operation on 6 March 1995 to repeal the previous Mental Health Act 1977. The new Act represented more contemporary views of mental illness and included an objective 'to minimise restrictions upon the liberty of patients and interference with their rights, dignity and self respect, so far as is consistent with proper protection and care of patients themselves and with the protection of the public' S.5(1)(b).

taken so that the deaths can be examined in the context of government service structures that have been established to care and protect the mentally ill.

8.4.1 The impact of coronial findings and recommendations in preventing deaths in metropolitan mental health services

The first cases presented are representative of the many people with severe mental illness who completed suicide and became the subject of a coronial inquest between 1990 and 2003. In all cases, these deaths occurred while the person was under the care of an approved psychiatric treatment hospital (either as a detained or voluntary patient) or had very recently been in contact with such a service seeking assistance. The first group of deaths occurred in metropolitan Adelaide, beginning with David, a 29 year old man, who died in a northern suburbs hospital in February 1991.

The official cause of David's death was multi-organ failure, but this resulted from him being in a coma for two months following a cardio-pulmonary arrest after he hung himself while an inpatient at a public hospital[57]. David was a deaf mute from birth with a history of mental illness and epilepsy who had on more than one occasion attempted suicide and been hospitalised. He was again hospitalised in December 1990 for an overdose of anti-epileptic medication (Dilantin) and admitted to a general ward for observation (he was assessed by the medical consultant to be medically unfit to be transferred to a specialist psychiatric hospital). According to evidence presented, he was assessed by nursing staff and a social worker on the medical ward to be a high suicide risk who needed to be detained for his own safety and that of others (he had also indicated the intention to kill a former girlfriend). One of the nurses observed, 'he was so mobile he was walking off the ward and was gone for long periods of time and we didn't know his whereabouts'. These concerns were conveyed to the medical staff but a detention order was not initiated. Unfortunately, the concerns of the nursing

57 The Coroner made mention of the fact that this death was not initially reported to the Coroner's Office because the certifying doctor did not realise the circumstances of the death were reportable. By the time the death was reported, the deceased had been buried for some time and consequently a post-mortem was not conducted. The Coroner, however, accepted the cause of death as identified on the death certificated. See Ahern, K. Finding of Inquest, 55/91.

staff were realised when the patient was found to have hanged himself in the ward.

In his findings, the Coroner noted that staffing limits on the general ward, which precluded a constant watch being maintained over the activities of the deceased, compounded the situation. He recommended that if persons with a psychiatric illness were to be kept in an 'ordinary' hospital for the duration of a physical ailment, then there should be appropriate psychiatric facilities available for the care of such people. The Coroner also noted that this was not an isolated case and made reference in the findings to another inquest held the previous year where a person was taken to the same hospital for psychiatric assessment but again was not assessed as being detainable and within half an hour or so of being discharged shot himself[58].

When these deaths occurred SAMHS was in an embryonic stage of development and psychiatric services were provided at either Glenside or Hillcrest Hospitals. The hospital concerned in these deaths did not yet have an approved psychiatric treatment facility, although plans were in train to build one. However, as the next case suggests, even being detained in an approved specialist psychiatric hospital was no guarantee against a similar adverse event.

Jack, a 47 year old male, died in October 1994 as a result of cerebral anoxia due to hanging while detained in hospital. Jack had a long psychiatric history that included bipolar disorder, personality disorder and alcoholism. From 1989 until his death, he had 28 admissions to this hospital usually associated with alcoholism and self-destructive behaviour. Presumably because of his numerous admissions, his hospital case notes contained a series of 'casualty protocols' written by various doctors as a guide for casualty staff in how to manage him on presentation. The last one written in February 1994 indicated:

> Voluntary admission should be refused unless there is some compelling change in his circumstance. If he is admitted to another hospital because of drug overdosing or self-mutilation, he should be discharged from that hospital when medically stable, but not detained ...[here]... If

58 Ahern, K. Finding of Inquest, 55/91 p4.

he arrives detained, he should be put in a closed ward overnight, and discharged as soon a practicable[59].

The day prior to his death, police conveyed Jack to an acute hospital in the Southern suburbs after they had picked him up at a hotel affected by alcohol and with cuts to his wrists. The attending doctor noted his wounds as superficial, but assessed him to be significantly depressed and really wanting to do away with himself. The doctor subsequently detained Jack pursuant to the Mental Health Act and arranged for the police to transfer him to the psychiatric hospital. The doctor telephoned staff at the hospital to advise them of Jack's detention and transfer, at which time the doctor was informed about Jack's 'casualty protocol' and subsequently faxed a copy[60]. During his transfer in a caged police vehicle, Jack was observed attempting to hang himself with his shirt. The police intervened accordingly, and reported the incident to nursing staff on arrival at the psychiatric hospital.

Jack was taken to a closed ward, whereupon he was given back his shirt by the nursing staff. The police testified that when they questioned this decision, given he had previously tried to hang himself with it, one of the staff replied Jack was 'an attention seeker who does it all the time, so what's different this time?'[61].

Jack was then assessed by one of the staff doctors who concluded he was extremely intoxicated and therefore a full psychiatric assessment was not performed. He was left lying in the coma position on the floor outside the nurses station, as the doctor felt this was the best place for him to be observed as in her opinion he was no more suicidal than he had been on previous occasions and was more at risk of aspirating vomit. Around midnight Jack was put to bed and when checked about an hour later was found hanging by his shirt from the

---

59 Chivell, W. Finding of Inquest, 14/96 p5.

60 The Coroner made two observations in relation to this. First, that while this doctor indicated that even if he knew about the protocol, it would not have overridden his decision to detain Jack – the Coroner held that had he known about its existence it would have placed some pressure on him to alter his clinical judgement – particularly because the protocol emanated from a specialist psychiatric institution. Second, the Coroner pointed out that the protocol was probably faxed to the doctor so that he should take it into account if Jack presented to him in the future. Chivell, W. Finding of Inquest, 14/96.

61 Chivell, W. Finding of Inquest, 14/96 p10.

shower rose. While he was resuscitated and transferred to a general hospital, he did not recover.

The Coroner raised a number of issues related to this death. He observed that there seemed to have been little effective communication between Jack's consultant psychiatrist and staff at the psychiatric hospital. Indeed there was some question as to whether the staff at the hospital took into account Jack was suffering from a bipolar disorder that was diagnosed in 1982, or whether they were even aware of this diagnosis. The Coroner held that Jack had multiple hospital admissions to various public hospitals around Adelaide, but there was no real communication between these hospitals regarding his condition. On all but one occasion (in 1994) the patient was discharged from the psychiatric hospital without any arrangement for follow-up care. The Coroner was left with the impression that Jack simply drifted from one institution to the next without any attempts being made to coordinate his ongoing need of care.

The existence of the 'casualty protocols' came in for particular criticism, although there was no direct evidence that it played a part in the decisions taken by the staff on the evening of Jack's death. However, the Coroner noted that the number and frequency of Jack's overnight admissions and discharges without any real attempt to provide ongoing managements for his actual bipolar disorder were so consistent with the protocol that it was inescapable to believe it didn't play a part in the earlier phases of Jack's hospital management.

The Coroner recommended that hospital administrators and others concerned with the administration of the heath system needed to consider ways in which communication between staff at public hospitals, psychiatric institutions and psychiatrics in private practice might be improved and that the practice of casualty protocols in relation to psychiatric patients should be discontinued.

It seems that the recommendation to discontinue casualty protocols was acted on[62]. The fact that the inquest findings noted Jack's private psychiatrist to be horrified by the nature of these protocols, suggesting that their existence could lead to many more 'coroner's cases', would have provided legal incentive to ensure the practice was abandoned. As it happened, counsel for SAMHS indicated during the inquest that the newly appointed senior psychiatrist at the hospital had already directed that the practice cease.

The Coroner's recommendation for improved communication among those responsible for the care and management of patients with mental illness has been less successful in its translation to practice. Indeed, this particular issue has been an ongoing source of frustration for the Coroner. In 1996, when the finding of Jack's inquest was made public, State Coroner Chivell had been in office for three years and had developed considerable experience in investigating mental health related deaths. Around this time he also began a series of inquests into six deaths where psychiatric illness was found to be a contributing factor (hereafter referred to as the series of six inquests)[63]. The first group involved the deaths of three women by homicide; two involved mothers killed by their sons and the third, a psychiatrist, killed by her patient. In each case the perpetrator was suffering from either schizophrenia or schizo-affective disorder[64] and was found not guilty by reason of insanity in the criminal court system. The second group involved the deaths of three young males with either schizophrenia or schizo-affective disorder who, in separate incidents, suffered fatal injuries from a passing train after lying on or near a railway track. Each of these deaths occurred within the space of four months while these men were inpatients or recently discharged outpatients of a specialist psychiatric hospital.

---

62 It was beyond the boundaries of this research to physically review all patient case files to substantiate this claim.

63 The findings of these six inquests were published separately from 30 July to 28 October, 1997 and can be downloaded at http://www.courts.sa.gov.au/courts/coroner/findings/index.html

64 Schizo-affective disorder is a psychiatric illness in which a mood episode and the active phase symptoms of schizophrenia occur together, preceded or followed by at least two weeks of delusions or hallucinations in the absence of prominent mood symptoms. American Psychiatric Association, DSM-IV, 2000 p298.

The attention to detail in the series of six inquests demonstrated the Coroner's determination to ensure that the findings were based on a thorough analysis of events, affording little opportunity for the recommendations to be ignored or discredited. He called Professor Goldney[65] as an expert witness, along with a number of other consultant psychiatrists, mental health workers and health bureaucrats to identify the circumstances and factors contributing to these deaths. In all six cases the Coroner found clear evidence of serious defects in the psychiatric treatment provided and concluded that these deficiencies should not be seen in isolation, but in the general context of the mental health system as a whole. Drawing on Goldney's evidence, the Coroner described staff working in mental health services as suffering from 'malignant alienation', a form of hopelessness and powerlessness that was exacerbated by understaffing, underfunding, lack of training and lack of organisational cohesion. Moreover, he found that these feelings were being transferred to patients and, like a malignancy, they were growing to a degree that patients were dying as a result.

The Coroner made a total of eighteen recommendations to the Minister of Health as well as those in charge of psychiatric institutions, the psychiatric profession and others involved in providing services to patients suffering from schizophrenia and related disorders. Among these recommendations he noted the need for:

- early diagnosis and treatment
- the Guardianship Board to be provided with accurate and up-to-date information about patients
- services to be provided by qualified psychiatrists
- better supervision and training of general practitioners in treating patients with mental illness
- efficacious and judicious medication management
- families to be keep informed of patient progress
- improved record-keeping, in particular the need for regular and accurate recording of patients' mental state
- better community education about mental illness
- the development of at least one specialist 'centre of excellence' for the provision of psychiatric treatment

---

65 Professor Robert Goldney is the Professor of Psychiatry at University of Adelaide who is frequently called as an expert witness to the Coroners Court. He has wide experience in both public and private psychiatry, is widely published and is considered an international expert on suicide (inclusive of being President of the International Academy for Suicide Research, an International Board Member of the American Association of Suicidology, and, Past President of the International Association for Suicide Prevention).

- closer attention to security for staff in psychiatric institutions
- improvements to the condition and ambience of closed words so that the detention of patients could be viewed as humane and therapeutic, rather than a punitive measure
- more flexible and suitable non-institutional accommodation for patients
- 'malignant alienation' among staff to be recognised and addressed[66].

It is probably not surprising that many of those on the receiving end of an adverse coronial finding have been critical of the conclusions drawn. There has also been criticism from some health professionals that the language used by coroners is legalistic rather than framed in relevant clinical terms and that recommendations often lack specificity as to how the system can be changed[67]. The findings handed down by Coroner Chivell in the series of six inquests (and indeed other cases he has heard) do not support this view. Most often, inquest findings are written in the clearest possible terms and the Coroner's decision trail can usually be discerned from the emphasis placed on details within the *Finding of Inquest*. Moreover, it is not the Coroner's role to spell out in detail how to implement change, though in practice, his recommendations usually specify a clear course of action(s). These recommendations usually mirror the form adopted in government health reports and inquiries and therefore failure to act on them more often falls within maladies and barriers in the health system than inability to decipher the Coroner's intent. It is also worth observing that many of the Coroner's recommendations in the series of six inquests were remarkably similar to those proposed three years later at the end of the five year UK national inquiry into suicide and homicide in the mentally ill[68].

Despite the release of the findings in the series of six inquests and repeated calls for improved communication and more coordinated management plans for patients in the mental health system, the ability of hospitals to curb the number of inpatients completing suicide continued to be problematic. Even more frustrating, warning signs continued to be ignored and circumstances behind these deaths were troublingly similar as evidenced by Ben's death in July 1996.

---

66 Chivell, W. Finding of Inquest, 31/96.

67 McMillan, N Ibrahim, J O'Brien, et al, *The role of the coronial process in initiatives for improving quality and safety in health care: an overview discussion paper*, State Coroners Office and Victorian Institute of Forensic Medicine, Melbourne, 2002.

68 UK Department of Health, 2001.

Ben, a 38 year old married man with four children, died as the result of a head injury sustained when he jumped from the roof of the hospital where he was an inpatient (*Hospital 1*). Ben had a long history of epilepsy, but his first psychiatric admission to *Hospital 1* was not until January 1996, when he was admitted for depression with some psychotic features and thoughts of harming himself and his family. Although compliant with his medications, his epilepsy was not well controlled and his mood disorder was thought to be secondary to his epilepsy. Along with anti-convulsant medications, he was prescribed an anti-depressant, but this medication seemed to cause manic psychosis and was ceased. Instead he was prescribed an anti-psychotic and tranquillising medication and was discharged with arrangements that he be followed-up at the psychiatric outpatient department.

About 7 weeks later he was again admitted to *Hospital 1* with depression and suicidal thoughts. The dose of one of his anti-convulsant medications (carbamazapine) was increased, but despite his blood results indicating the dose was still too low and paradoxically affecting the concentration of the other (phenytoin), he was discharged to the care of a psychiatrist as an outpatient at another hospital (*Hospital 2*).

His progress as an outpatient was variable, his carbamazapine dose was increased, but his blood levels remained sub-therapeutic and he was admitted to *Hospital 2* about two months later for a few days because of increasing depression, irritability and suicidal ideation. Following discharge he presented a few days later at *Hospital 1* with suicidal thoughts. He was transferred to a psychiatric public hospital (*Hospital 3*) where he was detained under the Mental Health Act for seven days before being transferred back to *Hospital 1* as a voluntary patient. His carbamazapine levels were still sub-therapeutic at *Hospital 3* but it was not clear if this information was ever passed on to *Hospital 1*. Five days later his casenotes indicated he was still expressing suicidal thoughts, however, he remained a voluntary patient in an open psychiatric ward at *Hospital 1*.

The next day Ben was found in a distressed state on the roof of the hospital car park, but was persuaded to return to the ward. The medical staff contemplated returning him to *Hospital 3* for detention, but decided to give him a further trial as a voluntary patient in the belief that he was 'petrified' of *Hospital 3* and if he was sent there, it might deter him from disclosing suicidal thoughts to staff in the future. His moods fluctuated over the next week and on the morning of his death he was very upset and expressed to one of the nurses that thoughts of suicide had returned. The nurse indicated at the inquest that while she didn't have time to talk to him then, she had arranged a meeting with him later in the morning and organised a sedative in the meantime. Nothing more was known of Ben's movements until about a half hour later when he was observed by two nurses lying across the railing of the car park just before he fell[69].

Among other expert witnesses, the Coroner again sought opinion from Goldney who, on analysing various hospital records, agreed that Ben was suffering from a major depressive disorder, probably bipolar. Goldney was critical of the patient's medication therapy particularly that the doses of carbamazapine were not increased more quickly after the blood test showed sub-therapeutic levels. As to whether Ben should have been detained and transferred to *Hospital 3* after the first time he was found on the car park roof, Goldney was less critical. He indicated that it is a dilemma for practitioners, even international experts, to predict suicide in patients and for this reason he was also not critical of the nurse's actions on the morning of Ben's death.

In his findings, the Coroner held that while Ben was an inpatient in an approved psychiatric treatment centre, *Hospital 1* did not have a closed ward that would have provided better protection. The chief psychiatrist at *Hospital 1* indicated that there were plans to develop a closed ward in about eighteen months or so, but even this assurance did not deter the Coroner from making a very clear recommendation that all major psychiatric treatment facilities in the State should include a closed ward. As of 2004, *Hospital 1* still does not have a closed ward,

---

69 Chivell, W. Finding of Inquest, 28/97.

although apparently government funding has been allocated to construct such a facility[70].

Coronial records show that during the 1990s it was not an uncommon event for the mentally ill to die as the result of a fall while hospitalised, particularly in rural South Australia. For example, in 1992 a man died after falling from an open window at a regional hospital north of Adelaide. While in this case the Coroner was unable to determine if the patient acted deliberately or otherwise, he argued that it was beside the point anyway, the patient should never have been allowed to get out of the window in the first place[71]. In 1994 another male in a regional hospital north west of Adelaide completed suicide by falling from an unsecured window. In this inquest the Coroner noted it was of some concern that physical security of hospitals and adequate assessment and communication of patients' mental state were still not being adequately attended to[72]. Five years later, in what was a remarkably similar set of circumstances to the 1992 case, an elderly man fell to his death from the window of a regional hospital south of Adelaide. The Coroner referred back to the two previous inquests observing:

> In my opinion, this absence of notification to country hospitals of important coronial findings concerning the death of patients is deeply disturbing. Had all country hospitals been notified of these findings in 1993 and 1996, [this] death might have been avoided. I have no doubt that the S.A. Health Commission was aware of the results of both inquests. In those circumstances, it is a matter of the gravest concern that the recommendations were not disseminated to country hospitals in South Australia. I draw this issue to the attention of the Minister for Human Services, in the hope that such failure of communication does not occur in future.

Unlike *Hospital 1* in Ben's inquest, these three regional hospitals were not approved psychiatric treatment centres. However, as the next case demonstrates, even in approved treatment centres physical security cannot be guaranteed, particularly when the facility is located in a mainstream acute hospital.

---

70 In December 2003 the hospital reported that construction had began on a new mental health facility which was to include a 40 bed psychiatric unit. (This was reported on page 1 of the hospital's news bulletin in December 2003. The reference has not been cited in full to protect the anonymity of the hospital).

71 Thompson, G. Finding of Inquest, 27/93.

72 Chivell, W. Finding of Inquest, 47/95.

In 1998 Luke, who was 20 years old and had recently been diagnosed with schizophrenia, was detained in the psychiatric unit of a metropolitan hospital. He was clearly unhappy about his detention and need to undergo psychiatric treatment. He appealed to the Guardianship Board to have the order lifted but the case was dismissed and he remained an inpatient, where according to the medical staff and his parents he showed some signs of improvement. While he was under a detention order, Luke seems to have had free movement around the hospital, which may have resulted from entering into an agreement with staff not to self-harm (although this was not specifically mentioned in the Findings).

On the day of his death, the nurse caring for Luke during the morning shift noted he spoke several times of plans for the future (contraindicating suicidal intent) and he also told her he had no 'suicidal ideations', a term she felt was a bit 'well rehearsed'. When the next nurse came on duty, he was unable to locate Luke and reported this to senior staff.

Staff testified that a missing person's report was not completed as it was not uncommon for patients to go missing for short periods and Luke had been known to wander the corridors before. The nurse did, however, conduct a search of the hospital grounds and attempted to contact Luke's mother (unsuccessfully) to report that her son was missing. The nurse was then called to another area to review a patient and took a meal break. As Luke had still not returned to the ward, the nurse decided to fill out a missing persons report (at this stage about four hours had lapsed). As the nurse was completing the report, it transpired that minutes earlier Luke was observed to have jumped to his death from a fifth floor window of the hospital[73].

The Coroner was critical of the lack of supervision afforded this patient. He held that an absence of 30 minutes from the ward should have been treated with alarm, particularly given Luke was assessed as a suicide risk and registered for half-hourly checks by nursing staff. He pointed out that given the large size of the hospital the nurse had little chance of finding Luke without assistance and should have notified hospital security staff since substantial parts of the complex

73 Chivell, W. Finding of Inquest, 16/00.

had video surveillance and the guards were equipped with radios. The Coroner noted several important omissions in the hospital's procedure for completing missing persons reports, including no instructions as to when the report should be completed and no mention of notifying hospital security staff. He recommended that the hospital amend its policy and procedure manual accordingly.

The design of the psychiatric unit, which was relatively new and purpose built, also came under review. The Coroner noted the lack of direct vision between the nurse's station and the entrance/exit to the unit. He held this was an important factor which had been highlighted in previous inquests[74]. He recommended that, while it was too late to redesign the unit, the hospital needed to consider how staff could monitor ingress and egress to the psychiatric facility under these circumstances.

Providing a secure environment for the mentally ill within the precincts of mainstream hospitals that primarily cater to the physically sick, has been a challenge for the government health department. Contemporary mental health practices have moved well away from punitive, custodial models of care that traditional prison-like mental institutions once favoured. Under deinstitutionalisation, the preferred model of care takes place in the community, but in times of crisis there is still a place for hospitalisation. The problem is how to provide accommodation in a setting that when required allows close observation, secured seclusion and spartan surrounds to minimise self harm, while at the same time ensuring a humane ambience in keeping with socially correct views of treating mental illness. In South Australia at least, this continues to be a source of major aggravation to government and health administrators as chief stakeholders in risk management.

---

74 Here the Coroner referred to the death of a 53 year old male who had died in the same unit four weeks before Luke as a result of asphyxia due to upper airway occlusion by a foreign body (he stuffed one of his blankets deep inside his mouth). The 53 year old male, who also suffered from schizophrenia, was detained under the Mental Health Act and was in the closed ward of the unit at the time of his death. See Chivell, W. Finding of Inquest, 15/00.

Providing quality care for the mentally ill has also provided government health departments with additional challenges not necessarily evident in mainstream hospital populations. The nature of mental illness is highly complex and still not well understood medically. In some cases, like the following, the question of inevitability is raised - given the person's history was he/she going to successfully suicide at some point anyway? Of course the converse of this argument is 'what if?' What if better systems and treatments were in place, might the outcome have been very different?

In 1997, Jason, a 26 year old indigenous male died in a psychiatric ward as a result of neck compression due to hanging. Jason first seems to have come in contact with the mental health system at the age of 18 when he was admitted to hospital following an overdose. While it appears he did not receive any formal psychiatric treatment at that stage, he was admitted as a voluntary patient to a specialist psychiatric hospital several years later after trying to gas himself. Again, there was no follow up action on his discharge and he re-presented about 18 months later after another suicide attempt. This time he was detained under the Mental Health Act. During this admission he was involved in several episodes of self-mutilation, voiced suicidal tendencies and expressed that he wanted to become a woman. A note in his case records at the time of his discharge suggested staff felt his self-harm behaviour was not suicidal in intent, but was instead 'triggered by his perceptions of rejection, particularly involving his family, homosexuality and Aboriginal status'[75]. As with his previous admissions, there was no discharge planning or follow-up.

About 6 months later, Jason was again admitted to hospital with a drug overdose and once stabilised he was transferred to the psychiatric ward as a voluntary patient. This admission seems to have been particularly complicated, not only from the perspective of Jason's illness, but as a result of an altercation with one of the nursing staff. He experienced severe mood swings, was often agitated and on one occasion attempted to barricade himself inside his room. He was then detained and placed in a seclusion room. While in seclusion, one of the nurses

75 Chivell, W. Finding of Inquest, 10/00 pp2-3.

(not the one involved in the altercation) found a rope that Jason had fashioned from a patient gown. When questioned about this Jason indicated he would have hung himself if he could have found somewhere to do it. The nurse failed to document this incident. The next day he gave the same nurse his bag containing his jeans saying, 'so that I can't hurt myself'. Again the nurse did not record this incident.

Thereafter, Jason was found to be cooperative although agitated at times and he was released from seclusion. Later that evening he was restless and unable to sleep, but the nursing staff felt his conversation and behaviour indicated he was looking to the future (a contraindication of suicidality). Nonetheless, when checked at 2am he was found hanging from a sheet tied to the rail in the wardrobe of his room.

The Coroner called on the opinion of an expert forensic psychiatrist, who observed that from what he had read about Jason's medical history, it was likely that he was going to successfully suicide at some point. In spite of this comment, the psychiatrist was critical of aspects of the patient's management and observed that while the altercation with the nurse was not a major precipitating event, it should be seen as part of what occurred leading up to the suicide.

In his findings the Coroner found inconsistencies in Jason's management plan, particularly in relation to how often his whereabouts needed to be checked. While some aspects of the documentation were commended, the Coroner held failure to document the 'rope' in the seclusion room and the patient handing over his jeans were serious omissions. The Coroner recommended that the hospital reinforce to medical and nursing staff the need for clearly structured management plans and proper record keeping. He also recommended that all psychiatric institutions remove wardrobe rails and replace then with plastic hooks that would not weight bear so they could not be used as hanging points.

The UK inquiry made similar recommendations in response to hanging being the commonest method of self harm by inpatients with psychiatric illness[76]. Likewise, coronial cases in South Australia confirm hanging to be the most frequent means for the institutionalised mentally ill to complete suicide. Therefore, minimising potential hanging points and providing adequate surveillance to observe patients at risk in approved psychiatric treatment centres would seem a fundamental management strategy with which health departments and hospitals would readily comply. While the intention may have been there, coronial findings like those from the inquest into 43 year old Anthony's death in 1998 indicate that in practice, coronial recommendations were making little difference.

Anthony suffered from major depression thought to be related to an organic brain disorder following a head injury in the early 1990s (he also suffered from epilepsy but in this case it was controlled by medication)[77]. He had several hospital admissions for depression, the last to a regional hospital where he attempted to hang himself while showering. Following this attempt he was transferred to the psychiatric unit of a metropolitan hospital and admitted as a voluntary patient. The next day, unbeknown to the staff, Anthony absconded from the hospital and attempted to again hang himself. As this proved unsuccessful, he purchased two knives and went to the beach where he cut his wrists and waded out to sea. He seemed to have second thoughts and sought the help of a local shopkeeper and was subsequently returned to the hospital where he was detained and admitted to a closed ward. His anti-depressant medication was changed and his condition appeared to improve to the extent that he was allowed into the open area at the discretion of the nursing staff. While he remained detained, as part of Anthony's rehabilitation he took part in several outings from the hospital without incident.

At 5pm on the day of his death, Anthony's demeanour was described by a nurse as flat and depressed, but no different from any other day in recent times. Soon after, he walked out of the ward unnoticed until 6.30pm when three young

76 UK Department of Health, 2001 p159.
77 Boucaut, W. Finding of Inquest, 2/99.

children came across his body in vacant land near the hospital hanging from a tree.

The Coroner held it was of concern that a detained patient within a psychiatric ward might be able to absent himself for the purpose of committing suicide without being noticed by staff. Like other similar findings pre- and post-Anthony's inquest, the Coroner recommended the need for improved methods of patient monitoring to enable staff to detect and act when patients absconded. However, the issue of patients absconding has by no means abated. In September 2003 it was reported that over the previous year, 208 patients with mental illness had escaped from the State's major psychiatric hospital. The Acting Minister of Health acknowledged that there were obviously major problems at the hospital and announced that the hospital's CEO was conducting an internal review into security[78]. Eight recommendations arose from this review, most of them echoing almost exactly those raised previously by the Coroner including the need for missing person policies to be amended to reflect appropriate notification about those who abscond while detained, better patient monitoring and improved observation and documentation of patient's mental status. What remained unanswered, was why these policies and procedures were not already in place given the Coroner's repeated recommendations and what faith could the public hold that these recommendations would be acted on when an independent authority like the Coroner was clearly not being listened to?

Patients absconding from institutions, however, was but one of many issues confronting mental health services. Another concerned how deinstitutionalisation was working for the mentally ill who recognised they were in crisis and wanted to access appropriate hospital care. Unfortunately, when this was unsuccessful and the outcome fatal, they too came under the purview of the Coroner. Unlike those detained pursuant to the Mental Health Act, however, conducting an inquest into these deaths was discretionary. In South Australia where there are about 200 suicides per year[79], for such deaths to reach inquest

---

78 Hunt, N. [reporter] 'Escapes prompt massive security upgrade', *The Advertiser*, 3 September 2003 p7

79 The Australian Bureau of Statistics (ABS) reported that in 2002 there were 174 suicides in South Australia out of a total of 11,991 deaths. The 25 to 34 year age group recorded the

the Coroner must decide that the case is in the public interest, the circumstances of which merit a detailed examination to prevent future deaths.

As very few of these deaths ever reach inquest, each case that does should be viewed as significant. The inquest into the death of 47 year old Paul is a pertinent example. Another of several inquests I attended during the course of this study, I have included extracts from my field notes, scripted below in italics to differentiate from what was documented in the *Finding of Inquest*. This extract reflects nuances not captured by objectified accounts of events in the *Finding* and serves to demonstrate how those appearing in court are dealt with under the Coroner's watchful eye and no nonsense vernacular.

Coroners Court Day 1.
There were seven of us in court today, the Coroner, Counsel Assisting the Coroner, Counsel for the Hospital and ACIS[80], Counsel for the SA Police (SAPOL), two court orderlies and me. The inquest was into the death of Paul who died in February 2000 from neck compression due to hanging.

Counsel Assisting commenced the inquest with a summary of the case:

- *Paul had a known psychiatric medical history and was under the care of a private psychiatrist for a chronic low grade depressive illness for which he was prescribed anti-depressants. (This was taken by affidavit and the psychiatrist was not called as a witness)*
- *In February 2000 the deceased consulted a GP with what may have been suicidal ideation*
- *Two days later the deceased telephoned ACIS at 10.45am in a 'situational crisis', possibly with suicidal ideation, and he was told that an ACIS team would visit him at 2.30pm that day*
- *At 12.00pm (same day) the deceased attended the ED of the Hospital where the triage nurse noted 'suicidal' on his triage form, he was assessed soon after by a surgical resident and discharged about 45 minutes later*
- *About the same time two police officers attended the deceased's home to check on his welfare following a call from the duty RN at ACIS. The door was unlocked and the police entered the residence and observed*
    a) that the deceased was not at home
    b) two cannabis plants were in the unit
    c) a rope was on the floor tied in what appeared to be a noose

---

highest number of deaths with a total of 41 people completing suicide. Australian Bureau of Statistics, 2003 http://www.abs.gov.au/ausstats/ [Accessed 29th December 2003].

80 The hospital and ACIS team came under the same metropolitan regional mental health service and therefore one counsel jointly represented both institutions. This lawyer was one of a panel of solicitors used by the DHS to represent its health services in cases where there was the potential for negligence litigation against the hospital and/or its workers.

- *A social worker and registered psychiatric nurse (RPN) from ACIS accompanied by the two police officers returned at 2.30pm. Following assessment the social worker and RPN diagnosed the deceased with 'situational crisis', provided some counselling and left about 45 minutes later*
- *The police officers then interviewed Paul regarding the cannabis plants, issued an expiation notice and left*[81]
- *Next day the deceased was found hanging by the rope, the result of an apparent suicide.*

Witness 1. GP - Counsel Assisting examining:
The GP indicated he could not recall the deceased although 'clearly I saw him two days before he died as I have recorded the consultation in the case notes' (subpoenaed by the Coroner). Normally, Paul saw another doctor in the practice. The GP's casenote entry was brief and vague, but it appeared that the deceased's presenting complaint was in the nature of a mental health problem: 'He had run out of Prozac (an anti-depressant) and had a skin rash'. There was no record that indicated the GP performed a mental or physical examination although he provided a prescription for 6 months of Prozac.

At the conclusion of Counsel's examination the Coroner quoted from a report obtained from Professor Goldney, in which he noted that mental illness was like any other chronic illness; if a patient visits a doctor with chest pain, then the blood pressure, vital signs and ECG are recorded. Likewise, when someone attends a doctor with a mental health illness, a mental status assessment should be performed and recorded to provide a longitudinal account of the patient's progress. The Coroner stated to the GP sternly – 'I will not beat round the bush – your notes are clearly inadequate for this purpose'. The GP, who was not represented by Counsel, apologized for the brevity of his notes and was dismissed.

Witness 2. Hospital Surgical Registrar - Counsel for the Hospital/ACIS examining:
The registrar was on duty the Sunday Paul attended ED at 12.04pm with a preliminary diagnosis of 'suicidal' given by the triage RN who categorised the patient as a Priority 4 (low priority). The registrar recalled ED was busy at the time, but remembered reviewing Paul, who presented with two problems (i) anxiety related to losing keys to his house where he had some cannabis plants, (ii) concern about his Hepatitis C status which he thought might lead to liver cancer [all of which the registrar thought quite reasonable]. The registrar suggested he should see his GP, however, Paul refused saying he didn't like his doctor. The registrar testified he then undertook a mental status examination on Paul, but didn't document the results in the patient's casenotes. At no point did Paul inform him that he had seen a GP two days previously or that he had phoned ACIS that

81 Subject to S45(a)(2) of the Controlled Substances Act 1984, before a prosecution is commenced against a person alleged to have committed a simple cannabis offence, an expiation notice must be given to the alleged offender under the Expiation of Offences Act 1996.

morning and they were planning to visit at 2.30pm. The registrar concluded Paul was in a situational crisis and:

- *recommended a new GP, wrote a referral letter, a copy of which he gave to Paul and asked him to make an appointment*
- *provided a card with the ACIS telephone number and told Paul to contact this agency if he needed urgent assistance for his mental health state.*

Counsel for the Coroner then cross-examined the registrar and asked why the triage RN had made the preliminary diagnosis of 'suicidal' and 6 minutes later he (the registrar) decided that Paul was no longer suicidal? The registrar was unable to clearly explain this, acknowledging he never spoke to the triage RN to ascertain why she thought the deceased was presenting with suicidal ideation.

The registrar also acknowledged that he could have sought a psychiatric consult from the psychiatrist registrar on call, but in his opinion he did not believe the patient was suicidal. Counsel noted that the registrar in his statement to the police said that the ED was busy on the day, however, the deceased's casenotes indicated that Paul was seen by him at 12.10pm (6 minutes after arriving to ED). The registrar attempted to explain to the Coroner how the triage priority system works. At this point the Coroner made it very clear that he knew exactly how it worked and that a Priority 4 usually meant a wait of about 3 hours – therefore the registrar 'was either very mistaken about how busy ED was when the victim attended or Paul's condition was such that medical assessment was seen to be urgent based on his suicidal presentation'.

The registrar was unable to explain this, but suggested, 'perhaps ED was not as busy as I thought'. The Coroner repeated the same points as he had to the GP including the inadequacy of his documentation in the casenotes - although not in quite the stern tone he used with the GP, whose demeanour came across more dismissive and condescending than the registrar's. This difference likely reflected the intervention of Counsel for the Hospital/ACIS who told me about preparing the registrar for his testimony before the Coroner including advising him to acknowledge the deficits of his assessment and record keeping.

Five more witnesses were called during the inquest including one of the police officers, Professor Goldney who provided both written and oral expert testimony, the social worker and RPN from ACIS who attended Paul at his residence and a senior staff member at ACIS who was called by Counsel for the Hospital/ACIS to explain to the Coroner the actions that had been implemented to prevent a similar event occurring in the future. These changes included:

- that the Hospital now employed RPNs in the ED on all shifts so that when a person presents with a mental health problem they are seen by this level specialist nurse for a mental status examination, rather than a resident doctor. The RPN can consult directly with the psychiatrist registrar who takes the next step of the assessment and makes the final decision on management
- ACIS had introduced casenote audits by senior staff to review the standard of documentation and advise staff where this is found to be wanting and the agency has established a death review group so that when a patient dies unexpectedly the team will review the circumstances around this as an education/quality improvement initiative
- the Psychiatric Triage Schedule form had been reviewed to remove ambiguities that arose during the inquest when tick boxes to questions were not filled out [82].

The Coroner also heard that when the police, social worker and RPN visited Paul's flat, they all reported seeing a rope (seemingly tied in a loop or noose). In spite of this potential sign, the social worker and nurse testified that they believed he was not psychotic and did not appear to be suicidal. Paradoxically, when they returned to their office they made a note under presenting complaint on Paul's Psychiatric Triage Schedule "feeling suicidal and unable to cope'.

Inadequacy in the treatment provided by the GP, particularly in giving Paul a six-month prescription of antidepressants at the first consultation with no follow-up arranged, was one of the issues raised in the findings. It will be recalled from the series of six inquests, that the Coroner had already recommended that GPs be provided with better supervision and training in treating patients with mental illness. The significance of this recommendation was supported by the findings of a national survey into the mental health of Australians that concluded GPs were the major providers of care to those with mental disorders[83]. Moreover, a separate Australian study had found that evidence from practice reviews

---

82 It will be recalled from Chapter 4, that this type of statement was referred to by the Coroner as 'confessing the void', where a party outlines positive changes that have been taken since the event in an effort to avoid an adverse coronial finding. It is worth noting that in Paul's case only the last action was implemented as a direct result of his death – the others having arisen from previous adverse events. Nevertheless, the Coroner saw these actions in a positive light and thus a harsh finding against these agencies was avoided.

83 Australian Bureau of Statistics, *Mental health and wellbeing: profile of adults Australia 1997*, Commonwealth of Australia, Canberra, 1997.

indicated major deficits in the quality of care provided by GPs to those with mental illness[84]. While some effort was made through professional colleges, such as the Royal Australian College of General Practitioners to address training in this area via continuing professional development points required to maintain registration, evidence of improved services for the mentally ill by GPs has yet to be demonstrated at the national level.

Another of the many issues that arose in Paul's inquest was the presence of the police, who frequently accompany ACIS workers to provide security during home assessment visits. The Coroner was concerned that this may have interfered with the ACIS workers' ability to properly assess Paul. Paul knew the police were there not only to provide security, but also to talk to him about his cannabis plants, which they had discovered earlier in the day when checking on his whereabouts. The Coroner recommended that a protocol be developed, or an existing protocol be modified, to provide guidance to the police and ACIS workers attending premises, so that psychiatric services could be provided without the prospect of full law-enforcement being carried out as the result of the police presence. In making this recommendation the Coroner referred to a previous inquest where the need for such a protocol had been raised[85]. He also recommended that the changes ACIS (and presumably the hospital) presented at the inquest should be supported, not only to improve workers' performance, but also to ensure patients receive access to qualified psychiatric treatment at an early stage.

It is worth noting that two months prior to Paul's death, the same hospital and ACIS agency were involved in a remarkably similar adverse event. This involved Kerry, a 43 year old mother of four children who also completed suicide while under the care of ACIS. While subject to an inquest, this case was not heard until July 2002, nevertheless, the circumstances of Kerry's death serve to further illustrate the barriers those in mental health crisis may experience in accessing adequate services.

---

84 SPHERE supplement, 'A national depression project', *Medical Journal of Australia,* Vol.175, July 2001.

85 The case the Coroner referred to involved a 39 year old female with a history of affective disorder and substance abuse who completed suicide by hanging in 1998 under similar circumstances. See Chivell, W. Finding of Inquest, 27/2000.

Kerry had been treated for depression for several years and just prior to her death had consulted general practice doctors, a specialist psychiatrist, and on two occasions presented to a hospital ED with symptoms of major depression and suicidal thoughts. The inquest heard expert opinion that was critical of the care she had received on both occasions at the ED. The examination and recording of findings by largely non-specialist medical staff were again found to be inadequate suggesting not enough was done to probe deeper into her reason for presenting and true state of mind before being sent home on both occasions.

On referral from her GP, Kerry was assessed four days before her death by a private psychiatrist who diagnosed major depression with significant endogenous features. The psychiatrist telephoned ACIS, whom he described as the 'gatekeepers to psychiatric admissions', to arrange urgent hospitalisation. He was told there were no beds available, however, given his description of Kerry's features to ACIS staff, including the fact that she wanted to harm herself, the psychiatrist expected a bed to be found for her within 24 hours or less. On this assumption, and not wishing to cause Kerry further distress, he decided not to detain her under the Mental Health Act. Kerry's mother, who was caring for her at the time, also called ACIS to inform them that she could not manage her daughter and that Kerry had asked for all the knives in the house to be removed, and had been questioning her along the lines of 'will I make it?'

A doctor and RPN from ACIS visited Kerry later that day in her home. This doctor took the view that a more appropriate treatment plan was to manage Kerry at home supported by daily visits from ACIS workers[86]. This decision was not conveyed to Kerry's psychiatrist until after her death. Kerry was visited by nursing staff from ACIS on the following two days and while it appears she showed some slight improvement (with the result that an ACIS nurse decided she

86 This doctor, while having some psychiatric hospital experience, did not have a formal psychiatric qualification. The ACIS Team Leader called as a witness agreed that it was extraordinary that the management plan of Kerry's psychiatrist, who was described as eminent, very experienced, reputable and competent, was effectively seconded guessed by another practitioner of considerably less experience. Schapel, A. Finding of Inquest, 19/02 at 7.11.

only needed a telephone consultation on the third day) Kerry was found early the next morning by her brother hanging from a tree in the backyard of her home.

In making his recommendations, the Coroner referred in detail to the findings outlined in Paul's case. Indeed, evidence about the actions taken by the hospital and ACIS set out in Paul's inquest were reiterated in his report[87]. The Coroner also noted that he had received a letter from a senior health administrator from the DHS describing a recent innovation in relation to suicide risk assessment. This included a formalised assessment process where those with a mental illness, on presentation to a public health service, would have a formal risk assessment undertaken by an appropriately qualified mental health professional prior to admission, and thereafter at regular intervals. The aim of this risk assessment was to minimise the likelihood of adverse events within the context of the overall management of patients.

The Coroner made five recommendations, most of which related to the need for improvements in communication between staff to ensure all available information is made known to relevant doctors whose responsibility it is to make a diagnosis and decide upon a management/treatment plan of patients with mental health issues.

In psychiatry, a distinction has been made between an individual experiencing a mental illness emergency as opposed to a crisis. Although these terms are often used interchangeably, an emergency is described as a life-threatening situation that demands immediate response by securing physical safety, removing the person from the source of danger and defusing physical violence[88]. This would most often involve detaining the patient in an approved psychiatric treatment facility. On the other hand, a crisis may not be immediately life threatening and therefore an appropriate early response would be assessment and intervention to defuse stress and interpersonal strife. Whether an emergency or crisis, a

---

87 The Coroner who heard this inquest was not the State Coroner, but rather an acting coroner who may have sought reference to similar cases in order to make findings consistent with previous inquests.

88 Rosen, A. 'Crisis management in the community', *Medical Journal of Australia*, e-resource 1998 http://www.mja.com.au/public/mentalhealth/articles/ rosen/rosen.html [Accessed 17th October 2003].

determinant of quality care rests with early intervention and appropriate treatment, particularly in preventing suicide. As evidenced by Paul's and Kerry's inquests, under deinstitutionalisation the dilemma for mental health professionals in treating a patient in crisis seems to be whether early intervention should occur in the community or hospital.

Clearly, the benefit of hindsight provided by these inquests suggests hospitalisation would have been the appropriate early management strategy. According to Goldney, one of the consequences of deinstitutionalisation has been the loss of a critical mass of psychiatric expertise that had previously been available in specialist psychiatric hospitals[89]. This is based on the assumption that, when there is a concentrated mass of expertise in one or two dedicated institutions, it is more likely that an individual will have access to specialist staff than in the community where there may only be four of five people at one centre and services become easily overloaded. He has called for the pendulum to swing back and for the government to provide more institutionalised facilities that offer old fashioned asylum, places of expertise where the acute mentally ill in crisis can be accommodated[90]. Others like Stefan Priebe, Chair of Social & Community Psychiatry at St Bartholomew's Hospital, London, disagree, suggesting instead that there is little, if any, research evidence that indicates early institutionalised psychiatric treatment prevents more negative illness outcomes[91].

There is, however, evidence to suggest that in order to adequately manage an individual in crisis in the community, a 24 hour crisis response service must be available[92]. In South Australia, the current service offered by ACIS usually operates from 8am until 10.30pm seven days per week and outside these hours a

89 Goldney, R. quoted by Chivell, W. Finding of Inquest, 31/96.
90 Goldney, R. quoted by Craig, L [Reporter] 'Closing asylums leaves trust tenants at risk', *The Advertiser,* 7 June 2003 p2.
91 Priebe, S. & Turner, T. 'Reinstitutionalisation in mental healthcare', *British Medical Journal,* Vol.326, 2003 pp176-177.
92 Hoult J, Rosen A, Reynolds I. 'Community orientated treatment compared to psychiatric hospital orientated treatment', *Social Science Medicine,* Vol.18, 1984 pp1005-1010; and, Rosen, 1998.

telephone advice service is available[93]. The State Director of Mental Health Services has been highly critical of the inadequacy of this service in providing 24 hours coverage, stating 'The way it is being run just can't continue because psychiatric illness takes no notice of the day or the clock'[94]. Despite ongoing pleas via the media, he has thus far been unable to persuade the government to extend the number of ACIS teams and provide 24 hours coverage as occurs in other states. Consequently, those requiring immediate intervention out of hours have no alternative but to attend a public hospital ED.

8.4.2 The impact of coronial findings and recommendations in preventing deaths in rural and remote mental health services

Location and level of service provision to the mentally ill in crisis is a vexatious issue with strong proponents on both sides of the deinstitutionalisation/ reinstitutionalisation fence. While the merits of either side of this debate are outside the context of this thesis, coronial findings presented so far indicate that, whether treated in hospital or in the community, the risk of a fatal adverse event is unacceptably high. If this is the situation in Adelaide where the concentration of both community and institutional services is greatest, how are the mentally ill in crisis faring outside the metropolitan area?

Not well, according to the 1993 findings of *The Burdekin Report*, which identified major problems with the quality and level of services in rural and remote South Australia. The Inquiry had heard from health administrators who reported that few regional hospitals had the resources to deal with people in acute phases of mental illness with one CEO stating 'because of economies of scale, in a place like South Australia where there are no cities of more than 30,000 outside of

---

93 Personal communication with the Assessment and Crisis Intervention Service (ACIS) 21 October 2003. Some ACIS teams, however, do not work on weekends and public holidays and it was reported that during the 2003/04 Christmas and New Year holiday period police had been left to deal with callouts involving psychiatrically disturbed people that were normally the responsibility of the ACIS teams. Colin, J. (Reporter) 'Mental health teams on holiday', *The Advertiser*, 27 December 2003 p9.

94 Phillips, J. quoted by Colin, J. (Reporter) 'Mental health teams on holiday', *The Advertiser*, 27 December 2003 p9. Also see: Phillips, J. quoted by Castello, R, (Reporter) 'Funding farce: mental health chief blasts Govt', *Eastern Courier Messenger*, Wednesday 15 October 2003 pp1-2.

Adelaide, ...[country people]... are particularly disadvantaged"[95]. The Inquiry also heard that shortage of appropriate facilities in some instances resulted in the mentally ill being detained at the local jail or police cell before being transported by police, often over long distances, to a city hospital. The vast geography of country South Australia and sparse population in remote regions were identified as inhibiting factors to providing comprehensive services. Even in larger urbanised regional centres with acute hospitals, most did not have trained psychiatric staff to provide the level of care required and, even when they did, they were so scare as to be unable to provide around the clock cover.

Starting with the death of Sandra in 1995, the following cases support the Inquiry's findings and explain the problems that arise when trained staff and coordinated mental health services are unavailable. These cases also suggest that 10 years on from *The Burdekin Report* little has changed.

Sandra was known to staff at the local hospital having had a history of psychiatric illness that involved self harm from lacerating both wrists and attempting to electrocute herself in the bath. Three days prior to her death, her employer conveyed her to hospital after finding her in a vehicle attempting to poison herself by carbon monoxide. At the hospital she was given oxygen and recovered reasonably quickly, but became agitated and tried to leave. The nursing staff, concerned for her welfare, drew her case to the attention of a doctor who saw her very briefly but did not have time to assess her more fully and she was allowed to leave.

In their concern for Sandra, the nursing staff contacted her GP to advise him of what had happened and also contacted the police to check on her welfare. The police called around to her flat, found her crying and distressed with injuries to both wrists, which were bleeding. They restrained her and pursuant to the Mental Health Act conveyed her to the hospital, where a locum doctor reviewed her[96]. There seems to have been some confusion as to what the locum doctor

---

95 Burdekin et al 1993 pp678-679.

96 A locum doctor is one who normally works outside the public service, but may be brought in to fill a temporary vacancy.

was told about her presentation to hospital that morning, in particular whether the doctor who had briefly seen Sandra had actually assessed her. The locum seemed to be under the impression that she was assessed by the first doctor, although the nursing staff were of the opinion that he was told otherwise. Nevertheless, the locum, who testified he did not read Sandra's casenotes before seeing her, decided not to detain her and she was discharged.

The nurse manager and RN on duty were alarmed about Sandra's discharge and contacted the police to again check on her welfare. The police called around to her flat several times to check on her wellbeing but she was not at home. Sandra's family was also concerned, culminating in her brother who was checking on her whereabouts finding her dead in a van. The post-mortem concluded that Sandra, aged 30, had died from carbon monoxide poisoning[97].

The Coroner conducted this inquest in the country town where the death occurred. Two expert witnesses were called who concluded that, given the deceased's history and presentation, she should have been detained when taken to the hospital by the police. While critical of the locum doctor, they appreciated he was in a very difficult position as a temporary medical officer dealing with a patient who presented with complex problems. The Coroner also heard evidence from the Regional Director for country health that the government was planning to put in place strategies like telemedicine facilities to better support country doctors dealing with mental health patients and provide them with assistance when these patients were discharged from hospital.

In his findings, the Coroner observed this town was more fortunate than most in that there was a resident consultant psychiatrist, however, he was away during Sandra's presentations to hospital. The Coroner recommended that formal written protocols be developed to assist doctors or nurses confronted by such a psychiatric emergency to make a decision about what can be done and how it can be delivered. Somewhat optimistically, he reasoned that once implemented these plans should result in a great improvement in the psychiatric services available to country people and reduce the likelihood of a similar death.

97 Chivell, W. Finding of Inquest, 40/95.

The Coroner returned to this same town a few years later to conduct another inquest into a similar death where a patient had not been detained as a means of reducing the risk of self-harm. The inquest was into the death of 23 year old Wayne, a male with a history of violent behaviour, depressive disorder and drug and alcohol abuse who had completed suicide in 2001. Wayne was also well known to the regional mental health unit and hospital, where he was admitted about two months prior to his death for drug induced psychosis. He discharged himself against medical advice, upon which the nursing staff contacted the coordinator of the mental health unit, who was a social worker. Despite the social worker's efforts to persuade Wayne to return to hospital he refused, so a telemedicine conference interview with a psychiatrist in Adelaide was arranged. Wayne failed to keep this appointment and as he was in the care of family it was decided no further intervention would be useful.

Wayne's mother became increasingly concerned about her son's bizarre behaviour and consulted a local doctor who advised her that unless Wayne wished to be helped there was little that could be done and told her to call the police if her son became violent. The same day the mother sought advice from the police, who indicated that they couldn't do anything unless an offence was committed. However, the police officer did attempt to contact the drug and alcohol services counsellor at the hospital on the mother's behalf. The counsellor who was employed twenty hours per week (half of which was spent counselling and the other half on community development work) was unavailable so the police left details and an urgent message for their call to be returned. As it turned out, the counsellor was on sick leave, this service did not operate a home-visiting crisis intervention service, and anyone exhibiting signs of mental illness would have been referred on to the mental health unit. No further action was taken and the following morning Wayne was found hanging in the backyard of his parents' property[98].

During the inquest the Coroner heard from the coordinator of the mental health unit who testified that his organisation did not provide a crisis intervention

98 Chivell, W. Finding of Inquest, 7/03.

service of the type available in Adelaide (ie ACIS), however, if the police had contacted his agency instead of the drug and alcohol counsellor, they would have been advised to use their powers under the Mental Health Act to detain Wayne and convey him to the hospital for assessment. The police response as to why Wayne was not detained on the day, was that there were only three officers on duty, which would have tied up two leaving one to look after the rest of the town. When the doctor who treated Wayne on several occasions at the hospital was asked why he never considered detaining him, he responded that doctors were under constant pressure from health administrators to exercise their powers of detention with circumspection as the hospital was not an approved psychiatric treatment centre and detention was a drastic and expensive step that involved a risky trip to Adelaide with an agitated patient in an aeroplane.

It was pointed out to the Coroner that plans were in train to make the hospital an approved psychiatric facility, however, this would be for 'non-combative' patients only, which Wayne would not have been classified as anyway. The Coroner also heard that things had improved since Wayne's death. The drug and alcohol service and the community mental health unit had been co-located to improve communication and plans were being made for a new intake system that would provide a more highly skilled worker to take incoming calls to these services and re-direct enquiries to the appropriate organisation. The Coroner recommended to the DHS that they proceed with all haste to develop such a system.

Whether the presence of such a system would have changed the outcome of Wayne's death is difficult to evaluate. As the next case shows, even with admission to an approved psychiatric facility in the city, without comprehensive discharge planning and adequate services back in the region, the outcome may be the same. The following inquest was conducted in 2002 and was another of the inquests I attended. The interesting feature of this case was not so much the circumstances of the death, which followed a similar pattern to all the others, but rather the Coroner's increasing vexation and frustration with the mental health system, evident in his findings.

By the time Neil was 34 years he had a lengthy history of psychiatric illness with a number of admissions to various hospitals with diagnoses including depression, personality disorder, self inflicted gun shot wound and drug overdoses. About a month prior to his death he was detained by a local country GP and conveyed to a psychiatric hospital in Adelaide. He was assessed over two days and a further application was made to extend his detention for 21 days. Over the next three weeks his condition seemed to improve and he was discharged back to the country town where he lived. On this occasion a discharge summary was faxed to the community mental health nurse in Neil's region.

Four days later the local GP again detained Neil after he had told police he was feeling suicidal. He was conveyed back to the city hospital where he was diagnosed with major depression and identified as a moderate to high suicide risk. This time Neil was not detained, instead agreeing to remain as a voluntary patient and entering into a safety contract. Four days later two doctors, one of whom was a consultant psychiatrist, assessed him to still be depressed and suicidal and noted in his case records 'he is happy to stay as an in-patient and has no plans to self harm if he remains...(however)...if allowed to go home at this point he will hang himself'[99]. He was reassessed two days later and his condition was found to have improved and another note was made that he could be discharged three days later (Monday). On contacting the hospital to check on Neil's condition, the community mental health nurse informed staff that there were no mental health services available in Neil's region on the weekend and she would be away on the Monday, thus the earliest she could review Neil at his home would be on the Tuesday.

For some reason, perhaps connected with bus timetables and hospital bed pressure, Neil was discharged at 7:15am the next day (Saturday) with a note saying medical staff had arranged follow-up. He was found several days later hanging in the shed of his property, the post-mortem results indicating that he completed suicide sometime on Monday.

---

99 Chevill, W. Finding of Inquest, 27/01.

The Coroner held that no follow-up occurred on Neil's last admission. He heard from a consultant psychiatrist, called as an expert witness, that the timing and standard of discharge was generally poor in that:

- on the evening before his discharge Neil had still been expressing homicidal thoughts
- Neil had only commenced taking Fluoxetine (an anti-depressant) four days before his discharge – and this drug takes between two and three weeks to have some effect
- it was generally held in the mental health system as inappropriate to discharge a patient on the weekend when there were no professional services available and in this case, insufficient support mechanisms in the region
- Neil was returning to the same environment and stressors which were operating on him prior to these admissions.

In his finding into Neil's death the Coroner referred back to previous inquests where the same issues had been raised and he had been assured problems would be fixed. He recalled the inquest into Sandra's death and observed:

> If patients are to receive effective treatment in the community after their discharge from hospital, then the mental health system must communicate better with General Practitioners. ... It is particularly disappointing to find that such difficulties are still being experienced in 1999. I was advised in 1996 that the amount of communication with, and support of, country General Practitioners was being increased, with use of such advances as telemedicine ... Nothing of the sort happened in this case, and I hope I was not being misled at the time[100].

Another issue the Coroner felt had not been addressed was that of hospital bed pressure in approved psychiatric facilities. He heard during Neil's inquest that there was still pressure on staff to discharge patients, to make room for other patients whose condition required hospitalisation. He referred back to his findings into the series of six inquests where he referred to the syndrome of 'malignant alienation'. He held that the clouding of clinical judgment by bed pressure was part of the same syndrome, which had an insidious effect on clinical judgment to the extent that the culture of an organisation could change, and quick turnover of patients become the norm because there were no realistic alternatives. He found that if there had not been pressure for Neil's bed, the staff might have been more inclined to persuade him to stay at the hospital until such

---

100 Chevill, W. Finding of Inquest, 27/01.

time as his condition had stabilised for a more substantial amount of time, and the Fluoxetine had more adequate time to take effect.

He acknowledged that the State Director of Mental Health Services and her staff were conducting studies and reviews into such areas, but he noted it was a matter of great concern that these issues were already well known and solutions had been proposed since at least 1996. He concluded that the ability to influence events was obviously being limited by the availability of resources. He therefore recommended that the Minister for Human Services review the extent of the resources made available to the state mental health system, with a view to determining the reasons why:

- bed pressure was still influencing clinical judgments in relation to discharge of patients
- problems in relation to communication with country practitioners, apparent in 1996 or earlier, still had not been addressed in 1999
- whether inadequacy of resources, or other factors, may be playing a part in these ongoing problems.

As at other inquests, the Coroner had been informed of steps that had been taken since Neil's death to reduce this type of adverse event. These included more systematic and frequent monitoring and recording of patients' mental state and suicidal ideation and an increased use of 'telemedicine' to improve communication and discharge planning with regional health professionals. He agreed that both of these strategies should prove useful in such cases but said 'in view of past experience, I will believe this evidence when I see it in action'[101].

The Coroner was correct in pointing out that problems of availability and accessibility that characterise regional mental health services were well known to the government. Indeed, apart from the findings into the series of six inquests or indeed Neil's death, the government's own ministerial review committee reported in 1993 that mental health services in country South Australia were grossly inadequate[102]. In addition, a national study commissioned by the Schizophrenia Australia Foundation to rate state and regional mental health services for the seriously mentally ill similarly found an appalling lack of resources for

101 Chevill, W. Finding of Inquest, 27/01 at 5.1.
102 Beltchev, Cramond & Sutton, 1993.

community mental health in rural South Australia[103]. This study, led by NSW psychiatrist and researcher John Hoult, identified shortage of qualified staff as a major problem, further compounded by the time needed for many existing staff to travel vast distances, reducing the number of overall effective staff hours available. The study also reported psychiatrists in rural Australia were scarce, as were rehabilitation and housing services for the mentally ill. The report recommended that if any sort of equity was to be achieved between metropolitan mental health services and those in the country, then the government needed to urgently address these issues.

Even attempts by the government to quantify activity outputs to cost mental health services in regional South Australia showed shortfalls in services. For example, a project by the Centre for Applied Research in Mental Health, under contract from the South Australian Health Commission, to construct a classification system and output based funding model was unable to achieve its aims[104]. While this was due to a number of factors, the report highlighted high staff turnover, staff shortages and the multiplicity of clinicians' roles that crossed various regional services made development of any classification system and costing model premature until better reporting systems could be put in place. The report also concluded that service delivery varied widely between regional agencies, reflecting the relative urbanisation of some country towns/regions and the remoteness of others[105].

Two recent reports also indicate that little has improved in terms of country mental health services. In 2000 another review into state mental health services, optimistically titled *A new millennium: a new beginning*, indicated that there were relatively low levels of integration of mental health within regional health networks and there was a perception of metropolitan control of resources and a failure to develop local community alternatives to city admissions[106]. Perhaps the

---

103 Hoult & Burchmore, p274-275.

104 Meredith, F. Elzinga, R. Ben-Tovim, D. *Developing a classification for community mental health services in rural and remote South Australia,* Centre for Applied Research in Mental Health, Adelaide, 1997.

105 Meredith et al, 1997 p18.

106 Brennan, 2000 p30.

most telling report card of the current status of rural and remote mental health services comes from the steering committee set up to evaluate outcomes from the federal government's second national mental health plan[107]. They reported that people living in rural and remote areas still had reduced access to mental health services, major staff shortages still existed and, despite initiatives to improve services, there were significant concerns regarding recruiting staff, access to crisis assessment services and the provision of supported accommodation. Reflecting the critical state that mental health services had reached in these communities, the report informed the Australian Health Ministers that it was:

> essential that current programs to improve access to mental health services for rural and remote communities are vigorously implemented, along with commitment to the development of other innovative approaches to meeting the needs of consumers in rural and remote Australia[108].

8.4.3 The impact of coronial findings and recommendations in preventing deaths among the severely intellectually disabled

The final set of cases comprises those individuals affected by organic brain disease that resulted in severe intellectual disability. While all the deaths presented in this section were attributed to an adverse event, not all were consequent upon the care provided by an acute hospital. Each of these cases, however, involved some level of contact with the public hospital system and all deaths occurred when the victim was under the care of disability services, an arm of the DHS. As a largely defenceless and forgotten group during life, the death of a severely intellectually disabled person from an adverse event is especially reliant on a robust coronial system for natural justice to be served.

During the 1990s, state and federal governments legislated for deinstitutionalisation and community oriented care for the intellectually disabled in much the same way as occurred with other mental health services. The related policy and planning reforms resulted in the severely intellectually disabled being accommodated in various types of settings including supported residential facilities, group homes and specialised institutions (the latter undergoing a

---

107 Whiteford, H. Gregory, P. *Evaluation of the second national mental health plan 1998-2003*, Prepared for the Australian Health Ministers' Advisory Council, Commonwealth Department of Health & Aging Canberra, 2003.

108 Whiteford & Gregory, 2003 p30.

process of downsizing with the eventual aim of housing all residents in the community)[109]. In line with principles of 'normalisation', these settings comprised the residents' home with the consequence that the distinction between an institution and residence was becoming blurred. This was raised as an issue during the 1997 inquest into the death of 39 year old Mathew, who resided in a group housing facility in a large country town[110].

Mathew suffered from Downs Syndrome as well as a severe intellectual disability. The Coroner heard that on the evening prior to his death, Mathew went into the kitchen for a drink where he consumed the contents of a two litre plastic container filled with an ammonia-based cleaning agent that had been left on the sink. Not long after he was found coughing severely by a carer who, on realising what had occurred, phoned an ambulance. On arrival at the local hospital he was assessed to be in acute pulmonary oedema and his oesophagus and tongue were swollen. He was intubated and ventilated and a discussion took place with staff from a metropolitan hospital to retrieve him to Adelaide. The retrieval team arrived about 7:30am, but on further assessment and collaboration between the medical staff and Mathew's family, it was agreed that his position was hopeless and nothing further was done.

Mathew's death was reported to the police by the executive officer of the organisation that operated the group home, when it was realised that the doctor at the local hospital had not reported his death. The doctor had not reported the death because he was in no doubt the cause was accidental, the medical treatment was appropriate and he wanted to spare the relatives any further grief. The Coroner observed that this was one of several cases where confusion had arisen over whose obligation it was to report a death when a person had been evacuated from an institution to a hospital just prior to death. While the Coroner was in no doubt that the group home fell under the definition of 'an institution' within Section 31(5) of the Coroners Act, he conceded that the term was vague

109 Intellectual Disability Services Council, *Accommodation for adults*, Department of Human Services, Adelaide, 2000.

110 Chivell, W. Finding of Inquest, 35/97.

and should be given a narrower definition. He recommended to the Attorney-General that consideration be given to amend this section of the Coroners Act.

When I interviewed the State Coroner in March 2003 he provided me with a copy of the Coroners Bill 2003 (that has since been passed by Parliament but not proclaimed). The new Act provides for the death of all individuals protected under the Guardianship and Administrations Act 1993, and/or those accommodated in licensed supported residential facilities under the Supported Residential Facilities Act 1992, to be reported[111].

While ambiguities in the Coroners Act 1975 meant that there was no reliable way to measure how many deaths may have occurred in these facilities from adverse events, existing coronial findings do provide a practical means of investigating medical misadventure in the severely intellectually impaired. They also offer a way to evaluate how the health system is responding to coronial recommendations to prevent similar deaths.

Wendy was a young woman who had severe physical and intellectual disabilities since birth and also suffered from epilepsy. She was unable to communicate apart from simple concepts, for instance when she was sad she cried, when she was happy she laughed. Since the early 1980s she had lived in a residential group home managed by a Christian community service, but owned by the Health Commission and leased back to this service.

During the inquest into Wendy's death, her father told the Coroner that she had an extremely high pain tolerance, to the extent that when she suffered an injury she did not complain of pain (another witness validated this statement). She also loved having baths to such an extent that she was observed to climb into a bath whether fully clothed or not, and whether the bath had water or not. The care workers at the residential group home were aware of Wendy's love of baths, nevertheless a carer left her unattended in the bathroom while running her bath. When the carer returned she found Wendy in the bath with the water

111 Coroners Act 2003 (SA) s3 'reportable death' (e)(i) (iv).

temperature very hot. She was placed under a cold shower, an ambulance was called and she was taken to a public hospital where she was diagnosed with 55% full and partial thickness burns to her body. During her hospitalisation she had several bouts of infection and died four weeks later from overwhelming sepsis due to hot water burns[112].

When the findings of this inquest were made public in 1993, the Coroner made several recommendations including that thermostatically controlled mixing valves be installed to all high dependency institutions for the disabled. He also recommended that such institutions ensure that staff not leave persons unattended in bathrooms and that there are unambiguous safety guidelines for staff to follow in relation to safety and emergency situations. However, the issue of not leaving residents unattended in bathrooms was found to have contributed to a similar death in 1998.

Like Wendy, Rose also suffered from a severe intellectual disability and epilepsy, and, had a liking for baths. She arose later than usual one morning as she had had an epileptic seizure the night before (due to some form of mix-up between night and day staff she had not been given her morning doses of anti-convulsant medication on the two previous days). She was taken to the bathroom by a carer and offered a shower, but she insisted on taking a bath. The carer, who was unfamiliar with Rose's needs, was not given a briefing before assuming responsibility for her care. Additionally, her casenotes, which indicated she was not to be left unattended in the bath, were also unavailable at the villa where she resided.

The carer filled the bath and after washing Rose left her unattended. When he returned Rose was submerged in the water, and while initially thinking she had just put her head under the water, he realised when he lifted her head she was unconscious. After some difficulty, he lifted her out of the bath and commenced cardiopulmonary resuscitation (CPR). As the staff intercom was not working he continued CPR for about two minutes, and realising he needed further assistance ran to the main entrance and shouted to other staff for help.

112 Chevill, W. Finding of Inquest, 60/93.

CPR was continued until the ambulance arrived and Rose was conveyed to the ICU of a hospital where her condition failed to improve and treatment was withdrawn the following day. While it was unclear on post-mortem examination if Rose had suffered a seizure in the bath, the visiting neurologist at the facility thought it was 'quite likely'[113].

The director of accommodation services with the Intellectual Disability Services Council (IDCS), which managed the facility, provided evidence at inquest that they had conducted their own inquiry into Rose's death. He outlined remedial actions that had occurred including the implementation of policies and procedures in relation to the administration of medications, briefing of carers and the transfer and availability of resident's casenotes. The intercom had been repaired and the director had written to all staff pointing out that extra care must be taken when people with epilepsy were taking a bath. While the director was reluctant to accept a blanket rule about individuals with epilepsy in supported accommodation taking a bath, the Coroner recommended that IDSC issue guidelines to staff that if a person with epilepsy is permitted to take a bath they should not be left alone more than one minute and, if this cannot be assured, then bathing should be avoided.

IDSC is part of the DHS and was established in 1982 to reshape services for people with intellectual disability in South Australia. This health unit has responsibility for planning, developing, purchasing and evaluating services for this group including the provision of accommodation services. My review of IDSC's Annual Plans for the years 1999-2000, 2000-2001 and 2001-2002 found no reference to performance indicators in relation to injury or mortality data for residents under the care of this organisation. The CEO's report for 2000-2001 briefly mentioned that for many clients the issue of basic safety and health were still of concern[114], but nothing was reported about the implementation of policies and procedures in relation to the administration of medications, briefing of carers and the transfer and availability of resident's casenotes in the context of the

113 Chevill, W. Finding of Inquest, 17/00.
114 Intellectual Disability Services Council, *IDSC Annual Report 2000-2001,* Government of South Australia, Adelaide 2001.

Coroner's findings into Rose's death. However, another report released in late 2001 highlighted several deficiencies in the services provided for the severely intellectually disabled. Among these was the urgent need for the development or expansion of specialist services to enable basic quality care to be delivered and the difficulty people with intellectual disability experienced in accessing public and private mental health services[115]. The report also raised the issue of transition of services once a child with a major intellectual disability reaches adulthood at 18 years. As the following case illustrates, such problems can also extend to accessing reasonable care in the adult public hospital system.

Robert was born with cerebral palsy, was severely intellectually disabled and could only communicate through his mother who was his major carer. He also suffered from severe kyphoscoliosis (curvature of the spine) and spastic quadraparesis (partial or incomplete paralysis of limbs). Over the years Robert had been admitted to a paediatric hospital on many occasions and was well known to the hospital's outpatients department. For some reason unknown by his doctors, but thought to be related to his cerebral palsy, Robert suffered from acute gastric dilatation. This condition was appropriately treated twice at the paediatric hospital by the insertion of a naso-gastric tube to allow built up gas and fluid to escape and relieve his detention.

When he reached 18 years, the doctors at the paediatric hospital informed the mother that as Robert had reached adulthood, he should now attend the acute adult hospital. She was given a discharge summary stating his care had been transferred to a consultant gastroenterologist at the adult hospital (as will be raised later this transfer never took place).

In December 1994, Robert who was now 20 years had another bout of gastric dilatation. His mother took him to the adult hospital about 9:00am, bringing with her the discharge summary from the paediatric hospital. ED medical staff reviewed him, an abdominal X-ray was taken and unsuccessful attempts were made to insert a naso-gastric tube and intravenous therapy. His condition

115 Intellectual Disability Services Council, *Development priorities for people with intellectual disability 2002*, Government of South Australia, Adelaide, 2001.

continued to worsen; he was pale and sweaty, dehydrated and generally unresponsive. Although not recorded in the casenotes, one of the doctors testified that a surgical review was considered at this time, but as the surgeons were busy in theatre, and the priority anyway was to stabilise his condition, they were not contacted.

At 12.30pm one of the registrars decided to telephone a doctor at the paediatric hospital familiar with Robert's case. At this time Robert's mother saw that her son had stopped breathing and called the doctor back to urgently attend her son. Resuscitation commenced and while there was some improvement in Robert's vital signs, his condition was described as poor. At this stage the consultant gastroenterologist, whose name appeared on the discharge summary, and an intensive care specialist arrived in the ED to attend Robert, having been summoned by ED medical staff. The intensive care specialist decided it was not appropriate to admit Robert to the ICU and declined to insert a central venous line. The gastroenterologist apparently challenged these decisions as he was of the opinion that at least two episodes related to Robert's deterioration occurred during or following interventions by hospital staff and Robert's mother wanted reasonable measures performed. These arguments were relayed to the intensive care specialist, but he didn't feel they were reasonable grounds to place the patient on a ventilator (because Robert's disabilities would make it difficult to wean him from this machine).

The gastroenterologist then contacted the paediatric hospital and organised for Robert to be transferred because he thought he would be likely to get an ICU bed at the paediatric hospital. The mother agreed to the transfer and Robert arrived about 3.40pm where he was immediately attended by specialist medical staff including the director of intensive care at this hospital. By this time he was gravely ill and despite resuscitation measures his condition failed to improve. On conferral with his mother, further resuscitation measures were withdrawn and Robert was certified dead at 4.45pm.

The Coroner found that no adequate plan for the continuity of care ever took place between the paediatric and adult hospital. Despite the existence of a

discharge summary, the first time the consultant gastroenterologist at the adult hospital knew of Robert's existence was when he was called to the ED. The Coroner also heard that Robert's mother had telephoned the paediatric hospital on two occasions asking for her son's case records to be forwarded on to the adult hospital. Failure to do this was held to be a contributing factor in the lead up to Robert's death that was supported by testimony from the expert medical witness, who concluded that the best chance Robert had was if he had been taken to the paediatric hospital in the first place. The Coroner agreed, pointing out the considerable delays in the treatment given to Robert at the adult hospital. He recommended that the paediatric hospital give further consideration to the issue of transferring responsibility of patients when they reach adulthood to ensure continuity of care and how this might be made known and understood by medical staff arranging such transfers.

As to the refusal to admit Robert to the adult hospital ICU, the Coroner was careful to avoid any finding that this may have been related to Robert's intellectual and physical disability, rather than his medical presentation on the day. At inquest the intensive care specialist conceded that perhaps 'we should have been more proactive in getting involved' but maintained that an ICU admission was not raised on a 'formal' basis. In what seemed as close to a reproach over the doctor's conduct as he was willing to document, the Coroner indicated that he hoped the lack of a formal request for admission was not a question of semantics. He observed that it would have been most unfortunate if such an important question as to whether or not Robert should have been admitted to ICU was dependent upon some sort of 'formal' request. He held that if the doctor felt that no further treatment was available, he should have discussed his views with the gastroenterologist, and if they both agreed, then the two of them should have advised Robert's mother accordingly. He recommended that all hospitals consider how it might be possible to ensure that proper and appropriate consultation can take place between specialists so that suitable advice can be given to the relatives of gravely ill patients about future treatment options.

While the outcome for Robert was tragic, he was at least afforded the opportunity to be examined by consultant medical staff. This was not the case for Tim, a 28 year old intellectually disabled man who was taken to the ED of another metropolitan public hospital in July 1999. When Tim's case finally reached inquest, appalling deficiencies in the public hospital system were clearly brought to public attention. As the final case to be presented, the findings of this inquest provide a very clear example of the public rhetoric and private pessimism espoused by health administrators and government about the hospital system. This inquest also further demonstrated that vulnerable and marginalized individuals, unable to advocate for themselves because of their illness, were highly susceptible to a fatal adverse event.

Tim, lived at a metropolitan residential institution for the disabled. He suffered from cerebral palsy, microcephaly with resultant spastic quadriplegia and epilepsy. He was incapable of verbal communication but was described by carers at the facility as a very happy and pleasant man who communicated with smiles and gestures. Staff also maintained that he was never in the habit of picking up objects and swallowing them.

The day prior to his death, Tim was observed by staff not to be his usual smiling self. Around lunchtime he was incontinent of faeces and at tea time he was observed to be aggressive lying flat on the floor and refusing to stand. Later in the evening he was found by one of the carers on the floor in the laundry sweating profusely. An RN assessed him and concluded he had some form of gastro-intestinal problem, and as his condition failed to improve during the evening, an ambulance was called and he was transferred to a public hospital. A carer from the facility accompanied Tim to the hospital with a letter from the RN explaining his symptoms and history.

Tim arrived at the hospital at 2:40am and was categorised by the triage nurse in the ED as a Priority 3 patient, which meant that a doctor should see him within 30 minutes. At 3:00am he was taken to a cubicle for observation where a discussion occurred between the RN and the carer in relation to Tim's

presentation. According to the RN, she was told by the carer that Tim often moaned, had a history of putting things in his mouth, always had his knees up to his chest and his hands were normally a purpley colour. The carer denied that she had made these statements and nothing about these findings were recorded in the casenotes. Tim was not seen again until 5:30am when an RN recorded his vital signs. About 10 minutes later, the carer noted that he was going blue around the lips and asked an RN if he could have some oxygen. A short while later Tim stopped breathing and despite efforts to resuscitate him he was pronounced dead at 6:10am. The cause of death at post-mortem was peritonitis and septic shock related to perforation of the small bowel by a plastic lid from a Coca-Cola bottle.

While the Coroner heard evidence that even if Tim had been assessed by doctors in accordance with a Priority 3 allocation, the unusually rapid development of his illness may not have changed the eventual outcome. The Coroner held, however, that Tim stood a better chance of survival if a doctor had reviewed him within 30 minutes and it was this loss of any chance that grieved his relatives the most.

The Coroner held that the reason Tim was not seen by a doctor within half an hour, as dictated by the National Triage Code[116], was because of gross overloading and under-resourcing of the hospital ED. The Coroner heard from various staff that described the night Tim's was admitted as 'grossly overcrowded' a 'war zone', 'dangerous' and 'out of control'. The senior RN on duty cited examples of patients with chest pain not being able to be monitored as all the ECG machines were in use, and the senior doctor, who commenced work at 3:00pm and was forced to work all night, described it as 'a particularly difficult night'. The system of ambulance diversion, where ambulances could be diverted to another (hopefully less-pressured) hospital if an ED is under extreme pressure, was not in operation at the time of Tim's death.

116 All patients presenting to emergency departments in Australian hospitals are assigned a priority from 1 to 5, according to the general classification set out in the National Triage Code, which was established by the Australian College for Emergency Medicine in 1993.

As to the disagreement over the context of the conversation between the ED RN and the carer at 3:00am, the Coroner was more inclined to accept the carer's version, noting that this breakdown in communication had serious consequences for Tim who was unable to advocate for himself. He concluded that this communication failure, however, occurred in the context of an ED that was grossly overcrowded, where staff were working at the absolute maximum capacity and that such errors will occur when staff are stressed to that extent.

While this was a particularly busy shift, the fact that it was not an aberrant occurrence at the hospital was not lost on key hospital staff, the DHS or indeed, the Coroner. The medical director of the hospital's ED testified that the problems culminating in Tim's death were of long standing, multifaceted in nature and ongoing. He said that the fall in beds in the hospital from 500 in 1995 to 400 in 1999 was a primary factor, as fewer beds in substantive wards caused 'access lock'. This was compounded by a substantial increase in the number of people using the ED and a lack of senior nursing and medical staff. Numerous documents, starting from 1992, were presented at inquest to support the fact that there had been repeated representations by the director (who by this time had resigned from the hospital) and successive CEOs to have this situation addressed by government health departments. None of these petitions were successful and evidence was presented that the situation had progressively worsened from 1995 where the proportion of patients spending longer than 12 hours in the ED was 0.5%, growing to 5% in 1997, 10% in 1999 and 20% in 2000. In October 1997, the medical director of ED wrote to the hospital's CEO advising that the situation had deteriorated to such an extent patient safety could no longer be guaranteed.

Contrary to this advice, four days later the general manager of the South Australian Health Commission (SAHC) wrote in a briefing note to the Minister of Human Services, that despite documented delays in admission of patients from the ED there was no suggestion that quality of care at this hospital has been compromised. Despite this assurance, there was clearly some unease within the Commission. A letter from the Executive Director of the purchasing office at the

SAHC, written in May 1998, expressed concern that the Commission might suffer financial penalties under the Medicare Agreement because Priority 2 and 3 patients at the hospital were being exposed to increased risk due to long waits in the ED. The letter went on to indicate that, as no particular cases of serious clinical deterioration attributed to waiting times had been identified over the last 12 months, the situation was therefore one of increased risk rather than actual adverse outcomes.

Public denial by key members of the SAHC about problems at the hospital continued, while at the same time the Commission established a taskforce to investigate issues related to 'access lock'. While the report from this team, entitled the 'Bed Management Project' was released in February 1999, problems failed to abate. Indeed, eleven days before Tim's death the hospital CEO received a petition from about 40 staff. This petition was prompted by reported comments in the media attributed to the SAHC Executive Director of Statewide Services, who had denied the existence of any crisis and observed the hospital to be managing reasonably well. Contradicting the Executive Director's assurances, staff outlined in this petition that over 18 days of July, 142 patients waiting for a hospital bed spent 12 hours or more in the ED.

The Coroner confirmed that the issues raised at Tim's inquest in relation to gross overloading and under-resourcing of the hospital's ED had in fact been evident since 1992 and that they had repeatedly been brought to the attention of health administrators and the government. He held that while some changes were made, 'the situation continues to deteriorate, leaving a substantial risk that further tragedies will occur. Further improvements are hoped for, but are yet to be demonstrated'[117]. He recommended that the Minister for Human Services urgently review the situation in all EDs in South Australian hospitals with a view to ensuring that there was compliance with the National Triage Code.
The day after the Coroner handed down his findings into Tim's death, an article appeared in *The Advertiser* newspaper outlining the 'grim picture' painted by the Coroner about the hospital's ED services. In this article, the reporter noted that

117 Chivell, W. Finding of Inquest 15/01 at 6.8.

while the Minister was unavailable for comment, the spokesman for the Department (who happened to be the same Executive Director that hospital staff had petitioned about previously) was quoted as saying the public could be absolutely confident of public hospital care and that while there were:

> clearly stressors on the system in that the number of people presenting to emergency departments continues to increase...by and large we are coping[118].

This spokesman went on to say that concerns were being addressed, funding increased and management changed. However, Budget Paper figures released in 2003 showed this hospital was still the State's worst performing in terms of ED waiting times and in fact all the state's public hospitals were below the national triage standard[119]. In May 2004, the minutes of a board meeting from this hospital indicated concern that patients overflowing from the ED were being kept 'inappropriately' in the theatre recovery area and asked hospital officials to investigate if these problems were causing an increase in the hospital's death rate[120]. Most recently, the Federal Governments *State of our Hospitals Report,* which compares the nation's 750 public hospitals, ranked South Australian hospital EDs as the country's worst performing for seeing patients on time in accordance with identified standards[121].

---

118 Weir, S. (reporter) 'Hospital 'war zone' a factor in death', *The Advertiser,* 25 August 2001 p8.

119 Pengelley, J. (reporter) 'Emergency patients- but they have to wait', *The Advertiser,* 2 June 2003 p3. This was reiterated more recently in 2004 Budget paper. See, recently Pengelley, J. (reporter) 'Too long waiting times: way Government had to act', *The Advertise,* 29 May 2004 p1.

120 [Hospital] death rate inquiry, *The Advertiser,* 12 May 2004 p7. In an attempt to address the problem the Government has recently announced in the state budget $30 million over four years to improve patient care in the ED. See, Pengelley, J. (reporter) 'Intensive care for hospitals', *The Advertiser,* 28 May 2004 p27.

121 Commonwealth Department of Health and Ageing, *The state of out public hospitals, June 2004 report,* Acute Care Division Commonwealth Department of Health and Ageing, Canberra, 2004. A copy of this report can be accessed from http://www.health.gov.au/ahca/

8.5 Mental Health Services: should consumers be optimistic that fatal adverse events are on the decline?

After well over a decade of reforms and changes to mental health services and numerous coronial findings into fatal adverse events, there is little evidence that safety and quality of services have improved. Moreover, research to investigate quality and safety in mental health services has been scarce and studies that have been conducted lack empirical validity. For example a study by Pirkis et al, used 1996 data collected over three months as part of the Mental Health Classification and Service Costs Project to measure performance of services for completed in-patient episodes, incompleted inpatient episodes and community episodes of care[122]. They found 0.34% of all episodes ended in death and in 4.7% of episodes a suicide attempt was made. This study had significant limitations in that it used data for a purpose other than it was intended, the data were collected over a short timeframe, it was retrospective in nature and no context information was available with which to compare findings against other benchmarks. There is clearly a desperate need in Australia for well designed prospective studies to measure quality and safety in mental health services.

There also can be no doubt that many problems within the mental health sector emanate from innate system failures that cannot be fixed easily. Indeed, over the past decade successive governments have tried and failed. Even when they attempted to take a positive step forward, it seemed unexpected events intervened to complicate reform. For example a 2000 report into mental health services in South Australia advised the government that strategic leadership was needed and recommended that a State Director of Mental Health Services position be created. The government adopted this strategy and appointed well respected psychiatrist and heath administrator, Dr Margaret Tobin, to the position. Her appointment was met with anticipation, as it was believed she had the skills to cure at least some of the ills plaguing this sector. Tragically, in 2002 she was murdered at the offices of the DHS by a former colleague. Ten years after the death of another psychiatrist had thrown the state's mental health services into disarray, history seemed to be repeated.

---

122 Pirkis, J. Burgess, P. Dunt. D. Henry, L. *Measuring quality in Australian mental health services,* Commonwealth Department of Health and Aged Care, Canberra, 1999.

The next appointment to this post was Dr Jonathon Phillips, who clearly inherited a service under enormous pressure. Since his appointment, he has been publicly critical of State Government funding allocated to crisis accommodation for the mentally ill and has been quoted as saying he is not convinced legislators have the resolve to sort out problems in mental health services[123]. According to the 2000 review, however, the overall expenditure on mental health in South Australia was above the national average. The report also advised the government that, while additional funds would be welcomed, the first priority was to rectify systemic problems[124]. A more recent review indicates that spending above the national average is probably still well below adequate funding targets. This is based on figures that demonstrate while mental health accounts for at least 20% of the total health costs due to death and disability, Australia only spends about 7% (A$2.56 billion) of its health budget in this area[125].

It might be argued that when it comes to allocating health funds to implement system changes recommended by the Coroner on the basis of an individual inquest, there is a risk of resources being skewed in certain directions, perhaps to the detriment of spending in other equally worthy areas. Such a view, however, transgresses understanding of the purpose of a robust coronial system. The legislative intent of the Coroner is to act in the public interest and impartially investigate deaths to determine the facts and make recommendations to reduce the likelihood of similar fatalities. Health policy direction and resource allocation is the domain of government not the Coroner.

As evident from the issues raised here, as well as those raised in many of the coronial inquests into fatal adverse events, there are significant internal differences and contradictions within government health departments about the state of mental health services. Even when it comes to evaluating how effective the coronial system has been in improving safety for those with severe chronic

123 Phillips, J. quoted by Castello, R, (reporter) 'Funding farce: mental health chief blasts Govt', *Eastern Courier Messenger,* 15 October pp1-2.

124 Brennan, P. *A new millennium: a new beginning: MCSPS the mental health services review,* South Perth, 2000 p9.

125 Groom, G. Hickie, I. *Out of hospital, out of mind: a review of mental health services in Australia – 2003,* Mental Health Council of Australia, Canberra, 2003.

forms of mental illness, there is little agreement. When I interviewed key risk managers from the South Australian DHS, they indicated that changes had been made to mental health services as a direct result of recommendations handed down by the Coroner. They were unable to confirm, however, the existence of any objective evidence to support a decline in fatal adverse events of patients under the mental health services, but anecdotally thought there had been[126]. When I asked the Coroner the same question, his response was that, based on the number of deaths still being reported to his office, including a recent case where a patient walked out of a psychiatric hospital and wandered up the freeway where she was struck and killed by a truck, he thought not[127].

In July 2004, State Coroner Chivell again publicly called for the DHS to review resources available to properly manage the states mental health services[128]. This recommendation arose from yet another inquest into the death of a young male with schizophrenia who completed suicide. In this case the victim, following his discharge from the psychiatric ward of a public hospital, killed his girlfriend and then himself. It seems the Coroner is justified to be sceptical about the capacity of his recommendations to reduce fatal adverse events in the mentally ill.

---

126 Interview with key risk management officers, Department of Human Services, Adelaide, 5 March 2003.

127 Interview with Wayne Chivell, South Australian State Coroner, Adelaide 21 March 2003. The patient he was referring to was a 26 year old woman with a history of schizo-affective disorder. Her father was quoted as describing incompetencies within the mental health system being responsible for his daughter being left unsupervised in an unlocked ward See: Riches, S. (reporter) 'The smile that hid Claire's dark world', *The Advertiser,* 15 March 2003 p7. There is yet to be an inquest into her death.

128 Economou, A. [reporter] 'Coroner's plea for mental health funds', *The Advertiser,* 17 July 2004 p51.

CHAPTER 9

Conclusion: toward enlightenment

The coroner's inquest and the funeral
over, daylight was again admitted....

Frederick Marryat 1834

9.1 The coroner and fatal adverse events: lessons from the past

Increasing global awareness of the significant social and economic impact of preventable adverse medical events has provided incentive for governments, health administrators and medical personnel to examine multiple means by which to learn from serious failures. In Australia, as in other parts of the Western world, proponents of a safer health system have advocated system wide approaches to investigate sentinel adverse events. Analytical methods have been proposed to examine the root causes of medical misadventure to understand and prevent similar incidents. Such approaches seek to peel away each layer surrounding the event to reveal factors, human and/or system based, that create the conditions in which misadventure occurs. Coroners' inquisitorial powers might provide an important means by which such an analysis can be conducted, assuming that a coronial inquest is an impartial, multidisciplinary, fact-finding forum. However, the coronial system is concerned with both examining causality issues and a statutory duty to mitigate similar fatalities though recommendatory processes. Although this suggests that the extent to which coronial recommendations prevent or reduce future deaths or injuries is an outcome that can be measured, until this study there had been no specific research conducted to examine the effectiveness of this office in reducing medical injury.

This thesis set out to investigate whether coronial recommendations arising from inquests into hospital related fatalities in South Australia were being translated into practice, thereby decreasing the incidence of similar deaths recurring. Eight questions were identified and a range of investigative methods employed in order to seek answers. The first set of questions principally related to how the office evolved and whether political and social forces furnished clues to explain how contemporary coroners dealt with

hospital related fatalities. The thesis was premised on the full acknowledgement that coronial findings and recommendations offer only one mechanism by which medical misadventure can be studied and its incidence potentially reduced.

While the coronial system has been subject to many reforms over its 800 year history and, the role and function of coroners changed to meet the requirements of death investigation in the societies in which they operated, there are some interesting parallels between the old office and the new. The origin of the coroner's office in medieval England explains the emergence of the coroner as primarily an official of the Crown, the *King's man*, who had two main functions. The first was to record events associated with criminal matters, most particularly those related to homicides or deaths from misadventure. The second was to act as revenue collector for the furtherance of the King's financial interests. As a Crown official, the coroner was expected to be a loyal subject of knightly or near knightly class with an independent income and, all being well, hold office for life.

Although there is some dispute among historians over the exact duties of early coroners, it seems they had no authority to act as judges to try criminal matters. As I pointed out in Chapter 4, in South Australia statute still prevents the coroner from making a finding, or suggestion, of criminal or civil liability[1]. Until relatively recently, coroners in England and Australia were officials appointed on the basis of being a 'fit and proper person', rather than any particular legal or medical qualification, and their tenure was most often for life or until such time as they chose to move on. Traditionally, coroners were middle class men with connections and position in local society. A core function has always been careful record keeping (*keeper of the pleas*) and, while new technologies have allowed records to be retained in contemporary forms, their purpose of providing historical accounts of fatalities for the state's gaze has not altered.

1 See 4.3.4 of this thesis.

I apply the term *state* as analogous to the Crown, indicating the status of rulers and the efficacy of their rule[2] in the context of political authority in matters of civil government. The coroner was once the *King's man* and the extent to which he remains under the influence of the state is an interesting one, particularly as it pertains to investigating fatalities under state operated health services. Lowndes, writing about the Australian magistracy, informs us that:

> The coronial system is the perfect embodiment of the priceless tradition of judicial independence. Its hallmarks are independence, impartiality, and fairness. However, with the judicial independence that adheres to the office of coroner comes public accountability which requires that the coronial system operate in the public interest.[3]

As I pointed out in Chapter 4, the degree of judicial independence enjoyed by coroners has been subject to debate[4]. Certain reforms have been implemented to insulate the coroner and other members of the judiciary from the government but, in reality, the Coroner's Office like that of the Director of Public Prosecutions, answers to the Attorney-General, a senior ministerial government post held by a member of Cabinet. This is not to suggest that the government directly hinders the way in which the Coroner's Office carries out its functions, or that it does not take seriously recommendations arising from coronial inquests into state-run agencies. Rather, a potential exists for government to apply pressure through subtle means like appointment to office, funding and resource options as a way of ensuring the coronership operates within certain boundaries. In addition, public faith in the integrity of the courts is often predicated on how the media portray officials, victims and perpetrators within the justice system. In South Australia, the government promotes itself as one with a strong mandate for law and order reform and recent events, such as those culminating in the resignation of the DPP[5], show that the government will weigh into judicial matters if it feels it has the support of the public, vis-à-vis the media.

---

2 For a detailed historical account of how the term *state* has come to be used in political theory see, Skinner, Q. 'The State', *Contemporary political philosophy: an anthology*, R.Goodin & P. Pettit (eds), Blackwell Publishers, Oxford, 1997 pp3-26.

3 Lowndes, J. *The Australian magistracy: from justices of the peace to judges and beyond*, Parliamentary Library Website, 2000 p23. http://www.aph.gov.au/library/intguide/law/legalprofession.htm #judges [Accessed July 5 2001].

4 See Chapter 4 at 4.3.3.

5 I described these events in Chapter 4 pp104-105.

9.2 Coroners, medicine and modern attitudes to death

Throughout this thesis I identified a number of political and social drivers that influenced the way coroners have come to manage hospital related fatalities. During the 19th and 20th centuries a number of medical practitioners performed the duties of coroner in both England and Australia. Because the role evolved to one where coroners were increasingly being seen as public health and safety watchdogs, and many of the deaths they were required to scrutinise were misadventures involving doctors, the need for legally trained coroners won favour over medical coronerships. The was premised on the view that a legal coroner was more likely to command public confidence by virtue of being seen as independent from the medical profession over contrary beliefs that medical coroners would be better placed to evaluate medical evidence. This was certainly the recommendation of several landmark inquiries referred to in this thesis, including the *Royal Commission into Aboriginal Deaths in Custody* in Australia and the Wright Committee and Broderick Committee reports in the UK, as well as the more recent Luce Committee Report[6]. Across Australia, all State Coroners must now be legal practitioners, although in England and Wales medical practitioners may still be appointed as coroners.

There has been considerable debate about professional qualifications needed to undertake the role of coroner, but individual qualities are equally fundamental. Selby has identified an effective coroner as someone who has a sharp inquiring and open mind, who encourages submissions from relevant parties, is able to analyse complex evidence, asks pertinent questions, weighs and balances competing statements of fact and opinion, and is able to draft findings and recommendations in a clear and persuasive manner[7]. State coroners are also required to be proficient administrators as well as effective communicators, able to project public health and safety messages to the community. The role also carries a history of controversy and, like other

---

6 See, Johnston Royal Commission, The *National Report of the Royal Commission into Aboriginal Deaths in Custody,* Commonwealth of Australia, Canberra, May 1991; Wright Committee Report, *Departmental Committee on Coroners,* Cmd.5070, London, 1936; Broderick Committee Report, *Report of the committee on death certification and coroners.* Cmnd.4810, London, 1971. Luce Committee Report, *Report of the fundamental review 2003: Death certification & investigation in England, Wales & Northern Ireland,* Cm5831, London, June 2003.

7 Selby, H. 'Introduction' in H.Selby (ed), *The inquest handbook,* The Federation Press, Sydney. 1998 ppxvii-xxiii espxx.

public officials with similar ombudsmen functions, coroners are frequently exposed to degrees of censure by those dissatisfied with decisions and outcomes.

Changing ways of thinking about death have been another significant driver influencing how the public has come to view medical fatalities. Traditionally, coroners and the law have been interested in death, particularly in relation to apportioning moral culpability. Death has also been the domain of clerics and priests, but more from the perspective of redemption and spiritual salvation as a way to ensure eternal life after physical demise. In Chapter 5 I argued that advances in organised medicine in the Western world helped change society's attitudes toward death and dying[8]. As the professional status of medicine increased and technology offered ways to sustain life, society looked more toward doctors than priests as potential secular providers of immortality. Now that most forms of invasive medicine is practiced in the modern hospital, death is no longer rationalised as an *act of God*, but instead has come to be seen as a failure of medical science or hospital procedures. The status, power and pre-eminence of the medical profession, however, has come at a cost. The public expects the medical profession to meet its own declaration that doctors will make appropriate clinical judgments under all situations and make no errors that will cause serious harm to their patients. Of course, health professionals are human and thus susceptible to failures. Even the most competent practitioner can make an error of judgment that leads to a fatal adverse event but this point is not well promoted in the greater scheme of medicine's public portrayal. So hospital related fatalities are viewed as abhorrent in a society that reveres medicine. When the public seeks independent impartial explanations to why medicine has failed, the coronial system is often considered the most appropriate agency to obtain them. The investigation of these deaths requires coroners and doctors to interact in interesting, and sometimes, paradoxical ways, particularly in relation to forensic inquiry on the one hand, and causality implications on the other.

---

8 See Chapter 5 at 5.2.

9.2.1 Protagonist alliances

In highly industrialised societies, where new technologies increasingly provide potential risks linked with death or injuries, reliance on forensic expertise necessitated coroners to forge close ties with this branch of medicine. In the US this was a harbinger for the emergence of the medical examiner who effectively took over death investigation of the type coroners previously pursued and created a system where rational objectification of death investigation became the primary interest over the coronial inquest's more moral arbitration of facts. I argued in Chapter 2 that, while the US has a mixed system of medical examiners and coroners, overall, the nature of death investigation in that country is more medically oriented than legally aligned[9]. Proponents of this system argue that the neutrality of science leads to more objectivity and rationality in death investigation. I argued, however, that in the case of an inquiry into a hospital related fatality, determination of factors contributing to causality was unlikely to be aired publicly, and instead, more likely to be fought out within the confines of the adversarial civil or criminal court system. Comparisons between the US medical examiner system and the coronial system in Australia and the UK indicate that while no system is perfect, the coronial system can provide an open, inquisitorial forum that can expose failures and remedies of which the pubic might not become aware otherwise.

There have been recent endeavours in Australia to align the coronership more closely with forensic medicine[10]. This has already been achieved in one jurisdiction, Victoria, through affiliation between the State Coroner and the Victorian Institute of Forensic Medicine (VIFM) in a model not too dissimilar from that employed within the US medical examiner system. It is also worth noting that the Luce Committee reported positively on such alliances for England, Wales & Northern Ireland and proposed that a chief coroner be appointed in each national jurisdiction to oversee the office[11]. However, the UK, like Australia, has a shortage of specialist forensic pathologists and it is

---

9 See Chapter 2 at 2.4.3.

10 See Chapter 4 at 4.5.

11 Luce Committee Report, 2003 p21. Of interest, the report also indicated that the Committee found that more attention had been paid to developing efficient coronial systems in countries such as Australia, New Zealand and Canada than in England where the system had originated. See, Luce Committee Report, 2003 p7.

unlikely that a full transition to a medical examiner type system will eventuate in Australia, at least in the foreseeable future.

Nevertheless, there are moves to objectify death investigation in this country by promoting stronger ties between coroners and local forensic science units. Such alliances will no doubt contribute to promoting models of science and epidemiological research of the nature used to establish the National Coronial Information System (NCIS) that was developed between Monash University and the VIFM. There are both benefits and pitfalls in such alliances. Dominant models of science and information ownership can be used constructively to inform public health policy. Equally, such models can drive the public health and safety agenda and pre-empt public debate on wider socio-political factors that impinge on the delivery of safe healthcare. Rationalised scientific accounts, which superimpose bureaucratic processes of information ownership about fatal adverse events, have the potential to fuel public suspicion and mistrust in those agencies established to promote and ensure a safer health system.

9.2.2 Antagonist divides

By necessity, coroners have formed links with medicine in forensic detection of unnatural or unexplained deaths. Even so, the relationship between medicine and the coronership has not always been a comfortable one, particularly when it comes to the investigation of a medical related fatality. I showed in Chapter 6 that a robust coronial system relies on doctors reporting cases of suspicious or unexpected deaths but there is strong evidence that many deaths still go unreported for a variety of reasons[12]. These include failure of medical practitioners to understand their statutory obligations, confusion about what constitutes an unusual death, lack of counsel from within the coroner's office to assist medical staff in reporting deaths, miscommunication or inadvertent lack of attention to comply with reporting a death, concern about public exposure and fear of liability. For the most part, doctors and nurses are suspicious and distrustful of the legal system, particularly civil proceedings that deal with negligence claims arising from cases of medical misadventure. This permeates their thinking in relation to coronial investigations and

12 See Chapter 6 at 6.3.

promotes concern about an adverse coronial finding leading to litigation. Negative perceptions of the coronial system are also fed by fear of damaging public exposure via mass media inaccuracy when reporting hospital deaths subject to an inquest.

Medicine's mistrust of the coronial system also arises from inconsistencies in relation to cases that reach inquest. Unless specifically provided for in legislation, the majority of hospital deaths reported are not investigated and are never subjected to an inquest. There may be several deaths under similar circumstances, only one of which will be inquested. This leads to confusion and 'why me' questions among health professionals unclear about the criteria that sees one death given 'distinction' over another. We should recognise that many doctors and nurses who appear before the coroner to answer for medical fatalities are like the victims, casualties of a dysfunctional health system and, in the case of mental health, one in absolute crisis. The reality is that there are very few 'bad apples' in the barrel of health professionals that are responsible for causing medical injuries[13]. Most serious medical injuries stretch far beyond the actions of specific individuals to wider system failures. Therefore, punitive measures to discard or punish 'bad apples', apart from those involved in gross negligence or recklessness, will not alleviate adverse events. The public shame of an adverse coronial finding against an individual health professional can be considered a punitive measure but not one that will reduce the incidence of medical misadventure.

Perhaps it is not surprising that doctors, in particular, tend to 'go to ground' when mishaps occur. This is not to suggest that deliberate measures will necessarily be taken to cover-up mistakes, but that the profession is more inclined to consider internal death reviews or audits as more constructive and enlightened methods by which to scrutinize clinical iatrogenesis and prevent its recurrence. However, research evidence introduced in Chapter 6 suggests that death audits may be used as neutralisation strategies of the type

13 Carter, a surgeon writing in the British Medical Journal, suggests that while there may be the occasional 'rotten apple', most errors in surgery, as in other disciplines, are committed by well trained, well motivated individuals. See Carter, D. 'The surgeon as a risk factor: determinants of outcome include technical skill, volume of work, and case mix', *British Medical Journal*, Vol.326, 2003 pp832-833.

described by Richman[14]. Nevertheless, there are opportunities to better utilise internal reviews and later in this chapter I outline some suggestions as to how these audits can be improved[15].

There is considerable diversity between the practice of medicine and that of law that leads to misunderstandings when medical related fatalities are investigated by the coroner. Medicine is a science-based discipline where facts are empirically supported or clinically determined. The law is based on legislatures and judicial opinion and a legal fact is one which is more probable than countervailing arguments[16]. Although the coroner's court is not about determining guilt or innocence, there is a degree of moral arbitration of the facts and many medical practitioners (and other health professionals) appearing in this court lack insight into the nature of a coronial inquest. For example, certain entrenched medical characteristics, such as profound self-assurance, aloofness, superiority and dogmatism that may instigate confidence and power within the hospital milieu, are unlikely to be viewed favourably in the coroner's court. Health personnel involved in an adverse event who are called to testify in this court are well advised to seek independent legal counsel.

Several other conclusions are in order at this juncture. While I have argued that medicine has come to hold considerable influence in the coroner's court because the system is dependent on medical expertise, the relationship between coroners and doctors is, at best, uneasy. Hospitals have become increasingly complex environments and even the most proficient health professional can expect to be involved from time to time in an adverse event. It is highly probable that medical personnel, particularly hospital doctors, will appear at least once during their career before a coroner. It is therefore important that health professionals have a greater appreciation of the coronial system and more emphasis should be placed in undergraduate and postgraduate programs on understanding the law as it pertains to their day-to-day work.

---

14 Richman, J. *Medicine and health,* Longman, London, 1987 p167.

15 These suggestions are outlined under 9.3.

16 Samuels, G. 'Medical truth and legal proof: changing expectations of the expert witness', *Medical Journal of Australia,* Vol.168, 1998 pp84-87.

Transcripts of coronial findings provide a wealth of insight into circumstances behind medical misadventure, but to date they have remained a largely untapped source of knowledge. In general, the medical profession has been dismissive of the value of coronial findings to the practice of medicine and this indifference has been an obstacle to the implementation of recommendations. The fact that transcripts identify by name those involved in the event is another likely barrier to their use within medical education. Medicine, in particular, is a discipline that fosters professional hierarchy and authoritarian knowledge and is uncomfortable with exposure and open scrutiny of its members. It would be useful for coroners or the NCIS to provide de-identified transcripts for teaching purposes on a national level. Coroners and health professionals need to communicate more closely if coronial inquiries are to actively inform clinical practice and reduce the likelihood of similar failures being repeated. This communication could be facilitated within the relatively neutral territory of the classroom which can also assist both parties to become better informed about the systems in which each operates, outside of the court where communication is often mediated through legal representation.

9.3 The coroner's system and its handling of hospital related fatalities

Barriers to the translation of coronial recommendations to hospital practice are not confined to discipline issues, or those related to communication between coroners and health professionals. The second set of questions explored in this thesis addressed the type of hospital related fatalities that the coroner in South Australia investigates and how such an inquiry is managed from beginning to end. The fieldwork undertaken to investigate these questions exposed a range of barriers within and outside the coronial system that explains why this office has had limited impact on stemming the number of fatal adverse events from similar or the same causes.

9.3.1 Coronial inquiries: internal barriers to productive change

In Chapter 7, by way of illustrating whether coronial recommendations were being translated into practice and, if not, why, I divided coronial procedures into five stages. Commencing with the reporting of deaths, I outlined several barriers evident at this point that impinge on a robust coronership. It is widely accepted that not all hospital related fatalities are reported to the

coroner and this system does not provide an accurate source of data by which such deaths can be empirically tallied[17]. Legislative measures within the new Coroners Act are attempting to ensure better reporting[18], however, there are other factors that are less easy to overcome.

The Coroner's Office in South Australia has limited resources to investigate deaths. If death occurred when the deceased was detained in custody pursuant to law an inquest is mandatory and these fatalities comprise a considerable portion of the coroner's workload. Other deaths must be prioritized on the basis that a full investigation is within the public interest. It could be argued that every medical fatality is within the public interest but it is clear that the office does not have the resources necessary to conduct an inquest into each case. As I pointed out earlier, an internal review of the circumstances surrounding a medical misadventure will be conducted by hospitals as part of their risk management protocol[19]. There is a view that modern approaches to internal audits, as opposed to the old medical 'death rounds' that Richman criticised[20], provide a more valuable fact finding alternative to a formal coronial inquest. This is because an internal review occurs soon after the event and is undertaken by risk managers with clinical knowledge and training in root cause analysis. Advocates for internal reviews also argue that health professionals are more likely to contribute in a frank and open way during an internal audit and the information gained can be used to address deficits quickly and less 'painstakingly' than the drawn out coronial process.

Currently, an internal review is perceived to have slightly different objectives than a coronial inquiry even though the goal of both investigations is prevention of the same or similar event. An internal audit is conducted to examine local policy and procedure failures related to a medical injury (fatal or otherwise). A criticism of this option is that it is not seen, on its own, as an open and public forum by which any moral arbitration of the facts is

---

17 I pointed out in Chapter 6 that there was general consensus from those who work in the coronial system that there is under reporting of hospital deaths. By applying several sources of mortality data I calculated the expected number of fatal adverse events that should be reported and compared these figures with actual deaths reported to the coroner over a three and a half year period (See Table 6 at page 178).

18 Refer to discussion of the Coroners Act 2003 in Chapter 4 pp111-113.

19 This was explained in Chapter 7 at pages 187-188.

20 Richman, 1987 p167.

accounted. The family of victims can perceive an internal review as an attempt to cover-up the circumstances since family members are normally excluded from the process and are unlikely to be provided with the findings. While the deceased's family may not necessarily obtain the outcome they seek from a coronial inquest, it does provide an opportunity for them to confront those involved and, possibly for the first time, hear their version of events leading to the misadventure. If hospitals and the Department of Health are serious about fulfilling pledges of more candid and auditable accounting of medical harm, then they should consider modelling internal hospital reviews into sentinel events on the more open lines of a coronial inquest. There is enough overlap in these retrospective inquiries to facilitate this occurring and provide the opportunity for intelligent accountability that may pre-empt the need for legal recourse. This would also allow those deaths that never reach inquest to have an adequate, accounted, hearing.

Many other barriers to the effectiveness of a coronial inquiry have been illustrated in this thesis. The delay between the death and the inquest is clearly a problem. Holding an inquest years later not only means witnesses' memories will have diminished, but that staff at the practice level will no longer be particularly interested because many will have moved on by the time recommendations have been handed down, and new staff will not be connected to past events.

Chapter 7 also pointed to accessibility of hospital records to inform the inquiry as an impediment to a comprehensive investigation of all available evidence[21]. Increasingly adversarial approaches in the coroner's court and the issue of conflicting expert evidence provide additional barriers. It seems that once the matter is shifted to the legal system, a defensive approach is adopted. Each death is managed and responded to individually and quick fix solutions are offered to both the coroner and the public as evidence that the situation is under control and the fatality aberrant in nature. Defensive measures by administrators or practitioners to avoid an adverse finding have become the norm within the coroner's court as hospitals and/or the health department retain experienced senior lawyers who use adversarial approaches to vigorously argue the merits of the measures adopted following the death to

21 See Chapter 7 at 7.3.

reduce any likelihood of a similar misadventure. As I illustrated in Chapters 7 and 8, however, many cases that came before the coroner reflected similar patterns of events and it was not uncommon for recommendations to be repeated. Measures purportedly taken by health departments and hospitals in response to misadventures were not implemented, only partially implemented, or if executed, failed to curb similar, later fatalities.

One lawyer I spoke with, to whom I will refer to as Kim, was particularly forthright about why the coroner's system had little or no impact on preventing medical misadventure, particularly deaths under the public mental health system. Kim described a public verses private sector mentality that exists within the health system whereby health personnel paid to work in the public sector feel that liability issues rest with the hospital and not them individually:

> Doctors have often admitted to me they stuffed-up. But, because they didn't have to pay, their attitude was that it was the hospital's problem and the institution would pay out. This changed of course, when individuals' reputations were at stake, such as occurs from exposure in the press, and then they become concerned and involved.

To demonstrate the difference in modes of thinking about accountability, Kim gave an example of an industrial accident in a privately owned firm.

> If a worker is killed because of faulty or poorly maintained equipment, an adverse coronial finding will result in change to the equipment, maintenance etc. Why? (rhetorical), because if it is not done, the insurance premiums will rise to a level that the company will not be able to operate – so they are coerced into complying. This does not necessarily happen in the public hospital sector because the Government will pay – so why bother to change?

The way the recommendations are framed can also influence whether they are translated to practice. To some extent coroners reside in an 'ivory tower world' informed by hindsight. When making recommendations coroners do not always take into account the wider implications for change within the complexity of a hospital or factors such as economic constraints and the consequence of an ongoing shortage of qualified nursing and medical personnel. In addition, while moves to make statutory provision to ensure that coronial recommendations are considered by relevant Crown instrumentalities, the reverse has not been forthcoming. Perhaps some consideration should be given to ways that coroners can be given feedback

about their analysis of the circumstances surrounding a death and the soundness of their recommendations. It remains to be seen whether reports to be tabled in Parliament that outline details of actions taken, or proposed, in response to coronial recommendations will address the validity of the findings themselves[22].

9.3.2 The coronial system: external barriers to effectiveness

When it comes to handling hospital related fatalities, the coroner is required to interact with the government health department and its bureaucrats. At the beginning of this thesis I suggested that the fallout from public exposure of failures in the health system renders government and health bureaucrats vulnerable to damaging criticism from constituents and adversaries alike and, as a result, a substantial sub-set industry has grown around managing hospital related adverse events[23]. By way of illustration, I outlined in Chapter 7 the role of the Insurance Services Unit at the Department of Human Services (DHS) and how it manages hospital related deaths reported to the coroner[24]. I argued that the development of such protocols was not only about assisting staff comply with their coronial obligations but, equally, about managing risk and protecting the interest of government. A high quality, safe, accessible hospital system is of particular public interest and therefore the health department has become a carefully orchestrated government portfolio.

By way of example, in South Australia after changes of government in 1993 and again in 2002 each new incumbent restructured the health department according to their policy agenda[25]. In 1997, the Liberal Government unstitched the largely Labour initiated structures within the South Australian Health Commission (SAHC) and integrated the health portfolio into a mega division, the Department of Human Services (DHS). When Labour took office in 2002, one of the first changes made to the DHS was to sack the Chief

---

22 I pointed out in Chapter 7 (7.6) that Section 25 of the Coroners Act 2003 (SA) includes statutory provision that a Minister or other agency or instrumentality of the Crown that has been the subject of a coronial recommendation must provide a report to each House of Parliament within 6 months of receiving the findings. This report must provide details of any actions taken or proposed in response to recommendations and a copy forwarded to the State Coroner.

23 See Chapter 1 p3.

24 See Chapter 7 at 7.2 pp187-188.

25 The Liberal party took office from Labour on 11th December 1993 and Labour took back government on 9th February 2002.

Executive and appoint a new executive more palatable to the new Cabinet[26]. Under Labour, that part of the DHS that looked after health matters was replaced in 2004 by a new Department of Health, which assumed responsibility for all public hospital services in the state[27].

While changes to the health portfolio are to be expected in meeting new social and political health policies, a key thrust of my argument here, and one present through much of this thesis, is that hospital related fatalities and the way the coroner handles such matters are highly political. For government to raise a coronial recommendation to policy, indicates the seriousness of the matter and by doing so acknowledges failures within its own backyard. For the government and its public hospitals, the political nature of medical misadventure impacts on the translation of coronial recommendations at several levels. Internally, the health department largely acknowledges its failures and at some levels seeks to develop protocols and policies to mitigate adverse events, although this is often stymied by the complexity and intractable nature of system problems and the unpredictable elements of human error that even the most competent health professional may be prone to commit from time to time. In addition, strategic harm prevention and risk management have blurred into health policies that are more about reducing lawsuits and containing costs associated with litigious claims from adverse events rather than distinct and decisive guidelines and educational programs aimed at averting medical misadventure. As I pointed out in Chapter 6, the first and largest investigation into medical injuries in acute hospitals, the Harvard Medical Practice Study (HMPS), was driven by the need to investigate the economic cost of adverse events and push for a no-fault insurance plan as an alternative to the tort liability system[28].

Reducing the economic consequences of compensation claims associated with medical misadventure has been a major driver of research into adverse events

---

26 Both Chief Executives were experienced and well credentialed public servants who would have been well aware of the political consequences of their respective appointments.

27 This new department was established on 1 July 2004, South Australian Department of Health, http://www.health.sa.gov.au [Accessed 24th July 2004]. What is interesting about incumbent governments' reshuffling of health administrative structures is that, while several amendments have been made to the South Australian Health Commission Act 1976, no government has attempted to introduce new legislation to rationalise and coordinate health services in this State.

28 Johnson, W. Brennan, T. Newhouse, J. et al 'The economic consequences of medical injuries: implications for a no-fault insurance plan,' *JAMA*, Vol.267, 1992 pp2487-2492.

and some useful solutions have been proposed from such studies. Resonating the thoughts of Leape and others who investigated medical injuries[29], Thurman, a US based lawyer and counsel to a Pittsburgh hospital, offered a prudential view when it came to health departments dealing with adverse events. He suggested that the mission of healthcare was incompatible with nondisclosure of adverse events because it interfered with the generation of knowledge about system weaknesses, individual errors and failures that could lead to improved patient treatment and care[30]. Compellingly, Thurman argued that there was no objective foundation for the belief that admitting errors increased liability claims. On the contrary, he argued that admitting when things had gone wrong was integral to maintaining the fiduciary relationship between health professionals and their patients and therefore likely to be good risk management practice[31]. Thurman's view is consistent with that of eminent Cambridge philosopher and bio-ethicist, Baroness Onara O'Neill, who argued that effective accountability in public service institutions requires both good governance and an obligation to tell the truth at all times[32].

Despite persuasive arguments for moving away from hospital cultures that foster individual blame to that of open acknowledgment of error and no fault litigation, observation of how hospitals respond to fatal adverse events within the coronial system suggests that nondisclosure and refutation continue to be the dominant approach used. The findings of a number of cases that I reviewed over the course of this study indicated a potential for at least some deaths, particularly those reported to the coroner by members of the victim's family, not to have reached inquest if the hospital and health professionals concerned had sought to openly discuss the circumstances with the family soon after the event. The majority of the public want to trust the health system and the professionals who service it, but an essential element of trust is honesty. When the family of a victim of medical misadventure cannot get

---

29 See among others, Leape, L. 'Error in Medicine' *JAMA* Vol.272, 1994 pp1851-1857, Vincent, C. 'The human element of adverse events', *Medical Journal of Australia*, Vol.170, 1999 pp404-405, Helmreich, R. 'On error management: lessons from aviation', *British Medical Journal*, Vol.320, 2000 pp781-785.

30 Thurman, A. 'Institutional responses to medical mistakes: ethical and legal perspectives', *Kennedy Institute of Ethics Journal*, Vol.11, 2001, pp147-156. Thurman's views covered both for-profit and non-profit hospitals and he argued that the missions of both types of institutions were incompatible with covering up clinically significant medical error p148.

31 Thurman, 2001, p148.

32 O'Neill, O. 'Called to account', Lecture 3 in *The philosophy of trust*, Reith Lectures, British Broadcasting Corporation, The Open University, 2002. This lecture can also be downloaded from http://www.bbc.co.uk/print/radio4/reith2002/lecture3.shtml?print

information about the event, this harvests suspicion and distrust and is likely to lead to the development of an adversarial relationship with the hospital and professionals involved.

Even the Health Ministers own advisory council, the Australian Council for Safety and Quality in Health Care (ACSQHC), has advocated the importance of open disclosure as one way to manage adverse events[33]. In 2003 the Council released a framework for public and private hospitals to use when developing or amending policies for open disclosure following an adverse event. While advocating the importance of open and frank discussion of incidents that result in harm to patients, the Council also advised hospitals to take into account the requirements of those who provide insurance to healthcare organizations and professionals. The Council suggested that insurance agencies needed to be involved early and pro-actively in such policy development to educate their constituents about open disclosure including ways relevant staff could evade admissions of liability in either verbal or documentary form[34]. The standard also outlined that where a patient died as a result of an adverse event, policies and practices should ensure that the victim's family is provided with known information, care and support and should also be referred to the coroner for more detailed information[35].

Notwithstanding that this is a recent initiative, I saw little in the Coroner's Court in South Australia to support that such practices were being offered. Of course, for government and health professionals, an adverse coronial finding diminishes public trust in the healthcare system and, more often than not, health departments and hospitals will operate from a position of damage control when managing a hospital related fatality subject to coronial inquiry.

It should also be appreciated that agencies like the ACSQHC are government instrumentalities that at times will be restricted within boundaries imposed by

---

33 I explained in Chapter 6 (p169) that the ACSQHC was established in 2000 to lead efforts nationally in Australia to reduce patient harm from medical injury.

34 Australian Council for Safety and Quality in Health Care, Open Disclosure Standard: a national standard for open communication in public and private hospitals, following an adverse event in health care, ACQSHC, Canberra, July 2003 p3. This standard was an attachment to the Council's fourth annual report to Health Ministers, *Patient Safety: Towards Sustainable Improvement, Fourth Report to the Australian Health Ministers' Conference, 31 July 2003.*

35 ACQSHC, Canberra, July 2003 p7.

political agendas. Formed to coordinate efforts nationally on behalf of health ministers to reduce patient harm from medical misadventure, the Council has a membership weighted towards senior health bureaucrats with affiliations to government officials. By way of example, the ACSQHC commissioned a three year project in 1999 to review communication between coroners, health departments and healthcare professions with a view to bring about national reforms to improve patient safety. The VIFM was commissioned to undertake the project and a team was appointed to conduct consultative workshops and interview key informants. The final report was submitted to the Council in 2003, but although the results were anticipated with interest by coroners and health administrators involved in the project, the report was never made public.

Sources involved in this project indicated to me that an official response from the ACSQHC explaining why the report was not released has never been forthcoming[36]. The same sources indicated, however, that the project turned out to be highly political and recommendations within the report that all state and territories develop a national approach to developing uniform standards was seen by some Attorneys-General as having the potential to encroach on local powers. While it has also been suggested that the report did not necessarily reflect all coroners' and health departments' views, it seems that key state officials wanted to retain absolute control of their own communication processes related to fatal adverse events and the Council subsequently buried the report.

9.4 Medical fatalities: rhetoric and reality

Coronial cases discussed in this thesis illustrate the type of medical fatalities that come before the South Australian Coroner's Court. Case studies presented in Chapter 7 were primarily of a general nature in that victims were diagnosed with a diverse range of illnesses necessitating admission to an acute hospital. Many of these victims were middle aged or elderly with co-morbidities that elevated their risk of clinical iatrogenesis. Such risk factors have been well identified in the literature as increasing the likelihood of in-

36 Email communication with Clinical Liaison Service State Coroners Office and VIFM, 30 June 2004.

hospital death from an adverse event[37]. In Chapter 8, case studies of another high-risk group, the mentally ill, were outlined to demonstrate the difficulties those with severe mental disorders experience in navigating the mental health system. This group involved a much younger population set. There were, however, commonalities across all patient populations that contributed to a fatal adverse event regardless of the victim's medical diagnosis. These included poor communication between health professionals, intentional or unintentional violation of policies or procedures and inadequate patient assessment by non-specialist or junior staff.

For those with an interest in patient safety, and knowledge of the harm prevention literature, it will come as no surprise that recommendations proposed by the coroner in relation to medical fatalities have failed to have a significant impact on preventing similar deaths. Much is now known about the root causes of adverse events and human error. The difficulty comes in translating this knowledge to practical solutions within complex hospital environments.

37 See for example: Brennan, Leape, Laird et al, 1991 pp370-376; Wilson, Runciman, Gibberd. et al,1995 pp458-471; and, O'Hara, D. Carson, N. 'Reporting of adverse events in hospitals in Victoria, 1994-1995', *Medical Journal of Australia*, Vol.166, 1997 pp460-463. Bellomo, R, Goldsmith, D. Russell, S et al 'Postoperative serious adverse events in a teaching hospital: a prospective study', *Medical Journal of Australia*, Vol.176, 2000 pp216-218.

APPENDIX A

Sample of questions asked at interview.

- Can you briefly outline your professional background and what you see as your primary role and responsibilities in this office?
- How many deaths from hospital related misadventure are reported to the Coroner's Office each year?
- Do you believe this number accurately reflects how many deaths occur each year (from this cause) in South Australian hospitals?
- Can you describe the procedural steps taken by the Coroner's Office in investigating a hospital related fatality?
- How is the death investigation managed and how long does it normally take to complete?
- What medical information is made available by the hospital (and any other sources) to assist the investigation?
- Are there any barriers to accessing this information?
- How many of these deaths reach inquest each year?
- What major factors influence whether a case reaches inquest?
- Are medical witnesses always used during the investigation phase of a hospital related fatality?
- How are medical experts selected?
- If medical expert witnesses have a conflict of opinion related to an adverse event, how is this resolved?
- Are there any weaknesses or barriers to accessing patient medical information when investigating a fatal adverse event?
- How long is an inquest normally conducted and who are the major 'players' in the court?
- While I understand the Coroner's Court is an inquisitional forum, writers on coronial law (eg Ian Freckelton) have suggested that the adversarial role of counsel representing hospitals or doctors is influencing coroners away from making recommendations – what is your view?

- I have observed that the number of inquests held each year has fallen over the last decade while the number of deaths reported to the Coroner has risen. What factors are responsible for this?

- How frequently are recommendations included in the findings in cases involving medical misadventure?

- How are the findings and recommendations disseminated/communicated to interested parties?

- Do you believe coronial recommendations are being implemented? (If so, how do you know this?) (If not, why?)

- How significant were the findings from the Royal Commission into Aboriginal Deaths in Custody to coronial reforms in South Australia.

- What reforms may help to ensure that all fatal hospital related adverse events are detected?

- Do you use the National Coronial Information System database and if so in what ways?

- South Australia was the first state to post coroner's findings on the court website – how and why did this come about?

- My research includes a history of the coroner and a comparison of the UK and US systems with the Australian coronership. Do you have any communication with coroners in these jurisdictions and how would you compare the different systems?

REFERENCES

Books and Journals

Abel-Smith, B. *The hospitals 1800-1948: a study in social administration in England and Wales*, Heinemann, London, 1964.

Adelson, L. 'Forensic pathology then and now: retrospect and reflections', *American Journal of Forensic Medicine and Pathology*, Vol.10, 1989 pp251-260.

Aharonovich, E. Liu, X. Nunes, E. Hasin, D. 'Suicide attempts in substance abusers: Effects of major depression in relation to substance use disorders', *American Journal of Psychiatry*; Vol.159, 2002 pp.1600-1602.

Allegheny County Medical Society, *The American coroner, 1839-1962,* Bulletin of Allegheny County Medical Society, Vol.641, 1962.

American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders*: 4th Ed. Text Revision. (DSM-IV), American Psychiatric Association, Washington, 2000.

Andrews, L. Stocking, C. Krizek, T. 'An alternative strategy for studying adverse events in medical care,' *The Lancet,* Vol.349, 1997 pp309-313.

Aranda, S, 'Palliative nursing in Australia' in A.Kellehear (ed), *Death and Dying in Australia,* Oxford University Press, South Melbourne, 2000 pp255-266.

Ariés, P. *The hour of our death,* Allen Lane, London, 1981.

Ariés, P. *Western attitudes towards death from the middle ages to the present,* John Hopkins University Press, Baltimore, 1974.

Armstrong, D. 'Decline of the hospital: reconstructing institutional dangers' *Sociology of Health & Illness,* Vol.20, 1998 pp445-457.

Backus, J. *Offices and duties of sheriff, coroner and constable.* Vol 1 & 2, W. A. Davis, New York, 1812.

Baker, J. 'Bipolar disorders: an overview of current literature', *Journal of Psychiatric and Mental Health Nursing,* Vol.8, 2001 pp437-441.

Balfour-Lynn, I. Tasker, R. 'Futility and death in paediatric medical intensive care', *Journal of Medical Ethics,* Vol.22, 1996 pp279-281.

Ballard, P. 'Intimations of mortality: some sociological considerations' in P.Badham, P.Ballard, (eds), *Facing death: an interdisciplinary approach,* University of Wales Press, Cardiff, 1996 pp7-28.

Ballentine, J. *Law dictionary with pronunciations,* W.S. Anderson Bancroft-Whitney Co, San Francisco, 1969

Baxter, D. Appleby, L. 'Case register study of suicide risk in mental disorders', *British Journal of Psychiatry,* Vol.175, 1999 pp.322-326.

Bellomo, R, Goldsmith, D. Russell, S et al 'Postoperative serious adverse events in a teaching hospital: a prospective study', *Medical Journal of Australia,* Vol.176, 2000 pp216-218.

Bendiksen, R. 'Death, dying and bioethics: current issues in the USA, in K.Charmaz, G.Howarth, A.Kellehear, (eds), *The unknown country: death in Australia, Britain and the USA,* MacMillan Press Ltd, Houndmills, 1997 pp198-212.

Benoliel, J. 'Dying in an institution', in H.Wass (ed), *Dying: facing the facts,* Hemisphere Publishing Corporation, Washington, 1979 pp137-157.

Berglund M, Nilsson K. 'Mortality in severe depression: a prospective study including 103 suicides', *Acta Psychiatrica Scandinavica* ,Vol.76, 1987 pp.372-380.

Berlant, J. *Profession and monopoly: a study of medicine in the United States and Great Britain*, University of California Press, Berkeley, 1975.
Berlin, L. 'Malpractice issues in radiology – hindsight bias', *American Journal of Radiology*, Vol.175, 2000 pp597-601.
Biswas, B. 'The medicalisation of dying: a nurse's view' in D.Clark (ed), *The future for palliative care: issues of policy and practice*, Open University Press, Buckingham, 1993 pp132-139.
Blinderman, A. 'The coroner describes the manner of dying in New York City, 1784-1816', *American Journal of Medicine*, Vol.61, 1976 pp103-110.
Bracton, H. *De Legibus et Consuetudinibus Angliae*, S. Thorne translator, The Selden Society Harvard University Press, Cambridge, Vol.2 1968.
Bradbury, M. *Representations of death: a social psychological perspective*, Routledge, London, 1999.
Breen, K., Plueckhahn, V. Cordner, S. *Ethics, law and medical practice*, Allen & Unwin, Sydney. 1997 p231.
Brennan, P. *A new millennium: a new beginning: MCSPS the mental health services review*, South Perth, 2000.
Brennan, T. Hebert, L. Laird, N. et al, 'Hospital characteristics associated with adverse events and substandard care', *JAMA*, Vol.265, 1991 pp3265-3269.
Brennan, T. Leape, L. Laird, N. et al 'Incidence of adverse events and negligence in hospitalized patients: results of the Harvard Medical Practice Study I' *New England Journal of Medicine*, Vol.324, 1991 pp370-376.
Brook, R. Berg, M. Schechter, P. 'Effectiveness of non-emergency care via an emergency room', *Annals of Internal Medicine*, Vol.78, 1973 pp333-339.
Burns, N. Grove, S. *Understanding Nursing Research*, W.B.Saunders Comp, Philadelphia, 1995.
Burton, F. Troxclair, D. Newman, W. 'Autopsy diagnoses and malignant neoplasms: how often are clinical diagnosis incorrect?, *JAMA*, Vol.280, 1998 pp1245-1248.
Burton, J. Chambers, D. Gill, P. *Coroners inquiries: a guide to law and practice*, The Coroners' Society of England and Wales, Brentford, 1998.
Buxton, D. *Anaesthetics: their uses and administration*, HK Lewis, London. 1888.
Caldwell, C. Gottesman I. 'Schizophrenics kill themselves too: a review of risk factors for suicide', *Schizophrenics Bulletin*, Vol.16, 1990 pp.571-589.
Callahan, D. *Setting Limits: Medical Goals in an Aging Society*, Simon & Schuster, New York, 1987.
Cannadine, D. 'War and death, grief and mourning in modern Britain' in J.Whaley (ed), *Mirrors of mortality: studies in the social history of death*, Europa Publications Ltd, London, 1981 p187-242.
Carlin, M. 'Medieval English hospitals' in L. Granshaw, R. Porter (eds), *The hospital in history*, Routledge, London, 1989 pp21-39.
Carlson, R. *The end of medicine*, John Wiley, New York 1975.
Carson, R. 'Euthanasia or the right to die', in H.Wass (ed), *Dying: facing the facts*, Hemisphere Publishing Corporation, Washington, 1979 pp360-374 esp. 362.
Castles, A. *An Australian legal history*, The Law Book Company Ltd, Sydney, 1982.
Carter, D. 'The surgeon as a risk factor: determinants of outcome include technical skill, volume of work, and case mix', *British Medical Journal*, Vol.326, 2003 pp832-833.

Cawthon, E. 'Thomas Wakley and the medical coronership - occupational death and the judicial process', *Medical History,* Vol.30, 1986 pp191-202.
Centers for Disease Control (CDC) and World Health Organisation (WHO), *International Classification of Diseases 10th Revision Clinical Modification,* WHO Publications Center USA, Albany, 2001.
Chapman, D. *1788 The people of the First Fleet,* Doubleday Australia Pty Ltd, Sydney, 1986.
Chivell, W. *Developments in the Coroner's Court,* The Law Society of South Australia, December 2001.
Choron, J. *Death and Western thought,* Collier Books, New York, 1963, Harmondsworth, 1977.
Cloud, J. Cole, W. Sieger, M. et al 'A kinder, gentler death', *Time,* Vol.156, Sept 2000, pp60-66.
Cohen, L. Test, M. Brown, R. 'Suicide and schizophrenia: data from a prospective community treatment study', *American Journal of Psychiatry,* Vol.1, 1990 pp.602-607.
Commonwealth of Australia, *Historical records of Australia.* Vol.XIV, Government Printers, Canberra, 1922.
Commonwealth of Australia, *Historical records of Australia.* Vol. XII. Government Printers, Canberra, 1919.
Commonwealth of Australia, *Historical records of Australia.* Vol. X. Government Printers, Canberra, 1917.
Commonwealth of Australia, *Historical records of Australia.* Vol.VII, Government Printers, Canberra, 1916.
Cordner, S. 'The autopsy in decline' Editorial *Medical Journal of Australia,* Vol.156, 1992 p448.
Corr, C. 'Living with the changing face of death', in H.Wass (ed), *Dying: facing the facts,* Hemisphere Publishing Corporation, Washington, 1979 pp44-72.
Couch, N. Tilney, N. Rayner, A. Moore, F. 'The high cost of low-frequency events: the anatomy and economics of surgical mishaps', *New England Journal of Medicine,* Vol.302, 1981 pp634-637.
Crane, M. 'Medical mistakes: must doctors take the rap?' *Medical Economics,* Vol.77, 2000 pp108-124.
Curran, W. 'Medical-examiner-system reorganisation in Massachusetts', *New England Journal of Medicine,* Vol.299, 1978 p295.
Daly, M. *Gyn/ecology: the metaethics of radial feminism,* Beacon Press, Boston, 1978.
Daniel, A. *Medicine and the State: professional autonomy and public accountability,* Allen & Unwin, Wellington, 1990.
Darchy, B. LeMiere, E. Figueredo, B. et al 'Iatrogenic diseases as a reason for admission to the intensive care unit: incidence, causes and consequences', *Annals of Internal Medicine,* Vol.159, 1999 pp71-78.
Davis, B. Billings, J. Ryland, R. 'Evaluation of nursing process documentation', *Journal of Advanced Nursing, Vol.*19, 1994 pp.960-969.
Devereux, J. 'Medical law reporter', *Journal of Law and Medicine,* Vol.6, 1998 pp19-29.
Dewdney, J. *Australian health services,* John Wiley & Sons, Sydney, 1972.
Dickenson, M. Mason, C. *Hospitals and politics: the Australian Hospital Association, 1946-86,* Australian Hospital Association, Deakin, 1986.

Dickey, B. 'Social welfare: the government sector', in *The Flinders History of South Australia: Social History,* E. Richards (ed), Wakefield Press, Adelaide, 1986.
Dickey, B. 'The Labour Government and Health Services in New South Wales, 1910-1914' *Historical Studies Australia and New Zealand* Vol.12, 1967 pp541-555.
Dickey, B. 'The Politics of Hospital Finance: The Royal Prince Alfred Hospital, 1900-1914', *Community Health Studies,* Vol.IV, 1980 pp111-120.
Douglas, N. *Inquiry into obstetrics and gynaecology services at King Edward Memorial Hospital,* Paper presented at the Safety and Quality in Action Conference, Perth, 14th-16th July 2003.
Dubois, R. Brook, R. 'Preventable deaths: who, how often, and why?' *Annals of Internal Medicine,* Vol.109, 1988 pp582-589.
Dudley, H. 'Necessity for surgical audit', *British Medical Journal,* Vol.16, 1974 pp275-277.
Durdin, J. *Eleven thousand nurses: a history of nursing education at the Royal Adelaide Hospital 1899-1993,* Royal Adelaide Hospital, Adelaide, 1999.
Eckert, W. 'Medicolegal investigation in New York City: history and activities 1918-1978', *American Journal of Forensic Medicine and Pathology,* Vol.4, 1983 pp33-54.
Eckert, W. 'The development of forensic medicine in the United Kingdom from the 18th century', *American Journal of Forensic Medicine and Pathology,* Vol.13, 1992 pp124-131.
Ehrenberg, A. Ehnfors, M. 'The accuracy of patient records in Swedish nursing homes: congruence of record content and nurses' and patients' descriptions', *Scandinavian Journal of Caring Sciences,* Vol.15 2001 pp303-310.
Elias, N. *The loneliness of the dying,* Basil Blackwell Ltd, Oxford, 1985.
Estcourt Hughs, J. *A history of the Royal Adelaide Hospital,* 2nd edn, Board of Management of the RAH, Adelaide, 1982.
Fernando, K. Siriwardena, A. 'Evidence against the reliability of the inpatient case-note record as an accurate descriptor of the process of care', *British Journal of Surgery,* Vol.88, 2001 p34.
Ferroul, Y. 'The doctor and death in the middle ages and Renaissance' in E.DuBruck, B. Gusick (eds), *Death and dying in the middle ages,* Peter Lang, New York, 1999 pp31-50.
Field, D. 'Palliative medicine and the medicalisation of death', *European Journal of Cancer Care,* Vol.3, 1994 pp58-62.
Fleta in *Fleta.* The Selden Society, Bernard Quaritch, London Vol.2. 1955.
Foley, F. Flannery, J. Graydon, D. et al. 'AIDS Palliative care – challenging the palliative paradigm', *Journal of Palliative Care,* Vol.11, 1995 pp19-22.
Forbes, I. 'Aspects of health care' in *The Flinders History of South Australia: Social History,* E. Richards (ed), Wakefield Press, Adelaide, 1986.
Foucault M. *The birth of the clinic,* Vintage Books, New York, 1973.
Freckelton, I. 'Expert proof in the coroner's jurisdiction', in H.Selby (ed), *The aftermath of death,* The Federation Press, Sydney, 1992 pp37-68.
Freckelton, I. 'Inquest law' in H.Selby, ed, *The inquest handbook,* The Federation Press, Sydney. 1998.
Freckelton, I. 'Legislation commentary', *Journal of Law and Medicine,* Vol.6, 1998 pp26-29.
Freidson, E. 'Profession of medicine: a study of the sociology of applied knowledge', University of Chicago Press, Chicago, 1988.

Freidson, E. *The Medical Profession in Transition,* Rutgers, New Brunswick, 1986.
Freidson, E. 'The Changing Nature of Professional Control', *Annual Review of Sociology,* Vol.10 1984 pp1-20.
Freidson, E. *Professional Dominance,* Aldine Press, New York, 1970.
Freidson, E. 'Specialties without roots: the utilization of new services', *Human Organisation,* Vol.18, 1959 pp112-116.
Fuchs, V. *Who shall live? Health economics and social choice,* Basic Books, New York, 1974.
Fuchs, V. *Who shall live? Health economics and social choice,* Basic Books, New York 1974.
Garcia-Martin, M. Lardelli-Claret, P. Beueno-Cavanillas, A. et.al ' Proportion of hospital deaths associated with adverse events', *Journal of Clinical Epidemiology,* Vol.50, 1997 pp1319-1326.
Gardner, B. *A dictionary of modern legal usage,* 2nd edn, Oxford University Press, New York, 1995.
Gawande, A. Thomas, E. Zinner, M. et al 'The incidence and nature of surgical adverse events in Colorado and Utah in 1992', *Surgery,* Vol.126, 1999 pp66-75.
George, S. 'Towards an integrated treatment approach for manic depression', *Journal of Mental Health,* Vol.7, 1998 pp145–156.
Giddens, A. *Modernity and self-identity: self and society in the late modern age,* Standford University Press, Standford, 1991.
Glaser, B. Strauss, A. 'Discovery of substantive theory: a basic strategy underlying qualitative research', *American Behavioural Scientist,* Vol.8, 1965 pp5-12.
Glaser, B. Strauss, A. *Awareness of dying,* Aldine Publishing Company, Chicago, 1965.
Goffman, E. *Asylums: essays on the social situation of mental patients and other inmates,* Penguin, Harmondsworth 1968.
Golder, H. *High and responsible office: a history of the NSW magistracy,* Sydney University Press, Sydney, 1991.
Goodwin, F. Jamison, K. *Suicide in manic-depressive illness,* Oxford University Press, New York, 1990.
Gorton, M. 'Law report: coronial reform', *Australian & New Zealand College of Anaesthetists,* Bulletin Vol.8, 1999 p8.
Gorton, M. 'Law report: medical manslaughter revisited?' *Australian & New Zealand College of Anaesthetists,* Bulletin Vol.7, 1998 pp6-8.
Green, J. 'The medico-legal production of fatal accidents' *Sociology of Health & Illness* Vol.14, 1992 pp373-389.
Green, J. *Risk and misfortune: a social construction of accidents,* UCL Press, London, 1997.
Green, J. Britten, N 'Qualitative research and evidence based medicine', *British Medical Journal,* Vol.316, 1998 pp1230-1232.
Greenblatt, M. York, R. Brown, L. *From custodial to therapeutic patient care in mental hospitals,* Russell Sage Foundation, New York, 1955.
Groom, G. Hickie, I. *Out of hospital, out of mind: a review of mental health services in Australia – 2003,* Mental Health Council of Australia, Canberra, 2003.
Gross, C. *Select cases from the coroners' rolls A.D. 1265-1413,* The Selden Society, Bernard Quaritch, London 1896.

Haley, R. Culver, D. White, J. et.al 'The nationwide nosocomial infection rate: a new need for vital statistics', *American Journal of Epidemiology,* Vol.121, 1985 pp.159-67.

Hall, P. Brockington, I. *The closure of mental hospitals,* Gaskell, London 1991.

Halstead, B. 'Coroners' recommendations following deaths in custody,' in H.Selby (ed), *The inquest handbook,* The Federation Press, Sydney, 1998 pp186-207.

Hand, D. Fife-Yeomans, J. *The Coroner: investigation sudden death,* ABC Books, Sydney, 2004.

Hanzlick, R. Combs, D. Gibson Parrish, R. et al, 'Death investigation in the United States 1990: a survey of statutes, systems, and educational requirements', *Journal of Forensic Sciences,* Vol.38, 1993 pp628-632.

Hanzlick, R. 'History of the National Association of Medical Examiners and its meetings, 1966-93', *American Journal of Forensic Medicine and Pathology,* Vol.16, 1995 pp278-313.

Hanzlick, R. Parrish, R. 'The role of medical examiners and coroners in public health surveillance and epidemiologic research', *Annual Review of Public Health,* Vol.17, 1996 pp383-409.

Hanzlick, R. Parrish, R. 'The role of medical examiners and coroners in public health surveillance and epidemiologic research', *Annual Review of Public Health,* Vo.17, 1996 pp.383-409.

Hanzlick, R. 'Coroner training needs', *JAMA,* Vol.276, 1996 pp 1775-1778.

Hanzlick, R. Combs, D. 'Medical examiner and coroner system: history and trends', *JAMA,* Vol.279, 1998 pp870-874.

Helberg, D. 'The coroner: a man more sinned against than sinner?', *Journal of Forensic Sciences,* Vol.3, 1958 pp156-173.

Helmreich, R. 'On error management: lessons from aviation' *British Medical Journal,* Vol.320, 2000 pp781-785.

Helpern, M. 'Forensic medicine: past, present and future', *New York State Journal of Medicine,* Vol.72, 1972 pp801-804.

Hiatt, H. Barnes, H. Brennan, T. et al 'A study of medical injury and medical malpractice', *The New England Medical Journal,* Vol.321, 1989 pp480-484.

Hicks, N. 'Medical history and history of medicine', Chap.4 in G. Osborne and W. Mandle (eds), *New history: studying Australia today,* Allen and Unwin, 1982 pp69-81.

Hoult J, Rosen A, Reynolds I. 'Community orientated treatment compared to psychiatric hospital orientated treatment', *Social Science Medicine,* Vol.18, 1984 pp1005-1010.

Hoult, J. Burchmore, H. *Care of the seriously mentally ill in Australia: a rating of state and regional programs,* Schizophrenia Australia Foundation, Melbourne 1994.

Howarth, G. 'Investigating deathwork: a personal account' in D.Clark (ed), *The sociology of death,* Blackwell, Oxford, 1993 pp221-237.

Howarth, G. 'Is there a British way of death?' in K.Charmaz, G.Howarth, A.Kellehear, (eds), *The unknown country: death in Australia, Britain and the USA,* MacMillan Press Ltd., Houndmills, 1997 pp84-97.

Hugh, T. Tracy, G. 'Hindsight bias in medicolegal expert reports', *Medical Journal of Australia,* Vol.176, 2002 pp277-278.

Hugo, M. 'Comparative efficiency ratings between public and private acute patient facilities', *Book of Proceedings: 10th Annual Mental Health Conference Inc. of Australia and New Zealand,* Adelaide, 2000 pp179-186.

Hunnisett, R. *The medieval coroner,* Cambridge University Press, Cambridge, 1961.
Hunnisett, R. 'The importance of eighteenth-century coroners' bills', in *Law, litigants and the legal profession,* E.W. Ives, A.H. Manchester (eds), Humanities Press, London, 1983 pp126-139.
Illich, I. *Limits to medicine: medical nemesis: the expropriation of health,* Penguin Books, Harmondsworth, 1977.
Inglis, K. *Hospital and community: a history of the Royal Melbourne Hospital,* Melbourne University Press, Carlton, 1958.
James, R. James, H. 'Historical perspective: retention of human organs and the dismissal of Ramsy Smith', *Pathology,* Vol.33, 2001 pp172-173.
Johnson, W. Brennan, T. Newhouse, J. et al 'The economic consequences of medical injuries: implications for a no-fault insurance plan,' *JAMA,* Vol.267, 1992 pp2487-2492.
Johnstone, G. 'An avenue for death and injury prevention' in H.Selby (ed), *The aftermath of death,* The Federation Press, Sydney, 1992 pp140-184.
Kearl, M. 'You never have to die: on Mormons, NDEs, cryonics, and the American immortalist ethos' in K.Charmaz, G.Howarth, A.Kellehear (eds), *The unknown country: death in Australia, Britain and the USA,* MacMillan Press Ltd, Houndmills, 1997 pp184-197.
Kearney, M. 'Palliative medicine: just another specialty?', *Palliative medicine,* Vol.6, 1992 pp39-46.
Kellehear, A. Anderson I. 'Death in the country of Matilda', in K.Charmaz, G.Howarth, A.Kellehear, (eds), *The unknown country: death in Australia, Britain and the USA,* MacMillan Press Ltd, Houndmills, 1997 pp1-14.
Kellehear, A. 'The Australian way of dying: formative historical and social influences' in A.Kellehear (ed), *Death and Dying in Australia,* Oxford University Press, South Melbourne, 2000 pp1-13.
Kelly, B. 'HIV/AIDS' in A.Kellehear (ed), *Death and Dying in Australia,* Oxford University Press, South Melbourne, 2000 pp145- 162.
Kerr, C. Taylor, R. Heard, G. *Handbook of public health methods,* McGraw-Hill, Sydney, 1998.
Killip, T. Kimball, J. 'A survey of the coronary care unit: concepts and results', *Prognosis Cardiovascular Disease,* Vol.2, 1968 p45.
Kmietowicz, Z 'Hospital infection rates in England out of control', *British Medical Journal,* Vol.320, 2000 p534.
Knapman, P. Powers, M. *The law and practice on coroners,* Barry Rose, Chichester, 1985.
Knapman, P. Powers, M. *Casebook on coroners,* Barry Rose/MediLaw, Chichester 1989.
Knapman, P. 'The crowner's quest', *Journal of the Royal Society of Medicine,* Vol.86, 1993 pp716-720.
Knight, B. *History of the medieval English coroner system,* 1999 http://www.britannia.com/history/articles/coroner1.html
Kohn, L. Corrigan, J. Donaldson, M. *To err is human: building a safer health system,* Institute of Medicine, National Academy Press, Washington DC, 1999.
LaBine, S. LaBine, G. 'Determinations of negligence and the hindsight bias', *Law and Human Behaviour,* Vol.20, 1996 pp501-516.
Leape, L. 'Error in Medicine' *JAMA,* Vol.272, 1994 pp1851-1857.

Leape, L. Brennan, T. Laird, N. et al 'The nature of adverse events in hospitalized patients: results of the Harvard Medical Practice Study II' *New England Journal of Medicine*, Vol. 324, 1991 pp377-384.
Leape, L. Lawthers, A. Brennan, T. et al 'Preventing medical injury', *Quality Review Bulletin*, Vol.19, 1993 pp144-149.
Leape, L. Swankin, D. Yessian, M. 'A conversation on medical injury', *Public Health Reports*, Vol.114 (booklet), 1999.
Leming, M. Dickinson, G. 'The American ways of death' in K.Charmaz, G.Howarth, A.Kellehear (eds), *The unknown country: death in Australia, Britain and the USA*, MacMillan Press Ltd., Houndmills, 1997 pp169-183.
Levine, M. 'The coroner's court, the past, the present and the future', *Medicine, Science & the Law*, Vol.35, 1995 pp9-11.
Levine, M. *Levine on Coroners' Courts*, Sweet & Maxwell, London. 1999.
Lewinsohn, P. Hops, H. Roberts, R. et al 'Adolescent psychopathology: I. Prevalence and incidence of depression and other DSM-III-R disorders in high school students', *Journal of Abnormal Psychology*, Vol.102, 1993 pp133-144.
Lilian, E. Mattioni, J. 'The Philadelphia medical examiner', *Temple Law Quarterly*, Vol.37, 1964 pp204-242.
Lowndes, J. *The Australian magistracy: from justices of the peace to judges and beyond*, Parliamentary Library Website, 2000 http://www.aph.gov.au/library/intguide/law/legalprofession.htm #judges
Lundberg, G. 'Medical students, truth, and autopsies', *JAMA*, Vol.250, 1984 pp390-392.
Lundberg, G. 'The archives of pathology and laboratory medicine and the autopsy', *JAMA*, Vol.258, 1987 pp364-369.
Lundberg, G. 'Now is the time to emphasize the autopsy in quality assurance', *JAMA*, Vol.260, 1988 pp3488.
Lundberg, G. 'Low-tech autopsies in the era of high-tech medicine', *JAMA*, Vol.280, 1998 p1273-1274.
MacLaine, G. MacCather, E. Heathcote, C. 'A comparison of death certificates and autopsies in the Australian Capital Territory', *Medical Journal of Australia*, Vol.156, 1992 pp462-468.
Maddocks, I. 'Palliative medicine in Australia', in A.Kellehear (ed), *Death and Dying in Australia*, Oxford University Press, South Melbourne, 2000 pp243-254.
Maddox, K. *Schlink of Prince Alfred: a biography of Sir Herbert Schlink*, Prince Alfred Hospital Camperdown, 1978.
Magnusson, R. *Angels of death, exploring the euthanasia underground*, Melbourne University Press, Melbourne, 2002.
Martin, B 'The Clarke Institute experience with completed suicide: 1966 to 1997', *Canadian Journal of Psychiatry*, Vol.45, 2000 pp630-638.
Matthews, P. Foreman, J. *Jervis on the office and duties of coroners with forms and precedents*. 10th edn, Sweet & Maxwell, London, 1986.
Matthews, P. Foreman, J. *Jervis on the office and duties of coroners*, 12th edn, Sweet & Maxwell, London 2002
Matthews, P. 'What is the coroner for?' *Law Quarterly Review*, Vol.110, October 1994 pp536-541.
Mays, N. Pope, C. 'Qualitative Research: Observational methods in health care settings', *British Medical Journal*, Vol.311, 1995 pp182-184.

Mays, N. Pope. C. 'Rigour and qualitative research', *British Medical Journal*, Vol.311, 1995 pp109-112.
McKelvie, P. Rode, J. 'Autopsy rate and a clinicopathological audit in Australian metropolitan hospital: cause for concern', *Medical Journal of Australia*, Vol.156, 1992 pp456-462.
McLaws, M. Gold, J. King, K. 'The prevalence of nosocomial and community acquired infections in Australian hospitals', *Medical Journal of Australia*, Vol.149, 1988 pp582-90.
McMillan, N Ibrahim, J. O'Brien, A. Baker, I. Ranson, D. *The role of the coronial process in initiatives for improving quality and safety in health care: an overview discussion paper*, State Coroners Office and Victorian Institute of Forensic Medicine, Melbourne, 2002.
Mechanic, D. Aiken, L. 'Improving the care of patients with chronic mental illness', *The New England Journal of Medicine*, Vol.317, 1987 pp1634-1638.
Mechanic, D. *Mental health and social policy*, 4th Ed. Allyn and Bacon, Boston, 1999.
Meets, P. Ayliffe, G. Emmerson, et al. 'Report on the national survey of infection in hospitals', *Journal of Hospital Infection*, Vol.2 (suppl), 1981 pp.1-51.
Mellen, P. Bouvier, E. 'Nineteenth-century Massachusetts coroner inquests', *American Journal of Forensic Medicine and Pathology*, Vol.17, 1996 pp207-209.
Menezes, P. Johnson, S. Thornicroft, G. et al 'Drug and alcohol problems among individuals with severe mental illness in South London' *British Journal of Psychiatry*, Vol.168, 1996 pp612-619.
Meredith, F. Elzinga, R. Ben-Tovim, D. *Developing a classification for community mental health services in rural and remote South Australia*, Centre for Applied Research in Mental Health, Adelaide, 1997.
Mills, D. *Report of the medical insurance feasibility study*, California Medical Association, San Francisco, 1977.
MIMS Annual, Australian edn, Intercontinental Medical Statistics (Australasia), Crows Nest, 1997.
Mitchell, A. *The hospital south of the Yarra: a history of Alfred Hospital Melbourne from foundation to the nineteen-forties*, Alfred Hospital, Melbourne 1977.
Möller, H. 'Suicide, suicidality and suicide prevention in affective disorders', Acta Psychiatrica Scandinavica, Vol.108, (Suppl.418) 2003 pp73-80.
Mormando, F. 'What happens to us when we die?' in E.DuBruck, B.Gusick (eds), *Death and dying in the middle ages*, Peter Lang, New York, 1999, pp109-142.
Moser, R. 'Diseases of medical process', *New England Journal of Medicine*, Vol.255, 1956 p606.
Murphy, C. 'From Friedenheim to hospice: a century of cancer hospitals' in L.Granshaw, R. Porter (eds), *The hospital in history*, Routledge, London, 1989.
Nairn, B. Serle, G. *Australian Dictionary of Biography 1891-1939*, Vol.8, Melbourne University Press, Melbourne 1981.
Nichols, L. Aronica, P. Babe, C. 'Are autopsies obsolete?' *American Journal of Clinical Pathology*, Vol.110, 1996 pp210-218.
Nightingale, F. *Notes on Nursing: What it is, and what it is not*, Harrision, Pall Mall, 1860.
Norris, J. *The Coroners Act 1958 – A general review*, Melbourne, Victoria, 1980.
O'Brien, K. 'Carers at risk – some forensic implications of the devolution of mental health services' *Psychiatry, Psychology and Law*, Vol.5, 1998 pp167-176.

O'Hara, D. Carson, N. 'Reporting of adverse events in hospitals in Victoria, 1994-1995', *Medical Journal of Australia*, Vol.166, 1997 pp460-463.
O'Neill, O. 'Called to account', Lecture 3 in *The philosophy of trust*, Reith Lectures, British Broadcasting Corporation, The Open University, 2002.
Oswald, H. *Memoirs of a London county coroner*, Stanley Paul & Company Ltd. London, 1936.
Peachment, A. 'Science, risk and health policy: the changing operational relationship', *Australian Journal of Public Administration*, Vol.50, 1991 pp369-382.
Peterson, M. *The medical profession in Mid-Victorian London*, University of California Press, Berkeley, 1978.
Pike, D. *Paradise of dissent: South Australia 1829-1857*, Melbourne University Press, Melbourne 1967.
Pincombe, J. Brown, M. McCutcheon, H. 'No time for dying: a study of the care of dying patients in two acute care Australian hospitals', *Journal of Palliative Care*, Vol.19, 2003 pp77-86.
Pirkis, J. Burgess, P. Dunt. D. Henry, L. *Measuring quality in Australian mental health services*, Commonwealth Department of Health and Aged Care, Canberra, 1999.
Plueckhahn, V. Cordner, S. *Ethics, legal medicine and forensic pathology*, 2nd edn, Melbourne University Press, Melbourne, 1991.
Pope. C. Mays, N. 'Researching the parts other methods cannot reach: an introduction to qualitative research methods in health and health services research', *British Medical Journal*, Vol.311, 1995 pp42-45.
Porter, R. 'The gift relation: philanthropy and provincial hospitals in eighteenth-century England', in L.Granshaw, R.Porter, (eds), *The hospital in history*, Routledge, London, 1989 pp149-178.
Pounder, D. 'Law and forensic medicine in Scotland', *American Journal of Forensic Medicine and Pathology*, Vol.14, 1993 pp340-349.
Prahlow, J. Lantz, P. 'Medical examiner/death investigator training requirements in state medical examiner systems', *Journal of Forensic Sciences*, Vol.40, 1995 pp55-58.
Priebe, S. Turner, T. 'Reinstitutionalisation in mental healthcare', *British Medical Journal*, Vol.326, 2003 pp176-177.
Prest, W. [ed] 'Newspapers', in *Wakefield Companion to SA History*, Adelaide, 2002.
Quine, S. 'Selecting and focusing the research problem' in *Handbook of public health methods*, C. Kerr, R. Taylor, G. Heard (eds), McGraw-Hill, Sydney, 1998 pp10-23
Radomsky, E. Haas G. 'Suicidal behavior in patients with schizophrenia and other psychotic disorders', *American Journal of Psychiatry*, Vol.156, 1999 pp.1590-1595.
Ramon, S. *Psychiatric hospital closure: myths and realities*, Singular Publishing Group, San Diego 1992.
Ranson, D. 'The role of the pathologist' in H.Selby (ed), *The aftermath of death*, The Federation Press, Sydney, 1992 pp80-125.
Raymond, J. 'Medicine as patriarchal religion', *Journal of Medicine & Philosophy*, Vol.7, 1982 pp197-216.
Reason, J. *Human Error*, Cambridge University Press, Cambridge 1990.

Redding, R. 'Physiology of dying' in H.Wass (ed), *Dying: facing the facts,* Hemisphere Publishing Corporation, Washington, 1979 pp76-107.
Regier, D. Farmer, M. Rae, D et al 'Comorbidity of mental disorders with alcohol and other drug abuse' *JAMA,* Vol.264, 1990 pp2511-2518.
Richardson, R. *Death, dissection and the destitute,* 2nd edn, University of Chicago Press, Chicago, 2000.
Richman, J. *Medicine and health,* Longman, London, 1987.
Roberts-Smith, L. 'The conduct of coronial inquiries in Western Australia: a practitioner's guide', *Western Australian Law Review,* Vol 24, 1994 pp172-185.
Rosen, A. 'Crisis management in the community', *Medical Journal of Australia,* e-resource 1998 http://www.mja.com.au/public/mentalhealth/articles/rosen/rosen.html
Rosenbaum, P. 'Cerebral palsy: what parents and doctors want to know', *British Medical Journal,* Vol.326, 2003 pp970-974.
Rosenthal, M. *The incompetent doctor: behind closed doors, Open University Press,* Buckingham, 1995.
Runciman, W. Webb, R. Helps, S. et al 'A comparison of iatrogenic injury studies in Australian and America II: reviewer behaviour and quality of care', *International Journal for Quality in Health Care,* Vol.12, 2000 pp379-388.
Rushman, G. Davis, N. Atkinson, R. A short history of anaesthesia: the first 150 years, Butterworth Heinemann, Oxford, 1996.
Ruzeck, S. *The women's health movement: feminist alternatives to medical control,* Praeger, New York, 1978.
Samuels, G. 'Medical truth and legal proof: changing expectations of the expert witness', *Medical Journal of Australia,* Vol.168, 1998 pp84-87.
Sassard, A. O'Leary, J. 'William S. 'Wadsworth and the evolution of the medical examiner', *American Surgeon,* Vol.65, 1999 pp794-795.
Saunders, C. *The management of terminal disease,* Edwards Arnold, London, 1978.
Schimmel, E. 'The hazards of hospitalization', *Annals of Internal Medicine,* Vol.60, 1964 pp100-110.
Schou, K. 'Awareness contexts and the construction of dying in the cancer setting: micro and macro levels in narrative analysis' in D.Clark (ed), *The sociology of death,* Blackwell Publishers, Oxford, 1993 pp238-263.
Selby, H. 'Introduction' in H.Selby (ed), *The inquest handbook,* The Federation Press, Sydney. 1998 ppxvii-xxiii.
Selway, B. *The Constitution of South Australia,* The Federation Press, Sydney, 1997.
Serle, G. *Australian Dictionary of Biography,* Vol.11, 1891-1936, Melbourne University Press, Melbourne 1998 pp674-675.
Sewell, R. *A treatise on the law of coroner,* J.Crockford, London, 1850.
Sexton, J. Thomas, E. Helmreich, R. 'Error, stress, and teamwork in medicine and aviation: cross sectional surveys', *British Medical Journal,* Vol.320, 2000 pp745-749.
Shapiro, E. Davis, A. 'Law and pathology through the ages: The coroner and his descendants - legitimate and illegitimate', *New York State Journal of Medicine,* Vol.72, 1972 pp805-809.
Sheridan, J. Bakewell, J. *The Magistrates' Guide,* Government Printer, Adelaide, 1879.

Silver, J. Kramer, R. Greenwalds, S. Weissman, M. 'The association between head injuries and psychiatric disorders: findings from the New Haven NIMH Epidemiologic Catchments Area Study', *Brain Injury,* Vol.15, 2001 pp.935-943.

Singer, C. *Studies in the history and method of science,* Arno Press, New York, 1975.

Skinner, Q. 'The State', *Contemporary political philosophy: an anthology,* R.Goodin, P. Pettit (eds), Blackwell Publishers, Oxford, 1997.

Smith, W. (Ramsy), *A manual for coroners,* Hussey & Gillingham, Adelaide, 1904.

South Australian Trained Nurses' Centenary Committee, *Nursing in South Australia: first hundred years 1837-1937,* 2nd edn, Griffin Press, Adelaide, 1989.

SPHERE supplement, 'A national depression project', *Medical Journal of Australia,* Vol.175, July 2001.

Starr, P. *The social transformation of American medicine,* Basic Books, New York 1982.

State Records Of South Australia, *Ancestors in archives: a guide for family historians to South Australia's government archives,* Department for Administrative & Information Services, Adelaide, 2000.

Steel, K. Gertman, P. Crescenzi, C. Anderson, J. 'Iatrogenic illness on a general medical service at a university hospital', *New England Medical Journal,* Vol.304, 1981 pp638-642.

Stephen, J. *A history of the criminal law of England,* Vol.1, McMillan & Co, London 1883.

Sudnow, D. *Passing on: the social organisation of dying,* Prentice-Hall, Englewood Cliffs, 1967.

Swerissen, H. Duckett, S. 'Health policy and financing' in H.Gardner & S.Barraclough, (eds), *Health policy in Australia,* 2nd edn, Oxford University Press, South Melbourne, 2002 pp13-48.

Tapp, R. 'Inhibitors and Facilitators to Documentation of Nursing Practice', *Western Journal of Nursing Research,* Vol.12, 1990 pp 229-241.

Taxis, K. Barber, N. 'Ethnographic study of incidence and severity of intravenous drug errors', *British Medical Journal,* Vol.326, 2003 pp684-687.

Taylor, R. *Medicine out of control: the anatomy of medicine out of control,* Sun Books, Melbourne, 1979.

The American coroner, 1839-1962. Bulletin of Allegheny County Medical Society, Vol. 641, 1962 [unknown author].

Therapeutic Goods Administration (TGA), *Australian Adverse Drug Reactions Bulletin,* Vol.14, August 1995.

Thurman, A. 'Institutional responses to medical mistakes: ethical and legal perspectives', *Kennedy Institute of Ethics Journal,* Vol.11, 2001, pp147-156.

Thomas, E. Studdert, D. Runciman, W. et al 'A comparison of iatrogenic injury studies in Australian and America I context, methods, casemix, population, patient and hospital characteristics', *International Journal for Quality in Health Care,* Vol.12, 2000 pp371-378

Thompson, L. Goodman, D. Little, G. 'Is more neonatal intensive care always better? Insights from a cross-national comparison of reproductive care.' *Pediatrics,* Vol.109, 2002 pp1036-1043.

Tohen, M. Grundy, S. 'Management of acute mania', *Journal of Clinical Psychiatry,* Vol.60, 1999 pp31-34.

Trauer, T. Callaly, T Hantz, P. 'The measurement of improvement during hospitalisation for acute psychiatric illness', *Australian and New Zealand Journal of Psychiatry*, Vol.33, 1999 pp379-384.
Umfreville, E. *Lex Coronatoria, or the law and practice of the office of coroner,* J.M.Gutch Bristol, 1822.
U.S. Department of Health and Human Services (DHHS), *International Classification of Diseases 9th Revision Clinical Modification,* DHHS, Washington, 1980.
Van Caenegem, R. *The birth of the English common law.* 2nd ed. Cambridge University Press, Cambridge, 1988.
van den Hoorn, R. Playford, J. 'The Adelaide Hospital Row', *The Flinders history of South Australia: Political history,* D.Jaensch (ed), Wakefield Press, Adelaide, 1986.
Van Dissel, D. 'The Adelaide gentry, 1850-1920' in *The Flinders History of South Australia: Social History,* E. Richards (ed), Wakefield Press, Adelaide, 1986.
Victorian Institute of Forensic Medicine & Australian Council for Safety and Quality in Health Care, Summary report: *National consultative workshop on improving the value of coronial data for patient safety initiatives,* PALM Management Pty Ltd, Melbourne 2002.
Vincent, C. Coulter, A. 'Patient safety: what about the patient?' *Quality & Safety in Health Care,* Vol.11, 2002 pp.76-80.
Vincent, C. Neale, G. Woloshynowych, M. 'Adverse events in British hospitals: preliminary retrospective record review', *British Medical Journal,* Vol.322, 2001 pp.517-519.
Vincent, C. 'The human element of adverse events', *Medical Journal of Australia,* Vol.170, 1999 pp404-405.
Vincent, C. Stanhope, N. Crowley-Murphy, M. 'Reasons for not reporting adverse incidents: an empirical study', *Journal of Evalucation in Clinical Practice,*Vol.5, 1999 pp13-21.
Vincent. C. 'Risk, safety, and the dark side of quality', *British Medical Journal,* Vol.314, 1997, pp1775-1776.
Vincent, C. Pincus, T. Scurr, J. 'Patients' experience of surgical accidents', *Quality Health Care,* Vol.2, 1993 pp77-82.
Vincent, C. Martin, T. Ennis M. 'Obstetric accidents: the patient's perspective', *British Journal of Obstetrics & Gynaecology,* Vol.98, 1991 pp390-395.
Vincent, C. Research into medical accidents: a case of negligence? *British Medical Journal,* Vol.299, 1989 pp1150- 1153.
Vogel, M. *The invention of the modern hospital: Boston, 1870-1930,* University of Chicago Press, Chicago, 1980.
Vogel, M. 'Managing medicine: creating a profession of hospital administration in the United States, 1895-1915', in L.Granshaw, R Porter (eds), *The hospital in history,* Routledge, London, 1989 pp243- 260.
Vogel, M. *On the Administrative Frontier of Medicine,* Garland Pub, New York, 1989.
Vogel, M. Rosenberg, C. *The Therapeutic revolution: essays in the social history of American medicine,* University of Pennsylvania Press, Philadelphia, 1979.
Waddington, I. 'The role of the hospital in the development of modern medicine', *Sociology,* Vol.7, 1973 pp211-224.
Wade, J. *The extraordinary black book.* 2nd edn, 1832, reprinted A.M. Kelly, New York 1970.

Walker, D. *The Oxford companion to law*, Clarendon Press, Oxford, 1980.
Wallace, M. *Health care and the law*, Lawbook Company, Sydney, 2001.
Waller, K. 'The modern approach to coronial hearings in Australasia' in *The aftermath of death*, H. Selby (ed), The Federation Press, Annandale 1992 pp2-10.
Waller, K., *Coronial law and practice in New South Wales*. 3rd edn, Butterworths, Sydney 1994.
Walter, T. 'Sociologists never die: British sociology and death', in D.Clark, (ed), *The sociology of death*, Blackwell Publishers, Oxford, 1993 pp264-295.
Weingart, S. Wilson, R. Gibberd, R. et al 'Epidemiology of medical error', *British Medical Journal*, Vol.320, 2000 p774-777.
Weisman, A. 'The psychiatrist and the inexorable', in H.Feifel (ed), *New meanings of death*, McGraw-Hill, New York, 1977 pp107-122.
Westbrook, J. Rushworth, R. 'Evaluating health care: what can hospital separation data tell us about the complications of hospital care?' *Journal of Quality Clinical Practice*, Vol.14, 1994 pp157-166.
Whaley, J. 'Introduction' in J.Whaley (ed), *Mirrors of mortality: studies in the social history of death*, Europa Publications Ltd., London, 1981 p1-14.
Whiteford, H. Gregory, P. *Evaluation of the second national mental health plan 1998-2003*, Prepared for the Australian Health Ministers' Advisory Council, Commonwealth Department of Health & Aging Canberra, 2003.
Willis, E. *Medical dominance*, Allen & Unwin, Sydney, 1989.
Wilson, R. Harrison, B. Gibberd, R. et al 'An analysis of the causes of adverse events from the Australian health care study', *Medical Journal of Australia*, Vol.170, 1999 pp411-415.
Wilson, R. Runciman, W. Gibberd, R. et al 'The quality in Australian health care study', *Medical Journal of Australia*, Vol.163, 1995 pp458-471.
Windeyer, W. *Lecturers on legal history*, 2nd edn, The Law Book Company of Australasia, Sydney, 1957.
Woodward, J. *To do the sick no harm: A study of the British voluntary hospital system to 1875*, Routledge & Kegan Paul, London, 1974.
World Health Organisation, *ICD-10 classification of mental and behavioural disorders: clinical descriptions and diagnostic guidelines*, WHO, Geneva, 1992b.
Wu, A. Folkman, S. McPhee, S. et al 'Do house officers learn from their mistakes?' *JAMA*, Vol.265, 1991 pp2089-2094.
Zarling, E. Sexton, H. Milnor, P. 'Failure to diagnose acute myocardial infarction', *JAMA*, Vol.250, 1983 pp.1177-1181.

Unpublished Thesis

Grech, C. *Holism: its meaning an expression in critical care nursing*, unpublished thesis for the degree Master of Nursing, Flinders University of South Australia, 1995.
Jennings, R. *The medical profession and the state in South Australia, 1836-1975*, PhD thesis, Adelaide University, 1998.
Kitchin, C. *Evolving role of the coroner*. Unpublished honours thesis, The University of Adelaide, Adealide, 1982.
Williams, J *Supervised autonomy: medical specialties and structured conflict in an Australian General Hospital* PhD Thesis, University of Adelaide, Adelaide 1992.

Reports

Adealide Hosptial, *Admission Register 1840-1871*, State Records, Adelaide, GRG 78/49 Microfilm.

Allen, R. *Statistics of the deaths reported to coroners: England and Wales*, Home Office, 1999, 2000, 2001, 2002, 2003.

American Association of Critical Care Nurses, *History of the AACN*, AACN, 2002, http://www.aacn.org

Anaesthetic Mortality Committee (AMC) (SA), *A report on 232 classified cases, 1969-1974*, Adelaide, Deptment of Public Health, 1975.

Anaesthetic Mortality Committee (AMC) (SA), *Anaesthetic deaths in South Australia 1974-1983*, Adelaide, Deptment of Public Health, 1985.

Anaesthetic Mortality Committee (AMC), *Deaths associated with anaesthesia in South Australia and the Northern Territory, 1992-1997*, Department of Human Services, 1998.

Australian & New Zealand Intensive Care Society (ANZICS), *Adult Patient Database*, ANZICS, Carlton, Victoria 2002.

Australian Broadcasting Corporation, 'Expert Witness', *Four Corners*, ABC Television Program Transcript, 22 October 2001, http://www.abc.net.au/4corners/stories/s397448.htm

Australian Bureau of Statistics, *South Australia - What a state we're in!*, Commonwealth of Australia, 2000 http://www.abs.gov.au/ausstats/

Australian Bureau of Statistics, *Australian Historical Population Statistics 1788 onwards*, Cat.No. 3105.0.65.001, Commonwealth of Australia, Canberra, 2003.

Australian Bureau of Statistics, *Mental health and wellbeing: profile of adults Australia 1997*, Commonwealth of Australia, Canberra, 1997.

Australian Capital Territory Government, *A brief history of the ACT*, Report No.1000-4/96 (96/2082), Canberra, 1999.

Australian Council for Safety and Quality in Health Care, *Open Disclosure Standard: a national standard for open communication in public and private hospitals, following an adverse event in health care*, ACQSHC, Canberra, July 2003

Australian Council for Safety and Quality in Health Care *Patient Safety: Towards Sustainable Improvement*, Fourth report to the Australian Health Ministers' Conference, ACSQHC, 31 July 2003.

Australian Council for Safety and Quality in Health Care, *Safety through action*, Third report to the Australian Health Ministers' Conference, ACSQHC, Canberra, 2002.

Australian Council for Safety and Quality in Health Care, *Safety in numbers: a technical options paper for a national approach to the use of data for safer health care*, Canberra, August 2001.

Australian Council for Safety and Quality in Health Care, *Safety through action: improving patient safety in Australia*, Canberra, July 2002.

Australian Council for Safety and Quality in Health Care, *Safety in numbers*, Second report to the Australian Health Ministers' Conference, ACSQHC, Canberra, 2001.

Australian Health Ministers, *National mental health policy*, Department of Health & Family Services, Australian Government Publishing Service, Canberra, 1992.

Australian Health Ministers, *Second national mental health plan 1998-2003,* Department of Health & Family Services, Australian Government Publishing Service, Canberra 1998.
Australian Institute of Health and Welfare (AIHW), *Mental health services in Australia 2000-01*, AIHW, Canberra, 2003.
Australian Institute of Health and Welfare (AIHW), *Mortality data*, Canberra, 2002 http://www.aihw.gov.au/mortality/faqs.html.
Australian Institute of Health and Welfare (AIHW), *Australian hospital statistics 2000/01*, AIHW, Canberra, 2000 (Health Service Report No.19).
Beltchev, G. Cramond, W. Sutton, F. *Review of the South Australian Mental Health Service*, Report to the honourable Martyn Evans, Minister of Health, SAMHS, Adelaide 1993.
Beltchev, G. *Mental health realignment report: a consumer focus*, South Australian Health Commission, Adelaide, 1995.
Blunkett, D. (Home Secretary), *Reforming the coroner and death certification service: a position paper*, Cm.6159, London, 2004 p6.
Broderick Committee Report, *Report of the committee on death certification and coroners*. Cmnd.4810, London, 1971.
Broughton, J. Gravelsons, B. Hensman, C. et al *The cost of compensation culture,* Joint Report by the Institute of Actuaries, London and the Faculty of Actuaries, Edinburgh, London, 2002.
Burdekin, B. Guilgoyle, M. Hall, D. *Human rights and mental illness: Report of the national inquiry into human rights of people with mental illness*, Vol 1 & 2, Australian Government Publishing Service, Canberra 1993.
Centre for Disease Control (CDC), *About medical examiners and coroner information sharing program*, CDC, DC Epidemiology Program Office, 2001.
Chalmers Committee Report, *Second Report of the Departmental Committee appointed to inquire into the Law Relating to Coroners and Coroners' Inquests, and into the Practice in Coroners' Courts*, Cd.5004, London, 1910.
Clothier, C. *Inquiry into deaths and injuries on the children's ward at Grantham and Kesteven General Hospital in 1991*, London, 1994.
Commonwealth Department of Health and Ageing, *The state of out public hospitals, June 2004 report*, Acute Care Division Commonwealth Department of Health and Ageing, Canberra, 2004.
Commonwealth Department of Health & Aging, *Hospital reference manual round 6, 2001-2002*, Commonwealth of Australia, Canberra, 2002.
Commonwealth Department of Health & Aging, *Australian Health Ministers Endorse Report into Health Care Safety*, Media Release: Australian Health Ministers Conference – Adelaide 1st August 2001.
Commonwealth Department of Health & Aging, *New national council will oversee safety and quality in Australia's health care system*, Media Release: Australian Health Ministers Conference, Canberra, 4th August 1999.
Commonwealth Department of Health and Aging. *Implementing actions to support quality and safety improvement in Australian health care,* Final report to Health Ministers from the National Expert Advisory Group on Safety and Quality in Australian Health Care, Canberra, July 1999.
Commonwealth Department of Health and Aging & the Australian Institute of Health and Welfare, *National health priority areas report: Mental health 1998 – summary*, AIHW, Canberra 1998.

Commonwealth of Australia, *Documenting a democracy - Northern Territory Documents*, 2000, http://www.fed.gov.au/KSP
Consumer Affairs: Annual Report 2001/2002 South Australian Government, October 2002.
Corrigan, J. Eden, J. Smith, M. *Leadership by example: coordinating government roles in improving health care quality.* IOM, National Academy Press, Washington, 2002.
Department of Health, Housing & Community Services, 'Hospital services in Australia: accessing and financing', *National Health Strategy*, Issues paper No.2, Canberra, 1991.
Department of Health & Human Services, *Guidelines for Medical Examiners*, 2000.
Department of Human Services (DHS), *Process – coronial matters*, DHS Insurance Services Unit, Adelaide, (no date of publication).
Department of Human Services (DHS), *Protocol for notifying deaths to the State Coroner's Office*, DHS Insurance Services Unit, Adelaide, February 1999.
Department of Human Services (DHS), *Annual Report 1999-2000*, DHS, Adelaide, 2000.
Doctors Reform Society of Australia (DRS) http://www.drs.org.au (Dated not recorded on website - accessed 6th January 2003).
Douglas, N. Robinson, J. Fahy, K. *Inquiry into obstetrics and gynaecology services at King Edward Memorial Hospital*, Metropolitan Health Service Board, Perth, 2001.
Griffith, *NSW Parliamentary Debates*, II, Vol.15, 1904.
Harvey, R. Cross, J. *Report on the feasibility study of an Australian hospitals' adverse health care incidents study*, Commonwealth Department of Health, Housing and Community Services, Canberra, 1992.
Health Care Complaints Commission (HCCC), *Investigation report: Campbelltown and Camden Hospitals Macarthur Health Service*, HCCC, Sydney, December 2003.
Hospitals and Health Services Commission, S. Sax (Chairman) *A Report on hospitals in Australia*, Australian Government Publishing Service, Canberra, 1974.
Institute of Medicine, titled *Crossing the Quality Chasm: a new health system for the 21st century*', IOM, http://www.nap.edu
Intellectual Disability Services Council, *Accommodation for adults*, Department of Human Services, Adelaide, 2000.
Intellectual Disability Services Council, *Development priorities for people with intellectual disability 2002*, Government of South Australia, Adelaide, 2001.
Intellectual Disability Services Council, *IDSC Annual Report 2000-2001*, Government of South Australia, Adelaide 2001.
Johnston, E. (Chief Commissionor), The *National Report of the Royal Commission into Aboriginal Deaths in Custody*, Commonwealth of Australia, Canberra, 1991
Kennedy, I. *Learning from Bristol: report into children's heart surgery at Bristol Royal Infirmary*, London, 2001.
Kohn, L. Corrigan, J. Donaldson, M. *To err is human: building a safer health system*, Institute of Medicine, National Academy Press, Washington, 1999.
Law Reform Commission of Australia, *Human tissue transplants*, Report No 7, Canberra, 1977.

Luce, T. Hodder, E. Berry, C. et al, *Report of the fundamental review 2003: Death certification & investigation in England, Wales & Northern Ireland*, Cm5831, London, June 2003.

Meredith, F. Elzinga, R. *The South Australian Assessment and Crisis Intervention Service (ACIS) information management*, A report to the South Australian Health Commission, Centre for Allied Research in Mental Health, Adelaide, 1995.

Moller, J. *Coronial information systems: needs and feasibility study.* Australian Institute of Health & Welfare; National Injury Surveillance Unit; Adelaide, 1994.

Monash University National Centre for Coronial Information, *Annual Report 1998-99*, MUNCCI, Melbourne, 1999.

Monash University National Centre for Coronial Information, *Annual Report 1999-2000*, MUNCCI, Melbourne, 2000.

Monash University National Centre for Coronial Information, *Annual Report 2002-03*, MUNCCI, Melbourne, 2003.

Monash University National Centre for Coronial Information, *NCIS Access Agreement*, MUNCCI, Melbourne, 3April 2001.

Monash University National Centre for Coronial Information, *Information sheet for access to NCIS data for government departments and agencies and death / injury surveillance or research agencies*, MUNCCI, Melbourne, 2004

National Association of Medical Examiners, *Information on membership*, NAME, http://www.thename.org/AboutNAME/NAMEdescription.htm

National Health & Medical Research Council, *National statement on ethical conduct in research involving humans*, Commonwealth of Australia, Canberra, 1999.

Nyland, J. *Perre v Chivell*, South Australian Supreme Court, 279, 2000.

Organisation for Economic Cooperation & Development, *Statistics*, 2002, http://www.oecd.org/std/

President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry: *Final Report: Quality First: Better Health Care for All Americans*, March 12, 1998.

Quality Interagency Coordination Task Force (QuIC). *Fact Sheet*, AHRQ Publication No. 00-P027, February 2001. Agency for Healthcare Research and Quality, Rockville, MD. http://www.ahrq.gov/qual/quicfact.htm

Redfern, M. *The Royal Liverpool Children's inquiry*, London, 2001.

Royal Australian and New Zealand College of Obstetricians and Gynaecologists, *Historical collections: Veress needle*, http://www.ranzcog.edu.au/Open/historical-collections/museum.htm

Runciman, W. Moller, J. *Iatrogenic injury in Australia: a report prepared by the Australian Patient Safety Foundation'*, Australian Patient Safety, Adelaide 2001.

Smith, J. *The Shipman inquiry, an independent public inquiry into the issues arising from the case of Harold Fredrick Shipman*, London, 2002, 2003, 2004.

South Australian Health Commission & S.A. Police *Protocol for Police Investigation into Unnatural or Suspicious Deaths and Injuries and/or Major Criminal Activities in Public Health Care Facilities.* SAHC & SAPOL, Adelaide, 1998.

South Australian Health Commission and Department of Human Services, *Annual Report 1998-1999*, DHS, Adelaide, 1999.

South Australian Parliament, *Report of Board of Inquiry Re: Dr Ramsay Smith,* South Australian Parliament Paper No.37, 1903.
South Australian Colonial Secretary to Dr William Wyatt (Coroner) 'Letter' 6th February 1849, SA State Records, Adelaide, GRG 24/4 Microfilm.
South Australian Court of Criminal Appeal, Nemer v Holloway & ORS No. SCCIV-03-1209 [2003] SASC 372, http://www.austlii.edu.au/au/cases/sa/SASC/2003/372.html
Tarling, R. *Coroner service survey,* Home Office Research & Statistics Directorate, London, 1998.
Thomas, J., *South Australian year book,* Commonwealth Bureau of Census & Statistics, Adelaide 1975.
UK Department of Health, *Safety first, five year report of the National confidential inquiry into suicide and homicide by people with mental illness,* Stationery Office, London, 2001.
UK Department of Public Health, *An organisation with a memory: report of an expert group on learning from adverse events in the National Health Service,* The Stationery Office, London, 2000.
UK Department of Public Health, *Modernising mental health services: safe, sound and supportive'* http://www.doh.gov.uk/nsf/mentalh.htm
UK Medical Protection Society, *Information about MPS,* UK MPS, 2003 http://www.medicalprotection.org/medical/ united_kingdom
UK National Patient Safety Agency, *Information about the NPSA,* 2003, http://www.doh.gov.uk/cmo/ progress/patientsafety/patientsafety6.htm
University of Melbourne, *What do you know about government in Australia?* University of Melbourne, Melbourne, 2000 p1-6, http://www.centenary.org.au/booklet/index.html
Victorian Institure of Forensic Medicine & Australian Council for Safety and Quality in Health Care, Summary report: *National consultative workshop on improving the value of coronial data for patient safety initiatives,* PALM Management Pty Ltd, Melbourne 2002.
Victorian Government, *History of Victoria: Convicts,* State Records Victoria, http://www.prov.vic.gov.au/access/ PROVguide57.htm#victoria
Whiteford, H. Gregory, P. *Evaluation of the second national mental health plan prepared for the Australian Health Ministers' Advisory Council,* Department of Health & Aging, Australian Government Publishing Service, Canberra, 2003.
World Health Organisation (WHO), *The World Health Report 2001 Mental health: new understanding, new hope,* WHO, Geneva, 2001.
World Health Organisation, *ICD-10 classification of mental and behavioural disorders: clinical descriptions and diagnostic guidelines,* WHO Geneva 1992b.
World Health Organisation, *Mental health: prevention of suicidal behaviours: a task for all,* WHO Geneva 2002.
Wright Committee Report, *Departmental Committee on Coroners,* Cmd.5070, London, 1936.

Newspaper Articles

Contemporary

Bildstien, C. (reporter) 'Medical gear that can put patients and staff at risk', *The Advertiser*, 20 October 2004 p5.

Bildstein, C. [reporter] 'Evans accuses DPP inquiry of stalling', *The Advertiser*, 22 April 2004 p2.

Bildstein, C. [reporter] 'You interfere – I quit', *The Advertiser*, 17 April 2004 p3.

Bildstien, C. (reporter) 'Coroner rings deadly alarm bell', *The Advertiser*, 1 May 2004 pp1-2.

Bildstien, C. (reporter) 'Report damns Mt Gambier Hospital', *The Advertiser*, 19 May 2004 pp1-4.

Castello, R, (reporter) 'Funding farce: mental health chief blasts Govt', *Eastern Courier Messenger*, Wednesday 15 October pp1-2.

Clemow, M. (reporter) 'Sons sue over hospital death', *The Advertiser*, 29 February 2004 p29.

Colin, J. (reporter) 'Mental health teams on holiday', *The Advertiser*, 27 December 2003 p9.

Craig, L [reporter] 'Closing asylums leaves trust tenants at risk', *The Advertiser*, 7 June 2003 p2.

Craig, L. Fewster, S. [reporters] 'Search for new holder of poisoned chalice', *The Advertiser*, 4 May 2004 p4.

Kelton, G. [reporter] 'Get on your bike, Mr DPP', *The Advertiser*, 4 May 2004 pp1 & 4.

Kelton, G. [reporter] 'Labor uses power to axe key inquiries', *The Advertiser*, 26 August, 2004 p2.

Haran, P. (reporter) 'Forensic evidence on trial', *Sunday Mail*, 16 December 2001 pp2-3.

Haran, P. (reporter) 'Why key forensic findings are under a cloud', *Sunday Mail*, 5 November 2000.

Hunt, N. [reporter] 'Escapes prompt massive security upgrade', *The Advertiser*, 3 September 2003 p7.

Hunt, N. [reporter] 'Escapes prompt massive security upgrade', *The Advertiser*, 3 September 2003 p7.

Meikle, J. [reporter] 'Huge rise in medical negligence claims' *The Guardian Newspaper*, 3 June 2002.

Noble, T. (reporter) 'More deaths blamed on medical error' *The Age*, Melbourne, 12 August 2003 p1.

Pengelley, J. (reporter) 'Emergency patients- but they have to wait', *The Advertiser*, 2 June 2003 p3.

Pengelley, J. (reporter) 'Intensive care for hospitals', *The Advertiser*, 28 May 2004 p27.

Pengelley, J. (reporter) 'Too long waiting times: way Government had to act', *The Advertise*, 29 May 2004 p1.

Pengelley, J. (reporter) 'Tragic Christmas Eve', *The Advertiser*, 24 January 2000.

Reporter unacknowledged, 'Claims against hospitals soar', *The Advertiser*, 3 August 1998 p13.

Reporter unacknowledged, 'Criticism over patient's death', *The Advertiser*, 24 December 1996 p4.

Reporter unacknowledged, 'Dog killed new baby', *The Advertiser*, 23 July 2004 p11
Reporter unacknowledged, 'Hospital death rate inquiry', *The Advertiser*, 12 May 2004 p7.
Reporter unacknowledged, 'Hospital's fatal delay: Coroner accuses doctors in death of patient' *The Advertiser*, 19 February 2002 p1.
Reporter unacknowledged, 'Inquiry into DPP, coroner', *The Advertiser*, 3 July 2004 p37.
Reporter unacknowledged, 'The escalating costs of shortfall in hospital funds', *The Advertiser*, 27 August 1999 p3.
Reporter unacknowledged, 'What a mess: Health department crisis deepens', *The Advertiser*, 20 December 2003 p1.
Riches, S. (reporter) 'The smile that hid Claire's dark world', *The Advertiser*, 15 March 2003 p7.
Weir, S. (reporter) 'Hospital 'war zone' a factor in death', *The Advertiser*, 25 August 2001 p8.

Historical

'Coroner Inquest', *South Australian Register*, 3 March 1856.
'Coroner Inquest', *The Adelaide Observer*, 12 December 1857, pG1.
'Mr Rupert Ingleby QC Obituary 1866', *Davies collection of biographical newspaper cuttings*, Mortlock Library Vol.22, Adelaide, nd p97.
'Dr John Fisher Obituary 1879', *Davies collection of biographical newspaper cuttings*, Mortlock Library Vol.20, Adelaide, nd p38.
'Medical Qualifications', *The Adelaide Observer*, 16 August 1856.
'Obituary George Stevenson', *The Adelaide Times*, 20th October 1856.
'Ramsy Smith Enquiry', *The Adelaide Observer*, 12 September 1903.
Stevenson, G. (reporter) 'Coroners Inquest', *South Australian Gazette & Colonial Register*, Vol.1 No.16 1838.
Stevenson, G. (reporter) 'Control of Infirmary' *South Australian Gazette & Colonial Register* Vol.1 No.46 1838.

Statutes: Australia by State

South Australia

Anatomy Act 1884
Births, Deaths and Marriages Registration Act 1996
Coroners Bill 2001
Coroners Bill 2003
Coroners Act 1884
Coroners Ordinance of 1850
Coroners Amendment Act 1889
Coroners Further Amendment Act 1907
Coroners Act 1935
Coroners Amendment Act 1952
Coroners Act 1975
Coroners Amendment Act 1981
Coroners Act 2003

District Court Act 1991
Guardianship and Administration Act 1993
Hospitals Act 1867
Interpretation Act 1915
Magistrates Act 1983
Medical Practitioners Ordinance 1844
Medical Practitioners Act 1983
Mental Health Act 1977
Mental Health Act 1993
Nurses Act 1999
South Australian Act 1834
South Australian Health Commission Act 1976
South Australian Health Commission (Administrative Arrangements) Amendment Act 2000
South Australian Health Commission (Direction of Hospitals and Health Centres) Amendment Act 2000
Supported Residential Facilities Act 1992
Transplantation and Anatomy Act 1983

New South Wales
Act 27 Geo.III 1787
Act 1 Vic.I 1837
Act 24 Vic.I 1861
Act 39. Vic.I 1876
Births, Deaths and Marriages Registration Act 1995
Coroners (Amendment) Act 1988
Coroners (Miscellaneous Amendments) Act 1989
Coroners Act 1898
Coroners Act 1912
Coroners Act 1960
Coroners Act 1980
Human Tissue Act 1983
Local Courts Act 1982
NSW Act 4 Geo.1V 1823.
NSW Act 9 Geo.1V 1828

Victoria
Births, Deaths and Marriages Registration Act 1996
Coroners Act 1950
Coroners Act 1985
Coroners (Amendment) Act 1999.
Human Tissue Act, 1982

Queensland
Births, Deaths and Marriages Registration Act 2003
Coroners Act 1958
Coroners Act 2003
Inquests of Death Act 1863
Stipendiary Magistrates Act 1991

Western Australia
Births, Deaths and Marriages Registration Act 1998
Coroners Act 1920
Coroners Act 1996
Human Tissue and Transplant Act 1982
Stipendiary Magistrates Act Amendment Act 1979

Tasmania
Births, Deaths and Marriages Registration Act 1999
Coroners Act 1995
Magistrates Act 1969

Australian Capital Territory
Births, Deaths and Marriages Registration Act 1997
Coroners Act 1997

Northern Territory
Births, Deaths and Marriages Registration Act 1979
Coroners Act 1997
Magistrates Act 1976
Northern Territory Acceptance Act 1910

Statutes: United Kingdom
Act 3 Henry VII 1487
Act 1 Henry VIII 1509
Act 25 George II 1751
Act 3 Vic I 1838
Anatomy Act 1832
Attendance and Remuneration of Medical Witness at Coroners Inquests Act 1836
Births and Deaths Registration Act 1836
Birth and Deaths Regulations 1987
Coroners Act 1844
Coroners Act 1887
Coroners Act 1892
Coroners (Amendment) Act 1926
Coroners Act 1954
Coroners Act 1959 (Northern Ireland).
Coroners Act 1980
Coroners Act 1988
Criminal Law Act of 1977
De Officio Coronatoris 4 Edw I 1276
Local Government Act 1888
Local Government Act 1972

Statues: United States of America

Federal

Model Post-Mortem Examinations Act 1954.

State

Massachusetts Consolidated Laws, Chapter 38 s8, Medical Examiners and Inquests (date unknown) http://www.mass.gov/legis/laws/mgl/38-7.htm Last modified on 14-Jul-2004 (Accessed 2 August 2004).

New York State Consolidated Laws, Article 17-A, Coroner, Coroner`s Physician And Medical Examiner, (date unknown) http://caselaw.lp.findlaw.com/nycodes/c23/a26.html (Accessed 2 August 2004).

Finding of Inquests

Finding of Inquest George Pearce, 1867, State Records, Adelaide GRG 1/27.

Finding of Inquest Infant Brown 6th July 1867, State Records, Adelaide GRG 1/27.

Ahern, K., Finding of Inquest 55/91.

Ahern, K. Finding of Inquest, 4/92.

Boucaut, W. Finding of Inquest, 2/99.

Boucaut, W. Finding of Inquest, 9/99.

Boucaut, W. Finding of Inquest, 10/99.

Chevill, W. Finding of Inquest, 60/93.

Chivell, W. Finding of Inquest, 34/94.

Chivell, W. Finding of Inquest, 39/94.

Chivell, W. Finding of Inquest, 40/95.

Chivell, W. Finding of Inquest, 47/95.

Chivell, W. Finding of Inquest, 1/96.

Chivell, W. Finding of Inquest, 4/96.

Chivell, W. Finding of Inquest, 14/96.

Chivell, W. Finding of Inquest, 15/96.

Chivell, W. Finding of Inquest, 24/96.

Chivell, W. Finding of Inquest, 26/96.

Chivell, W. Finding of Inquest, 31/96.

Chivell, W. Finding of Inquest, 1-5/97.

Chivell, W. Finding of Inquest, 11/97.

Chivell, W. Finding of Inquest, 14/97.

Chivell, W. Finding of Inquest, 28/97.

Chevill, W. Finding of Inquest, 35/97.

Chivell, W. Finding of Inquest, 14/98.

Chivell, W. Finding of Inquest, 18/98.

Chivell, W. Finding of Inquest, 29/98.

Chivell, W. Finding of Inquest, 5/99.

Chivell, W. Finding of Inquest, 10/00.

Chivell, W. Finding of Inquest, 11/00.

Chivell, W. Finding of Inquest, 15/00.

Chivell, W. Finding of Inquest, 16/00.

Chevill, W. Finding of Inquest, 17/00.
Chivell, W. Finding of Inquest, 27/00.
Chivell, W. Finding of Inquest, 5/01.
Chivell, W. Finding of Inquest, 15/01.
Chevill, W. Finding of Inquest, 27/01.
Chivell, W. Finding of Inquest, 28/01.
Chivell, W. Finding of Inquest, 4/02.
Chivell, W. Findings of Inquest, 11/02.
Chivell, W. Findings of Inquest, 21/02.
Chivell, W. Finding of Inquest, 1/03.
Chivell, W. Finding of Inquest, 7/03.
Chivell, W. Finding of Inquest, 14/03.
Chivell, W. Finding of Inquest, 18/03.
Prescott, K. Finding of Inquest, 3/95.
Prescott, K. Finding of Inquest, 6/95.
Rogerson, A. Finding of Inquest, 14/95.
Rogerson, A. Finding of Inquest, 27/95.
Schapel, A. Finding of Inquest, 19/02
Schapel, A. Finding of Inquest, 28/02.
Thompson, G. Finding of Inquest, 28/92.
Thompson, G. Finding of Inquest, 23/93.
Thompson, G. Finding of Inquest, 27/93.