



Health Care and Change Management in the Context of Prisons

Rapid reviews of the literature in two parts

Part 1 Part 2

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Part 1: a rapid review of the literature in relation to models of prison health care

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Part 2: A rapid review of the literature in relation to managing change in the context of prisons

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Executive Summary

Part 1: a rapid review of the literature in relation to models of prison health care

The literature review in relation to models of health care for prisons has not found any specific model of health care to recommend. However the literature indicates a

number of "ingredients" for consideration in the design of a health care model for prisons:

- Health promotion as a unifying concept for health care in prisons incorporating health needs assessment
- Health screening on arrival in the prison system incorporating standardised protocols and validated instrument with an emphasis on mental health
- Partnership between prison services and the NHS
- Telemedicine as one mode of delivering health care in prisons
- Education of prison staff, including health care staff about the health needs of prisoners
- Developing a model of prison health care which looks beyond the prison environment to the communities which the prison serves

Part 2: A rapid review of the literature in relation to managing change in the context of prisons

The literature review of factors promoting or inhibiting change finds that there is no unified science of change management and that there is a general lack of empirical evidence across the board about change management in all domains of human industry.

- We have proposed a general five-level evidence framework that can be used to categorise broadly the quality of evidence for and commission research into prison management.
- We argue that proposals for change should be subjected to a formal decision making process in keeping with good practice in decision making in which alternatives to the proposed change are also evaluated.
- We find that change can occur to structures, processes, outcomes and people (table 6) in planned or unintended ways, gradually or radically.
- Despite the lack of empirical evidence we find that there is a broad consensus on the features of successful change management approaches.

Consensus features of successful change management are:

- Comprehensive forward planning with counter-resistance strategies
- Top management involvement
- Excellent communications
- Clarity of vision
- Involvement and ownership of change by staff affected by the change
- The use of change management techniques and methods including the Bridges (1991) approach endorsed by the Federal Judicial Centre and the US Department of Justice.

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Introduction

AIMS OF THE REVIEWS

In response to a call from Northern & Yorkshire NHSE and Her Majesty's Prison Service rapid reviews of literature were undertaken into *models of prison healthcare* and *factors promoting or inhibiting change in the context of prisons*.

These reviews were undertaken in order to inform a health care development action research project within the Durham Cluster of prisons.

The purpose of the part 1 review was to look for models and evidence of implementation and efficacy in the international literature, which may guide the implementation of a model of health care in the Durham prisons cluster.

The purpose of the part 2 review was to identify factors promoting or inhibiting change in the context of prisons.

Each review is self-contained and references are appended separately.

Neither review finds a strong empirical basis for policy formulation or practice development in the context of prisons. However, both reviews have identified a number of issues that need to be considered in the development and implementation of new models of health care in prisons.

WHO THE REVIEWS ARE FOR

This report is written for the sponsors of the project but we expect the report will be of interest to prison managers, staff and workforces in general as well as prison health care staff and NHS staff in primary and secondary care involved with or affected by prison work.

APPROACH AND METHODS

The review process was commissioned as a "rapid review" of literature. We took the approach of systematic review but with the very short period of time permitted for the process we have also necessarily been selective of literature.

Part 1 - Prison Health Care: a rapid review of the literature in relation to models of prison health care

Roger Watson, Anne Stimpson, Tony Hostick

INTRODUCTION

A rapid review was undertaken into prison healthcare in order to inform developments in this area within the Region. According to the invitation to tender, "concerns had been expressed for some years about the health of prisoners and the capacity of the current prison health care system." The driving force for reform is recent UK government policy in the area of prison health care, particularly:

- 1. The future organisation of prison health care (1999)
- 2. Prison health handbook (2001)
- 3. Changing the outlook: a strategy for developing and modernising mental health services in prisons (2001)

all published jointly by the Department of Health and HM Prison Service. The first report contains a significant section with sample models of health care in prison and these are identified under five broad categories:

- i. directly employed full time doctors
- ii. care provided by NHS GP
- iii. primary care contracted out to local GP
- iv. entire external provision of prison health care
- v. clustering of prisons to provide primary care

The report continues to provide a selection of models from around the UK. The second and third reports identified above provide a handbook of contacts and policies in relation to prison health care and a response to the *National Service Framework for Mental Health* applied to prisons respectively. The purpose of the present review is to look for models and evidence of implementation and efficacy in the international literature, which may guide the implementation of a model of health care in the Durham prisons cluster.

Who this part is written for

This report is written for the sponsors of the project, part of which was the commissioning of a rapid review of models of prison health care. However, the report will have wider utility amongst prison staff: correctional officers and prison health care staff in addition to NHS staff in primary and secondary care who are involved, or who may become involved, in delivering health services to prisoners. The report will also be a resource for academics and researchers in the field of prison health care and criminology and, of course, to the research team which takes forward the action research project to implement a model of health care in the Durham prisons cluster.

Due to the familiarity with the prisons service and the organisation of health care within this environment among the majority of consumers of this report any formalities relating to the organisation and statistics related to prison health care and the prison population generally will be dispensed with. Such details, for anyone who

requires them, may be obtained from the recent UK government policy documents referred to in this introduction.

How this part is organised

This report is presented in four parts: i) this introduction, ii) the literature review including the literature search strategy and raw data from the literature search, a brief narrative organised under broad headings under which the literature was organised along with some underlying themes, iii) a full list of references. The material under the headings, due to the rapid nature of this review, is not specifically referenced but each of these headings will be specified in part iv) which is an annotated Appendix providing the source of the reference, the title of the paper or report with the country of origin and the abbreviated theme title. In the above light this review should be seen as a work in progress. Within the time scale of the commissioned review it has not been possible to retrieve all the literature and during the remaining course of the project further material may be added. Ultimately, it is envisaged that a series of scholarly papers, professional articles and conference presentations by the research team will be produced in addition to any further written material on any aspect of prison health care emanating from this review which the sponsors request.

LITERATURE REVIEW PART 1

As a general comment it can be observed that the literature on prison health care is truly international with a large amount of work emanating from North America and Europe with contributions from Australasia, Pakistan and Africa. There is almost a total lack of theory in the field of prison health care; thus it is an area which is ripe for scholarly development.

The purpose of the review was to identify models of prison health care and these, again, were almost completely lacking. Certainly, it is possible to say that there are no 'off the shelf' solutions to implementing models of prison health care; essentially, there are none 'on the shelf' to be taken off and used in this way. Nevertheless the review contains some elements which must be fundamental to any model of prison health care and, on the whole, these are already part of UK government policy in this field. These commonalties will be referred to under the headings below and drawn together in the conclusion.

One underlying theme in the literature, whatever area of prison health care is being considered, is the tension between the correctional and health related aspects of the prison environment. This is recognised in UK government documents and will not be drawn out later as a separate theme: it is not possible to address this, as the primary consideration of the prison service must remain security of prisoners, staff and the general population. Nevertheless, this tension must be acknowledged and addressed in any scheme to implement a model of health care in prisons generally or in a specific prison and should form the starting point of any action research programme designed to meet this end.

Search strategy

Electronic databases relevant to the areas specified (models of prison health care) were accessed through the internet gateway ATHENS at the University of Hull. Papers from management, health, sociological and psychological literature sources have been included. Reports/policy documents were obtained from governmental and non-governmental organisations. Grey literature was accessed through the

Commission for Health Improvement, the NHS Centre for Reviews and Dissemination, Dissertation Abstracts.

The search was limited to 1991-2002, including international literature published in English (due to the time constraints there was insufficient time to seek translations). Key journals in the field were hand and reference list checked and citations checked to ensure a comprehensive search. Abstracts were printed for all relevant articles; these were then reviewed by the team and abstracts deemed not relevant were disregarded. Papers were obtained for the remainder.

Databases/organisations searched

Management: Proquest/ABI Inform

Health: Medline, CINAHL, Cochrane Library, BIDS, Psychlit, Sociological Abstracts, OMNI Reports/Policy: United Kingdom Department of Health, Her Majesty's Prison Service, World Health Organisation, the Council of Europe, The National Institute for Correction/US Federal Bureau of Prisons.

Search terms

The search strategy included all aspects of prison health: health promotion, mental health, communicable diseases and palliative care. This was accomplished by using broad search terms and the results being checked to eliminate the possibility of relevant articles being omitted. A free-text strategy was utilised in databases without a well constructed thesaurus. The free-text terms used were as follows:

- 1. Prison or prisons or prisoner
- 2. Health or healthcare
- 3. Model/s
- 4. 1 and 2 and 3

MeSH terms were used when searching Medline and CINAHL. For the other databases the Boolean operators "and" and "or" were utilised. The terms were as follows:

- 1. exp.prisoner*
- 2. health or healthcare
- 3. model or models

'Prisoner' is a MeSH term in the Medline thesaurus, 'health' is not a MeSH term thus the use of the Boolean operator 'or'. 'Models' is a MeSH term when attached to another term e.g. nursing model, psychological model but not healthcare model and the Boolean operator 'or' was used.

To understand the current models of health care operating in the region, ten prison governors in the Yorkshire region were approached and asked about health care models currently operating within their organisation. Responses were received from

six prisons. A wide of variety of health care provision was demonstrated by these responses. The amount and type of information received varied from prison to prison.

One of HMP's young offenders institution has been contracted out to the NHS for eight years, all staff in the unit are employed by the NHS, the manager is a dual registered nurse RGN & RMN and all of the nursing staff are registered nurses, two with dual registration. The hospital diabetes link nurse visits the prison, as does the Community Infection Control Officer. There is a high level of staff retention. Two doctors are employed by the NHS Trust, who hold a daily surgery of one hours duration and are then on call for twenty four hours. The prison operates to two standards:

Local trust policies e.g. control of infection, detoxification

Prison care standards as an audit tool.

At a second privately managed high security prison, health care provision is via a private medical model with a medical officer at the top of the hierarchy. Nurse led services are being introduced and greater integration with the NHS. Here an attempt is being made to move away from traditional bureaucratic models of healthcare to a more consensual approach.

A third prison has a medical model of health care with morning surgeries held by a primary care doctor and clinical appointments for doctor-patient consultations in the afternoons. The management structure includes a General Manager who is a Prison Governor who supports a Head of Clinical Services who is a Senior Medical Officer; a Health Care Manager who is a uniformed Prison Service grade with training in Health Care and Physiotherapy. The Health Care Manager manages the nursing work force through three first line managers one of whom is nurse qualified. There is a move to system of nurse led clinics, health promotion and well-person clinics. Nurse-led clinics have been achieved in asthma and diabetes to date.

Results

The total number of hits was 906, many of which were not relevant to the current project or were duplicates. 134 abstracts were printed of which 24 were regarded as not being relevant. 110 articles were retrieved either through inter-library loans (nine of which were not available due to binding, missing off shelves etc) or downloaded from the internet. Of these articles 9 articles were rejected leaving 90 articles and 12 reports/policy documents (13 UK; 5 USA; 3 Europe) to be reviewed. Items were rejected purely on the basis of relavance. No hierarchy of evidence was applied to retrieved items: there were no comparative studies of models of prison health care and the evidence was mainly presented in the form of scholarly papers, case-studies, opinion pieces and descriptive studies.

The material from the review is organised under the headings given below and each piece of material has been assigned to a unique heading depending upon the main focus of the paper or report. However, much of the material refers to more than one subject and many of these are interrelated as will be explained under the headings. The order of the headings is based upon the amount of material retrieved which we take to indicate the relative importance of these areas to prison health care.

Mental heath (MH)

A significant amount of material was concerned with the mental health of the prison population. However, closely related to this is substance abuse which, in turn, is closely related to communicable diseases, including sexually transmitted diseases. The material was mostly concerned with screening for mental health problems in general and not with specific diagnoses.

Mental health problems are more prevalent among the prison population than the general population and a cause for concern due to the potential for further deterioration in prison with the attendant risks to individuals with mental health problems, such as suicide and vulnerability to substance abuse and high risk sexual practices. Furthermore, the prisoner with mental health problems may be a risk to other prisoners or correctional officers and prison health care staff.

The key to addressing mental health problems in prisoners is assessment. Whether this is best done prior to incarceration, on remand or upon entry to prison is debatable. However, standardised assessment procedures incorporating validated assessment instruments are clearly advocated.

Modes of delivery of mental health care are not widely addressed in the literature but telemedicine, considered under a separate heading below, is one such mode. Generally speaking, correctional officers and prison health care staff - both nurses and doctors - have been shown to have few hours of specific training with regard to the mental health problems of prisoners. One positive finding is that there is little evidence for the 'warehousing' of prisoners with mental health problems in prisons nor any relationship to sentencing over and above their crimes.

Substance abuse (SA)

Substance abuse is common in prisons and very common among those committed to prison. Clearly, there is a relationship with substance dependency and crime and, as mentioned above, this is also related to mental health problems and communicable diseases.

There are no definitive data on the success of drug rehabilitation programmes in prison and efforts to reduce the prevalence of substance abuse are fraught with problems. Mandatory drug testing of prisoners has reduced substance abuse in some circumstances but it also leads to the use of harder drugs, for example opiates as opposed to marijuana, as the latter have a longer half life in the blood and prisoners may try to avoid failing drug tests by using drugs with shorter half lives.

Clearly, there is every imperative to educate prisoners about the dangers of substance abuse as most will, eventually, return to the community where a reduction is substance abuse may reduce recidivism and reduce the problem of substance abuse in the general population. In this respect, health promotion is essential and this will be considered under a separate heading below.

Communicable diseases (CD)

The prevalence of sexually transmitted diseases, including HIV/AIDS, in prisoners is high and they are at great risk in this respect from a combination of substance abuse and mental health problems. Again, health promotion is essential. The availability of condoms is one issue in the prevention of HIV/AIDS but this sends out a mixed message to prisoners and condoms can also be used for the concealment of drugs by ingestion. There has been some success in the provision of clean needles and other equipment whereby transmission might take place but there are attendant dangers in the distribution of needles and scissors, for example.

In terms of other communicable diseases such as tuberculosis, none from the UK, there are several case studies of how this has been handled in individual prisons.

Health promotion (HP)

Health promotion is considered essential in prisons and is an integral part of UK government policy in this regard. There are problems with the non-therapeutic environment of prisons and the lack of standardised assessment instruments. One paper on the health care of diabetic prisoners reported that they were not allowed to keep their own equipment for the administration of insulin thus reducing their autonomy. This is a clear demonstration of the tension between the correctional and health care aspects of being in prison. It is probably too early in the history of health promotion in prisons to report on the success or failure of particular schemes but this is an area of considerable importance for the future and one which must be integral to any model of health care. We are aware of literature on parenting, not uncovered in the review process and not reported here, which may be relevant with respect to health promotion as it is reported to increase prisoners' self-esteem and improve locus of control.

Older prisoners (OP)

Older prisoners have greater health needs than other prisoners reflecting the trend in the general population. In addition to the health related aspects of older prisoners they are also of criminological interest as they are less likely to offend on release and may be an unnecessary burden on the prison health care system.

Telemedicine (TM)

There are several reports of the successful use of telemedicine in the delivery of psychiatric services and even emergency services. This may be a potential component of any prison health care model. However, if prisoners have to be transported to telemedicine facilities in other prisons there are issues of security and cost to be considered.

General (GN)

Some material did not fall into any of the above categories but was nevertheless relevant to this review. Background material to the penal systems and health care in these systems in specific countries was presented. Any models described were not directly relevant to the UK such as private health care involvement and the formation

of consortia around universities in the USA. Partnerships was one theme which was evident and this will be referred to below.

Underlying themes

The material reported here could have been reported under separate headings and, indeed, relevant papers are reported under the headings above. However the papers reported below had multiple perspectives and were relevant to more than one theme.

Women prisoners

Clearly, women prisoners could easily form a separate category but in terms of the present review, they appeared as an exaggeration of some of the issues reported under the headings above - with the exception of pregnancy on which there was only one paper. Women appear to have greater problems with mental health, substance abuse and sexually transmitted diseases and their reasons for incarceration, clearly related to the above problems, display a different pattern. Prostitution, being abused as a child and running away from home were all identified as leading to the imprisonment of women. Any model of health care for prisoners must acknowledge the greater likelihood of the above problems among women.

The health of the community

It was repeatedly recognised in the literature that prisons, in addition to being a potential focus for the health promotion of prisoners, were also a potential focus for improving the health of the community from which the prisoners came. This potential for a 'value added' aspect to the health care of prisoners, while there is as yet little evidence for its efficacy, must be an alluring concept in the development of any model of prison health care. In one sense, this is the nearest to a theoretical concept which was uncovered in the literature.

Partnership

Partnership is integral to the delivery of prison health care as envisaged in current UK government policy documents. There are examples in the literature, few directly applicable to the UK, of where partnerships in prison health care with, for example secondary services, social work, private health care providers and other institutions have been successfully implemented.

Conclusion

On the one hand, the conclusion cannot be a recommendation for any particular model of health care for the Durham prison cluster. On the other hand, the literature points to some essential ingredients which should be considered including:

- Health promotion as a unifying concept for health care in prisons incorporating health needs assessment
- Health screening on arrival in the prison system incorporating standardised protocols and validated instrument with an emphasis on mental health

- Partnership between prison services and the NHS
- Telemedicine as one mode of delivering health care in prisons
- Education of prison staff, including health care staff about the health needs of prisoners
- Developing a model of prison health care which looks beyond the prison environment to the communities which the prison serves

Part 2: A rapid review of the literature in relation to managing change in the context of prisons

Mike Walsh, Anne Stimpson, Tony Hostick

INTRODUCTION

The purpose of the second part of the review was to identify factors promoting or inhibiting change in the context of prisons.

In order to identify these factors we gave thought to the standard of evidence on change management. We have proposed a number of cautions in the interpretation and application of findings from change management literature. These relate to the context, methods and quality of data when deciding whether findings apply to the context of prisons.

We have proposed a broad five level framework against which the quality of evidence can be evaluated.

We considered the meaning of change and distinguished between patterns of change and changes to different functional aspects of organisation.

A further issue dealt with is the motive for change and we have proposed that change ought to be considered as a decision to change – and therefore be subject to the same formal process as any rigorous evidence based decision.

We have identified consensus factors on successful change and consensus factors inhibiting change including resistance to change.

Finally we have set out in brief an approach to change endorsed by the Federal Judicial Centre (1997) that we feel captures much of the consensus on issues of change management.

How this section is organised

This section of the review has four parts: i) this introduction, ii) the search strategy and results, iii) the literature review consisting of broad headings and themes and iv) a full list of references.

Search strategy

Electronic databases relevant to change management were accessed through the internet gateway ATHENS at the University of Hull.

Books and papers from management and prison literature sources were included.

Reports/policy documents were also obtained from governmental and non-governmental organisations.

The search was limited initially to 1991-2002 for all literature published in English. This produced very little useful material from ABI / PROQUEST because of the large quantity of "noise" – very low quality "magazine" style articles rather than peer reviewed journal hits. As expected there was very little specifically in relation to prisons.

To confirm this ABI /PROQUEST was searched again for the years 1986 – 1999 and 1999 – 2002 (Table 1).

Another database was searched from 1991 – 2002: the Emerald journals full text service (http://www.emeraldinsight.com/ft). This produced more hits and more substantial material on managed change generally from a more focused set of international management journals (Table 2) than the search of ABI / PROQUEST.

Searches were also conducted of the National Criminal Justice Reference System (United States, www.ncjrs.org), the Federal Bureau of Prisons National Institute of Corrections (www.bop.gov) and the UK Home Office research database (www.homeoffice.gov) (Table 3).

The internet was also searched for "change management" and "managed change" using Profusion (www.profusion.com) from which an international survey on change management was found and obtained from ProSci (2000) that is not available currently through libraries.

The team reviewed abstracts (or titles where abstracts were not available) and those deemed not relevant were disregarded leaving 65 papers and books which were consulted and listed in part 2 references. Selected references have been cited.

Databases/organisations searched

Proquest/ABI Inform

Emerald Full Text

National Criminal Justice Reference Service (US)

Federal Bureau of Prisons National Institute of Corrections (US)

Search terms

Home Office (UK)

The search strategy included all aspects of change management. The main terms used are listed in tables 1, 2 and 3.

Results

Table 1: ABI / PROQUEST SEARCH

Database	Keyword(s)	Hit(s)
ABI / PROQUEST	Change management	537
1986-1998	Change management AND Prisons	0
	Management change	79
	Management change AND prisons	0
	Management AND change AND Prisons	4
	prisons	592
	Prisons AND management	60
	Prisons AND management change	0
	Prisons AND change management	0
1999-2002	Change management	66
	Change management AND Prisons	0
	Management change	20
	Management change AND prisons	0
	Management AND change AND Prisons	0
	prisons	137
	Prisons AND management	7
	Prisons AND management change	0
	Prisons AND change management	0

Table 2: EMERALD JOURNALS FULL TEXT SEARCH

Database	Keyword(s)	Hit(s)	Abstracts Examined
Emerald Journals Full Text			
www.emeraldinsight.com			
1991-2002	Change AND management	594	594
3* rated for research	Change AND management	13	13
3* rated for practice	Change AND management	78	78

Table 3: US AND UK GOVERNMENT DATABASES

Database	Keyword(s)	Hit(s)	Abstracts
			examined
National Criminal Justice Reference Service			
http://www.ncjrs.org	Change AND management	305	305
1991-2002	Change AND management AND Prisons	33	33
Federal Bureau of Prisons National Institute of Corrections			Titles only in this database therefore articles selected
http://www.bop.gov 1991-2002	Change AND management	90	5
Home Office			
www.homeoffice.gov.uk 1991-2002	Change AND management	0	0

As can be seen the results are patchy. The addition of the term "prison" eliminates most references in change management. The UK home office database was particularly disappointing. The American databases are substantial and relatively easy to access to anyone with internet access with most articles available for

download in a variety of formats. The Emerald full text service is available through the ATHENS gateway but according to the hit rate and abstracts retrieved appears more helpful than ABI / PROQUEST although we understand that all Emerald journals are indexed by the ABI database. It seems that ABI is so big that a much larger proportion of irrelevant material is often also retrieved.

The material from the review is organised under the headings given below. Given the large number of subjects dealt with in the literature and that much of the material covers many of these no comprehensive classification of individual documents by subject has been attempted.

LITERATURE REVIEW PART 2

There is a large volume of change management literature. Our concern was to determine whether a publication contained something useful about managing change in prisons.

Put precisely: does the publication contain valid and reliable information? Can it be applied to prisons, validly and reliably?

Having examined this literature closely we find that there are quality problems with the standard of evidence. We believe that there is need for caution about context, methods and quality of data when deciding whether findings apply to prisons.

THE STANDARD OF EVIDENCE ON CHANGE MANAGEMENT

CAUTION ABOUT CONTEXT

Unfortunately, what literature exists on change management has been produced mainly in other contexts – usually that of commercial industry. There is also a widespread tendency for researchers in social sciences not to report negative findings. This may be especially so in management where, as Barker (1998) observes few papers report company failure.

Reviewing change management for the NHS Illes and Sutherland said "It cannot be emphasised strongly enough that the nature of evidence and the field of change management may differ from that which is relevant in use for a clinical arena" (2001, p.13). We believe the same caution also applies to the arena of prisons.

This suggests that great care is needed in transferring findings from one industrial domain to another - say from commerce to not-for-profit public service industry.

There are only two ways of dealing with this context of knowledge problem: *either* transfer knowledge from other domains with careful interpretation (it may have worked for the police or Pepsi or even in a Texas Correction Facility but will it work "here"?) *or* generate primary research in the prisons domain which also supports the publication of negative as well as positive findings.

CAUTION ABOUT METHODS: THE ABSENCE OF A UNIFIED SCIENCE OF CHANGE

Closer inspection of the literature on change management in industry in general shows there is a general lack of empirical evidence on change (Illes and Sutherland, 2001; Guimaraes and Armstrong, 1998). This reflects a similar lack of empirical evidence on decision making in all industries - especially at the top management level (Harrison, 1999, p.345).

Much of the literature consists of anecdotes, opinions and case studies that are difficult to collate or to theories or ideas produced by "gurus" that appear plausible but in the end have only anecdotal support – something noted by Illes and Sutherland (2001).

But in making a decision to change something or nothing managers want to know that the decision is based on valid and reliable evidence. In other words managers want to know what "works". So what standard of evidence about change management is good enough?

From a Prison Management viewpoint the ideal evidence on managed change in prisons might be thought to consist of objective, valid and reliable "scientific facts" either about whole prisons or about specific aspects of their structures, processes, outcomes and people (and the other aspects of organisation listed in table 6).

If gathered into a searchable database of factors that are proven scientifically to cause change of one kind or another to aspects of prison organisation this would form a Prison Management Evidence Database. This would be similar to, for example, the databases of clinical evidence now being developed and used in health services internationally – such as the Cochrane database.

In a prison context these facts would be directly linked to management objectives related to security, risk, work, education, recreation, health, administration, human resources, plant and buildings, finance, effectiveness, efficiency, quality and so on.

Knowing what causes what would give managers greater command and control over change.

However we have not found any published evidence on change management generally that conforms to this scientific standard.

This absence reflects the extreme difficulty in carrying out scientific style research in management. The vast majority of studies on change management generally are "opinion pieces", case studies or small sample surveys. We caution that many case studies may really be anecdotes or experiential accounts that have been "repackaged" for publication. Illes and Sutherland (2001) note that the majority of useful studies of change management are qualitative and not quantitative.

Clearly the findings of small samples and case studies must be interpreted and applied with caution. Acknowledging the lack of empirical evidence, Guimaraes and Armstrong (1998) for instance undertook empirical research into change management, obtaining a small convenience sample from a part of the United States and using data that consists of managers' responses to interview questions – an opinion survey not a collection of primary data.

The absence also reflects the problem that management consists of many divided disciplines and philosophical frameworks that are impossible to summarise without frank contradictions with other sources — for examples see Burrell and Morgan (1979), Morgan (1986), Reed (1992) and Jackson (2000) all of whom contradict each other often explicitly in important ways. Between them they represent orthodox modern, post-modern, reductionist, systems, action, quantitative and qualitative ways of understanding and managing organisations and organisational change.

Unfortunately, these divisions mean that it is impossible to speak of a consensus "science" of managed change. Indeed management "facts" tend not to make a coherent picture – put together they are more like a jarring Picasso than a comfortable Constable.

However, there is a case for assembling a dedicated prisons management database that does permit the many kinds of management research to be brought together and which would also act as a commissioning resource.

CAUTION ABOUT SECONDARY DATA: THE ROLE OF FACTS AND OPINIONS

Another sign of the difficulty in getting to the "facts" of change management is the dominance of the literature by opinion surveys and other indirect secondary data.

Opinions often seem to be used as an alternative to direct "hard" primary measurements of structures, processes or outcomes because these are not feasible either technically, politically or financially. The best current commercial survey of change management (ProSci, 2000) is a cross sectional opinion survey of executives in more than 250 firms worldwide. This is comparable to highly regarded examples of management research like that of Stagner (1969) who surveyed 500 vice presidents of 125 firms in the United States.

Yet opinions are probably the least reliable of measures of what are assumed to be objective situations and must be interpreted with caution. In securing the conviction of someone for speeding the opinions of police officers are not usually sufficient – primary data consisting of pictures taken by special cameras are normally required. Even expert opinion is still only opinion

We take the view that opinions of stakeholders are important in their own right however, research on change management should use primary "hard" data as first choice and that opinion surveys should be triangulated to reveal consistencies and inconsistencies.

AN EVIDENCE FRAMEWORK

To clarify matters we propose that practical levels of evidence ought to be applied to change management and management studies generally (table 4). We argue that while this framework is very traditional in its appearance it does reflect the needs of managers and policy makers in the Prison Service and can be applied to qualitative and quantitative research, to reductionist and systems research and to action and traditional research.

All material obtained for this literature review falls into levels 4 and 5. We have been unable to identify any relevant studies from any source that fall into levels 1, 2 or 3.

We recommend that evidence from levels 1, 2 and 3 is addressed in commissioning further research and development and that a Prison Management Database be established.

Table 4: STANDARDS OF EVIDENCE FOR CHANGE MANAGEMENT

Standard of Evidence

- Level 1 Longitudinal comparisons of managed change projects with controls using primary data.
- Level 2 Cross sectional comparisons of managed change projects using primary data.
- Level 3 Case Studies using primary data.
- Level 4 Opinion surveys and case studies using secondary data.
- Level 5 Gurus, anecdotes, experiences and theories

THE MEANING OF CHANGE

Illes and Sutherland (2001) provide part of the answer to the question "how does change occur?" by distinguishing between patterns of change. We have summarised and adapted their scheme in table 5.

Table 5: PATTERNS OF CHANGE AND THEIR MEANING

PATTERN OF CHANGE	MEANING
Emergent	Unintended naturally occurring change
Planned	Intended deliberate change
Episodic	Intended radical change that only occurs occasionally
Continuous / Developmental	Ongoing, adaptive and cumulative
Transitional	Episodic change that redirects the existing organisation
Transformational	Episodic change that changes the organisation fundamentally

While there is overlap between these, the literature on change management tends to deal mainly with Planned Transitional change.

Clearly the other patterns of change are also important. However we also feel it is helpful to go further than Illes and Sutherland (2001) in clarifying in a brief way *what* can change.

WHAT CAN CHANGE?

Unfortunate though it may seem there is no single view as to what can change.

Much of this literature deals with change in specific business processes, systems and organizational structures. There are also many investigations of organisational culture, attitudes and values. However, within the limits of a rapid review of literature, we have been able to clarify what can change very precisely in table 6 by adapting a number of ideas from Organisational Cybernetics, Quality Management and Organisational Behaviour.

We have drawn upon Sir Stafford Beer's Viable System Model (Beer, 1985; Espejo and Harnden, 1989) and Donabedian (1985) who set out an influential formula for quality management in health services. To this we have added the dimension of "people" (Martin, 2001).

We have brought these ideas together in table 6 which provides a powerful way of analysing what aspects of an organisation can change in general terms.

While it is not possible here to describe or discuss the many features that are concealed within table 6 some points are worth noting.

Following the Viable System Model all effective organisations can be thought of as nests of "Russian Dolls".

Any big organisation also contains smaller organisations inside it. Each smaller organisation contains tiny organisations – and so *ad infinitum*. Each of these parts (or "recursions" in cybernetic language) is in many ways a self contained replica of the whole but with different features. For example, a prison wing needs properly delegated management that is in keeping with the Governance of the whole Prison.

Therefore, Table 6 raises questions about change in organisation at the big level (say that of a prison) but it also raises them at the level of the parts of an organisation (say a prison wing).

This means it can be used to "zoom in" to any part of an organisation down to the level of individuals. It can also "zoom out" to the policy level of Government.

Self contained parts of an organisation can undergo patterns of change relatively independently. This is a strength when it helps to focus and set boundaries for change but it is a potential weakness if change is anarchic – clearly the least desirable kind of Emergent Change.

So it is equally important to decide what is to be held constant and stable as well as what is to change – and determine the boundaries, responsibilities and accountabilities of each specific change management project. The Federal Judicial Centre (1997) recommends explaining to employees what will and what will not change.

On the other hand, table 6 also shows that change in any part of organisation has implications for the rest of it. Change management must account for the whole as well as the parts.

Table 6: ASPECTS OF ORGANISATIONAL CHANGE

WHAT CAN CHANGE?	MEANING
Structures	Physical structures: buildings, facilities, and equipment.
	"Virtual" structures: bureaucracy, teams and relationships.

Inputs of materials and other resources
·
Value adding activities that make use of inputs
Customer – supplier chains
Outputs of goods and services
Outputs of processes
The intended purposes of processes
The overall policy goals or management objectives of either the whole organisation or a self contained part of it
The ways and means of strategic decision making
Marketing activity
Public relations activity
Information selected by strategists and operational managers from outside and inside the organisation
Creative analysis and application of this information
Operational management goals or objectives
The ways and means of operational management – decision making, regulation of activity and administration
The balance between autonomy and control of activity
Balance between different areas of activity (to prevent "Paul robbing Peter")
Communication and audit channels
The purpose, time and place of communication
Language of communications
Content of communications
The packaging of communications
The way communications are sent and received
The identity of senders and receivers
Behaviour (what people do)
Identity (who people are)
Rewards (what people want)
Psychology: attitudes, perceptions, beliefs, and feelings
Culture: norms, myths, rituals and rites
Politics: competitions, collaborations, conflicts, winners, losers

WHY CHANGE?

Change may be an inevitable and naturally occurring feature of organisation but why change anything deliberately?

The imperative to change can come from extreme external pressure and has been identified as a cause of successful change (ProSci, 2000). Such pressures can be competitive or political but it is also possible that without extreme pressures that there is inertia – a tendency not to change. There may even be a perceived need for

change without action to change anything at all. In the current policy environment of the Prison Service change is often required (HM Prison Service, 1999 for example). Yet a natural inertia should be expected until a decision to change has been made.

Clearly, it is logical to improve strategies, intelligence, control, coordination, structures, processes, outcomes, communications, and audit and people wherever the benefits of change outweigh costs and risks. Put another way anything can be changed where technically feasible and sufficiently desirable to influential stakeholders.

A key problem though is who counts the costs and benefits of change, how and why? This is a question of stakeholder values well known in health economics (Mooney, 1992).

Since commercial planning tends to be based on cycles of three years or less long-term costs are not counted where they can be avoided so, for example, the long term effects of pollution have traditionally been ignored. In other words, stakeholder values tend to be left out where these conflict with the commercial goal of maximising shareholder value.

In contrast, not-for-profit public services are assumed to be managed on the basis of value for money under the scrutiny of a much larger circle of influential stakeholders including politicians and interest groups all of whom have their own views as what costs and benefits are. This also means that public services have a greater ethical exposure. Change is often going to be driven not just by value for money, but by issues of morality-for-money. Commercial industry is able to deal with issues of morality in a more mercenary way.

Change management projects in the context of prisons in the UK are necessary in order to improve the quality, efficiency, effectiveness and long term viability of the Service. However, change is always going to be more contentious, more constrained and yet more financially, morally and politically sensitive than in commerce.

Therefore, the decision to change ought to be taken in conformance with principles of effective decision making. On the basis of his review of decision research Harrison (1999) strongly advocates the use of formal decision making processes. This involves setting managerial objectives ("the standards against which the performance of management is measured" Harrison, 1999, p.43), searching for alternative courses of action, comparing and evaluating alternatives, the act of choice, implementation and follow up and control (chapter 2 in Harrison, 1999).

Similarly, proposed change projects can and should be assessed against management objectives and be evaluated against alternative proposals for change including that of doing nothing. A successful change is one that, by definition, takes the organisation closer to its management objectives.

It is striking that change management literature that we have seen does not deal with the evaluation of the decision to change – it is assumed that the decision to change has already been taken and that the vision of change is clear.

Taking a formal approach to the decision to change will be uncomfortable for those who are critics of traditional top down management but we feel that in the context of prisons policy makers will favour formality. An excellent example of a formal approach to the identification and evaluation of alternative courses of action, that also facilitates participation, is Friend and Hickling's (1997) Strategic Choice.

FACTORS PROMOTING SUCCESSFUL CHANGE

The literature has produced a number of consensus points on factors promoting successful change.

Change management planning

- The need for change management plans produced well in advance of the change is highlighted in the literature.
- The plans should deal with all the aspects of change at all levels of the organisation listed in table 6. Plans must contain a precise and clear view of the goal and contain a workable way of getting to it.
- Plans should anticipate and contain strategies to deal with negative responses and resistance. The culture and psychology of resistance should be accounted for in strategies, communication plans and provision of career, performance and counselling support.
- Plans should contain effective communication strategies that specify mechanisms to minimise disinformation, maximise information, and provide explanation and feedback at the level wanted by employees.
- Plans should distinguish between operational management roles and project management roles.
- Many of the change management methods listed in appendix 2 are planning and approaches in their own right.

Top management involvement

- Top management means Chief Executive or other Senior Managers giving "Visible, strong upper-management support" (ProSci, 2000, p.5). This may be the single greatest factor promoting successful change management projects. It is also a strong feature of literature on quality management (Oakland, 1999).
- Top management activities include leadership, participation in planning and implementation, making sufficient and necessary resources available for change and clarifying roles, explaining the reasons for the change, facilitating and responding to feedback, taking personal ownership, protecting change agents from attack, meeting resistance "head on".

Involvement of employees and managers throughout the organization

- Ownership must be developed by all those involved in an organisational change. There is evidence that prisons workers who have greater participation in decision making are more effective, less stressed and have higher job satisfaction (Wright, Saylor, Gilman and Camp, 1997).
- Support from all levels of management. Secure commitment and support by presenting each change project as a priority.
- Planning teams are mentioned more than individual planners but there is no
 indication as to which is more effective. The majority of change management
 methods and the quality improvement literature take team planning for
 granted.

Communication

A key skill is the ability of the top management to define and communicate the
vision of what the change leads to. This includes communicating reasons for
the change, what changes could be expected when, and explaining how
change affects individuals and what is expected of them (ProSci, 2000).

- Communication should be open and consistent at least weekly using a variety
 of means including face-to-face, memos, and management team updates by
 the project team, Chief Executive or senior manager presentations.
- Another key skill is the ability to listen at all levels of the change. In part this is simply a logical precondition for gathering data. It is also a logical precondition for effective human relationships. Covey (1989) calls it seeking first to understand and then to be understood.
- From linguistics, all effective communications must be intelligible (using words that are understood), sincere (i.e. reliable, trustworthy like the BBC), true (i.e. the facts are correct) and right (i.e. socially and legally acceptable) (Walsh, 1999; Habermas, 1984). Failure in any of these lead to misinformation, failure to coordinate actions and failure of trust. Communication failure is probably the most often cited cause of all scandals of all kinds in the public sector. There are good grounds for hypothesising that communication failure will probably have been associated with many failures in managed change projects.

Other factors identified are

- Leadership tends to be mentioned as a factor in change management but is vague and difficult to pin down with multiple definitions and a frank contradiction between those who see leadership as an individually acquirable skill or talent (but how do you "acquire" charisma?) and those who see leadership as a property of context and groups (Grint, 2000). Key attributes of leadership often identified are hardiness, curiosity, a positive view of the future, self confidence, self-awareness and the ability to ask for help (US Department of Justice, 1993).
- Physical change such as movement to new premises.
- Extreme pressure to change coming from outside the organization.
- Personnel changes to support the new organization.
- Pre-implementation training of employees.
- Use of external facilitators who have either technical and change management experience to the team.
- Identifying root causes of resistance to change and responding accordingly.
- The use of incentives, appropriate rewards, bonuses and recognition of milestone achievements.
- Use of techniques and methods. See appendix 2.
- Distinguishing between phases of change "Endings", "Neutral Zone" and "New Beginnings" (see later).

FACTORS INHIBITING CHANGE

Management "behaviours" not supporting change

This may be the biggest single factor inhibiting change (ProSci, 2000, p.5). It includes

- Management that is uninvolved or sceptical of new ways (because of lack of understanding or ownership).
- Senior management failure to communicate a "workable" strategy.
- Senior management lack of time to help implement and support.

Inadequate resources of time, money and knowledge.

Resistance by the workforce.

- Resistance is often linked to failure of change management projects (ProSci, 2000; Maurer, 1997; Waldersee and Griffiths, 1997).
- Resistance is natural. Scott and Jaffe (1995) identify change phases that are similar to phases of bereavement: denial, resistance, exploration and commitment. Similarly the US Department of Justice (1993) observes that people hide feelings about loss, that denial is normal and common and that effective change requires a sense of closure-as in bereavement.
- Culture and values often expressed as attitudes are inherently stable and may be highly resistant to change – unless change is itself a core value. The need for top management involvement in change may be symptomatic of the battle for "hearts and minds" (Zhao, He and Lovrich, 1999) that may need to be fought in order to change culture, values and attitudes.
- Workforces may hope that things will remain as they were. This wish for stability is normal. Letting go of established routines can be difficult. The value placed on precedent or tradition or established values may make this more difficult (US Department of Corrections, 2002).
- Resistance may come from a variety of "fears", including fear of job losses, fear of uncertainties, fear of inconvenience, fear of power loss and fear of failure.
- Managers blaming change on external forces will demoralise their workers management must own change (US Department of Corrections, 2002).
- The "trailing edge" is identified in US Department of Justice (1993) literature: older workers, the untrained, the cautious and conservative and the non assertive. Biases and political agendas are also identified.
- Psychological literature like that of Bovey and Hede (2001), and popular but highly regarded "guru" literature like that of Covey (1989) and Peck (1983) identify potential causes of resistance including a lack of recognition of personal responsibility for and ability to change emotion and behaviour; failure to challenge personal beliefs and to admit to irrationality and failure to work at personal change. In theory these can be responded to with appropriate counselling (French, 2001), appraisal and performance review techniques.
- Communication failures and lack of information may slow acceptance of change (US Department of Justice, 1993) and even perhaps lead to a change project failure

METHODS AND TECHNIQUES IN CHANGE MANAGEMENT

A large proportion of management and organisational literature is concerned with description of methods and techniques that are aimed at facilitating developmental or episodic changes. All of these have a literature associated with them but the same evidence problems apply that were discussed previously.

Some of these methods and techniques are relatively all encompassing and sophisticated and others appear simpler – but it is hard to make any generalisation. Examples of more complicated methods and techniques include Total Quality Management (Oakland, 1999), Business Process Engineering (Harrison and D'Vaz.

1995), Viable System Diagnosis (Beer, 1985), Soft Systems Methodology (Checkland and Scholes, 1990), Interactive Planning (Ackoff, 1981) and Strategic Choice (Friend and Hickling, 1997) which has software support.

Arguably simpler (but not less sophisticated) approaches include Strategic Assumption Surfacing and Testing (Mason and Mitroff, 1981) and Critical Systems Heuristics (Ulrich, 1994).

Simpler still are such approaches as Lewin's (1951) famous and highly influential Field Theory, Weisbord's (1976) Six Box model, the Five Whys? approach (Senge, Kleiner, Roberts, Ross and Smith, 1994), and the 7S's model (Peters and Waterman, 1982).

All of these approaches can be used with training or with expert facilitation and guidance. Of course, none of them constitutes a magic recipe for change management success. The proliferation of ways of managing change simply reflects that there are many ways and that evaluation of success is difficult.

One other approach we feel deserves a more complete description is the Bridges (1991) approach to the management of change that is endorsed by the US Department of Justice (1993) and the Federal Judicial Centre (1997). We feel this offers a distinct but practical view of change management that supports and elaborates many of the themes we have identified in the literature.

THE BRIDGES (1991) APPROACH

This approach divides change into three phases:

- Endings phase
- Neutral Zone
- New Beginnings

The Endings Phase

The process of change begins with the end of old behaviour patterns. The main challenge is to get everyone to accept this.

- To achieve this it is necessary for management to state what is ending. This
 means explaining that circumstances have changed and that what worked well
 is no longer relevant.
- Information should be provided that is needed to enable everyone to understand what led to the change. Delays to the provision of information will lead to suspicion and rumour.
- It is better to provide incomplete information than no information. Weekly updates saying there is no more news is better than no news. Provide "storm warnings" warn staff to remain alert for further information and advise them on precautions they should take.
- Set up planning committees consisting of cross-sections of staff to design the change management plan.
- Managers should be prepared to discuss the negative as well as positive aspects of the change, pointing out obstacles, and listening to staff and responding truthfully. This is necessary to develop empathy, trust and truthfulness in the identification and resolution of problems.

- Managers need to provide a purpose for change and a picture of the resulting change including how different the new way of working will feel from the old. This should include where possible accounts from other units that have successfully implemented the particular kind of change.
- Management should judge matters from the staff perspective and acknowledge what will be lost and what will continue.
- Some staff might be overwhelmed by change and not hear the whole message at first. Therefore focus on smaller aspects of the change with them.
- Mark the ending clearly by providing information in a tone that allays misgivings and promotes support for the change.

The neutral zone

This is a period of uncertainty and a re-orientation between endings and new beginnings. Having ended old routines staff probably still feel uncomfortable with new routines and a number of things can happen. Staff may experience anxiety and morale may suffer. Sickness or absence may increase. Old unresolved issues and weakness may resurface. Critics may have at least some short term popularity. Work quality may suffer. Therefore adjustment to new ways of working may take longer than expected

- Managers should explain to staff that they understand that this might happen and take measures to help implementation.
- Managers should also make use of staff concerns and interests, fostering creativity and provide appropriate training.
- Potential critics can be disarmed by giving them a role in the transition.
- Do not over-react to criticism. Get critics concerns into the open helping them to describe them – do not be defensive. Follow Covey (1989): seek first to understand then to be understood.
- Identify supporters and potential resistors of change. Think about individuals or groups: what are their prime concerns and interests?
- Identify blockers (opposed to change will attempt to undermine and prevent it);
 watchers (neither opposes nor supports the change); helpers (supporters of the change); leaders (will mobilise support amongst others).
- Analyse individual and group stances to set the stage for conversations aimed at moving forward. Identify bedfellows, allies, opponents, adversaries and fence sitters.
- Monitor the transition perhaps by setting up monitoring teams.

New beginnings

In this phase the changed way of working is up and running and this may be associated with both excitement and fear. A true new beginning has occurred when people make an emotional commitment to do things in a new way.

The most common cause of failure to achieve a new beginning is rushing through the previous phases. The need to manage endings means that old routines may continue for a while. Hurrying through the neutral zone means staff will not be able to acquire the skills necessary or explore the creative options that can support the change.

 Look for indications that people are out of the neutral zone: for example by an increase in suggestions about how to move forward.

Conclusion

We have found that there is no unified science of change management and that there is a general lack of empirical evidence across the board about change management. In the context of prisons there is even less empirical evidence on which to base change management decisions.

We have proposed a general evidence framework that can be used to categorise broadly the quality of evidence for and commission research into prisons management.

We argue that proposals for change should be subjected to a formal decision making process in keeping with good practice in decision making in which alternatives to the proposed change are also evaluated.

We find that change can occur to structures, processes, outcomes and people (table 6) in planned or unintended ways, gradually or radically.

Despite the lack of empirical evidence we find that there is a broad consensus on the features of successful change management approaches. These features are comprehensive forward planning with counter-resistance strategies, top management involvement, excellent communications, clarity of vision, involvement and ownership of staff affected by the change and the use of change management techniques and methods.

We have summarised in brief the Bridges (1991) approach to change management that is endorsed by the US Department of Corrections.

Appendix: Prison Health Literature (annotated)

Key: CD Communicable diseases (including sexually transmitted

diseases)

GN General

HP Health promotion
MH Mental health
OP Older prisoners
PC Palliative care
SA Substance abuse

TM Telemedicine

Author(s) & year	Title	Country of origin and main points	
Akhtar et al 2001	HIV/Aids knowledge, attitudes and beliefs bases prediction models for practices in prison inmates, Sindh, Pakistan	Pakistan: increased knowledge about HIV/AIDS correlated with heterosexuality, knowledge alone did not modify behaviour, drug use clouds judgement leading to unplanned sexual activity	CD
Allwright et al 2000	Prevalence of antibodies to hepatitis B, hepatitis C, and HIV and risk factors in Irish prisoners: results of a national cross sectional survey	Ireland & UK: statistics from Ireland	CD
Anonymo us 2001	Methicillin-resistant Staphylococcus aureus skin or soft tissue infections in a state prison – Mississippi, 2000	USA: Offprint requested	CD
Anonymo us 2001	Helping mentally ill people break the cycle of jail and homelessness	USA: decreasing homelessness has benefits for the community	MH
Appelbau m et al 2002	A university-state- corporation partnership for providing correctional mental health services	USA: about revenue raising for private enterprise in this area	MH

Appelbau m et al 2001	The role of correctional officers in multidisciplinary mental health care in prisons	USA: outlines the role of correctional officers in liaison with health team	MH
Badger et al 1999	Planning to meet the needs of offenders with mental disorders in the United Kingdom	UK: Offprint requested	MH
Beaupre 1994	Confidentiality, HIV/Aids and prison health care services	Canada: tensions for doctors regarding confidentiality for infected prisoners	CD
Bellis et al 1997	Prevalence of HIV and injecting drug use in men entering Liverpool prison	UK: presents descriptive statistics	CD
Birecree et al 1994	Diagnostic efforts regarding women in Oregon's prison system: a preliminary report	USA: incidence of mental health disorder high and substance abuse common	MH
Birmingha m et al 1999	The psychiatric implications of visible tattoos in an adult male prison population	UK: tattoos linked to diagnosis of schizophrenia but not to other diagnoses	MH
Birmingha m et al 1997	Health screening at first reception in prison	UK: considerable amount of psychiatric morbidity missed at initial screening and thereafter	МН
Birmingha m et al 1996	Prevalence of mental disorder in remand prisoners: consecutive case study	UK: prevalence is high but numbers identified at reception is low	MH
Blaauw et al 2000	Mental disorders in European prison systems. Arrangements for mentally disordered prisoners in prison systems of 13 European countries.	Holland & Canada: provides European prevalence, reports poor level of training in mental health for correctional officers	MH
Blanc et al 2001	The effect of incarceration on prisoners' perception of their health	French: uses French translation of the Nottingham Health Profile successfully with prisoners, described as easy to use and acceptable to inmates in recognition of factors associated with suicide	МН

Bone et al 2000	Tuberculosis control in prisons: a manual for programme managers	Europe: a WHO report from many countries with comprehensive guidelines	CD
Bowden 2000	The future of prison health care	?: Offprint requested	GN
Brecht et al 1996	The University of Texas Branch-Texas Department of Criminal Justice Telemedicine Project: findings from the first year of operation	USA: issues of cost, security and distance are considered	TM
Brinded et al 2001	Prevalence of psychiatric disorders in New Zealand prisons: a national study	New Zealand: identifies need for increase in services and improved screening instruments	MH
Brinded 2000	Forensic psychiatry in New Zealand	New Zealand: a historical review of systems in New Zealand	МН
Butler et al 2001	Syphilis in New South Wales (Australia) prisons	Australia: indigenous ethnicity greatest predictor, could be linked to low access to health services	CD
Caraher et al 2000	Evaluation of a campaign to promote mental health in young offender institutions: problems and lessons for future practice	UK: guiding staff on their role is crucial	MH
Caraher et al 2000	The range and quality of health promotion in HM prisons	UK: health promotion in under-resourced, concept poorly understood and practiced	HP
Coninx et al 1999	First-line tuberculosis therapy and drug- resistant Mycobacterium tuberculosis in prisons	Switzerland: problems of antibiotic resistance raised	CD
Corrado et al 2000	Comparative examination of the prevalence of mental disorders among jailed inmates in Canada and the United States	Canada: reports use of Brief Psychiatric Rating Scale, little evidence for 'warehousing' of mentally ill offenders in prisons	MH

Corwin 2001	Senioritis: why elderly federal inmates are literally dying to get out of prison	USA: not about health but about how older people are kept in prison until they die despite low recidivism rates	OP
Council of Europe Committe e of Ministers 1998	Recommendations No R(98)7 of the Committee of Ministers to Member States Concerning the Ethical and Organisational Aspects of Health Care in Prison	Europe: provides main characteristics of the right to health in prison	GN
Dale & Woods 2002	Caring for prisoners: RCN prison nurses forum Roles and Boundaries Project	UK: provides characteristics of nurses who work in prisons and the main features of the role which they find problematic	GN
Des Anges & Diamond 1996	An exploration of social policy and organisational culture in jail-based mental health services	USA: explores prison health care from four different perspectives; considers change	GN
Diamond et al 2001	The prevalence of mental illness in prison	USA: methodological, looks at prevalence studies, compares mental health and correctional policies	МН
DOH & HM Prison Service 2001a	Changing the Outlook: A Strategy for Developing and Modernising Mental Health Services in Prisons	UK: a response to the National Service Framework for Mental Health	MH
DOH & HM Prison Service 2001b	Prison Health Handbook	UK: a resource book for prisons for the organisation and management of prison health care	GN
DOH & HM Prison Service 2001c	Report of the Working Group on Doctors Working in Prisons: Summary and Key Recommendations Plan of Action	UK: makes recommendations on pay and training for doctors and structure and qualifications	GN

Duhamel et al 2001	Social and health status of arrivals in a French prison: a consecutive case study from 1989 to 1995	France: health needs assessment of arrivals in prison, advocates the use of a standardised questionnaire for new arrivals, sample size 14, 785	GN
Edwards et al 2001	Issues in the management of prisoners infected with HIV-1: the King's College Hospital HIV prison service retrospective cohort study	UK: the details of one system	CD
Elkins & Olagundo ye 2000	The prison population in 2000: a statistical review.	UK: statistics of prison population	GN
Ellis et al 2001	A telemedicine model for emergency care in a short-term correctional facility	USA: successful implementation providing some secondary care	TM
Estebanez et al 2002	The role of prisons in the HIV epidemic among female injecting drug users.	Spain: identifies factors associated with high risk behaviour including drug use, substantial reproductive health needs identified	CD
Fazel et al 2001	Health of elderly male prisoners: worse than the general public, worse than younger prisoners.	UK & Ireland: rates of illness among older prisoners greater than among younger prisoners	OP
Fazel & Danesh 2002	Serious mental disorder in 23 000 prisoners: a systematic review of 62 surveys	Large worldwide problem but not know how well it is being addressed	МН
Fearnley & Zaatar 2001	A cross-sectional study which measures the prevalence and characteristics of prisoners who report a family history of epilepsy	Prisoners with epilepsy have more psychological problems and this may affect relatives	HP
Gallagher 2001	Elders in prison: health and well-being of older inmates	Canada: not enough know about the health of older prisoners	OP

Gershon et al 1999	Compliance with universal precautions in correctional health care facilities	USA: concerned with reducing blood borne infection in correctional health care workers	CD
Godin et al 2001	Correctional officers intention of accepting or refusing to make HIV preventive tools accessible to inmates	Canada: generally favourable but not favourable (only 21%) to all tools (eg condoms, bleach, syringes) being available and psychometric correlates of officers are given	CD
Greifinger et al 1993	Tuberculosis in prison: balancing justice and public health	USA: tuberculosis in prisons is a threat to the general population	CD
Gullone et al 2000	Coping styles and prison experience as predictors of psychological well-being in male prisoners	Australia: psychosocial/psychometric assessment of prisoners reveals compromised well-being and coping styles related to prisoners	MH
Hanson & Gray 1997	Lessons learned from developing a women's prison health promotion program	USA: five lessons including the fact that prisons are not therapeutic environments	HP
Hartwell 2001	An examination of racial differences among mentally ill offenders in Massachusetts	Mental health problems ascribed to different racial groups	МН
Hilton & Simmons 2001	The influence of actuarial risk assessment in clinical judgements and tribunal decisions about mentally disordered offenders in maximum security	Canada: actuarial assessment consistently better and no relationship to clinician's judgement	MH
Huws et al 1997	Prison transfers to Special Hospitals since the introduction of the Mental Health Act 1983	UK: considers correctional/clinical interface, little evidence of relationship between tie in hospital and gravity of offence or of hospitalisation being used to lengthen sentences	МН
HM Inspectora te of Prisons 1996	Patient or Prisoner? A new strategy for health care in prisons.	UK: advocates the end of separation of health care for prisoners from NHS	GN

HM Prison Service & NHSE 1999	The Future Organisation of Prison Health Care	UK: definitive report on the organisation of UK prison health care, includes sections on change management and models of health care	GN
HM Prison Brixton 2000	Health Needs Assessment	UK: a comprehensive report on the implementation of health needs assessment in one prison	GN
HM Prison Service & DOH 2000	Nursing in Prisons	UK: recommendations for nursing and health acre officers working in prison including specific training and the development of occupational standards	GN
HM Prison Service & DOH 2001	Prison Health Policy Unit and Task Force Annual Report 2000/2001	UK: essentially a follow up report from The Future Organisation of Prison Health Care providing statistics and progress	GN
Hobbs & Dear 2000	Prisoners' perceptions of prison officers as sources of support	Australia: if prisoners can only seek help via prison officers (eg for stress) then they will be reluctant to do so	МН
Hoptman et al 1999	Clinical predictors of assaultive behavior among male psychiatric patients at a maximum-security forensic facility	USA: clinical assessment is useful	MH
Hucklesby 2001	Drug misuse in prison: some comments on the prison service drug strategy	UK: problems with mandatory drug testing leading to greater use of harder drugs, supply of drugs is not the problem	SA
Ingram- Fogel 1991	Health problems and needs of incarcerated women	USA: Offprint requested	GN
Jager 2001	Forensic psychiatry services in Australia	Australia: describes Australian system	МН
Joukama 1995	Psychiatric morbidity among Finnish prisoners with special reference to socio- demographic factors: results of the Health Survey of Finnish Prisoners (Wattu Project)	Finland: alcoholism and personality disorders related to psychiatric morbidity	МН

Koulieraki s et al 2000	HIV risk behaviour correlates among injecting drug users in Greek prisons	Greece: can identify pre-prison factors leading to drug use in prison	SA
Lamb & Weinberg er 2001	Persons with severe mental illness in jails and prisons: a review (reprinted from 1998 source)	UK: a very thorough review of the issues organised under headings such as 'incarceration versus hospitalization', 'causative factors'	MH
Lamberti et al 2001	The mentally ill in jails and prisons: towards an integrated model of prevention	USA: report on Project Link, a university led consortium, success reported	MH
Langan et al 2001	Gender differences among prisoners in drug treatment.	USA: women are more frequent drug users and face greater social difficulties than male prisoners	SA
Lindquist & Lindquist 1999	Health behind bars: utilization and evaluation of medical care among jail inmates	USA: females and older prisoners experience more health needs than other prisoners	GN
Liska et al 1999	Modelling the relationship between the criminal justice and mental health systems	USA: multivariate modelling of relationships, racial composition influences jail capacity	MH
Lynch 1993	Forensic nursing: diversity in education and practice	USA: presents historical perspective and a theoretical model for forensic nursing	GN
McClanah an et al 1999	Pathways into prostitution among female jail detainees	USA: child abused, being a run away and being drug dependent are related to prostitution	MH
MacKay & Machin 2000	The operation of Section 48 of the Mental Health Act 1983	UK: need for more secure beds identified	МН
Maeve & Vaughn 2001	Nursing with prisoners: the practice of caring, forensic nursing or penal harm nursing?	USA: about the application of models of nursing to prison health care, better pay might encourage better nurses to work in the prisons	GN

Malloch 2000	Caring for drug users? The experience of women prisoners	UK: prison is a place for improved healthcare regarding drug misuse through promotion of a positive environment, but problematic for women	SA
Marquart & Merianos 1996	Thinking about the relationship between health dynamics in the free community and the prison	USA: Proposes a research agenda which should include consequences of confinement on health, mortality in prison and the link between use of correctional health services and societal health patterns	GN
Marshall et al 2001	Health care needs assessment in prisons: a toolkit	UK: promotes a systematic approach to health care needs assessment using University of Birmingham toolkit	GN
Marshall et al 2000	Toolkit for healthcare needs assessment in prisons	UK: a report providing the details referred to in Marshall et al 2001	GN
Maull 1998	Issues in prison hospice: toward a model of delivery of hospice care in a correctional setting	USA: provides a model and raises future research questions	HC
Metzner et al 1994	Mental health screening and evaluation within prisons	USA: about implementation of USA standards	МН
Mitchell et al 2001	An outbreak of syphilis in Alabama prisons: correctional health policy and communicable diseases	USA: protection of public mentioned, condoms recommended	CD
Mitka 2001	Innovative program for mentally ill inmates	USA: a non-punitive way of dealing with violent mentally ill offenders	МН
Mohle- Boetani et al 2002	Tuberculosis outbreak in a housing unit for human immunodeficiency virus-infected patients in a correctional facility: transmission risk factors and effective outbreak control	USA: demonstrates collaboration between prison and health department	CD
Munetz et al 2001	The incarceration of individuals with severe mental disorders	USA: schizophrenia is major diagnosis with 70% abusing substances	МН

Okwumab ua 2000	Perspectives of low- income African Americans on syphilis and HIV: implications for prevention	US: predominant in African-Americans, ignorance of severity of HIV, role of women and community emphasised	CD
Parsons et al 2001	Prevalence of mental disorder in female remand prisons	UK: conclude that prevalence is very high	MH
Petit et al 2001	Management of diabetes in French prisons: a cross-sectional study	France: prisoners could not keep own syringes etc and autonomy of prisoners decreased as a result	HP
Pollack et al 1999	Health care delivery strategies for criminal offenders	USA: describes dimensions of Medicaid managed care	GN
Pope 2000	Health care in prison takes a model from managed care	USA: describes a model of managed care involving two universities	GN
Potts 2000	HIV/Aids in federal prisons: Canada's national response	Canada: prevalence in prison 20 times general population	CD
Rasmusse n et al 1999	Personality disorders, psychopathy, and crime in a Norwegian prison population	Norway: statistics from Norwegian prisons including type of crime	МН
Reed & Lyne 2000	Inpatient care of mentally ill people in prison: results of a year's programme of semistructured inspections.	UK: identified standards below NHS standards in terms of lack of psychiatric training amongst doctors and nurses	MH
Reeder & Meldman 1991	Conceptualizing psychosocial nursing in the jail setting	USA: conflicts for nurses working with mentally ill offenders, biopsychosocial model of nursing may be appropriate in this setting	МН
Renton 1998	Evaluation of a pilot service for male mentally disordered offenders on remand: the Bentham remand bed unit and assessment service	UK: describes locked ward for remand prisoners, aims to speed transfer to NHS care	MH
Resnick 1995	Waiting for treatment: an audit of psychiatric services at Bullingdon prison.	UK: attainability of standards questioned and suggestions made for improving services	МН

Reyes & Coninx 1997	Pitfalls of tuberculosis programmes in prisons	Switzerland: asks if prisons could ever be a good environment for tuberculosis programmes	CD
Rogers & Seigenthal er 2001	Correctional health as a vital part of community health	USA: screening for infectious diseases in prisons recommended, health of general community mentioned	CD
Roskes & Feldman 1999	A collaborative community-based treatment program for offenders with mental illness	USA: describes a programme, more research required into clinical correctional collaboration	MH
Siefert & Pimlott 2001	Improving pregnancy outcome during imprisonment: a model residential care program	USA: drug dependency and psychological needs considered, proposes a model for social work involvement	SA
Simooya & Sanjobo 2001	'In but free'- an HIV/AIDS intervention in an African prison	Zambia: practical approach, decreased sex between men but condoms send mixed messages	CD
Singleton et al 1997	Psychiatric morbidity among prisoners	UK: statistics presented under different headings eg personality disorders, self-harm etc	MH
Smith 2000	'Healthy Prisons': A contradiction in terms?	UK: health promotion in prisons is located within wider drive towards health promotion in society, mandatory drug testing is challenged on several fronts	HP
Smith 1999	Prisoners: an end to second class health care?	UK: editorial arguing that NHS must take over	GN
Spaulding et al 2001	Can unsafe sex behind bars be barred?	USA: condoms are used for other purposes such a drug concealment	CD
Staton et al 2001	Health service utilization and victimization among incarcerated female substance users	USA: addresses the rising female prison population	SA
Steadman et al 1999	A SAMHSA research initiative assessing the effectiveness of jail diversion programs for mentally ill persons	USA: Offprint requested	MH

Stern 2001	Problems in prisons worldwide, with particular focus on Russia	UK: explores the link between prisons and disease, advocates separation of prison and health care management	GN
Swartz et al 1999	Psychiatric illness and comorbidity among male jail detainees in drug treatment	USA: Offprint requested	МН
Tarbuck 2001	Health of elderly prisoners (Editorial)	UK: editorial, older prisoners likely to be doubly disadvantaged but there is a paucity of research	OP
Tomasevs ki 1994	Prison health law	Denmark: prison health seen increasingly as part of health system rather than penal system	GN
Tripsianis & Gizari 2000	Greek adolescents in custody: psychological morbidity	Greece: Offprint requested	МН
US Departme nt of Justice 2001	Provision of mental health care in prisons	USA: statistics and recommendations from the USA	MH
US Departme nt of Justice 1998	Hospice and palliative care in prisons	USA: outlines advantages of providing palliative care in prisons	PC
US Departme nt of Justice 1997	Prison medical care: special needs populations and cost control	USA: reports on consolidated health care, telemedicine and managed care	GN
US Departme mt of Justice 1991	Intervening with substance-abusing offenders: a framework for action	USA: encourages link with other agencies	SA

WHO 2001	Healthcare study of the Irish prison population	Europe: contains statistics from Ireland	GN
WHO 2000	Preventing suicide: a resource for prison officers	Europe: provides best practice guidelines	МН
WHO 1999	Health in Prisons Project	Europe: a comprehensive project update reporting from the different aspects of the project and from different countries involved	GN
WHO 1997	Consensus statement on mental health in prisons	Europe: provides a statement and potential advantages for the various constituencies involved	МН
Willford 2001	Developing effective palliative care within a prison setting.	UK: anecdotal account of the professional development of prison nurses	PC
Zaylor et al 2001	Clinical outcomes in a prison tele-psychiatry clinic	USA: good outcomes from use of telemedicine for psychiatric consultations measured using symptom distress scale	TM

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