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This is the authors' version of a paper presented at the Commonwealth Department of Health and Ageing Casemix Conference 2008: *The casemix evolution: extending the boundaries*.

Please cite this article as:

Donnellan-Fernandez, R.E., Newman, L., Reiger, K. and Tracy, S., 2008. Maternity funding and workforce reform: strategies for better design, better value, better health and equity. *The casemix evolution: extending the boundaries*. Commonwealth Department of Health and Ageing Casemix Conference 2008.

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Maternity Funding & Workforce Reform: Strategies for Better Design, Better Value, Better Health and Equity

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Synopsis: The purpose of this paper is to make transparent the connections between funding, workforce issues, and clinical outcomes in Australian maternity services, including their relationship to Casemix. It will also examine how these factors intersect and impact existing service models, emerging service models and, most importantly, contemporary consumer demand, community expectations of health care, and health outcomes for women and babies in the short and long term. Central to this purpose, the paper offers a dual critique: a) that the principles, foundation and model for funding maternity service provision in Australia within acute hospital services is seriously flawed and a significant driver for increased expenditure as well as unnecessary clinical interventions in healthy women and babies, and short term adverse health outcomes for mothers, babies and families; it also results in a larger, hitherto unacknowledged systems legacy with significant implications for long term health and economic outcomes of the population, including future health system management of the burden of chronic disease; b) that there is a current mismatch between policy and funding structure whereby biomedical/acute care models of service delivery for healthy pregnant women and babies are broadly privileged as the dominant paradigm for maternity services. This constitutes incoherent health policy and is inconsistent with both medical research and evidence-based 'best practice,' including a population health approach to delivery of maternity services and the view that good maternity service provision can act as a population level preventative health strategy. The paper uses Ulrich's Systematic Boundary Critique (1) as a framework to make transparent the limitations and dysfunction of the current system and to propose an alternative design which has the capacity to improve equity, access, clinical outcomes, and reconfiguration and utilization of the skilled midwifery workforce. The new design can contribute reduced health care costs, labour force efficiency, staff retention, and economically sustainable services. The paper concludes that a national approach to policy and structural funding reform that relocates mainstream maternity services for healthy women and babies within a primary health care paradigm is urgently required in Australia, and is aligned with widespread consumer lobbying for such reform.

Introduction

Health care costs are escalating in Western economies, including Australia (2). In South Australia the Health Department has failed to meet savings targets and over the next three years needs to reduce costs by \$350m (3). Governments, policy makers, funders, providers, service users and resource managers need to find ways to reduce these costs. However, health care resources do not produce the same "value for money" across countries, (4), and there is now significant evidence that the amount of health care spending bears no relation to the level of a country's population health or the degree of improvement in outcomes (5). There are many examples in the health system where the practice of investing more money into a problem exacerbates the problem, perpetuating both spiralling health care costs and additional health and systems challenges. Ongoing government subsidization of the private health insurance industry is considered a current case in point by some long term economic and health policy commentators (6). Specific examples in relation to maternity service distortions have been provided in recent years (7, 8, 9). There is also robust and increasing international evidence supporting the links between a rising caesarean section rate, (currently at 30.3% of births in Australia for 2005), and elevated levels of maternal morbidity (10, 11, 12, 13). Additionally, Australian-specific examples clearly demonstrate associations between increased assisted and operative birth rates for low risk women as a result of hospital interventions during the process of normal labour, (14, 15, 16, 17), juxtaposed against reducing length of hospital stay (18). Elshaug and colleagues are strong proponents of the need for government disinvestment in health care technology and practices that are ineffective (19). It is asserted that funding and delivery of maternity services in the Australian context is the result of long term ineffective health policy and funding structure, and that major reform to both is required to address current distortion. This paper seeks to highlight and critique some of the broad structural weaknesses in the Australian health economy as relates to funding and configuration of maternity services, as well as adverse health outcomes for women and their families which are generally not acknowledged. It advances the need

for national leadership, community engagement, and long term vision in maternity service policy, planning and reform initiatives being undertaken in the context of the current national review of maternity services by the Australian Government (20). It also charts strategies for better design, better value, better health and equity in maternity care, from the perspective of some service users and service providers.

Problems with Current Maternity Funding Reimbursement in Australia

Despite the fact that childbirth accounts for one of the largest number of bed stay days in Australian public and private hospitals, with admitted patient services in childbearing consuming 92% of the federal maternity budget (20), maternity services are currently not being overtly acknowledged by policy makers or funders as a significant consumer of financial health resources and workforce. Reimbursement for maternity care in Australia is subject to the same perverse cost shifting arrangements between state and federal government that infests other areas of health. Federal funding for episodic maternity care reimbursement exists through the universal government insurer Medicare. As with those who hold private health insurance status, reimbursement through the Medicare Schedule takes place within a restricted, anti-competitive market that excludes providers who are not medical professionals, and for childbirth, environments that are not funded through acute sector hospital settings. Both current provider and acute sector funding arrangements encourage distortion in that they are based on fee for service and/or procedural cost weightings that privilege a biomedical model, with linkage discrimination to favour general medical practitioners and specialist obstetricians. A recent addition to the Medicare Funding Schedule (Item 16400) exacerbates market distortion by including medical reimbursement for services provided by other health workers on behalf of a medical business. These arrangements are in stark contrast to health systems in other countries where a primary health care policy and evidence-based approach to workforce and service provision enables recognized primary maternity providers such as midwives to be funded and configured in community based services as the first point of contact for healthy pregnant women, with appropriate evidence-based guidelines in place for medical referral (21, 22, 23).

In Australia, the vast majority of pregnancy and childbirth care is accessed through public sector health services (20). Within these services state based funding is disproportionately consumed through the acute care hospital sector in which the authors of this paper claim it is the episodic, procedural Casemix Diagnostic Related Groups and their cost weightings that both assist to encourage increased interventions and therefore also exert considerable influence and distortion of funding distribution. Ethicist Tonti-Filippini cautioned against judging efficiency and productivity in relation to Casemix funding by statistical analysis alone over ten years ago (24), and in 1998 Hanson expressed the view that "lack of participation by the broader clinical community not only could leave Australia with patient classification and funding systems with inadequate clinical relevance, but could also affect the financial stability of a range of clinical services, reduce clinical autonomy and potentially compromise quality of patient care" (25). In the same year, Roberts, Innes and Walker pointedly commented that "codes for diseases and procedures are the basic ingredients of the casemix recipe," (26), thus raising the question of whether it constitutes a suitable funding modality for primary health care services. In the context of private sector maternity service arrangements, private health insurance funds also privilege medicine, are anti-competitive using 'free-market' arguments, and penalize public sector services as private health premium rebates are being significantly subsidized by Australian tax payers. No other 'private' industry enjoys this level of protectionism, and as several commentators have pointed out in relation to the health system more broadly, this can enhance risk considerably for market distortion and 'moral hazard' issue in the delivery of health services (2, 6).

Funding as a Driver for Increased Medical Procedures on Healthy Women & Babies

During the early years of Casemix introduction to the Australian health system Duckett acknowledged that, 'although the design of a funding system is in part a technical process to ensure that hospitals have appropriate incentives for efficiency, it is also a political process insofar as providers need to be assured that the funding formula is fair' (27). So what is currently wrong? Funding for maternity services in Australia is not based on maximizing health outcomes and minimizing costs. Funding is reactive. The economic effects of this in relation to maternity care are transparently demonstrated by the Medicare spending increases that occurred from 2003-2004 after the introduction of the Commonwealth Medicare Safety Net. For the July-September quarter yearly comparisons, Quinlivan noted an extraordinary 71% rise in obstetric expenditure from one year to the next (28). Current funding models for healthy pregnant women inside and outside Casemix arrangements privilege medical and acute sector hospital-based care. Casemix is designed to protect the immediate funding interests of the hospital, and thereby, as far as childbirth is concerned inadvertently provides an inappropriate financial incentive to perform unnecessary medical procedures. It is asserted that in relation to maternity care this will continue to have long term cumulative direct and indirect

consequences that distort both funding and, in its wake, other health outcomes such as breastfeeding rates, allergy and childhood obesity rates, diabetes, perinatal depression rates, and long term risks for other unknown costly chronic morbidity. An alarming example of such morbidity is the 20% increase in the risk of childhood-onset type 1 diabetes after caesarean section delivery that cannot be explained by known confounders (29). In the 2007 Australian Institute of Health and Welfare (AIHW) National Perinatal Statistics Unit annual perinatal report “the proportion of women who had induced or no labour, and the proportion who had instrumental delivery or caesarean section, increased with socioeconomic advantage”, rather than increasing in line with characteristics that would be expected to be associated with poorer health outcomes, such as Aboriginality, lower income level, and level of socioeconomic disadvantage (30). These findings confirmed the findings of the 1999 Senate Inquiry Into Childbirth Procedures which found that “while women acknowledge the contribution of the medical profession to Australia’s low mortality rates they are generally concerned by the extent to which childbirth has been medicalised. This has led to a significant increase in the level of intervention and consequent morbidity and in the disempowerment of the women giving birth” (31). Linkages between health insurance status and increased rates of obstetric intervention and cost have now also been well established by other studies in Australia (9, 16, 32, 33).

Work Force Inefficiency

Micro-economic reform will not fix systemic structural deficiency in relation to significant public health issues (34). This includes maternal and child health. Whilst critique of current health funding arrangements in Australia is already the subject of broad commentary by health economists (2, 6), few commentators have been willing to take up specific critique in relation to either policy or the funding of maternity services, which has been left to organized consumer advocacy groups such as the national Maternity Coalition in their lobbying efforts for access to a broader range of funded service models in maternity care (35, 36). It is asserted that current structure is expensive, wasteful, and has significant workforce ramifications, ie inefficient utilisation of current skilled workforce (medical, but particularly midwives), many of whom become or remain disenfranchised, deskilled and alienated in the existing fragmented system. This system does not acknowledge and utilise the professional midwifery scope of practice to full advantage, nor is it maximizing the efficiencies that could be gained from utilizing existent midwifery workforce to expand a primary health care approach to maternity care, (37,38, 39, 40, 41). Additionally, midwives currently educated through comprehensive 3 year Bachelor of Midwifery programs at Australian universities are not having their skills recognized, utilized or integrated within existing work force models. This situation is diametrically opposed to policy principles and public health strategies attempting to enhance recruitment and retention of skilled work force (42). It is paradoxical that ‘hospital avoidance’ and ‘care in the community’ strategies that are currently being applied in other sectors, such as aged care and the management of chronic disease, are receiving nowhere the same amount of due diligence and structural reform considerations in relation to maternity services. Midwifery is a public health initiative and in maternity care, similar principles could be applied not in relation to outpatient clinic design, but in home- and community-based, locally accessible caseload midwifery services (43).

Symptoms of the Current Dis- ease in the System

What are the basic values and principles underpinning how maternity care policy is structured and services are delivered in Australia? To borrow a well used phrase from the Centre for Policy Development, ‘the tail wags the dog’ in maternity, as it is currently funding structures that drive policy and service delivery modes, rather than the converse (44). An historical exception was the short lived Alternative Birthing Services (ABSP) pilot programs and services established under a finite quarantined funding pool provided by the federal government in 1989, including a limited number of ‘culturally appropriate’ services for small numbers of Aboriginal women. Many of these models provided funding only for 20 to 30 women per year, and were neither well integrated with existing services, nor established within structures and systems that promoted expansion and long term sustainability. Despite the robust safety record of midwife-led care in Australia’s birth centres, it remains the case that less than 3% of the birthing population have access to these facilities (45). Even broader mainstream initiatives to introduce collaborative midwifery services to groups outside the ‘low risk pregnancy’ category have relied more on localised responses to maternity service withdrawal (46,47) or the long standing will and determination of key players within established health bureaucracy, rather than with a view to root and branch reform and long term sustainability. Many of these services demonstrate remarkable improvements in maternal and infant health outcomes, yet remain conscripted to metropolitan areas where they are both geographically constrained and forced to ‘cap’ service numbers due to high rates of oversubscription and unmet demand, with limited opportunities to expand and extend the access and equity of service provision (48). As a consequence, widespread reform to mainstream maternity service provision remains stymied due to both policy vacuum and ongoing structural impediments, including funding and inefficient use of the

current skilled midwifery workforce. There is widely held belief that the basic values and principles informing maternity care policy and services in Australia should be underpinned by woman-centred care which prioritises normal birth according to World Health Organization (WHO) recommendations and the Fortaleza Declaration (49, 50). There is a need for maternity care policy, planning, funding and evaluation to acknowledge the health impacts on people and processes beyond the immediate procedure. This must include processes for consumer participation (51). There is currently little acknowledgement of the significant impact of pregnancy/ birth /early life outcomes on the mother's mental and physical health, the early childhood environment, and the prevention of chronic disease later in life, all of which have economic and health consequences across the life course.

The current funding system contributes to high levels of health expenditure and adverse impacts on women's and babies' health in the short and long term that are currently under-recognised (52). Aside from Australia's good record in terms of maternal and infant mortality rates (30), there is no serious recognition of, nor associated proactive strategic action on, the significant co-morbidities resulting from the high Australian caesarean section rate, eg sub-optimal breastfeeding rates (also linked to poorer outcomes such as increased allergies, asthma, childhood obesity, diabetes), and the high postnatal depression rates, which are often linked to women's unsatisfactory experiences of services and treatments, including 'uncaring care' in the current maternity system, (31). These are serious systemic failures that have ongoing health and economic consequences for women's, babies' and families' wellbeing throughout their lives, regardless of country or culture (53). Thus far, policymakers and government reaction has been solely to seek cost reduction by centralization and rationalization of maternity services in the public system into large metropolitan acute care tertiary settings (47), and subsidisation of care into the private health system. As has already been shown, private health insurance status in maternity care has a direct link to higher intervention rates for the healthiest and most affluent members of the population. Not only is this false economy, it constitutes both poor policy and poor population health care, and is contributing to:

- **Suboptimal health outcomes which are expensive at varying points along the life course** for mothers and babies, from early childhood to a later burden of chronic disease. The current focus of care in acute care settings simply continues to perpetuate the 'industrialized' birthing model which is proving to be dysfunctional because it is associated with increasing intervention rates and suboptimal health outcomes in the broader sense (54, 55).
- **Problems from centralisation:** Recent centralization initiatives in the heavily medicalized Australian 'birth system' is further disadvantaging individuals and groups who are already marginalized by poverty and who are often powerless to access alternative models. This has other cumulative negative effects, such as penalising and discouraging antenatal attendance for women in particular high needs groups who already carry a high burden of chronic disease across the life course (eg Aboriginal, teenage, low-income and refugee groups) (56, 57). Access and equity is compromised due to the absence of local community points of service delivery in many jurisdictions, further exacerbated by the closure of rural and regional units, whose intervention outcomes are generally superior to their metropolitan counterparts (47). Closures have generally been based on decision making dominated by the discourse of a dominant biomedical framework, rather than by the evidence or with a view to efficient utilization of the existent primary care workforce. Such policy is reactive as well as being incongruous with a community and population health approach committed to improving maternity related outcomes for specific groups of disadvantaged women and babies (58, 59).
- **Increased costs:** Increased health system costs, including links between 'early intervention' principles and short and long term costs associated with the burden of chronic disease management. There is little evidence available to suggest these factors are currently being taken into account by policymakers or funders in planning or decision making in relation to maternity care in Australia, and the current authors argue that significant scope exists for economic modelling and projections in relation to both cost and health outcomes in relation to these areas for the future, as has occurred in other countries (39, 40, 41).
- **Inefficient workforce:** The health system is not utilizing its current midwifery workforce efficiently (37,38,60), nor planning for comprehensive and integrated service model changes that align with the new era of comprehensive midwifery education, now being conducted in over half Australian state and territory jurisdictions as entry to practice requirement. Innovative opportunities for capacity building in rural, regional and local communities exist in relation to both workforce recruitment, retention, and the implementation of new service models, but are currently not being fully exploited.

What is to be done? To encourage decreased expenditure due to unnecessary interventions being performed on healthy mothers and babies may require bonus incentives for achieving normal birth

under current funding systems due to the perverse inbuilt incentive to 'do more'. However, this would first be dependent on congruent national and state policy strategies which openly promote normal birth and its health benefits, including breastfeeding for mothers and babies, over and above funding and service configuration that encourages routine medicalization of birth, such as elective caesarean section.

Systematically Critiquing the Current Funding, including Casemix

Using Ulrich's Systematic Boundary Critique method from Critical Systems Thinking enables us to summarize some of the key problems and inefficiencies which we perceive with the current funding arrangements and policy vacuum. Boundary Critique clarifies the assumptions on which the funding is based, and whose views and intentions constitute the system of concern (1). By drawing on the systems knowledge and skills of consumers, health care professionals and academic researchers in relation to Australia's maternity care system, it also allows us to identify deficits and systemic failures and a way to propose alternatives. Table 1 (Components for Better Design) uses Boundary Critique to summarise problems with the current system (already discussed in the paragraphs above), and identifies alternatives which together we believe offer strategies for structural maternity improvements. These components are now discussed in turn, in relation to improving the fundamentals of design, better workforce utilization, better maternal and infant health outcomes, and better equity.

Better Design, Better Value, Better Health and Equity

a) Fundamentals of better design

In light of the current pressure on health care expenditure in Australia, and the significant outlays on maternity care, the authors of this paper propose a better design whereby funding is quarantined for maternity care, and is accountable and benchmarked against best-practice outcomes (eg increased vaginal birth rates and increased breastfeeding rates). This is not the norm under current funding structures. Furthermore, the structure on which the funding system is based should be underpinned by a **national maternity care policy** which states **explicit values** and which aims to **maximise health outcomes in the short and long term for the whole population**, because good health is a basic human right (61). In light of WHO recommendations (49, 50), these values should be based on a broad socio-psychological (body-mind-spirit) and lifecourse view of birth, rather than the current narrow medical view which has contributed to a cultural warping of childbirth (62, 63, 64). The socio-psychological position reflects a worldview that **pregnancy and birth are not illness** and that government should fund systems which maximise health outcomes in the broadest sense, rather than funding systems which contribute to the burden of chronic disease over the life course. Consistent with these principles is the position of the midwife as the most appropriate and cost effective maternity provider for the majority of healthy women and their babies, including the view that health care should be delivered in settings which include the home and community, with referral to medical care as indicated by the **midwife as primary health care professional** (49). Funding mechanisms that prioritise the achievement of health outcomes through supporting and promoting normal birth within primary care midwifery models which are predominantly community-based should therefore be advanced. Evidence shows this to reduce the occurrence of expensive medical interventions. This broad systems change would also enhance equity, access and cultural safety across all communities for the majority of women who, with an appropriate care model, would be more likely to have healthy pregnancies and births that would not require expensive specialist medical services. There are already many examples and evaluations across states and territories demonstrating improved outcomes linked to midwifery-led care in the Australian context, albeit generally catering for small numbers of women per annum (usually 20 to 500) and hence nowhere near their capacity threshold to meet population level requirement (46, 56, 58, 59, 65, 66, 67).

b) Better Workforce Utilization

The maternity services workforce is not currently sustainable. The midwifery workforce shortage has been estimated at 1,800 (60). The key to addressing this problem will be to alter the way care is delivered to make optimal use of the skills of these health professionals. Midwives are leaving the profession due largely to stress and frustration caused by the dominance of medicalised systems of maternity care in Australia, and the limited opportunities most maternity services give them to care for women across the full scope of midwifery practice as defined by the WHO (1999). Midwives are capable of providing high quality, safe and competent care to the healthy majority of pregnant women on their own responsibility in both urban and rural areas. Opportunities to work in more flexible ways, collaboratively but with professional autonomy, will ensure that Australia attracts and retains midwives.

There is no research evidence to support the assumption that traditional approaches to service provision (with highly trained specialist obstetricians routinely providing care to low risk, healthy

Table 1: Components for Better Design

	Boundaries	Current System (“Is”)	Better System (“Ought”)
Sources of motivation	The Client <i>(whose interests should be served)</i>	Centralised tertiary hospitals and the “standard client”	Locally-based services based on individual need and cultural appropriateness for individual women, babies and families.
	The Purpose <i>(what should be the consequences)</i>	<i>Procedures:</i> reimburse for clinical “episodes of care” within acute care hospitals (which fragments people and processes and discourages care in the community and “Keeping birth normal”)	<i>People & Processes:</i> reimburse for improved health outcomes, eg: vaginal birth and reduction of unnecessary medical interventions (based on primary health care principles and care in the community)
	Measures of improvement <i>(how do we decide that consequences constitute improvement)</i>	Health outcome benchmarks, but no penalties for non-compliance, and no ‘common sense’ linkage to funding	Benchmark measures of “normal birth”, better physical and mental health outcomes for women, babies, families – short and long term, and at reduced expenditure per site
Sources of Power	The Decision-maker(s) <i>(who is in a position to change the measure of improvement)</i>	Policymakers make decisions through structural frameworks and what is funded on PBS, hospital visiting rights, private subsidisation, access to indemnification (with limited funding for ‘alternative’ care models)	Policymakers genuinely working with consumers to decide focus of investment and disinvestment “Women have the right to choose freely and have control over their sexual and reproductive health” (UN 1995)
	Resources <i>(what resources or conditions of success should be controlled by the decision-maker)</i>	* Service Providers get priority, not women & babies (current default is medicalized care) *Models to which funding is directed *Role and level of technology: is prioritized over and above women’s needs and rights	* Women and babies are the focus. Funding follows the woman (as opposed to the system & procedures). This gives choice & prioritizes women’s needs and rights. *Workforce - focus on primary care workforce not specialists *Role and level of technology: available, but not the primary focus
	Decision environment <i>(what conditions are/should be part of the decision-making environment))</i>	Historical and traditional forms of medical service delivery and practice. Traditional encouragement to hospitalised care	Priority to evidence-based practice for best health outcomes, with flexibility. Recognition of differing needs, based on population health approach
Sources of Knowledge (continued next page)	The Professional(s) <i>(who are/ought to be considered a professional/expert (as researcher, planner, etc)</i>	Policymakers, obstetricians, professional colleges, traditional and existing practice; professional experience; research evidence (excludes consumers)	Consumers-as-experts; midwives, obstetricians, policymakers, professional experience; research evidence
	Expertise <i>(what expertise ought to be consulted; what counts as relevant knowledge)</i>	Medical, traditional, historical, scientific, technological. Institutional guidelines, policies & procedures to encourage socialised compliance	*Women’s views: pregnancy, birth & parenting as a social paradigm; *Midwifery views, medical and policy views (primary health care) are complementary, not dominant

Sources of knowledge (continued)	Guarantee (<i>who should be the guarantor of success; that improvement will be achieved?</i>)	What mechanisms define and identify success? Current lack of quality control and accountability for service outcomes?	Annual review of national indicators and public availability of maternity services and perinatal data collection; longitudinal analysis of health outcomes; user satisfaction surveys (as per NZ and Victoria). Overseen by State Directors General of Health, and a Consumer Watchdog
Sources of legitimisation	Witness (<i>who should be witness to the interest of those affected but not involved? those who can't speak for themselves; future generations</i>)	As per Decision Environment, Guidelines, Policies and Professionals	All those affected <i>should</i> be involved. If this is not possible, standard ethical care should be judged by community consensus which includes consumers, midwives, medical specialists, ethicists
	Emancipation (<i>what secures the emancipation of those affected from the premises and promises of those involved</i>)	Consumer representation and participation: often rhetorical & tokenistic	Personal resources (education, empowerment, culture) which support self-emancipation or consumer groups which support this.
	World View (<i>what should these be; how should these be reconciled?</i>)	Pregnancy and birth are only normal in retrospect, and risk is best managed in a tertiary environment with medical specialists as the gatekeepers of standards and normality	Pregnancy and birth are not illnesses and should be managed in a primary care setting including home and community, with referral to medical care as indicated by the primary care professional (World Health Organisation 1985 - Fortaleza; WHO Care in Normal Birth 1996).

pregnant women) is the only safe and desirable way to provide care. Better funding design would focus on **reimbursement for improved health outcomes** and incentives for the reduction of unnecessary medical interventions. This would include the promotion of primary health care principles that support broader health improvements such as good start to life, improved breastfeeding and healthy eating, early childhood development and parental involvement, and positive mental health outcomes for mothers and babies (68). This would mean in practice that we would see increased provision of local access, increased publicly funded access to salaried midwifery-led models, increased options for women in the private sector which go beyond the current single focus on care from medical specialists even for normal birth, and hospital avoidance and 'care in the community' strategies applied more widely to maternity care which build on the current small number of such projects (48, 58, 59). It would also prioritise the achievement of seamless provision of support and integrated services from antenatal through birth to postnatal care (a **"Pregnancy-Parturition-Parenting" focus**) which acknowledges the life course impact of birth experiences on infant, maternal and family health (69).

c) Better Maternal and Infant Health

It is stating the obvious that women and their families want the best health outcomes for themselves and their babies. Whilst families want low mortality and morbidity associated with birth, they also want to minimise adverse effects on the physical and mental health of the mother, baby and father in the short and longer term. Contrary to popular belief, when informed, the majority prefer to avoid unnecessary, costly, and potentially harmful interventions. Randomized trials in Australia and overseas have confirmed the health benefits to mothers and babies from models of care where a midwife follows each woman through her pregnancy, labour, birth and transition to parenting, providing primary care throughout and collaborating with obstetricians and other health professionals as the needs of each woman dictate (70, 71, 72, 73, 74, 75, 76, 77). These models are variously named 'caseload midwifery practice', 'midwifery group practice', 'know your midwife', and 'community midwifery'. Such models are in use in isolated sites in most states and territories. These midwifery models have been evaluated and proven to be safe, are rated highly by women, and effective in improving the work satisfaction and hence retention of midwives. They have also been proven to be

cost effective, costing no more (and often less) than standard fragmented care. Moving **midwifery models** from the acute care service margins to the primary care mainstream for healthy women and babies must be a keystone of national maternity systems reform if there is to be **better maternal and infant health outcomes** in Australia and a systematic approach to population level health. Recent research into the relationships between fertility and family size in Australia postulates as a 'sleeper' issue the area of unintended health consequences of current high levels of traumatic birth on families, including adverse effects on the early childhood environment and the longer term emotional and physical legacies for maternal and child health, and a negative impact on the desire to have further children which adversely affects national fertility rates (69).

d) Better Equity

The current authors propose that new funding and workforce design also holds the potential to support greater equity of access to services and opportunities for enhanced health outcomes for the whole population as well as for underserved or 'vulnerable' groups. In both the short and longer term this would reduce negative mental and physical health impacts for mothers and babies which affect the early childhood environment and lifecourse. The health system must recognise and respond to those with special needs (the marginalised or underserved groups in society). Special attention quite obviously needs to be given to Aboriginal and Torres Strait Islander people to **close the gap** between indigenous health and that of other Australians, and improving maternal and perinatal outcomes for Aboriginal women and babies must be a high priority which needs dedicated programs and resources. Partnerships between midwives and Aboriginal health workers are already proving highly effective in NSW, Qld, SA and the NT, but are still only available to a limited percentage of Aboriginal women. The opportunity to give birth 'on country' should also be provided, as experience in other countries has shown this substantially reduces maternal and perinatal mortality, with additional scope to address broader systemic social problems (78). Other special-needs populations, such as refugees and women on low-incomes or living with a disability, could also arguably benefit from improved access to better maternity care. Many of these issues are supported to some extent in the Discussion Paper for the National Maternity Services Review, indicating that the time is ripe for change and that there is a certain degree of political will to carry this through. The extent to which the funding structures and workforce will support these macro-structural changes waits to be seen.

Conclusion

The direction of our health system and the provision of health services must be shaped around the health needs of individuals, their families and communities. However, most maternity services in Australia are currently focused less on the needs of individual women and their families than on the needs of the institutions providing care. The majority of women receive depersonalised and fragmented care during pregnancy and labour from a variety of strangers (both midwives and doctors) despite birth being a highly intimate experience. Most women receive little or no postnatal care at all once discharged from hospital, which is now happening within hours or days of birth. Their health care needs during this time are virtually ignored by our maternity services, and maternal and child health services are not designed to assist women with the critical adjustment to mothering a new baby in the early weeks of life. It is not surprising that rates of postnatal depression are on the rise, with more than 14% of women being diagnosed with PND and many more remaining undiagnosed. Do Australian families want financial impediments to competition in maternity services supply in Australia removed and/or federal funding and workforce solutions that deliver universal access and equity of supply of comprehensive midwifery primary care in their local community? This paper would suggest it is both. The health system should be responsive to individual differences, cultural diversity and preferences through choice in health care. Thirty per cent (30%) of women have no choice about their maternity care, as they live in a rural or remote area where there is only one choice of provider or no service at all. For the balance of women there are really only two choices - private obstetric care or public hospital care. If they choose private care, they can access only private obstetric care not private midwifery care. Within the public sector, very few women have the option of midwifery care within birth centres or midwifery group practices. The Federal Senate Inquiry in 1999 confirmed that this is most certainly due to a lack of access, not a lack of demand. The potential therefore exists to support greater equity of access to services and opportunities for enhanced health outcomes for the whole population as well as for underserved or 'vulnerable' groups, and in both the short and longer term to reduce negative mental and physical health impacts for mothers and babies which affect the early childhood environment and health over the lifecourse. All of these changes should also result in improved workforce and funding efficiencies, reduced expenditures, sustainable services, and funder accountability for health outcomes.

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