# Health policy and rural maternity care: Four case studies in north Queensland

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I declare that this thesis is my own work and has not been submitted in any form for another degree or diploma at any university or other institution of tertiary education. Information derived from the published or unpublished work of others has been acknowledged in the text and a list of references is given.

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# STATEMENT ON THE CONTRIBUTION OF OTHERS

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# DECLARATION ON ETHICS

The research presented and reported in this thesis was conducted within the guidelines for research ethics outlined in the *National Statement on Ethics Conduct in Research Involving Human (*1999*),* the *Joint NHMRC/AVCC Statement and Guidelines on Research Practice* (1997)*,* the *James Cook University Policy on Experimentation Ethics*. *Standard Practices and Guidelines* (2001), and the *James Cook University Statement and Guidelines on Research Practice* (2001)*.* The proposed research methodology received clearance from the James Cook University Experimentation Ethics Review Committee (approval numbers H2264 H2453).

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# Abstract

Equity, access, safety and quality are prominent themes in Australian health policy. Yet, in one area of health care, maternity services, rural facilities have continued to close. During 1995-2005, over 130 rural maternity units closed across Australia and 36 out of 84 units closed throughout Queensland. These closures raise serious concerns about equity of access to, and quality of, maternity care for rural residents. Few studies examine the relationship between policy discourse and citizens' lived experiences of policy outcomes. However, it is important that policy-makers obtain such qualitative information to discern the appropriateness of present strategies and to inform future policy-making. This project was guided by two research questions, namely, to identify prominent policy influences on rural maternity care and to understand the lived experiences of residents who provide and/or access this care in rural north Queensland. A methodology comprising a policy review followed by four case studies was used to explore the relationship between health policy discourse and the lived experiences of rural residents in seeking or providing maternity care.

Thematic analysis of relevant policies was undertaken to better understand the present policy environment and resulted in the identification of a number of key themes. Firstly, there were overarching themes of equity of access to care found in large-scale policies. Secondly, very little policy support specifically for rural maternity services could be found; this insufficiency was also emphasised during interviews with health professionals. Thirdly, policy discourse revealed an inclination to centralise health services. This, mostly implicit, policy direction was reinforced by the reality of service migration away from rural towns and towards more urbanised centres. Fourth, there was a notable emphasis on avoiding clinical risks which subsequently influenced the practice of rural maternity care professionals. Fifth, achieving cost-efficiencies was a concern in many, particularly state-level, policies which is characteristic of corporate rationalists.

Case studies of four rural north Queensland towns were completed and illustrated the lived experiences of residents who seek and provide maternity care. The four case study sites experienced a variety of outcomes: one town had recently seen their birthing service close; another unit had just established an innovative midwifery-led model of care; another provided maternity care in the traditional medical model and had retained a robust proceduralist roster; and yet another officially had a service,

though it was quite inconsistent. Despite the variety of outcomes, all maternity units experienced a common pressure to constrain services and all had faced some service downgrading. A number of recurrent themes emerged through the inductive analysis of data and were sorted into four groups.

Firstly, there were themes closely related to community. It was clear that rural communities still valued local maternity services, especially birthing. For most individuals, local services offered a more convenient and acceptable option for accessing maternity care. At a community level, viable local maternity services were perceived as important for the sustainability of rural towns. The level of true community engagement with health services or policy was found to be negligible, although locally initiated public *action* was instrumental in maintaining services at two of the towns. The majority of interviewees, especially health professionals, saw benefits in engaging the local community in health service decision-making, but they also held common reservations about the success of such initiatives in their own towns.

Secondly, workforce insufficiencies remained the biggest threat to the sustainability of rural maternity units. Despite the considerable policy attention that has been paid to rectifying the maldistribution of medical practitioners, recruitment and retention difficulties still caused major problems for all the maternity units in this study. Ageing and short supply of rural midwives were equally pressing. The progressive downgrading of services led to (a) a loss of local skills as health professionals left to practice in other towns, or else remained and ultimately became de-skilled; and (b) a collective demoralisation among hospital staff with progressively less scope to provide holistic health services of a high quality with continuity of carers.

Thirdly, the quality of care (not necessarily clinical quality) experienced by rural residents was profoundly affected by the downgrading of rural maternity services in a number of ways. Most obviously, the loss of services caused less equitable geographic access to care. This led to the introduction of more carers and facilities, thus causing care to become increasingly fragmented. In addition, the financial costs of accessing care increased significantly for rural residents and included costs of regular travel, lost work and relocation to the regional centre weeks prior to delivery.

Fourth, there were issues of safety and risk. Many health professionals reported the pressure they felt in reconciling higher patient expectations of health care with the nature of adverse events in obstetrics. This pressure was exacerbated by a policy

environment that was perceived as highly risk-averse. For rural residents, the removal of local services appeared to encourage them to take more risks in accessing maternity care. Further safety concerns were voiced by health professionals in relation to the cessation of rural birthing services. The subsequent loss of important clinical skills leading to reduced capacity to manage local obstetric emergencies also threatens the sustainability of a range of other local health services.

Overall, it was found that government policies and the general policy environment did not support the sustainability of rural maternity services. Instead, rural maternity units were vulnerable to pressures of service centralisation, achieving cost-efficiencies and risk-aversion. Thus, while rural maternity units are not supported and continue to close, disparities in the geographic location of birthing units grow, ultimately having the effect of transferring to rural families the costs and risks that were once borne by the government. A number of recommendations for future policy-making emerge from the findings of this study including the need for specific policies to support rural maternity services; developing policy initiatives to bolster the workforce, infrastructure and models of rural maternity care; and the implementation of policies which better compensate rural residents for decreased geographic access to services.

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# List of Abbreviations and Acronyms

| | |
|---|---|
| ABS | Australian Bureau of Statistics |
| ACCHS | Aboriginal Community Controlled Health Service |
| ACM | Australian College of Midwives |
| ACRRM | Australian College of Rural and Remote Medicine |
| AHCA | Australian Health Care Agreements |
| AIHW | Australian Institute of Health and Welfare |
| ALP | Australian Labor Party |
| AMA | Australian Medical Association |
| AMWAC | Australian Medical Workforce Advisory Committee |
| ARIA | Accessibility/Remoteness Index of Australia |
| ASGC | Australian Standard Geographical Classification |
| CME | continuing medical education |
| CRANA | Council of Remote Area Nurses of Australia |
| CSCF | Clinical Services Capability Framework |
| DoN | Director of Nursing |
| DRANZCOG | Diploma of the Australian and New Zealand College of Obstetricians and Gynaecologists |
| FTE | full-time equivalent |
| GDP | gross domestic product |
| GP | general practitioner |
| GPRIP | General Practice Rural Incentives Program |
| HCRRA | Health Consumers of Rural and Remote Australia |
| HREC | Human Research Ethics Committee |
| IMG | international medical graduate |
| IRSD | Index of Relative Socio-Economic Disadvantage |
| JCU | James Cook University |
| MBS | Medical Benefits Schedule |
| NAHS | Northern Area Health Service |
| NRHA | National Rural Health Alliance |
| O&G | obstetrics and gynaecology |
| OECD | Organisation for Economic Cooperation and Development |
| PBS | Pharmaceutical Benefits Scheme |
| PTSS | Patient Travel Subsidy Scheme |

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| RANZCOG | Royal Australian and New Zealand College of Obstetricians and Gynaecologists |
| RDAA | Rural Doctors Association of Australia |
| RFDS | Royal Flying Doctor Service |
| RHSET | Rural Health Support Education and Training |
| RHWA | Rural Health Workforce Australia |
| RRMA | Rural, Remote and Metropolitan Areas |
| RUSC | Rural Undergraduate Steering Committee |
| RWA | rural workforce agency |
| SEIFA | Socio-Economic Indexes for Areas |
| SLA | statistical local area |
| SMO | Senior Medical Officer |
| SPP | Special Purpose Payment |
| WHO | World Health Organization |
| Wonca | World Organization of Family Doctors or longer name: World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians |

# Glossary

Antenatal period: The time from conception to the onset of labour (*Mosby's medical, nursing and allied health dictionary*, 2002). Prenatal, antenatal, pregnancy and antepartum are all terms used interchangeably in the literature to refer to the same period of time.

Area health service: Queensland Health applied geographical divisions of Queensland for organisational purposes. 3 area health services existed at the commencement of the thesis: southern, central and northern area health services. This thesis was placed within northern area health service boundaries which can be found in Appendix 5. Area Health Services were abolished during Queensland Health restructuring in late 2008.

ASGC: A method for classifying the rurality of Australian locations. The ASGC is one of three commonly-used remoteness classification systems used in Australia and comprises six remoteness categories: major cities; inner regional; outer regional; remote; very remote and migratory. The ASGC remoteness categories are described in more detail in Appendix 1.

Birthing: Actions associated with giving birth to offspring. "Intrapartum period" can also be used to refer to this time.

FTE: In this thesis, full-time equivalents (FTE) are understood to be "calculated by multiplying the number of medical practitioners by the average weekly hours worked, and dividing by the number of hours in a 'standard' full-time working week. FTE gives a useful measure of supply as it takes into account both those working full-time and those working part-time" (Australian Institute of Health and Welfare, 2008b, p. 22).

GP proceduralists: Term used to refer to medical practitioners with primary qualifications but with additional postgraduate qualifications in a

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|---|---|
| | procedural discipline such as anaesthetics, obstetrics and/or general surgery. |
| IMG | International Medical Graduate (IMG) refers to medical practitioners whose primary medical qualifications were obtained in countries other than Australia. |
| Intrapartum period: | The term “intrapartum” refers to the period of time from the onset of labour to the final stage of birth (*Mosby's medical, nursing and allied health dictionary*, 2002). Used interchangeably with the term “birthing”. |
| Maternity care: | Collective term for antenatal, intrapartum and postnatal care, that is, care during pregnancy, birth and immediately following birth, respectively. |
| Medical practitioner: | A person with the appropriate qualifications, experience, skills and knowledge to be registered as a medical practitioner under the *Medical Practitioners Registration Act 2001* ("Medical Practitioners Registration Act," 2001). |
| Midwife: | A registered nurse (RN) who has completed additional training in midwifery care. |
| North Queensland: | Generally referring to the area covered by the former Northern Area Health Service (Mackay to Cape York and west to the Queensland-Northern Territory border). Refer to map in Appendix 5. |
| Policy: | In the public policy sense, refers to any direction made by government as to the action to be taken on given issues. Explicitly, policies may be identified through such things as government press releases, published documents that are labelled as policies, initiating projects or the provision of funding. Grey literature, the absence of action, funding or support may provide implicit indications of government policy intentions. |

Postnatal: The first few days following childbirth (*Mosby's medical, nursing and allied health dictionary*, 2002), although in common and medical parlance, this period often extends out to 6-8 weeks after birth. Used interchangeably with postpartum.

Queensland Health: The government department for health care in the state of Queensland.

Regional hospital: In this thesis, the next nearest hospital to which local practitioners may refer or transfer cases that require care beyond that which can be offered at the rural hospital. These are usually at the nearest regional town and increasingly specialised services can mostly be found in the appropriate capital city. "Referral hospital" may be used interchangeably.

Rural: For the purposes of this study, rural has been defined as areas classified as RRMA 3-7; 1.84-12 on the ARIA scale; and 2.4-15 on the ASGC system.

SLAs: Statistical local areas (SLAs) are spatial units "based on the administrative areas of local government where these exist. Where there is no incorporated body of local government, SLAs are defined to cover the unincorporated areas" (Australian Institute of Health and Welfare, 2004, p. viii).

# Chapter 1:

# Introduction

*Expectant mothers in the Ingham region will now have to travel to Townsville to give birth, after the Ingham Hospital's maternity department was closed down on Friday. The interim decision was made due to a lack of skilled medical professionals able to practice anaesthetics and obstetrics. . . . Townsville Health Service District spokesman Andrew Johnson says it is difficult to put a timeframe on when the maternity ward will be re-opened. 'We will continue to re-evaluate as we continue our recruitment efforts,' he said. '. . . if we were able to find people with those skills, anaesthetics and obstetrics, then we'd look to re-open the service. But I'm not going to have a service running in Ingham that's not safe - it would be silly.' Ingham canefarmer Ross Ganjemi says the situation is not good enough. Mr Ganjemi's wife Leonie is due to give birth to their third child in the next 10 days. He says expectant mothers should not have to travel away from home to give birth.* - (ABC Online, 2005)

## 1.1 Background

The above quote is taken from a local newspaper. It reports the closure of a maternity unit in the rural town of Ingham, over 100km north of Townsville in northern Queensland. The excerpt, though small, brings attention to many of the issues associated with providing rural maternity services. First, it is difficult to maintain contemporary rural maternity services, which is why many units are closing. Second, shortages of appropriately trained medical professionals are behind many of the closures. Third, safety of care is an overriding concern for the health department. Fourth, rural residents appear predominantly concerned with access to care. As Mr Ganjemi implies in the above quote, this access is perceived as a right: "expectant mothers should not have to travel away from home to birth."

Yet, rural maternity unit closures do not appear to be isolated, or even uncommon events. In the years 1995-2005, over 130 rural maternity units were closed across Australia (National Rural Health Alliance, 2006). These closures raise serious concerns about equity of access to, and quality of, maternity care for rural residents. Closer examination of rural maternity care reveals a mixture of many issues which bring together two dynamic and contentious fields of study: (a) rural health care more broadly; and (b) maternity care.

### *1.1.1 Rural health care*

Rural Australians persistently demonstrate poorer health status than their urban counterparts and perform worse on a range of health indicators. While Australians collectively enjoy one of the highest life expectancies in the world, the rural population does not have an equal opportunity to enjoy this good standard of health. Many factors contribute to this health differential but poor access to health services is one of the largest problems for rural health in Australia (Strasser, 2003). The vast spaces of low population density which characterise non-metropolitan Australia make it difficult to provide accessible health care for rural populations. Yet, accessing health services that are concentrated in urban areas is problematic for rural people owing to the long distances and difficult terrain that must be travelled. Second, maldistribution of health and medical professionals compromises the actual availability of services. This has been a major impediment to ensuring adequate service provision in rural areas. Recent data confirm a continuation of this trend and predict that the situation may worsen in the near future (Health Workforce Queensland, 2006). The regionalisation of secondary and tertiary health services has led to the downgrading of many rural

hospitals which have been unable to continue providing the services they once did. Resources are consistently directed to metropolitan cities to provide the majority of health services where economies of scale are more readily achieved (Gregory, Armstrong, & Van Der Weyden, 2006; Health Workforce Queensland, 2005; Queensland Health, 2002b)

Problems in rural health are not new, nor are they confined to Australia. The inaugural national rural health conference in Australia (1991) saw a variety of stakeholders come together to work towards health equity for rural populations. This conference helped to establish rural health on the government agenda; spawned a wider recognition of rural health; and led to a number of policy initiatives including the *National Rural Health Strategy* (Australian Health Ministers' Conference, 1994, 1996) and *Healthy Horizons* (National Rural Health Policy Forum, National Rural Health Alliance, & Australian Health Ministers' Conference, 1999). Objectives of these initiatives aligned with international efforts such as the Durban Declaration which was adopted at the 2nd World Rural Health Congress and which reaffirmed rural health professionals' commitment to achieving "Health for All Rural People by the Year 2020" (Wonca Working Party on Rural Practice, 1997). Since then, government interest in rural health has waxed and waned although, despite some improvements, significant health inequalities remain between rural and urban Australian populations.

### *1.1.2 Maternity care*

Contention is one word that could be used to describe the maternity care landscape. While it has become commonplace to access health care during pregnancy, birthing and in the immediate postnatal period, there is plenty of debate around who should provide this care and of what this care should comprise. Much of the tension can be traced back to opposing philosophies of care; one being the current prevailing practice[1] within the medical model and the other, a more naturalistic approach with emphasis on woman-centred and low-interventionist care. These philosophies are generally advocated along professional lines thus pitting the interests of the medical profession against those of midwives. Medical practitioners generally support the current orthodoxy in which they have a monopoly, whereas midwives pose an ever-increasing challenge to this status quo by campaigning to be recognised as competent independent carers, legitimised by laws and gaining access to health service funding.

[1] Throughout this thesis, in line with much of the published literature, "practice" will be used to denote both where health professionals work and what health professionals do.

With the completion of comprehensive national and state reviews of maternity services (Department of Health and Ageing, 2009; Hirst, 2005), the stage is set for change in this field of health care. The ongoing decline in numbers of obstetric practitioners and persistent shortages in rural medical proceduralists has implications for access to maternity care and has opened the door for governments to change the status quo and legitimise the practice of alternative maternity care professionals where medical support is available when required. (It should be noted that this study is focussed on mainstream maternity services. The important and specific issues around Indigenous birthing expectations, practices and needs are not specifically addressed in this thesis.)

### *1.1.3 Health policy*

Apart from the areas of rural health and maternity care, this study also draws on the field of health policy. Australian governments play an important role in health care services and health policies are the tools with which government can shape citizens' experiences of these services. Equity principles feature prominently in many national and Queensland health policies and resonate strongly with international ideologies that recognise the fundamental right to health for every person. Arguably Australia's largest health policy, Medicare, aims to ensure appropriate health care is accessible and affordable for all Australians. The aforementioned *National Rural Health Strategy* and *Healthy Horizons* were developed with equity of care for rural populations as central tenets. In Queensland, the state government's *Smart State Health 2020: A Vision for the Future* (Queensland Health, 2002b) contains goals of developing a health system that ranks with the best in the world by 2020 and contains the objective of ensuring that "all Queenslanders have access to appropriate, quality, integrated, patient-focused health services with the health system for 2020 developed around the principles of equitable access based on need, evidence and sustainability" (p. 28).

## 1.2 Statement of the problem

Queensland has the most decentralised population of all the states on mainland Australia (Holmes, Charles-Edwards, & Bell, 2005) with approximately 1.7 million people dispersed throughout regional, rural and remote centres of the state[2] (Department of Infrastructure and Planning, 2008). High population dispersal poses

[2] Approximately 70% of Queensland's population is found in the south-east corner of the state which includes the state's capital city, Brisbane (Department of Infrastructure and Planning, 2008).

challenges for service provision and attaining cost-efficiencies. Nonetheless, both state and national governments have made public commitments to improving rural residents' access to health care services (Australian Health Ministers' Conference, 1994, 1996; National Rural Health Policy Forum et al., 1999; Queensland Government, Agforce, & Local Government Association of Queensland, 2006).

Yet, between 1995 and 2005, 42% of rural obstetric units throughout Queensland have closed (Hirst, 2005). Aside from diverging from government policies, these closures give rise to concerns regarding the equity of access and quality of maternity care available to rural women and their families. It is important to discern the role of government policies in this situation as well as exploring what outcomes are experienced by providers and consumers of rural maternity care to inform future policy-making.

## 1.3 Aims of the research

The broad aim of this research is to better understand the impact of policy around rural maternity care for citizens, in order to improve policy learning and expand the knowledge base for future policy-making. Within these broad aims, this thesis has a number of more specific objectives:

1) To identify and critically examine both Commonwealth and Queensland government policies that affect the provision of rural maternity care;
2) Using a case study design, to gain insight into the influence of these policies on the lives of those who access and provide maternity care in the rural north Queensland context;
3) To compare case study findings and the predominant policy discourse; and
4) To make appropriate recommendations for future policy-making and local services, with a view to improving rural maternity care.

## 1.4 Research questions

This project is guided by two key research questions:

1. What government policies have influenced the provision of rural maternity care in north Queensland?
2. How does the policy discourse compare with the lived experiences of residents who provide or access rural maternity care in north Queensland?

## 1.5 Significance of the study

The significance of this project lies in the potential to understand impacts of present government policies on the delivery of high-quality rural maternity care and to inform future health policy for rural Queensland. There are a number of barriers which can deter the evaluation of policy outcomes, including the difficulty of such studies, financial costs and political motives (Hogwood & Gunn, 1984b). Yet, without an understanding of policy outcomes, it cannot be discerned whether policy objectives have been met, if there were any unintended consequences or whether the implemented policy continues to be relevant.

This study is concerned with understanding policy outcomes in the area of rural maternity care, particularly as they concern the providers and users of these services. Although this project is not a full policy evaluation in itself, it serves to elucidate the extent to which outcomes have met policy objectives and the level of acceptability within rural communities. Through understanding policy outcomes on the providers and consumers of rural maternity care, this study will provide an insight to the appropriateness of current policies while also making recommendations and contributing to the knowledge base for future health policies in this area. Underscoring the design of this study is a proposal made by a group of New Zealand researchers, that ". . . there is a continuous need to simultaneously read policy discourse with, and against, the experiences of those affected by policy decisions." (Panelli, Gallagher, & Kearns, 2006).

## 1.6 Reflexivity of the researcher

"Research is only as good as the investigator" (Morse, Barrett, Mayan, Olson, & Spiers, 2002, p. 10). This quote highlights the importance of the researcher's skills and characteristics to the final outcomes of a research project. It is also true that the researcher, or more correctly the history and philosophical views of the researcher can be a source of bias in qualitative research. As such, the importance of the qualitative researcher informing readers of their social and educational background, pertinent values, philosophical perspectives and life experiences has been well noted (Creswell & Miller, 2000; Mays & Pope, 2000; Quinn Patton, 1999). Such biographical information should be shared to facilitate the reader's own judgements about how the researcher may have influenced aspects of the project. Although strategies can be employed to minimise researcher bias, it is inevitable that the background and

experiences of the researcher will have some effect on the way in which data are collected and interpreted.

Thus, before proceeding any further in this thesis, it is important to provide some information on the researcher. The objective of Box 1 is to provide sufficient information to set the scene in which the research was undertaken and interpreted.

Box 1

*Brief biography of the researcher*

I consider my family very much representative of middle-class Australia. My mother is of Asian heritage, my father Australian. After living in Malaysia and New South Wales, I have spent the past 14 years in Townsville. Though not having lived in a rural centre, the surrounding north Queensland region has a highly dispersed population made up almost exclusively of towns considered rural or remote.

My undergraduate degree was in Sport and Exercise Science. This provided me with a foundation in health science and an appreciation of what good health entails. I enrolled in an additional year to complete a research honours project in which I investigated the health beliefs of volunteer physical activity participants as they relate to cardiovascular disease and physical activity using a mostly quantitative research design. Data collection required me to visit several communities throughout north Queensland.

Having enjoyed the research experience during my honours year, I was fortunate to have been employed for two and a half years as a research assistant at James Cook University (JCU) School of Medicine and Dentistry (SMD), primarily working on a project titled 'The Quality of Rural Procedural Medical Care'. The project was a valuable introduction to qualitative research methods and rural health issues in Australia. Many hours were spent interviewing medical practitioners and patients about anaesthetic, obstetric and surgical services provided by rural proceduralist general practitioners, and then analysing the subsequent transcripts. I had many valuable experiences during this time: being in a research environment, undertaking research courses and assisting in other qualitative projects which allowed me to further refine my qualitative research skills.

At the conclusion of that project, I had a number of motivations for embarking on my own project exploring the interface between rural health care and public policy. My university education and research experience up until the point of commencing candidature had raised my interest in the mechanics of public policy, and particularly, the influence of health policy on the everyday lives of citizens. Further, being exposed to issues around quality of care and rural health had drawn my attention to the plight of the health of rural Australians. Underpinning all this was a developing belief in the ideals of social justice, especially that regarding the equality of opportunity for all Australians to access appropriate and good quality health care services.

I was concerned at the outset of the present study that differences between myself and the project participants would influence the dynamic of interviews or focus groups and subsequently affect the data that was so integral to the project. I did not have the vocational backgrounds of the medical practitioners, nurses or health administrators, nor any personal experience of working in a rural hospital setting. Further, I had no children and was therefore unacquainted with the experience of pregnancy and birthing. Nonetheless, my initial apprehension was unfounded. I believe that introducing myself as being from a non-medical and childless background actually encouraged health professionals and mothers to share more detailed accounts of their experiences and views. An additional advantage of not having similar experiences or backgrounds to the participants was the potential for greater objectivity as my own personal experiences of providing or accessing maternity care could not bias the data collection or analysis. In addition, being associated with JCU SMD was likely to have been beneficial in gaining access to participants due to the SMD's reputation in the region and their known commitment to improving rural health. It is also possible that participants may have had some pre-conceived ideas about what sort of answers I "wanted to hear" which may have affected the data that I collected.

Overall, I commenced this project with some background knowledge in rural health issues and some proficiency in qualitative research techniques however, I feel that the experience of completing this PhD project has extended my understanding and improved my application of qualitative methodologies, challenged the way that I interpret the complex realities that are people's life experiences and how I represent these for others.

A closing quote from Kearns and Joseph (1997) is appropriate here:

> *At minimum, there is a need to be critically aware that we who make acquaintance of rural places and their people in the mission of social research have the capacity to become stakeholders ourselves – as self-assumed story-tellers of their geographies of health.* – (p. 30)

Like these authors, it is acknowledged that despite efforts made to remove bias, the data and analysis presented in this study are ultimately the researcher's own interpretation of the experiences and stories shared by rural parents and health practitioners at the four case study sites.

## 1.7 Thesis outline

This thesis consists of three parts: (i) setting the scene; (ii) the case studies; and (iii) interpretation and conclusions. The first three chapters provide the background for this project. This chapter has provided an introduction to the thesis, having outlined the scope of, and rationale for, the present study. Chapter 2 contains a review of literature that relates to this study. A policy analysis is presented in Chapter 3 and considers the context, process, actors and content of policies relevant to rural maternity care. These three chapters provide background information on the major issues associated with this study (rural health, maternity care, health policy) and the policy environment in which rural maternity care is provided.

The next part of the thesis is primarily concerned with the case studies. Chapter 4 explains the methodology and case study design, justifying the research techniques employed throughout the different project phases. The results of data collection and analysis are reported over two chapters: Chapter 5 contains vignettes of the four case study towns and provides contextual information which enhances the appreciation of the emergent themes as reported in Chapter 6.

The third and final part of the thesis contains a discussion of the findings and concluding comments. Chapter 7 considers the results in light of the research questions posed at the outset of the project, reflects on the relevance of the results to policy-making and the equitable provision of maternity services in the future. The thesis concludes with Chapter 8 where the findings are placed in the wider context of achieving health for all, recommendations are made for future policy-making in rural health and future research directions are also suggested.

## 1.8 Chapter 1 summary

This chapter briefly reviewed the background to this project and introduced the research problem. The specific research questions and aims were detailed and the structure of the thesis outlined. Chapter 2 provides a more in-depth examination of the context of the research problem by presenting a review of literature in the three academic areas spanned by this study: health care, with emphasis on the rural setting; maternity care; and health policy.

# Chapter 2:

# Literature Review

> *Nothing is more fundamental than the span of life and the health that permits life to be lived to the full.* – (Sheehan & Sheehan, 2002, p. 169)

This thesis is concerned with the connection between health policy and the lived experiences of citizens in either accessing or providing an essential health service in a rural setting. The purpose of this chapter is to elaborate on the elements which underpin this study. In doing this, the chapter is divided into three parts. **Section I** defines health and reflects on the importance of pursuing equity in health and health care. The increasing demand for health care, the finite nature of health care resources and the subsequent dilemma this poses for government is then considered. Against this background, the health disadvantage experienced by rural Australians and the challenges of providing rural health services, are examined.

**Section II** is concerned with maternity care; what it comprises, how it has evolved and the many debates which continue in this particular area of health care. The purpose here is to provide sufficient background to allow the reader a basic understanding of

the components of maternity care in Australia, and an insight to the opposing philosophies within, before considering how this care differs in rural areas. A basic understanding of the nature of maternity care will be useful in appreciating the lived experiences of the providers and users of rural maternity care described in the four case studies. **Section III** introduces and defines health policy as a variant of public policy. The framework used to examine rural health policies in this thesis is then outlined and an argument is made for the importance of studying policy outcomes. But, to begin, the fundamental principle of the study is discussed: why pursuing equity of access to health services, such as maternity care, is so significant.

# SECTION I: HEALTH, HEALTH CARE AND RURAL HEALTH

## 2.1 Health and health care

Much of this thesis concerns health and health care, so it is important, first, to be clear on what good health is and why it is given such importance. The World Health Organization (WHO) definition of health is perhaps the most widely quoted and is appropriate for this study: "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (World Health Organization, 1946). The WHO definition of health arises from the biopsychosocial model which acknowledges biological, psychological and social causes of health and illness (Bloch, 2001). Good "health" is not only the lack of illness but also the consideration of a person's mental and social welfare and, as such, the importance of many underlying social determinants of health have been recognised including such factors as housing, income, education and position in the social hierarchy (Commission on Social Determinants of Health & World Health Organization, 2008; Marmot, 2006; Secretariat of the Commission on Social Determinants of Health, 2005).

Health is considered one of the most important conditions of human life (Sen, 2002) and is necessary for the exercise of other human rights (Committee on Economic, 2000b). Without health, an individual has limited opportunity to flourish and their life options are restricted (Alleyne, 2000). The Declaration of Alma Ata in 1978 reaffirmed the WHO definition and asserted that good health:

> *. . is a fundamental human right and that the attainment of the highest possible level of health is a most important world-wide social goal whose realization requires the action of many other social and economic*

> *sectors in addition to the health sector.* (International Conference on Primary Health Care, 1978, part I)

This is often paraphrased as “the right to health” and demonstrates the importance that the global society places on good health. The right to health is enshrined in international agreements including the United Nations Universal Declaration of Rights (United Nations, 1948), the International Covenant on Economic, Social and Cultural Rights (United Nations, 1966) and World Organization of Family Doctors’ (Wonca) Durban Declaration on health for all rural people (Wonca Working Party on Rural Practice, 1997). Each of these espouse the value of health as a basic human right which should be sought for each human-being without discrimination. That said, the Universal Declaration of Human Rights makes special mention of mothers and children: “motherhood and childhood are entitled to special care and assistance” (United Nations, 1948, Article 25-2).

The right to health is not about the right of each person to be “healthy”, but rather, the opportunity of each person to reach their health potential, should they choose to do so. The United Nations Committee on Economic, Social and Cultural Rights expanded on this right by explaining that the right contains the freedom for each person to control their own body and entitles each person to access a health system which “provides equality of opportunity for people to enjoy the highest attainable level of health” (Committee on Economic, 2000a, Section I, para. 8). This committee goes further to say that the right to health requires health care that is: (a) available in sufficient quantities according to a nation’s level of development; (b) accessible to everyone without discrimination; (c) acceptable in ethical and cultural respects; (d) of good quality, including scientific and medical appropriateness of services (Committee on Economic, 2000b). Thus, the opportunity to attain good health is closely linked to the provision of health services.

## 2.2 On equity of health and health care

The right to health is closely related to notions of "health equity" and health care accessibility. The definition of health equity[3] varies with academic disciplines and philosophical tendencies, but the following definitions are favoured in the context of this thesis:

> *. . . equity in health can be defined as the absence of systematic disparities in health (or in the major social determinants of health) between social groups who have different levels of underlying social advantage/disadvantage – that is, different positions in a social hierarchy.* (Braveman & Gruskin, 2003, p. 254)

> *. . . [health inequities are] differences in health which are not only unnecessary and avoidable but, in addition, are considered unjust and unfair . . . . Equity is therefore concerned with creating equal opportunities for health and with bringing health differentials down to the lowest level possible.* (Whitehead, 1991, p. 220)

In accord with the recognition of the social determinants of health, Sen (2002) has highlighted that health equity is not concerned solely with health measurements, but also with wider social arrangements. In this way, health equity becomes a social justice issue:

> *In any discussion of social equity and justice, illness and health must figure as a major concern. . . . health equity cannot but be a central feature of the justice of social arrangements in general. The reach of health equity is immense. . . . Health equity cannot only be concerned with health, seen in isolation. Rather, it must come to grips with the larger issue of fairness and justice in social arrangements, including economic allocations, paying appropriate attention to the role of health in human life and freedom.* (Sen, 2002, p. 659)

[3] It is important to distinguish between the terms equity and equality (inequity and inequality) as these terms are sometimes used interchangeably in literature. To avoid ambiguity, their use in this thesis is clarified here. The distinction between inequities and inequalities is a normative one. Where an inequality is a disparity in health which is not considered unfair, an inequity refers to a disparity in health which is considered unjust and potentially avoidable, thus incorporating a moral judgement (Braveman & Gruskin, 2003).

Achieving equity of health is particularly important for the well-being of disadvantaged populations and improving their capacity to overcome other effects of social and economic disadvantage (Braveman & Gruskin, 2003).

Providing equitable access to health care services can make a significant contribution to improving the level of health equity within a nation. In clarifying what equitable access to health care entails, Whitehead (1991) supports a definition which comprises three primary facets: (i) equal access for equal need; (ii) equal utilisation of services for equal need; and (iii) equal quality of care for all segments of the population. Some specific examples are identified in which equitable access to health care is hindered, such as the tendency of health resources to be "unevenly distributed around the country, clustered in urban and more prosperous areas and scarce in deprived and rural neighbourhoods" (p. 221) as well as the larger burden of transport expenses for low-income populations who must travel to obtain health care. Universal health care or universal coverage are concepts closely linked with equity of health care access. Universal coverage or health care is about "extending the same scope of quality services to the whole population, according to needs and preferences, regardless of ability to pay" (Commission on Social Determinants of Health & World Health Organization, 2008, p. 95). Health systems organized around the principles of universal coverage are those that do most for improving health and health equity, claim WHO and the Commission on Social Determinant of Health (2008).

Although mindful of the broad scope of health equity, this thesis is primarily concerned with just one of the many contributing factors, that is, equitable access to health care for rural populations. At this juncture, it is appropriate to consider why health care is not provided in abundance to all citizens according to their need and the fundamental obstacles which prevent developed nations from achieving equitable access to health services within their own populations.

## 2.3 Contemporary health system challenges

Unprecedented growth in national health expenditure is one of the major challenges faced by many national governments around the world. Growing health expenditure now represents one of the largest components of public spending in developed countries (Organisation for Economic Cooperation and Development, 2005). In 2004-05, Australia spent 9.5% of gross domestic product (GDP) on health, just above the

2005 Organisation for Economic Cooperation and Development (OECD) average of 9.0% GDP. Similarly, Australia spent $3,128 (United States dollars) per person in 2004-05 compared with the OECD average of $2,179 (in 2005, Organisation for Economic Co-operation and Development, 2007). The Australian Institute of Health and Welfare (AIHW) reports Australian health expenditure to constitute slightly less GDP at 9.0%; although this still represents a considerable rise from 7.5% in 1995-96 (Australian Institute of Health and Welfare, 2007). Health accounts for a significant component of government spending in Australia, exceeded only by allocations to social security and welfare (Australian Government, 2006). Still, it is worth noting that high rates of health care spending do not necessarily correlate with improved health outcomes or superior health systems. For example, the United States spends comparatively more on health care than many other developed countries[4] but this financial investment is not reflected in the overall health status of the population nor in the health system, which continues to display gaps in access to care and variation in use of resources and services that is not necessarily related to need (Docteur, Suppanz, & Woo, 2003).

Escalating health care costs are driven by a number of notable changes in modern society. Firstly, people are living longer. The average life expectancy for Australians has been steadily rising and is currently one of the highest in the world (Australian Institute of Health and Welfare, 2008a). As the population ages, additional spending is required to accommodate the health and aged care needs of a growing proportion of elderly citizens (Productivity Commission, 2005b). Secondly, advances in medical research have led to the availability of a greatly expanded range of medical therapies. Advances produced by medical research have been linked with many health benefits but new technologies can be expensive to provide and have been identified as a significant driver of higher health care costs (Baker, Birnbaum, Geppert, & Mishol, 2003; Productivity Commission, 2005c). Thirdly, as medical science has progressed, patients' expectations have greatly increased (The OECD Health Project, 2004). Sax (1990) suggests that the influence of "medical breakthroughs" cannot be underestimated, especially in relation to their capacity to increase consumer expectations of their health care. Indeed, the demand for medical services may be "limitless" as consumers become more informed and their expectations rise (Lewis, 2005a).

[4] 15.3% GDP in 2004 (Organisation for Economic Co-operation and Development, 2006)

At a time when there is an increasing demand for health care and expenditure continues to increase, government faces a dilemma regarding the scarcity of resources which is summarised well by Fuchs' three fundamental conditions of society:

(i) Resources are finite. There are not enough resources (for example, money or people) to supply everyone with what they need, let alone all the things they may want. Therefore, people do not always get what they desire and difficult decisions must be made regarding where these scarce resources are allocated.

(ii) There are alternative uses for the resources. This makes allocation decisions all the more difficult as, not only are resources scarce, but what is available has the potential to be used for many different purposes. For example, money that is spent on health care is also money which could have been spent on education, housing, national defence or another equally valuable area. Similarly, if it is decided that more people will be trained as doctors, there must be an acceptance that less people will be trained as teachers, nurses, builders or other necessary professions.

(iii) People have different wants. In society, people prioritise things differently and do not all want the same things in the same order of priority. In the case of health, this is evident in the way that some people, although educated about the dangers, choose to smoke cigarettes, eat foods high in fat and sugar, avoid physical activity or don't wear seatbelts (Fuchs, 1998, pp. 4-5).

## 2.4 Rural health

The average life expectancy of Australians is amongst the highest of the OECD countries at 80.3 years (Organisation for Economic Cooperation and Development, 2005). Yet, while overall health in Australia may rate amongst the best in the world, there are significant inequalities in the health of particular sub-groups of the population. Foremost are the health inequities represented in the poorer health of (a) Indigenous compared with non-Indigenous Australians; and (b) rural residents compared with their urban counterparts. Indigenous Australian men can expect to live 17 years less than their non-Indigenous counterparts (Australian Institute of Health and Welfare, 2008d). Life expectancy of non-metropolitan Australians is lower than that that of metropolitan residents, varying from 1-2 years less amongst regional populations and up to 7 years less in residents living in remote areas (Australian Institute of Health and Welfare, 2008d). Given the rural setting of this study, the next section will consider the health disadvantages of rural populations in more detail.

### *2.4.1 The health of rural Australians*

According to the Australian Standard Geographical Classification[5] (ASGC) just over 30% of Australians live in regional, rural and remote areas (Australian Bureau of Statistics, 2006). Periods of prolonged drought and decreased demand for agricultural services have exacerbated the pressures on rural farming communities, also bringing into question the future viability of these towns (Mission Australia, 2006). This downturn in agricultural activity has contributed to growing levels of social and economic disadvantage throughout rural Australia. In the early 1990s, Cheers (1990) reviewed the literature pertaining to disadvantage in rural Australia and found that residents of rural communities reported higher levels of disadvantage than urban-dwellers. Lower incomes, higher rates of poverty, fewer job and education opportunities, elevated grocery prices, and higher unemployment levels were characteristic of rural communities.

Since then, circumstances appear to have worsened for rural farming communities: for them, reduced demand for agricultural services is only the beginning of a chain of events. Fincher (1999) found that decreased economic activity triggers the withdrawal of both public and private services (banking, business, health services) causing a downward spiral in which (a) residents have to travel out of town to access services; (b) local job opportunities decrease; (c) the businesses that remain suffer as residents do more shopping when they're out of town accessing the services that have closed down locally; and (d) housing prices begin to fall as the town loses appeal. Unable to sell their houses, residents consequently become trapped in the town. Ironically, the low cost of housing in a rural township which is relatively close to a metropolitan centre leads to a rise in the internal migration of low-income families; the very families who are dependent on the services which are likely to have been removed from the rural township. Initiatives such as the Regional Australia Summit and Blueprint for the Bush (Humphreys, 2000; Queensland Government et al., 2006; Regional Australia Summit Steering Committee, 2000) have indicated that Australian governments are aware of the difficulties faced by rural Australia. These and other similar initiatives are discussed in more detail in Chapter 3, especially in relation to how they have shaped the policy environment of rural health services.

[5] ***ASGC*** - a method for classifying the rurality of Australian locations. The six ASGC remoteness categories are described in more detail in Appendix 1. The ASGC is one of three commonly-used remoteness classification systems used in Australia.

The locational disadvantage of rural people is not only present in their social and economic circumstances, but also manifests in their health (Smith, 2004). The health status of rural Australians is reported as being generally poorer than urban Australians (Australian Institute of Health and Welfare, 2006a; Trickett, Titulaer, & Bhatia, 1997). Life expectancy and hospital separation rates indicate that when compared to urban residents, rural and remote populations can expect:

i. lower life expectancy (a pattern observed wherein life expectancy decreases with increasing remoteness);
ii. higher total death rates;
iii. greater mortality due to injury (especially males);
iv. higher death rates from road accidents;
v. greater hospitalisation rates due to injury, falls of aged people, and burns;
vi. a greater proportion of severely disabled people;
vii. more people diagnosed with a communicable disease such as Pertussis and Ross River Virus;
viii. poorer oral health among children; and
ix. higher rates of neonatal and overall perinatal mortality (Australian Institute of Health and Welfare, 1998, 2005, 2008d).

Generally, performance on most health indicators worsens with increasing remoteness.

A number of factors have been identified as potentially contributing to the poorer health of rural Australians. Firstly, the hazards associated with common rural occupations put rural people at greater risk of injury and even death (Mitchell, Franklin, Driscoll, & Fragar, 2002). Secondly, rural and remote populations appear to engage in more negative health behaviours such as smoking and physical inactivity which are known to be major contributors to the burden of disease (Australian Institute of Health and Welfare, 2005, 2006a). Thirdly, the much poorer health of Indigenous Australians, who constitute a larger proportion of the non-metropolitan population (particularly in remote areas), is also cited as a factor which may cause the locational health disadvantage to appear worse than what it may be in reality (Australian Institute of Health and Welfare, 2006a). Finally, access to health services in rural and remote areas can be problematic which may also have an influence on health outcomes. The provision of rural health care services differs in many ways to the care provided in metropolitan settings and is characterised by some inherent challenges. The next section will discuss the nature of rural health services and some of the challenges which prevent better coverage of health care services in rural communities.

## 2.5 Rural health services

Health service provision in rural regions differs from that in urban Australia. Due to the tendency of medical specialists to congregate in urbanised areas, and the relative inaccessibility of many rural communities, multi-skilled general practitioners (GPs) have historically been the cornerstone of rural health services. Table 1 shows that the medical workforce in major cities is characterised by a much higher proportion of specialists, while there is an increasing reliance on primary care practitioners and other non-specialists in rural and remote regions.

Table 1. *Employed Clinicians per 100,000 Population According to Practitioner Type and Australian Standard Geographical Classification (ASGC) Category, 2006*

| | **Full-Time Equivalents[6] (FTEs) in 2006** | | | |
|---|---|---|---|---|
| **Clinician type** | **Major cities** | **Inner regional** | **Outer regional** | **Remote / Very Remote [7]** |
| Primary care practitioner | 98 | 90 | 80 | 89 |
| Hospital non-specialist | 39 | 14 | 15 | 22 |
| Specialist | 118 | 55 | 35 | 16 |
| Specialist –in-training | 52 | 10 | 8 | 5 |
| *TOTAL* | 307 | 169 | 138 | 132 |

Source: (Australian Institute of Health and Welfare, 2008b)

With fewer local medical specialists, rural GPs often take on the responsibility for providing a wide range of essential health care services and utilise a broader range of clinical skills than would most urban GPs. A study of GPs by Humphreys et al. (2003) confirmed the pattern of increasing practice complexity with increasing remoteness of practice location. The authors concluded that the services provided by rural GPs, especially critical care, profoundly affect the health status and life chances of rural residents.

[6] ***Full-time equivalents (FTE)*** are "calculated by multiplying the number of medical practitioners by the average weekly hours worked, and dividing by the number of hours in a 'standard' full-time working week. FTE gives a useful measure of supply as it takes into account both those working full-time and those working part-time" (Australian Institute of Health and Welfare, 2008b, p. 22).

[7] ASGC remoteness classification categories are explained in Appendix 1.

In addition, nurses are more likely to provide a greater proportion of health care in rural and, particularly, remote communities (Hegney & McCarthy, 2000) given the lower availability of medical practitioners. Nurses play an important role in the provision of rural health care and, in the absence of a local GP or medical officer, will be the primary care giver at rural hospitals. The role of the nurse in a rural hospital is different from that found in metropolitan and even regional hospitals with rural nurses' workloads being more generalist in nature, as opposed to more specialised care provided by nurses employed in larger hospitals (Hegney, 1996).

### *2.5.1 The quality of rural health care*

As medicine has moved towards increasing sub-specialisation, there has been a concurrent rise in the belief that services provided by generalists in rural areas do not match the standard of quality offered by specialists. There are signs that suggest an underlying distrust of rural health care. Particularly in America, there is evidence that those with adequate mobility and resources are willing to travel for "bigger and better" services in more metropolitan areas (Bauer, 1992; Bronstein & Morrisey, 1990; Dean, 2004). Although the provision of health care in rural towns is characterised by less specialist care, there is nothing to suggest that the health care provided by members of the rural health care team is unsafe or inferior in comparison to urban health care. Indeed, an Australian study by Hays, Evans and Veitch (2005) demonstrated that, where facilities are accredited to provide such services, the quality of anaesthetic, surgical and obstetric services in rural hospitals differed little from the quality seen in metropolitan centres.

Rural hospitals are typically associated with low volumes of procedures, though there is little evidence that this is associated with poorer outcomes. There are some notable studies which demonstrate positive volume-outcome relationships in highly specialised fields such as cardiovascular surgery (Canto et al., 2000; Halm, Lee, & Chassin, 2002; Luft, 1980; Thiemann, Coresh, Oetgen, & Powe, 1999), but such specialised procedures are unlikely to be performed in rural hospitals. Studies of the volume-outcome relationship associated with procedures that are more likely to occur in small rural hospitals are more encouraging. There is evidence that good outcomes can be expected in low-volume rural hospitals for services such as colorectal surgery provided by rural generalist surgeons (Birks, Gunn, Birks, & Strasser, 2001); epidural anaesthesia by GP anaesthetists (Watts, 1992); colonoscopies (Edwards & Norris,

2004); and obstetric services (Cameron, 1998; Cameron & Cameron, 2001; Rosenblatt, Reinken, & Shoemack, 1985).

Evidence regarding the volume-outcome relationship has some important implications for rural hospitals which would regularly be defined as low-volume hospitals. It does suggest the need for rural generalist practitioners to attain appropriate training prior to moving into rural practice and the importance of rural institutions selecting their service mix carefully - not attempting to provide complex services required infrequently. However, evidence of a positive volume-outcome relationship in highly specialised medical care should not be used to justify cessation of fundamental and low-risk rural medical services such as rural maternity units which have demonstrated good outcomes despite being low-volume units (Cameron, 1998; Cameron & Cameron, 2001; Rosenblatt et al., 1985; Tracy et al., 2006). More in-depth consideration of the safety of rural maternity care is included in Section II of this chapter which looks more closely at maternity care in Australia.

*Difficulties measuring the quality of rural health care*

It is difficult to compare the quality of high-volume urban-based services and low-volume rural services using the quality indicators that are predominantly used. A number of barriers to comprehensively evaluating the quality of rural health care have been identified, including the limited resources found in these settings and the smaller numbers of diagnoses (Bushy, 2005). The use of very specific quality indicators[8] to assess standards of patient care has become standard practice (Australian Council on Healthcare Standards, 2003). Yet while these indicators have been refined primarily in urban-based hospitals, fewer indicators have been developed for the primary care setting which would be somewhat more suitable for the services provided in rural hospitals. In any case, indicators have limited functionality in identifying and describing problems: "an indicator will never completely capture the richness and complexity of a [health] system" (Pencheon, 2008, p. 6). The inadequacy of many quality

[8] ***Quality indicators*** in health care are ". . . a measure of the management or outcome of care. It is an objective measure of either the process or outcome in quantitative terms." (Australian Council on Healthcare Standards, 2003, p. 4). Pencheon (2008) uses the example of infant mortality to illustrate the basic form of an indicator. The metadata contains the title of the indicator, in this case 'infant mortality rate' and the definition of the indicator 'the number of deaths of children aged less than 1 year for every 1000 live births in that community in the same year'. The data applied to the indicator, for example, 56 deaths of children aged less than 1 year in a community where there have been 4963 live births. Thus, 'local infant mortality rate = 56 deaths for 4963 live births – approx 9 deaths per 1000 live births' (p. 9). The use of quality indicators has become a standard practice to assess whether a given standard of patient care is being met (Australian Council on Healthcare Standards, 2003).

measurement instruments has been discussed previously by Rosenblatt (2002) who made several recommendations for better evaluation of rural health care and advocated for a more holistic approach to the measurement of quality of health care services in rural settings. Such an approach would not depend on disease-specific measures, but recognise the importance of the whole local health care system functioning to provide high-quality care. That is, there is interdependency amongst many services provided in a rural hospital where the loss of one type of service can undermine the viability of the hospital and therefore jeopardise all local health care services. Thus, measuring and considering individual services in isolation may be detrimental to rural health services. Rosenblatt has also noted that a lack of data on rural patient encounters and outcomes has traditionally hampered measurements of health care quality in the rural setting (Muscovice & Rosenblatt, 2000; Rosenblatt, 2002). This was true in the Australian setting until relatively recently when a framework was developed to comprehensively evaluate and report on the health of rural Australians with regular additions and updates (Australian Institute of Health and Welfare, 2003a, 2003b, 2005, 2006b, 2008d). Even more recently, the performance of rural health systems has also been evaluated and published (Australian Institute of Health and Welfare, 2008e).

*Defining quality*

There is no universal definition of what good quality care is and, as such, it is difficult to know exactly what is meant by "good quality" or "bad quality" care. Decades of literature can be found which state different ways of defining, measuring and normatively describing the quality of health care.

Donabedian, in particular, devoted much of his life to health systems research and contributed significantly to our present understanding of health service quality and how it could be evaluated and measured (Donabedian, 1968, 1990, 2005). He conceptualised elements of quality of care forming concentric circles; each circle representing a level at which quality can be measured (Figure 1) and, in this way, gives us some insight to what factors may constitute quality of care (Donabedian, 1988). The centre circle concerns the performance of health care providers, encompassing aspects of both technical performance (knowledge, judgment, skill) and the interpersonal relationship (rapport with patient, privacy, confidentiality, informed choice). Flowing outwards from this are considerations of the amenities of care (convenience, comfort, privacy); patient attributes and actions associated with care (that is the components of care that are the responsibility of patients or their families);

and the care received by the community (social distribution of good quality care and relative access to health care).

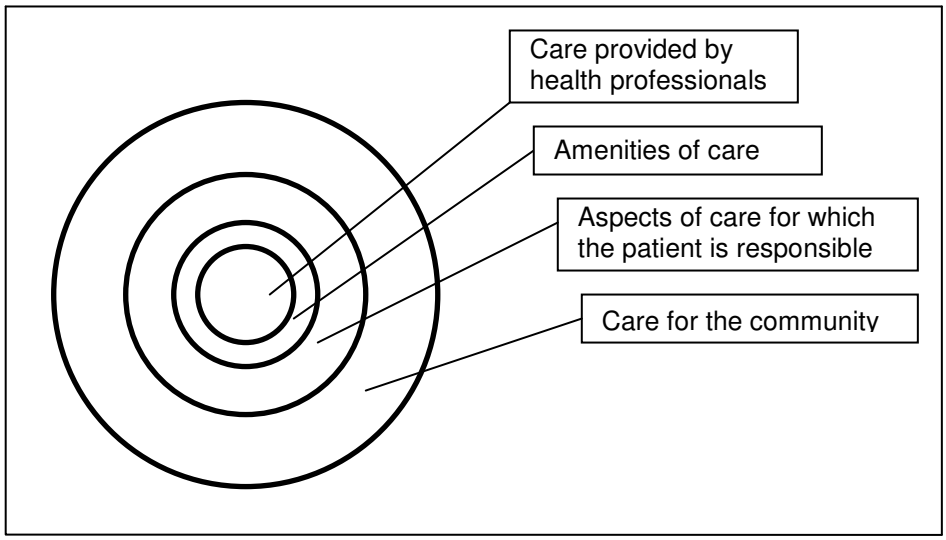


*Figure 1.* Donabedian's conceptualisation of levels at which quality of care can be measured. (1988, p. 1744).

Other contributors have suggested considerations of epidemiological quality; patient trust in the integrity of the health system; ability of the system to protect patient privacy; financial security offered; the bureaucratic burden placed on patients; individual freedom of choice allowed; physical amenities (Reinhardt, 1998); and adequacy of medical intervention, management strategies, effectiveness, equity, timeliness, efficiency (Starfield, 1998). Such contributions add an emphasis on factors other than those that are purely technical or clinical in nature to the understanding of health care quality. There is an understanding that the patient's values and perceptions also play a part in defining quality and the need to consider social and environmental issues as well.

In their discussion of the definition and measurement of quality of care, Brook, McGlynn and Shekelle (2000) identify two components that most definitions of quality of care have in common, one being a technical aspect and the other a more ethical or interpersonal aspect in which patients are treated humanely and appropriately with their autonomy respected. The authors go on to describe the way in which some aspects of care are more important for some than they are for others, that is, a person's values or their specific health condition may affect whether they value the

technical quality of their care above the art of care or vice versa. The differing values and preferences of rural populations, and women in particular, has previously been discussed by Wainer (1998), particularly the way in which rural women's health care values and preferences intersect with rural service availability to accentuate rural-urban differences in health care usage. Rural residents display a preference for care which is local and provided by someone with whom they are familiar, but the lack of specialised and continuous care in rural towns leads more rural women to opt for surgical treatment such as tubal ligation, mastectomy or hysterectomy in order to avoid lengthy or recurring visits to larger, remote, hospitals for treatment.

Considering all the valid contributions made to understanding quality in health care, perhaps Donabedian says it best:

> *As we seek to define quality, we soon become aware of the fact that several formulations are both possible and legitimate, depending on where we are located in the system of care and on what the nature and extent of our responsibilities are.* (1988, p. 1743)

Thus, health care quality can be perceived differently depending on who is evaluating the care. An Australian study of rural procedural medical care demonstrated that the various stakeholders tended to have different priorities when evaluating the quality of care provided (Hays, Veitch, & Evans, 2005). That is, medical and nursing staff focussed on technical aspects and resource support, whereas patients and their family were more likely to base their judgements on interpersonal and qualitative aspects of care. This study underscored the need for quality of care considerations in the rural context to include the needs and expectations of rural residents, which may diverge from the quantitative, technical outcomes of care captured in more commonly-used quality of care measurement tools. This is akin to suggestions made by Rosenblatt (2002) who recognised that the context, and preferences, of rural residents can differ from urban residents and even between rural communities. Thus, Rosenblatt advocated for quality of care measures, particularly in the rural setting, to consider the socio-economic and cultural aspects as well as the prevalent preferences of rural populations.

### *2.5.2 Problematic access to rural health services*

Against a background of disadvantage and demonstrably poorer health status, rural communities also face difficulties in ensuring the continuing provision of local health care services. Around the world, the key impediment to improving rural health care is

access (Strasser, 2003). The concentration of resources in metropolitan areas, transport needs, communication difficulties and a shortage of medical and other health practitioners are common problems for many countries. These access challenges are also true in the Australian context where the tyranny of distance is particularly pertinent and major health infrastructure is predominantly found in the major cities. Still, the shortage of rural health professionals is perhaps the greatest and most fundamental challenge faced and is arguably the facet of rural health that has received the most policy attention. It is worthwhile reviewing the current workforce issues which make the provision of rural health care so problematic.

### *2.5.3 Health workforce shortage and maldistribution*

There are a number of issues which threaten the availability of rural health care professionals and subsequently endanger access to rural health services. In the first instance, there is the shortage of appropriate health practitioners that is not only a domestic problem but one which is set against the backdrop of a global shortage of health professionals (medical, nursing and midwifery). Then there is the maldistribution of practitioners in favour of urbanised regions which leaves rural areas underserved. Figure 2 shows the relative distribution of a variety of health professionals across remoteness categories in Australia. It shows the pattern of relative maldistribution of many practitioners in which there is a greater concentration in urban areas and relative undersupply in increasingly remote regions. A global profile of health workers in the 2006 World Health Report (World Health Organization, 2006) indicates a similar pattern of health practitioner maldistribution exists world-wide. That is, although less than 55% of the world's population actually lives in urban areas, a disproportionate percentage of health care workers are found in urban areas. In Australia, nursing stands out as one profession which shows an even distribution, though the limited data for this profession indicate that this may be an even supply of a critically shrinking group. Medical and nursing (midwifery) workforce supply are of greatest relevance to this study, and though there are barriers to rural practice that are shared amongst the professions, there are also some issues which are distinctive. Therefore, it is worth considering the supply and distribution of the professions individually.

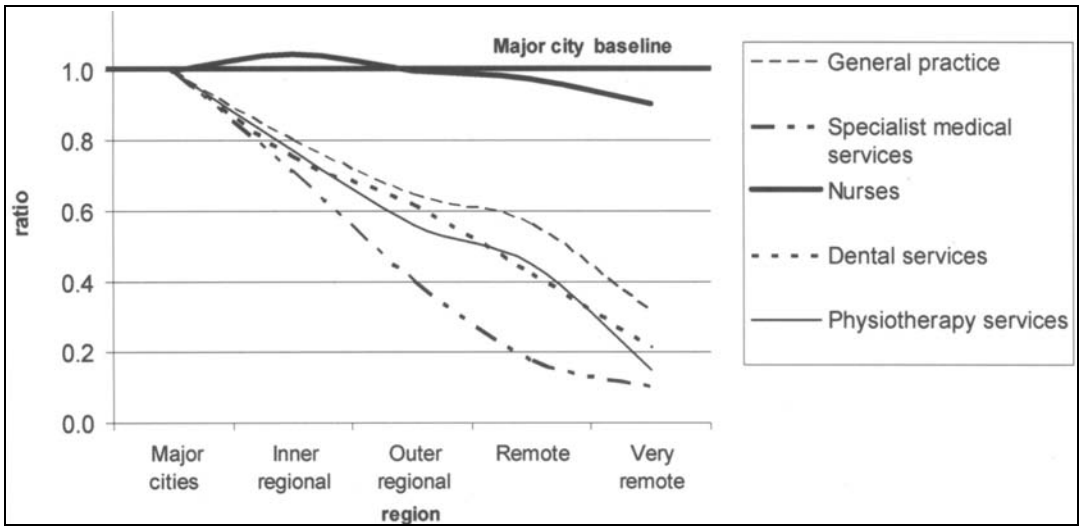


*Figure 2.* Practitioner to population ratio compared with levels in major cities. (Productivity Commission, 2005a)

*Medical workforce challenges*

Although GPs may be the traditional cornerstone of rural health services, research has shown an unequal distribution of GPs across Australia (measured as GPs per capita population). When this distribution is adjusted according to need, the spread of GPs appears to be, in fact, inequitable as areas in more need of health services are undersupplied. A consistent pattern is seen across states and territories: relative oversupply in capital cities and undersupply in rural and remote areas (Wilkinson, 2000). Throughout Rural, Remote and Metropolitan Areas[9] (RRMA) classifications 4-7 locations of Queensland, the shortfall of medical practitioners in 2003 was conservatively estimated to be 74 (Queensland Rural Medical Support Agency, 2003). Others have reported an overall shortage of GPs throughout the country, including metropolitan centres, but they also note that recruitment difficulties have left rural and remote areas particularly underserved (Health Workforce Queensland & Australian Rural and Remote Workforce Agencies Group, 2006).

An analysis of the Australian rural and remote medical workforce published in 2003 revealed that this section of the medical workforce consists of two distinct groups:

> *The first is a group of older, largely male, resident GPs who work relatively long hours and who are likely to have been in rural, and to a lesser extent remote areas, for a long time. These doctors are likely to work in group*

[9] **RRMA classification**—method for classifying the rurality of Australian locations. RRMA comprises three zones (remote, rural and metropolitan), within which there are seven narrower classification categories. Appendix 1 contains a longer description of the RRMA classification.

> *practices in rural areas and in solo practices in remote areas, where group practice is not sustainable. They are more likely than other rural and remote doctors to regularly practice anaesthesia, obstetrics or surgery. The second is a group of transitory doctors who move in and out of rural and remote locations, often while training. These doctors are more likely to be younger and female, and a considerable proportion appear to be overseas trained, although this information is currently not included in the minimum data set. They work fewer hours and are less likely to regularly practice anaesthesia, obstetrics or surgery but more likely to regularly practice emergency care and Aboriginal health care.* (Australian Rural and Remote Workforce Agencies Group, 2003, p. 5)

The authors of this study summarise some of the pressing issues in the future medical workforce. That is, the need to replace the ageing proceduralists in the first group and then to understand and combat the transience of practitioners in the second group to build a sustainable rural workforce into the future.

Issues associated with ensuring the sustainability of the future rural medical workforce must be addressed in an environment where general practice training places are undersubscribed nationally (Health Workforce Queensland, 2006), yet the number of training places made available continues to increase (General Practice Education and Training Limited, 2008). With quotas often unfilled, it has been suggested that "there is a declining interest in general practice training" (Health Workforce Queensland, 2006, p. 9). Difficulties in attracting applicants to rural training pathways within vocational general practice training are not encouraging signs for improving the fragility of the rural and remote medical workforce (Health Workforce Queensland, 2006).

Globalisation of the medical workforce and "feminisation" are other trends in the medical workforce which are expected to have implications for rural health care provision. Already, Australia has a great reliance on international medical graduates (IMGs) to service "areas of need" or those rural and remote towns which have been most adversely affected by the geographic maldistribution of medical practitioners (Productivity Commission, 2005a). However, as the market for medical professionals is now a global one, workforce planning has become even more complicated as rural towns compete in an international market to recruit medical practitioners (Brooks, Lapsley, & Butt, 2003). Other reports have predicted that the increasing feminisation of the medical workforce will also require some adjustment in workforce planning. The proportion of women entering the medical profession, particularly in general practice,

has been increasing but statistics indicate that they work only 70% of the hours worked by males (Australian Medical Workforce Advisory Committee, 2005), presumably in order to fulfil family responsibilities. However, the core of the problem may not be feminisation per se but an overall generational shift in the prioritisation of work as other research indicates that young practitioners, regardless of gender, are now opting to work fewer hours than what has been traditionally observed. This trend may reflect younger generations' desire to achieve a different balance between work and lifestyle than previous generations (Brooks et al., 2003; Productivity Commission, 2005a). As more practitioners opt to work less, regardless of gender, more graduates are required to cater for the same or increasing demand for medical services.

*Disincentives to rural medical practice*

While there are some aspects of rural practice which attract practitioners, there are also a number of well-documented disincentives that present considerable barriers to the effective recruitment and retention of a rural medical workforce (Access Economics Pty Ltd, 2002; Australian College of Rural and Remote Medicine, 2002; Australian Medical Workforce Advisory Committee, 1996; Committee of Inquiry into Medical Education and Medical Workforce, 1988; Commonwealth Department of Health and Family Services, 1999; Humphreys, Jones, Jones, & Mara, 2002; Productivity Commission, 2005a; Strasser, Hays, Kamien, & Carson, 2000). These disincentives can be broadly grouped into three categories: professional; financial; and social concerns and a brief discussion of these follows.

In a professional sense, concerns regarding rural medical practice frequently include the lack of (a) opportunities to pursue continuing medical education (CME) initiatives, (b) peer support and (c) access to specialists and allied health professionals to whom referrals can be made (Australian College of Rural and Remote Medicine, 2002; Hays, Veitch, Cheers, & Crossland, 1997; Humphreys, Jones et al., 2002). Particularly amongst women, lack of employment flexibility in rural areas, such as part-time or job-sharing options, can be problematic. Many professional issues are exacerbated when local colleagues decide to leave the area or discontinue the maintenance of their procedural skills. In this sense, Pashen et al. (2007) refer to the "dynamics of attrition": the loss of one provider increases the on-call demands on the remaining ones who subsequently opt out of practice. Furthermore, supporting health service infrastructure (such as diagnostic services) is often inferior, allied health professionals less available, and referrals to specialists more difficult (Productivity Commission, 2005a). A survey of rural proceduralists in Western Australia found that de-skilling associated with the

downgrading of rural hospitals was a significant contributor to the professional dissatisfaction which played a role in decisions to cease rural procedural practice (Kamien, 1998). Some authors have suggested that downgrading rural hospitals may underlie the pattern of rural GPs providing less hospital services (Britt, Miller, & Valenti, 2001). Hospital downgrading not only impacts on the availability of medical services for rural residents but, the removal of resources for local procedural care has implications for both the recruitment of new, and the retention of present, procedural medical practitioners in rural towns (Humphreys, Jones et al., 2002).

Financial disincentives to rural practice have also been identified. Many rural GPs have reported low procedural caseloads which, coupled with the high costs associated with maintaining skills, causes rural procedural practice to lack financial viability (Australian College of Rural and Remote Medicine, 2002). The Productivity Commission (2005a) also found the generalised perception that remuneration was lower in rural and remote areas contributed to the maldistribution of practitioners. Submissions to the Commission's review indicated a variety of reasons for comparatively lower income in rural areas, including the lower socio-economic nature of many rural and remote communities, the more complex health care needs that often require longer treatment times in rural areas and the constraints on career progression and specialisation which effectively limit salary increases. Recognition of the financial deterrents to rural practice are reflected in a number of government health policies that aim to improve the economic viability of rural practice by offering financial incentives to appropriately skilled practitioners. These policies are discussed in Section 3.6.4.

Further, the rising costs of medical indemnity premiums have caused the financial viability of rural procedural practice to further deteriorate and was rated one of the most pressing concerns amongst rural proceduralists in Australia (Australian College of Rural and Remote Medicine, 2002; Poggio, 2002). Governments have come to the support of rural proceduralists and provided financial assistance in the payment of insurance fees, however it is likely that this situation has already had a lasting impact on the number of rural proceduralists currently practicing. In addition to the fiscal imposition of medical insurance premiums, the fear of litigation and having to adopt defensive medical practices increases the stress experienced by rural doctors which may lead to the cessation of procedural practice amongst rural practitioners (Bassett, Iyer, & Kazanjian, 2000; Sondergeld & Nichols, 1998; Wiegers, 2003).

Rural practice can have a detrimental effect on lifestyle as it often entails a greater workload with longer working hours as well as greater on-call and after-hours commitments than urban GPs would encounter (Veitch, 1991). The Australian Medical Workforce Advisory Committee (AMWAC) figures indicate a trend of increasing work hours with increasing rurality (Australian Medical Workforce Advisory Committee, 1996, 2005). Lack of privacy and anonymity in small rural townships can be difficult for some and long distance away from family and friends can be isolating (Hays et al., 1997). Further, limited opportunities for spouse employment and education or child care needs of children are family considerations that may cause rural GPs, or other health professionals, to leave rural practice and seek work in urban centres (Australian College of Rural and Remote Medicine, 2002). Given that most rural medical practitioners come with a family, rural workforce agencies aiming to recruit and retain practitioners must recognise and accommodate the needs of the whole family unit and in this sense childcare, spouse employment and workplace flexibility are important considerations, particularly in the recruitment of female rural practitioners (Wainer, 2004). The pervasiveness of such social concerns is demonstrated in research which has shown that, although at the outset of their careers, medical students already perceived their future decisions regarding rural practice would be heavily influenced by considerations of proximity to family and opportunities for their spouse and children (Tolhurst, 2006).

Factors which discourage doctors from taking up or continuing rural practice have been known for some time (Committee of Inquiry into Medical Education and Medical Workforce, 1988). The greater the disincentives to rural practice, the fewer rural practitioners there will be and, amongst the practitioners who remain, less procedures will be undertaken; both scenarios lead to loss of access to medical care for rural communities. Numerous policy initiatives have been implemented to address obstacles to rural medical practice, including various financial incentives; innovations in medical school entry schemes and curricula to encourage better participation in the rural workforce; and the use of technology to enhance professional support for rural practitioners and novel models of service provision (Australian Medical Workforce Advisory Committee, 2005; Productivity Commission, 2005a). Many of these workforce-related policies will be discussed further in Chapter 3 as part of government policy strategies to manage present health and medical workforce problems.

*Nursing workforce shortages*

Until now, this discussion of the rural health workforce has concentrated on medical practitioners. This is somewhat misleading as the availability of appropriately trained nursing staff is equally important. However, the data for the nursing workforce are not nearly as comprehensive as those seen for the medical workforce and prevents discussion in similar detail. Nonetheless, national inquiries into the nursing workforce and education during 2002 indicated a considerable shortage of nurses; a situation that was expected to worsen (Department of the Senate & Community Affairs Committee, 2002; Heath, 2002). One projection estimated the shortage of nurses could be around 40,000 by 2010 (Karmel & Li, 2002). Most recent publications on the nursing workforce still indicate an overall undersupply of nurses throughout Australia (Department of Health and Ageing, 2008c), although the current workforce is relatively evenly distributed across remoteness classifications (see Figure 2). Despite being hampered by poor census response rates, data indicate that, in Queensland, the growth of the nursing workforce has not matched population growth while collectively, the current nursing workforce is ageing (average age in 2005 was 46.5 years), working longer weeks and increasingly employed in non-clinical capacities (Australian Institute of Health and Welfare, 2008c). The most recent nationwide audit of the rural and remote health workforce has highlighted an overall undersupply of nurses in Australia and revealed that Queensland ranks below the national average for numbers of nurses in all but very remote areas (Department of Health and Ageing, 2008c). Again, the ageing of the nursing workforce and the substantial number of registered nurses not seeking nursing work were issues identified as being particularly problematic for present and future rural nursing workforce.

From this, albeit imperfect, data, it can be inferred that workforce planners may have difficulties in ensuring that (a) the nursing workforce keeps pace with population growth and, hence, demand for nursing services; and (b) sufficient nursing graduates are entering the workforce to replace those who will soon be retiring from the workforce or who have left nursing careers. The nursing workforce forms the largest component of the rural and remote health workforce and maintaining the number of nurses is vital to the provision of rural health care:

> *Nurses form the largest and most evenly distributed health profession group working in rural and remote communities reflecting their vital role across these areas. However, there is a recognised shortage and high turnover of appropriately skilled nurses.* – submission to the Audit of

Health Workforce in Rural and Regional Australia by the Australian Nursing Federation (Department of Health and Ageing, 2008c)

Ensuring the sustainability of the nursing workforce will be pivotal to future rural health care services and to the potential of innovative workforce models which use nurses in expanded scopes of practice (Productivity Commission, 2005a). Workforce shortages specifically in maternity care (that is, of specialist obstetricians, GP obstetricians and midwives) are discussed in Section 2.9.1.

## 2.6 Summary of Section I

Section I has set the scene for this thesis by considering health, health care and rural populations. The multi-dimensional nature of "health" has been introduced as well as the ethical imperative of the right to health and achieving equitable access to health services. The challenges facing contemporary health care systems were considered and the ways in which these limit equitable access to health services. Recurring and growing health care expenditure requires governments to find an acceptable balance between adequate and appropriate health services while attempting to contain costs. Fuchs' three conditions of society explain how a nation's finite resources do not allow for all citizens' health care expectations to be fulfilled. In this challenging fiscal context, governments face difficult decisions regarding the allocation of scarce resources to overcome such issues as the inequitable distribution of health services.

Latter elements of Section I focussed on rural populations: the persistent health disadvantage they suffer and their poorer access to health care services. Recruitment and retention difficulties are major contributors to the workforce insufficiencies which threaten rural residents' access to adequate health care. The various ways in which rural health services differ from those in urban settings was discussed and though rural care tends to be provided by generalist practitioners (rather than specialists), there was little evidence to suggest that rural services are of inferior quality. Indeed, common quality measurement techniques rarely consider factors beyond purely technical aspects of clinical outcomes. These are important aspects to consider in assessing the quality of care, but there is also a need to include the patient or consumer perspective as important considerations (for example, the environment in which care is provided and interpersonal features of care). The potential for health behaviours of rural residents to differ from urban populations means there is a need to identify rural-

specific preferences and expectations and for these to be reflected in quality measures and health service planning.

## SECTION II: MATERNITY CARE

> *A pregnancy brings with it great hope for the future, and can give women a special and highly appreciated social status. It also brings great expectations of health care that is often willingly sought at this time.* – (World Health Organization, 2005, p. 42)

Maternity care comprises the health care services provided during pregnancy, birth and the postnatal period. There is wide recognition of the potential of maternity care to avoid maternal and neonatal morbidity and mortality (World Health Organization & UNICEF, 2003) and access to this care is advocated internationally (United Nations General Assembly, 2002). Nonetheless, around the world, there is great variation in the health care services provided during this time. For example, some countries tend towards an interventionist approach to pregnancy and birthing with high rates of routine interventions during pregnancy and births by caesarean section. The WHO indicate that the following four interventions are particularly susceptible to overuse: caesarean sections; episiotomy; use of oxytocin; and routine early amniotomy (World Health Organization, 2005). On the other hand, Scandinavian countries and the Netherlands have so far resisted the urge to medicalise pregnancy and birthing (Johanson, Newburn, & Macfarlane, 2002). The Dutch, in particular, are renowned for their high rate of home birthing, the predominance of midwifery care and low rates of medical intervention (Amelink-Verburg et al., 2008; Smeenk & ten Have, 2003). In Australia, particularly in metropolitan areas, pregnant women can choose from a number of different models of care which dictate the types of health professionals encountered and the environment in which care is provided. This section explores how maternity care has evolved and what services comprise maternity care in Australia today. Information is ordered under three headings – antenatal, intrapartum and postnatal care – which provides a chronological sense of maternity care. A brief review of the philosophical debate about the nature of maternity care is provided first.

## 2.7 Competing philosophical approaches to maternity care

"Organic" and "mechanic" philosophies are terms used to describe two, mostly opposing, approaches to maternity care (Hirst, 2005). The organic philosophy argues that pregnancy and childbirth are inherently natural events which require far less intervention than is currently the norm. Concerns about the "overmedicalisation" of birthing are not unique to Australia and the WHO has commented on this multi-national movement saying that "to reduce the risks and costs inherent in medical interventions and at the same time provide a responsive, humanized environment for care, overmedicalization, so often seen as part of commercialized care, should be discouraged" (2005, p. 73). Advocates of the organic philosophy, particularly midwives, argue that a woman-centred, de-medicalised approach to birthing allows women more control, less intervention and ultimately greater satisfaction in the birthing experience.

The mechanic philosophy of maternity care "stresses the need for access to the best facilities, equipment and carers modern medicine can provide in order to deal with the unforeseeable risks of pregnancy and birth" (Hirst, 2005, p. 15). Advocates of this philosophy argue that there is far more evidence to indicate that medical care has contributed to safe pregnancy and childbirth while comparatively little evidence exists to indicate the safety of maternity care outside of the hospital setting. Furthermore, the health and safety of mother and newborn should not be overshadowed by maternal preferences and satisfaction, as important as these considerations may be (de Costa & Robson, 2004). The Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG) state that women need to access both medical practitioners and midwives for maternity care, although they emphasise the need to access medical care in a timely way due to the possibility of complications arising (Royal Australian and New Zealand College of Obstetricians and Gynaecologists, 2007).

The debate and power struggle between the proponents of the two opposing philosophies continues today with many obstetricians maintaining that the present status quo in maternity care is the safest option for pregnancy and birthing, while advocates of an organic philosophy champion low-interventionist approaches outside of the hospital setting for low-risk pregnancies with medical back-up readily available if required. In the presence of these competing beliefs, there is increasing public concern about the safety of maternity care in an environment where inter-professional

conflict may hamper effective teamwork (MacColl, 2008). Throughout all of this, and lacking indisputable research to suggest the relative safety or danger of birth centre care, perhaps the most important function of health systems is to provide prospective mothers and their families with informed choice. That is, (a) providing sufficient information that citizens may make their own informed decisions about available carer(s) and birth settings; and then (b) providing access to the facilities and workforce to support citizen choices.

## 2.8 Content of maternity care

### *2.8.1 Antenatal care*

By definition, antenatal care is the care provided to a woman from conception to the onset of labour (*Mosby's medical, nursing and allied health dictionary*, 2002). Prenatal, antenatal, pregnancy and antepartum are all terms used interchangeably in the literature to refer to this period of time. The WHO (2005) suggest that the purpose of antenatal care is not only to identify women at risk of developing complications during labour, but can also encourage good health during pregnancy and prevent avoidable maternal mortality by (i) identifying and managing complications associated with pregnancy itself; (ii) diagnosing and treating diseases contracted during pregnancy; and (iii) potentially combating the negative effects of unhealthy lifestyles on pregnancy outcomes. Antenatal care also provides health professionals with an opportunity to present relevant health promotion messages, prepare the mother and partner for intrapartum care through the development of a birth plan and to prepare them for the postpartum period and parenting. Antenatal care can be provided by midwives, family GPs or specialist obstetricians. Shared care, often between hospital-based providers and GPs in the community, can be arranged and can have benefits in improving continuity and accessibility of care for the pregnant woman.

Throughout history, the fundamental nature of antenatal care has changed significantly, as has the overall approach to maternity care. Prior to 1900, it was considered unnecessary to seek medical or nursing advice for pregnancy: mothers in the community were considered the best sources of information regarding the condition of being pregnant (Tew, 1990). This continued until early obstetricians such as J.W. Ballantyne saw the benefit of women consulting with a physician in the early stages of pregnancy to facilitate timely interventions and better outcomes for the mother and baby (Dodd, Crowther, & Robinson, 2002; Tew, 1990).

Today, antenatal care involving a variety of health professionals has become commonplace for pregnant women in Australia, but there is some inconsistency in the antenatal care provided across the country (Hunt & Lumley, 2002; Oats, 2000). Care during pregnancy is now characterised by increasing complexity, with more visits to health professionals and a greater array of screening tests (Langer, Caneva, & Schlaeder, 1999; Oats, 2000; Villar, Carroli, Khan-Neelofur, Piaggio, & Gülmezoglu, 2001). The range of screening tests currently recommended by the RANZCOG for low-risk pregnancies are found in Appendix 2. Women assessed as being at higher risk of developing complications may receive different tests as dictated by the condition of the mother and foetus. Most commonly, pregnant women are encouraged to follow a schedule of visiting their antenatal care provider once a month until 28 weeks gestation, then every fortnight until 36 weeks and every week until 40 weeks or delivery (Hunt & Lumley, 2002). Although it is widely believed that "early and comprehensive antenatal care is the cornerstone of improving maternal and perinatal health outcomes" (Dunkley-Bent, 2005, p. 26), many have questioned the evidence-base for the intensity of current practice (Carroli et al., 2001; Dodd et al., 2002; Hunt & Lumley, 2002; Oats, 2000; Villar, Ba'aqeel et al., 2001; Villar, Carroli et al., 2001). Indeed, the WHO have published a, less intense, four-visit antenatal schedule, supported by the results of a multi-centre randomised control trial comparing this new model to the "standard 'Western' model of antenatal care" (WHO Antenatal Care Trial Research Group, 2002, p. 1).

### *2.8.2 Assessing obstetric risk*

The provision of maternity care is highly dependent on assessing the level of obstetric risk for each patient early in pregnancy. A variety of tools have been developed to formalise the assessment of obstetric risk. Although the exact content of these tools varies somewhat, most aim to predict the likelihood of complications during pregnancy or labour with a view to referring pregnant women to the most appropriate health professionals and care settings. The Australian College of Midwives (ACM) has produced an assessment tool based on a comprehensive checklist of medical conditions, existing gynaecological conditions and previous obstetric history (Appendix 3, Australian College of Midwives, 2004b). Queensland Health, in conjunction with the Royal Flying Doctor Service (RFDS), has also developed an obstetric risk assessment tool which considers the social situation of the woman as well as medical history (Appendix 4, Queensland Health & Royal Flying Doctor Service, 2007).

The use of obstetric risk assessment during antenatal care is a widely accepted practice in maternity care around the world, and several tools exist to assist. Still, it is worth noting the contention regarding the efficacy of risk assessment tools in accurately predicting obstetric complications (Berglund & Lindmark, 1999; Honest et al., 2004). Berglund & Lindmark (1999) found that 70% of pregnant women in their study who developed complications during pregnancy were initially assessed as being low-risk patients. Similarly, after a systematic review of literature, Honest et al. (2004), concluded that the quality of evidence supporting the use of obstetric risk assessment tools was poor and such tools were unlikely to be good predictors of spontaneous pre-term birth.

### *2.8.3 Intrapartum care*

The term "intrapartum" refers to the period of time from the onset of labour to the final stage of birth (*Mosby's medical, nursing and allied health dictionary*, 2002). Until the 1940s, birthing commonly occurred in the home in the presence of older women and with a midwife in attendance. Since then, maternity care has increasingly shifted towards the hospital setting where medical specialists take responsibility for overseeing pregnancy and intrapartum care although midwives still play an important role in caring for the woman and baby (Hirst, 2005). A doula[10] may also be employed by the woman or the couple as a support person during pregnancy, labour and early parenting.

Today, the vast majority of births continue to occur in the hospital setting (Laws, Abeywardana, Walker, & Sullivan, 2007). Care in birth centres or home births are other options, though these account for a very small proportion of total Australian births. Table 2 provides summary statistics on the location of birth in Australia and Queensland.

[10]"Doulas are support people who assist women in pregnancy, birth and post-birth care. Some undergo training although this is not accredited. Their role should not be confused with that of nurses or midwives – they come with the birthing woman and are not part of the hospital system. In some Aboriginal and Torres Strait Islander communities, traditional birth attendants continue to work in a doula role to support Aboriginal and Torres Strait Islander health workers. These women may be part of the workforce in dedicated facilities either as volunteers or paid workers" (Hirst, 2005, p. 136).

Table 2. *Location of Australian and Queensland Births*

| | Hospital (%) | Birth Centre (%) | Home (%) | Other (%) |
|---|---|---|---|---|
| Australia | 97.5 | 1.9 | 0.2 | 0.4 |
| Queensland | 98.6 | 0.8 | 0.1 | 0.5 |

Source: (Laws et al., 2007)

First developed in the late 1970s and early 1980s, birth centres provide a viable option for some Australian women who prefer an organic approach to their maternity care (Commonwealth of Australia, 1999; Waldenstrom & Lawson, 1998). However, the existing birth centre facilities in Australia are reportedly insufficient to meet the demand for this type of care (Commonwealth of Australia, 1999). Midwives are the primary carers for pregnant and labouring women in birth centres and medical assistance is provided only when requested by the midwives. Birthing is emphasised as a natural and normal process which, for most low-risk women, requires minimal intervention. The birth centre environment frequently aims to be home-like and non-clinical where services are family-centred and women are encouraged to take an active role in the birthing process (Waldenstrom & Lawson, 1998). Admittance to birth centres is generally restricted to women assessed as being at low risk of developing complications during pregnancy or labour. Centres are co-located with a hospital to ensure quick and efficient transfer of women to access medical intervention if complications arise (Commonwealth of Australia, 1999). Research on birth centres has indicated that outcomes for mothers and babies are comparable with those of hospital births and are associated with higher levels of patient satisfaction (Byrne, Crowther, & Moss, 2000; Feldman & Hurst, 1987; Scherman, Smith, & Davidson, 2008; Turnbull et al., 1996; Waldenstrom, Brown, McLachlan, Forster, & Brennecke, 2000; Waldenstrom & Turnbull, 1998).

Interventions during birth are perhaps one of the most contentious areas of maternity care. Obstetric interventions used in Australia include: caesarean sections (removing the baby from the uterus surgically); induction and/or augmentation of labour (artificially initiating or hastening labour); epidural anaesthesia (for pain relief); forceps delivery and vacuum extraction which is used to hasten or slow down delivery (Commonwealth of Australia, 1999). Most concern appears to be centred on the rising caesarean rate in many western countries. In Australia the rate of caesarean sections has climbed steadily from 20.3% in 1997 to 30.8% in 2006 (Laws & Hilder, 2008). A Senate Committee Inquiry found several factors are likely to have encouraged the growth in

rates of birth by caesarean section including the older average age of first time mothers (for whom there is a higher risk of developing complications), the relative safety of caesarean sections, the greater availability of the procedure in large urban hospitals where women are increasingly encouraged to birth, fear of litigation, and convenience for the doctor (Commonwealth of Australia, 1999). In particular, the pressures of avoiding medical litigation should not be underestimated as this is perceived to encourage defensive obstetric practice (Bassett et al., 2000; Johanson et al., 2002).
Although discussion persists about methods to halt and reverse the upward trend of caesarean sections, there is no agreement about what, if any, is a desirable rate for such intervention (Commonwealth of Australia, 1999; de Costa, 1999; The Lancet Editorial, 1997). As such, much confusion remains regarding the need for, and usefulness of, medical intervention in low-risk maternity care. What is clear though is the way that this topic highlights the divide between two disparate approaches to pregnancy and birthing.

### *2.8.4 Postnatal care*

The postnatal or postpartum period refers to the first few days following childbirth (*Mosby's medical, nursing and allied health dictionary*, 2002), although in common and medical parlance, this period often extends out to 6-8 weeks after birth. In Australia, there are two major models for the delivery of postnatal care: hospital-based care and care in the home, which is often provided by midwives and is also known as domiciliary care (Cooke & Barclay, 1999). Postnatal care services can be important for the ongoing health of the mother, baby and the rest of the family unit during what is often a period of readjustment following birth. For many women, the postnatal period is likely to be free of complications but there are a number of changes and events in the lives of both the mother and newborn that may benefit from regular monitoring by health professionals in the hospital or community setting. Health checks during the first six-eight weeks following delivery allow for the assessment of the baby's health as well as the mother's physical, emotional and social well-being. Postnatal care providers can (a) offer support for feeding problems; (b) screen newborns for disorders; (c) facilitate the recognition and management of postnatal depression; and (d) provide preventive care for the baby including immunisations and ongoing parental support and education regarding the health and progress of the infant (Bick, 2005; National Collaborating Centre for Primary Care, 2006).

Like other aspects of maternity care, postnatal care has undergone many changes. Perhaps the most significant, and most debated, is the trend towards decreasing the length of in-hospital stay following birth. Initially, early discharge programs were implemented primarily to free up bed space within the hospital and only in situations where sufficient home-based care could be provided (Declercq & Simmes, 1997). However, early discharge policies, which subsequently place greater emphasis on home-based care, are increasingly understood to be motivated by cost savings for hospitals (Cooke & Barclay, 1999; Declercq & Simmes, 1997; Liu et al., 2000; Lock & Ray, 1999; McIntosh, 1984). Many western countries, such as Canada, the United Kingdom, and Sweden exhibit similar patterns of decreasing postnatal hospital stay from an average of eight to 14 days in the 1950s down to two or three days or even less (Brown, Small, Faber, Krastev, & Davis, 2002). Indeed, 12 to 24 hours for an uncomplicated vaginal birth and 48 to 72 hours following a caesarean section is now the norm in the United States (Braveman, Egerter, Pearl, Marchi, & Miller, 1995). In 2005, Australian women stayed on average, three days in hospital following birth and shorter length of stays were most common in Queensland (Laws et al., 2007).

The literature around the safety of earlier discharge of mothers and newborns remains contentious. Those concerned about the negative effects of shorter hospital stays argue that there is greater risk of adverse events including: increased infant mortality and readmissions; delayed detection of infant and maternal morbidities (particularly jaundice amongst infants and postnatal depression, wound problems and infections amongst mothers); more problems with breastfeeding leading to earlier weaning; less maternal confidence owing to less professional support during the immediate postnatal period; lower maternal satisfaction with the care received; greater prevalence of postnatal depression; less opportunity for screening of newborns; and less rest time for mothers in the hospital setting prior to leaving for home (Braveman et al., 1995; Brown et al., 2002; Declercq & Simmes, 1997; Grullon & Grimes, 1997; Lock & Ray, 1999; Malkin, Garber, Broder, & Keeler, 2000). Proponents of shorter hospital stays argue the potential benefits of earlier discharge include: (a) encouraging more effective bonding of the family unit; (b) allowing women to get more rest outside of the busy and noisy hospital environs; (c) decreasing the exposure of mother and baby to infections; (d) increasing the mother's confidence in caring for the baby in the home environment; and (e) reducing breastfeeding problems via removal from schedules imposed by the hospital and the conflicting information that can be presented there (Brown et al., 2002). Nonetheless, there is no conclusive evidence to link early discharge with

adverse outcomes. More research is required to determine associations between length of postnatal stay in hospital and outcomes.

## 2.9 Maternity care in rural Australia

Australia is one of the safest places in the world to be pregnant and give birth (Organisation for Economic Cooperation and Development, 2008; World Health Organization, 2007). Nonetheless, in the years 2003-2005, a total of 65 maternal deaths were recorded in Australia (Sullivan, Hall, & King, 2008). Although the number of deaths may appear small, the significance of such deaths should not be underestimated: "each single maternal death has a major impact on the family and the community" (Kildea, Pollock, & Barclay, 2008, p. 130). There is evidence to suggest that what burden exists falls disproportionately on those families who live in outer regional, remote and very remote areas. For example, outer regional areas accounted for 10% of the population and births but 16% of the maternal deaths in 2000-2002 (Kildea et al., 2008).

Moreover, research evidence suggests that there may be a greater need for maternity care in rural areas due to the higher levels of disadvantage. A study by Roberts and Algert (2000) found differences between the profiles of rural and urban pregnant women in New South Wales. Rural mothers were more likely to be teenagers, not in married or defacto relationships, public patients and smokers. From their research, the authors concluded that socio-economic disadvantage in rural areas may indirectly lead to infants being small for their gestational age by way of rural mothers' increased exposure to adverse psychological, behavioural and environmental factors. They conclude by stating: "if rural maternity services become less accessible, more costly or fewer in number then perinatal outcomes may deteriorate further in the bush" (p. 296).

Further, research on the Queensland population has shown that rural and remote populations may be at greater risk of poor perinatal outcomes. Coory, Roselli and Carroll (2007) found rates of Down syndrome births to be higher for rural and remote populations than for urban-dwellers[11] over 15 years. Moreover, rates remained stable amongst the rural and remote populations while significantly decreasing in urban births. The authors suggest that one of the reasons behind this trend may be the unequal

[11] In this study, urban was defined as residing in the populous south-east corner of Queensland, rural residents were those living anywhere else in the state.

access to antenatal screening tests; that is, accurate measurement of nuchal translucency is only offered in urban centres given the need for appropriately trained practitioners, high-quality ultrasound machines and tight quality control measures. The authors conclude by arguing that the actions arising from screening outcomes are the moral preserve of individuals, though it is important that everyone at least has access to the procedures which provide information and choices.

### *2.9.1 Rural maternity units closing*

Options for local birthing are fewer in rural and remote areas of Australia than they are for urban women. Yet at the same time, rural maternity units are continuing to close. At least 130 rural maternity units closed between 1995 and 2006 throughout Australia. In Queensland, Hirst (2005) reported that 36 of the 84 public maternity units in Queensland had closed between 1995 and 2005, a 43% reduction in operational birthing units. Figure 3 shows the change in distribution of functional maternity units and illustrates the shift of care away from rural areas to the more populated coastal towns. Similar patterns of rural unit closures and subsequent centralisation of maternity services have also been experienced in other countries including the United States, Canada, the United Kingdom and France (Bronstein & Morrisey, 1990; Klein, Christilaw, & Johnston, 2002; O'Dowd, 2007; Pilkington, Blondel, Carayol, Breart, & Zeitlin, 2008).

Research from rural Washington State, where maternity unit closures were also a concern, suggests a link between the loss of local obstetric care and poorer perinatal outcomes (Nesbitt, Connell, Hart, & Rosenblatt, 1990). Researchers found that women from communities with little or no local obstetric care available tended to deliver at hospitals outside of their home town. However, compared to rural women able to deliver at their local hospital, these women were more likely to have complicated labour, premature delivery and their infants were more likely to need longer and more expensive hospital stays. The authors suggested that a causal relationship between lack of access to maternity care and poor outcomes was plausible though the design of the study prevented this from being confirmed.

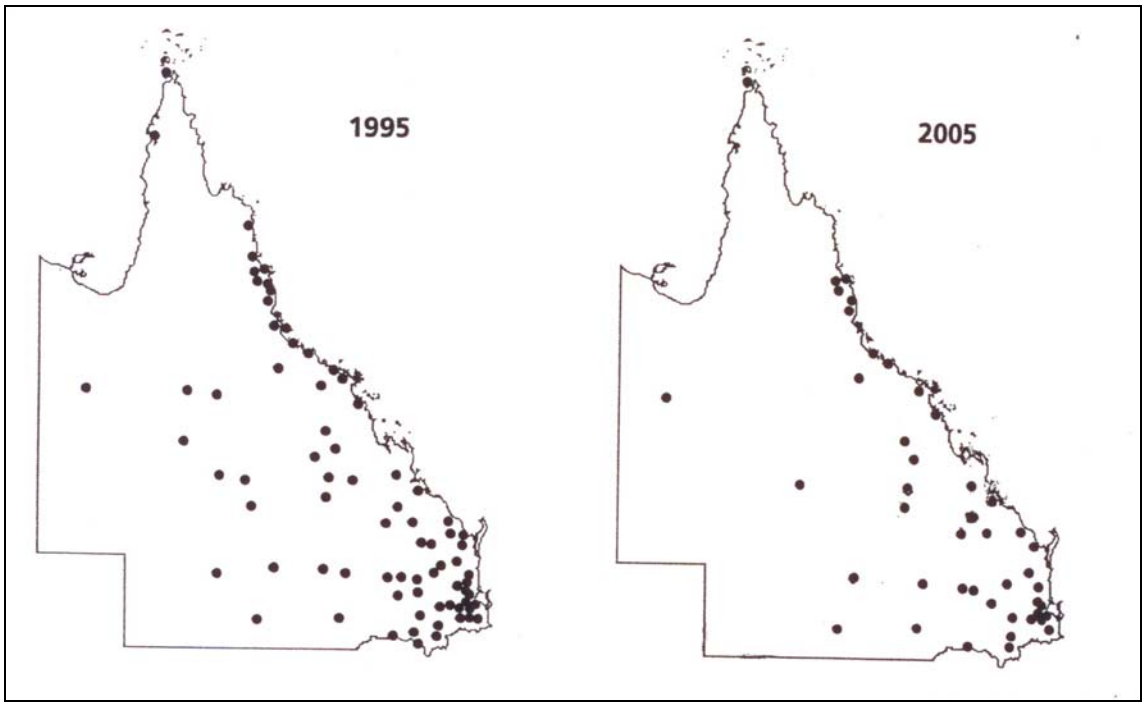


*Figure 3.* Location of maternity units throughout Queensland in 1995 and 2005 from Re-Birthing Report. (Hirst, 2005).

*Rural maternity workforce challenges*

Reasons for rural maternity unit closures are predominantly workforce-related. The provision of care throughout pregnancy, birthing and the postnatal period is, by and large, shared by GP obstetricians[12] and midwives (Australian Medical Workforce Advisory Committee, 2004). Two or more of (a) urban-based specialist obstetricians; (b) non-procedural rural GPs; (c) GP obstetricians with admitting rights to the local hospital; or (d) midwives may collaborate to provide maternity care for the rural patient in an arrangement typically referred to as "shared care" (Wiegers, 2003). The availability of specialist obstetricians or exclusively private care is almost non-existent in rural towns, although specialist obstetricians may provide an outreach service, usually from the regional public hospital or rural residents may travel to access specialist care in larger centres. In almost all cases, rural hospitals plan only to care for women who are assessed as being at low risk of developing complications during pregnancy. Women of higher risk are referred on to larger hospitals where there is access to more specialised maternity care.

[12] GPs who hold a Diploma of the Australian and New Zealand College of Obstetricians and Gynaecologists (DRANZCOG).

Shortages of midwives, rural medical practitioners and GP proceduralists (particularly anaesthetists and obstetricians), make it difficult to recruit and retain a qualified workforce to provide maternity care in these areas. Without a critical mass of qualified maternity carers, safety of care becomes a concern and frequently leads to the closure of units (Hirst, 2005). In the present environment of workforce challenges and the continuing disincentives to rural practice, the provision of rural maternity care faces further specific obstacles, particularly with regard to the obstetric and midwifery workforce.

The distribution of obstetric specialists mirrors trends in the wider medical workforce with the most recent figures from AMWAC indicating that only 15.7% of the obstetric and gynaecology (O&G) workforce is located outside of metropolitan centres (Australian Medical Workforce Advisory Committee, 2004). These figures do not include midwives and GPs who are the primary providers of maternity care in rural areas but the report concludes that a maldistribution problem exists throughout Australia, with rural and remote areas facing the most problematic recruitment and retention. The availability of obstetricians is set to decrease even further with a significant proportion intending to withdraw from practice in the near future. A survey conducted in 2001 found that 76% of O&G specialists who responded intended to cease practice within 10 years (MacLennan & Spencer, 2002). Reasons for ceasing practice included: intentions to specialise in gynaecology; fear or trauma of litigation; cost of indemnity (at the time of the survey average annual premiums were $35,515); costs associated with the practice; disruption to the family; and long and late hours worked. The researchers suggested that the current volume of O&G trainees would not be sufficient to replace the senior obstetricians intending to stop practice.

In the rural setting, a similarly bleak picture has been portrayed regarding the supply of GP obstetricians (Loy, Warton, & Dunbar, 2007). The proportion of GP obstetricians increases with increasing rurality, reflecting the continued reliance of rural maternity services on the availability of procedural GPs. Yet, over half of the GP obstetricians surveyed in Victoria indicated that they intended to leave obstetric practice within seven years, creating more uncertainty regarding the sustainability of rural obstetric services.

AMWAC's most recent review of the O&G workforce situation and future requirements supports the view that there is a maldistribution of active obstetric practitioners, particularly in regional and rural areas (Australian Medical Workforce Advisory Committee, 2004). The reviewers found that current O&G service levels are achieved

and sustained by IMGs, although this may become more difficult as the medical market place becomes increasingly globalised. Thus, AMWAC has recommended an increase in specialist training intake (particularly in Queensland) to increase the supply of practitioners and promote national self-sufficiency (Australian Medical Workforce Advisory Committee, 2004).

A shortage of appropriately trained nurses and midwives across Australia has also been reported, likely worse in rural and remote areas due to recruitment and retention difficulties (Department of Health and Ageing, 2008c; Tracy, Barclay, & Brodie, 2000). Ageing of the midwifery workforce is also expected to exacerbate current shortages (Tracy et al., 2000). Comprehensive data on the midwifery labour force is difficult to obtain, especially as it is most often collected and reported with nursing data. Thus it can be difficult to isolate information on midwives from that on the broader nursing profession. The two most comprehensive reports on the midwifery labour force are produced by the AIHW. *Nursing and Midwifery Labour Force 2005* (Australian Institute of Health and Welfare, 2008c) is based largely on census questionnaires administered by state and territory nurse and midwife registration boards while *Health and Community Services Labour Force 2006* (Australian Institute of Health and Welfare, 2009) is based on 2006 Census of Population and Housing data. In 2006, the number of midwives per 100,000 people was 59 nationally (down from 60 in 1996 and 2001). The rate was even less in Queensland with 53 for every 100,000 people (Australian Institute of Health and Welfare, 2009). When examined by remoteness area, the trend amongst midwives roughly follows that of the broader registered nurse workforce; that is, the highest rate in inner regional areas and decreasing rates with increasing remoteness Table 3.

Table 3. *Number of midwives and nurses per 100,000 people by remoteness area*

| | **Major city** | **Inner regional** | **Outer regional** | **Remote** | **Very remote** | **Australia** |
|---|---|---|---|---|---|---|
| Midwives | 58 | 64 | 59 | 53 | 42 | 59 |
| Registered nurses | 978 | 1056 | 886 | 748 | 589 | 979 |

Source (Australian Institute of Health and Welfare, 2009)

In Queensland, 8.55% of the nursing workforce in 2005 was engaged in midwifery and almost two thirds of this group reported working part-time. The average age of Queensland midwives was 46.3 years (Australian Institute of Health and Welfare, 2008c). To combat both current and impending midwife shortages, Tracy et al. (2000) highlighted the role of midwifery education reforms which aim to make qualifications more accessible, thus increasing the supply of graduates to replace experienced midwives as they retire in the coming years.

### *2.9.2 Safety of rural maternity care*

Rural maternity units continue to close mainly because of concerns over the safety of care they are able to provide, yet these concerns are largely theoretical. The issue of whether to centralise birthing care is often propelled by a belief that care is safer in larger hospitals. There is compelling evidence for the regionalisation of perinatal care which encourages the delivery of very low birth weight babies in tertiary level hospitals (Heller et al., 2002; Phibbs, Bronstein, Buxton, & Phibbs, 1996; Yeast, Poskin, Stockbauer, & Shaffer, 1998). However, the safety of low-volume birth units that cater for low-risk births has been less comprehensively studied and the relative safety[13] of these small units continues to attract debate in the literature. Studies conducted in other countries have found elevated neonatal mortality rates in smaller volume units which has fuelled the argument that birthing services should be centralised due to the inherently unsafe nature of birthing in small, commonly rural, birthing units (Heller et al., 2002; Moster, Lie, & Markestad, 2001).

Even so, international literature has described the relative safety of low-volume units designed for low-risk birthing for some years (Black & Fyfe, 1984; Hogg & Lemelin, 1986; Rosenblatt et al., 1985). In Australia, a number of good quality studies support the notion that low-volume units in this country provide safe care. In a paper titled "Does size matter?", Tracy et al. (2006) used the National Perinatal Data set to discern whether low-volume hospitals in Australia were more likely to report adverse outcomes for low-risk patients. After assessing over 331,000 low-risk births, the authors concluded that low birth volume was not associated with adverse outcomes for these women. Thus, the authors challenged the belief that women who give birth in low-volume units are in some way disadvantaged. Furthermore, two decades of good outcomes have been reported at the rural hospital in Atherton, in the Cairns hinterland

[13] Mortality rates are a routine measure of the safety of a service.

(Cameron, 1998; Cameron & Cameron, 2001). No maternal deaths were reported in the 20 years and the perinatal mortality rate compared very well with the surrounding region as well as that found in Queensland and Australia. The authors suggest that the hospital had found the right balance between accepting appropriate low-risk cases and referring patients to the regional hospital. Indeed, this pattern of referring higher risk patients is likely to be reflected in the above research findings. As small maternity units generally cater for low-risk pregnancies one might expect lower mortality rates than in high-volume units in large hospitals where patients at higher risk of complications are referred antenatally and sick or premature neonates are transferred.

### *2.9.3 Rural consumers' perspective*

The literature does not provide any clear information about what rural consumers consider most important in their maternity care. Aspects worth considering in the context of this thesis are the barriers faced by rural residents regarding access to care in urban centres, rural residents' preferences for local care and the prioritisation of safe care. Research with Queensland residents highlighted the non-clinical issues which rural and remote patients factor into decisions when considering seeking care in urban centres (Veitch, Sheehan, Holmes, Doolan, & Wallace, 1996). The most serious issues for these populations were associated with organising affairs at home prior to leaving (completing duties and making arrangements for the family they leave behind), travelling and accommodation costs, isolation from family and difficulties in the urban setting and with urban practitioners. Ultimately, these issues affect the health behaviours of rural residents and can have a negative impact on their compliance with a planned course of care.

In a study of Canadian rural women, Sutherns (2004) found that the most valued aspects of maternity services included:

(i) Local care: relating to the provision of reliable care in the home community where there is less difficulty associated with employment, childcare for other siblings or emotional distress associated with accessing care in other centres.
(ii) Relational care: associated with continuity of carers, better relationship-building and personalised attention for patients.
(iii) Informed choice: having a range of options for maternity care, being informed about these options and having the opportunity to act on their preferences.

In this particular study, patients appeared to value choice, location and relational aspects of their care over purely clinical features that may have influenced the technical safety of care.

Indeed, the desire to birth locally may be so strong that rural women present at the local hospital in advanced stages of labour to avoid being transferred to birth at the regional hospital (where they have been referred due to their risk profile or because the local birthing unit is closed); otherwise, determined women may even choose an unassisted home birth (Kornelsen & Grzybowski, 2006; Woollard & Hays, 1993). Both settings are relatively ill-equipped to manage births, especially those with complications. Here, the preferences of women to receive care that is close to home appears to outweigh the risk of adverse outcomes for mother and baby. Yet, a small qualitative study of women in a rural Queensland town found that safety considerations (actual and perceived) actually weighed heaviest in decisions about whether to access care locally or at the regional hospital (Smith & Askew, 2006). Overall, the literature suggests that rural women would prefer to access care that is locally accessible and personable while prioritising the safety of care appears less consistent.

These factors, along with maternity workforce shortages and the continuing closures of rural maternity units, have encouraged the exploration of alternative models of maternity care. Alternatives which have garnered most public attention include the relatively few units currently operating as midwife-led models. The debate which emerges from explorations of alternative models is particularly focused on whether midwifery-led models are appropriate and acceptable options for birthing in rural areas where there is an absence of sufficient and willing procedural GPs to provide medical intervention in emergency situations (for example, caesarean section). Yet, for women assessed as being at low risk of obstetric complications, there is international and Australian research to indicate that midwifery-led care produces maternal and infant outcomes comparable to those of standard maternity care and is associated with higher levels of patient satisfaction (Byrne et al., 2000; Feldman & Hurst, 1987; Scherman et al., 2008; Turnbull et al., 1996; Waldenstrom et al., 2000; Waldenstrom & Turnbull, 1998). Nonetheless, such models run counter to the long-standing dominance of medically-led care and it remains to be seen whether there will be widespread adoption of alternative models of care in rural, and even urban, centres.

Although alternative models of care are being investigated, the present situation for rural women accessing maternity services remains, in many cases, inadequate. The

consequences of limited local access to maternity care for rural families is commonly seen as unjust and unacceptable as evidenced by media headlines such as “Father forced to deliver stillborn baby on roadside” (ABC News Online, 2006) which told of the trauma a Queensland couple endured after being referred to the regional hospital 270km away (Todd & Herde, 2006), and “Third world: Inquest into baby's death told government inaction to blame” which reported rural practitioners’ perceptions that they were not receiving sufficient government support to maintain high-quality maternity services (Weatherup, 2006).

## 2.10 Summary of Section II

Section II has provided an overview of the health services provided throughout the spectrum of maternity care. While reviewing the services typically provided throughout the three phases of maternity care, areas of contention have been highlighted. Over the last century, maternity care has changed dramatically; shifting from care provided by midwives and older women in the home to becoming a highly specialised field of medicine. There is some symmetry between the shift of care from home to hospitals and the disagreement regarding the organic and mechanic approaches to maternity care. This disagreement is also characteristically drawn along professional boundaries; that is, midwives and nurses traditionally support more organic, low intervention methods while the medical profession advocates a more mechanic approach where intervention is at hand when required. Rising rates of intervention during birthing, debate about the content of maternity care, usefulness of risk assessment tools, and the shortening duration of postnatal hospital stays also mark areas of contention and ongoing debate within the field of maternity care.

Yet, maternity care is an important health care service for a near-universal event in the lives of women and families. Accessing appropriate care during pregnancy can play a vital role in protecting the health of mother and baby while at the same time preparing parent(s) for the postpartum period and parenting. Although the safety of rural maternity care has been questioned, outcomes associated with rural maternity units have been comparable with large urban units. Yet, local maternity units continue to close, with maternity care progressively contracting to more populous and coastal areas. This section also discussed how the centralisation of maternity services towards metropolitan centres occurs at a time when social and economic disadvantage characterises many rural communities and where the profile of rural pregnant women

may be conducive to poorer perinatal outcomes. Appropriate access to maternity care may assist in avoiding deterioration of perinatal or maternal outcomes and to ensure the ongoing health and well-being of rural mothers, families and communities.

# SECTION III: HEALTH POLICY

## 2.11 Health policy as public policy

Public policy traditionally emanates from government and can be thought of as decision(s) made in the public interest (Hancock, 1999). Health policies are also a form of public policy; they are made, ultimately, by the government in the interests of citizens' health. As such, much of the general (as opposed to specialised) public policy literature is relevant and useful to review prior to considering some of the more particular aspects which differentiate health policy.

Easton (1965) provides a "neat" way of conceptualising politics and policy-making. Figure 4 contains a diagram of Easton's model in which he depicts the policy process in terms similar to a biological system – dynamic yet maintaining a relatively steady state.

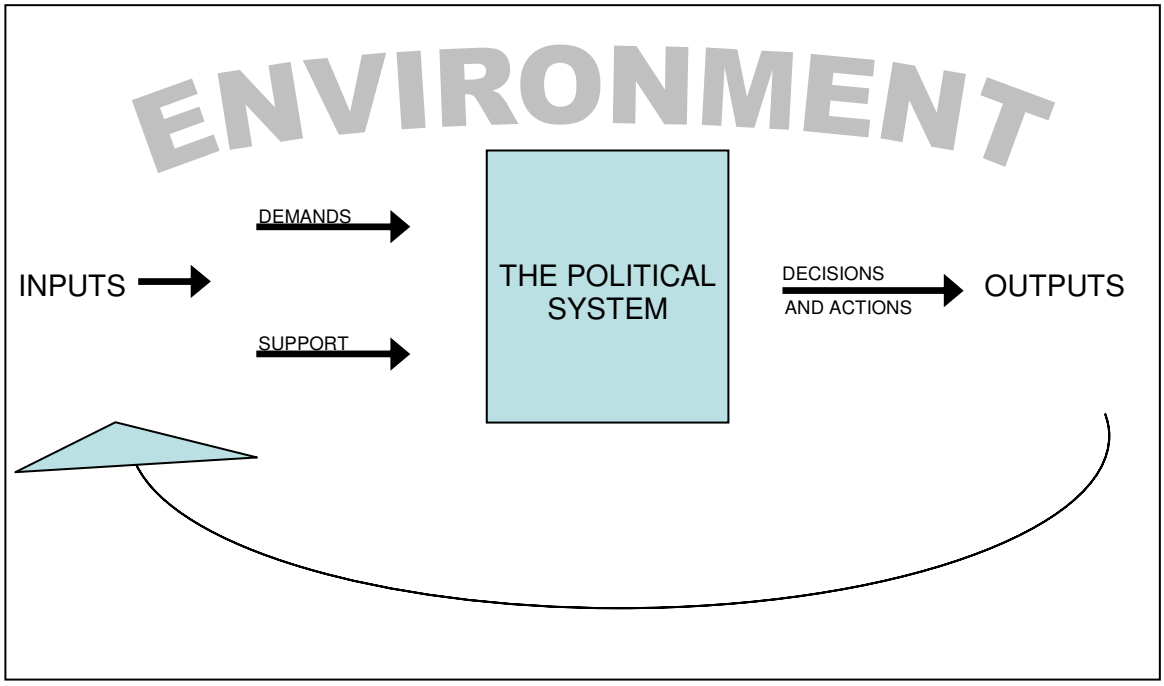


*Figure 4.* Easton's simplified model of a political system (1965).

Inputs to the political process include demands made by groups or individuals in society, such as petitioning for improved access to primary health care or better roads. Public support is also considered an input and may include favourable voting trends, public obedience or use of implemented facilities and services. Resources could also be considered an input to the process as, without sufficient funds and infrastructure, the government could not do anything about demands such as training more GPs or building new roads. Easton does acknowledge that political actors may make use of their privileged position to create political demands and refers to this as "withinputs" (1965). These inputs are fed into the "political system" which is considered somewhat of a black box. Activities that occur within this box can be difficult to observe and are not likely to be developed through the same, or even a rational, process each time. Policies are implemented and the outcomes trigger either positive or negative feedback into the system. For example, improved access to hospital care would be a positive outcome for which the government may obtain voter approval but increased costs to citizens may be a negative outcome which feeds back into the system as demands for government to alleviate these costs.

Like most models of the policy process, this is not a perfect representation of policy development. For example, the model assumes the government and the political process is neutral, so doesn't account for situations in which the government uses force to make its own demands or create support as inputs to the political system, nor does it take into account that it is often the interest groups closest to the government which have their demands heard (for example, urban rather than rural populations) (Walt, 1994). Given its limitations, Easton's model is still useful as a conceptual aid as it illustrates how issues come to bear on the political agenda and highlights the vagueness of the policy-making process in the black box. Also important is the way in which Easton's model emphasises the "long-term equilibrium" sought by the political system as it endeavours to match inputs with the most appropriate and feasible outputs. Certainly, the interests of the government, inherent in the black box of the political process, would not be served if demands were not converted into favourable policy outputs as public support for the government would surely wane.

### *2.11.1 The nature of public policy*

Despite the familiarity of public policies in day-to-day life, the literature offers no universally accepted definition of policy. Acknowledging the lack of clarity in purpose and intent of the word policy, Heclo (1972) once suggested that although definitions

elude us, commonly the term policy is used to refer to "something 'bigger' than particular decisions, but 'smaller' than general social movements" (p. 84). Although a universal definition remains elusive the extensive literature does allow for some important characteristics of public policy to be identified.

Firstly, problem identification and definition must precede a policy response. That is, prior to making a policy decision, there needs to be a reason to do so. A policy decision *can*, but doesn't always, involve plans for action to combat that problem. This is also evident in Easton's model (Figure 4) where demands arise due to the presence of a problem. Here, it is important to consider how the policy problem is framed. What informs the definition of the problem and who are the dominant parties promoting this issue?

Secondly, policies appear to revolve around decisions. The Collins Dictionary defines policy as a "course of action adopted, *esp*. in state affairs; prudence." (Krebs, 1989, p. 410). Certainly, it would appear that *often*, policy requires an active decision to be made so that all know what the "course of action" is to be:

> *[policies are] formal decisions made by public bodies; the 'outputs' of government.* (Heywood, 2002, p. 428)

But what about when government chooses not to make a decision? It is important to consider whether the government's stance to not make any decision is a policy in itself (that is, "policy by inaction"). Often it is politically expedient to avoid those highly emotive issues that have no clear winners or losers but which put the government at significant risk of losing votes. For example, the issue of abortion is a highly emotive and divisive topic. Government stands to gain little from contributing to the debate but risks alienating a sizeable proportion of the population and so generally prefers to avoid policy input to the issue. Thus, policy is not only about explicit decisions, but could also be considered:

> *Anything a government chooses to do or not to do* (Thomas Dye, cited in Howlett & Ramesh, 2003, p. 5).

In reality, policies are likely to be more than just one decision. The complex and inter-departmental nature of many modern public problems necessitates many policies to encompass a range of decisions and actions that will cross departmental boundaries and require the cooperation of several agencies. For example, given that there exists a broad range of factors that can influence the health status of any population, policies

aimed at improving health may require the collaboration of any number of departments including those that deal with housing, education, welfare, and/or the environment.

> *policy entails something more than simply a decision – that it is a course of action* (Hill, 1997, p. 6).

> *policy involves a course of action or a web of decisions rather than one decision . . . taking place over a long period of time . . . invariably change[s] over time . . . dynamic rather than static . . . concerns the examination of non-decisions* (Hill, 1997, pp. 7-8).

A final point to consider is the political nature of policy-making. As government is so heavily involved in public decision-making, "policy" and "politics" can become highly intertwined, and separation of the two can be quite difficult. In fact, the English language is one of only a few which actually distinguishes between these two words. As policy-making must necessarily occur in a highly political environment, it is essential that in any policy analysis there is consideration of political processes, structure and strategy. These factors can have a significant effect on the content of policies and the degree of success achieved in implementation. In the present study, this political environment necessitates consideration of the actors involved in the process, their interests and the power they hold. This is, as aptly phrased by Lasswell (1936), to study "influence and the influential".

Considerable ambiguity surrounds the term "public policy", what policy might (or might not) entail is not always obvious. Thus, as explained by Heclo (1972), it is important for each researcher to provide their own description of policy at the outset of their study:

> *Thus, policy does not seem to be a self-determining phenomenon; it is an analytic category, the contents of which are identified by the analyst rather that by the policy-maker or pieces of legislation or administration. There is no unambiguous datum constituting policy and waiting to be discovered in the world.* – (Heclo, 1972, p.85)

This thesis adopts an inclusive view of policy; it includes both explicit government decisions and those directions which are implied rather than embodied in policy documents, legislation or announced through media statements. As much as tangible outputs such as regulations and legislation are considered policy, the absence of funding and policy decisions is equally considered policy. Health policies, in whatever form, are the government's foremost means of influencing the state of health or the

nature of health care. Where policies are identified, these are understood to be the government's preferred direction on a health issue.

### *2.11.2 What makes health policy different?*

Although a form of public policy, a number of features differentiate "health policy" from other areas of public policy-making, and add considerably to the complexity of this field. Health policy is concerned with the decisions and actions made by governments in the interest of the public's health. Health policy suffers the same definitional deficiencies as public policy. Lewis (2005a) has previously defined health policy as ". . . a complex network of continuing interactions between actors who use structures and argumentation to articulate their ideas about health" (p. 14), thus particularly emphasising the influence of factors external to the government. Palmer and Short describe health policy as "the courses of action that affect that set of institutions, organisations, services and funding arrangements that we have called the health care system" (2000, p. 23). Much like public policies in general, heath policies can be understood as those actions, decisions and statements of intent that make up what the government says it will do, what it does and what it doesn't do.

Moreover, apart from being difficult to define, health policies can be difficult to identify and isolate given the confounding effect of underlying determinants of health such as housing and education which are the policy concern of other departments. Brown (1992) extends this thought regarding the intertwining of health and social policies by suggesting that it is useful to consider: (a) all social policies are also health policies, reflecting the way in which social and economic factors influence health; (b) health care policy is really only one type of health policy; and (c) programs and political strategies are just as likely to reflect health policy without explicitly being called such.

Within Australia, characteristics that differentiate health policy from broader public policy include:

> (a) The overwhelming dominance of the Australian medical profession. Indeed such authority by a profession is unmatched in any other field of policy (for example, teachers do not have comparable power in the field of education policies). Dominance is reflected in the way the medical profession has traditionally enjoyed almost unfettered access to the process of making health policy and the government understands that implementing health policies is

likely to be problematic without the support of these professional stakeholder groups.

(b) The nature of knowledge in health and medicine renders the consumer unable to discern what care is required and which services are of high quality without the assistance of a medical practitioner or other health professional. Thus, as the consumer is unlikely to have the knowledge to make a well-informed decision about their own care, normal competitive market mechanisms cannot be readily applied within health, despite being relatively commonplace in other policy areas.

(c) Matters of health and health care can be distressing and quite literally matters of life and death. These high stakes coupled with ever-increasing patient expectations means that many health policies can have a considerable influence on the lives of citizens and significant political consequences (Blank & Burau, 2004; Lewis, 2005a; Palmer & Short, 2000).

### *2.11.3 Community participation in health policy-making*

The *Declaration of Alma-Ata* on primary health care (International Conference on Primary Health Care, 1978) asserts participation as a right of citizens and important to achieving good outcomes in the provision of care: “the people have the right and duty to participate individually and collectively in the planning and implementation of their health care” (para. IV) and that primary health care “requires and promotes maximum community and individual self-reliance and participation in the planning, organization, operation and control of primary health care, making fullest use of local, national and other available resources; and to this end develops through appropriate education the ability of communities to participate” (para. VII). In many ways, the prescription for community participation in health policy development, and even implementation, is an extension of the right to health that was discussed in Sections 2.1 and 2.2.

Furthermore, the OECD also encourages national governments to seek greater public involvement in policy-making as a means of combatting the many new challenges faced by traditional governance approaches (Organisation for Economic Cooperation and Development, 2001). Indeed, societies now appear to have higher expectations of their governments, are more discerning about the quality of services they access and are even demanding more direct input to governance processes (Bishop & Davis, 2002; Martin, 2008). The OECD suggest the following mutually beneficial outcomes that can result from increasing citizen input:

(i) Better public policies will be produced. Citizen involvement will provide a more relevant knowledge base to inform policy-making and may also act to enhance public acceptance of policy choices and outcomes as well as assist in the implementation of policies.
(ii) There will be greater trust in government due to the transparency that comes with having the public closely involved in policy-making. The offshoot of which is an enhanced appearance of legitimacy for the government and a greater likelihood of the public reacting favourably to policies.
(iii) Democracy will be strengthened as citizen involvement increases the transparency of government processes and decision-making and encourages greater public accountability (Organisation for Economic Cooperation and Development, 2001, p.18).

Though touted as a right, and of benefit to government as well, the field of community participation remains highly contested, and the ideas and language still somewhat ambiguous. An appropriate definition of consumer engagement in the health policy context is provided by Gregory (2007): "consumer engagement is about involving consumers in developing and implementing the policies that will affect them as health consumers" (p. 2). In this definition, the term "consumer" is deliberately used in a broad way to include users and potential users of health services, individuals or groups of users, those who are specifically using a health service and those who have an interest in the health system and the way it is funded (Gregory, 2008b). The terms "public", "citizen" and "community" are used interchangeably in this thesis and are preferred for their inclusive qualities; incorporating both present and potential users of maternity services and those in the wider community who have some interest.

*Community participation activities*

Gregory's definition also uses the word "engagement" to cover a whole spectrum of potential engagement or participatory techniques including advisory boards, community meetings, citizens' juries, surveying and polling. Other authors have made value-based distinctions between participatory activities and developed schemas to rank activities according to perceived worth for citizens. An early contribution to this field was the participation ladder by Arnstein (1969) which makes clear value judgements about engagement activities by categorising each as being "nonparticipation", "degrees of tokenism" or "degrees of citizen power" (see Figure 5). Arnstein advocates for participatory activities which aim to devolve at least some decision-making authority to citizens in order to empower them, particularly those in disadvantaged circumstances.

Aboriginal Community Controlled Health Services[14] (ACCHS) are a local and contemporary example of activities that would sit under "citizen control" in Arnstein's ladder. By contrast, Arnstein suggests that non-participatory exercises often displace community efforts to meaningfully influence the policy-making process: "participation without redistribution of power is an empty and frustrating process for the powerless. . . . It maintains the status quo" (Arnstein, 1969, p.216).

Oakley (1989) categorises activities along a spectrum where participation can be the means or the end in itself. Similar to Arnstein's non-participation activities, participation as a means often involves co-opting citizens into indirect forms of participation where input is limited to providing comments or advice with little scope of direct control being divulged: "participation as a means is essentially a static, passive and ultimately controllable form of participation" (Oakley, 1989, p. 10). Alternatively, participation can be an end in itself; being part of a process to empower citizens and communities, allowing them to shape their own agendas and circumstances.

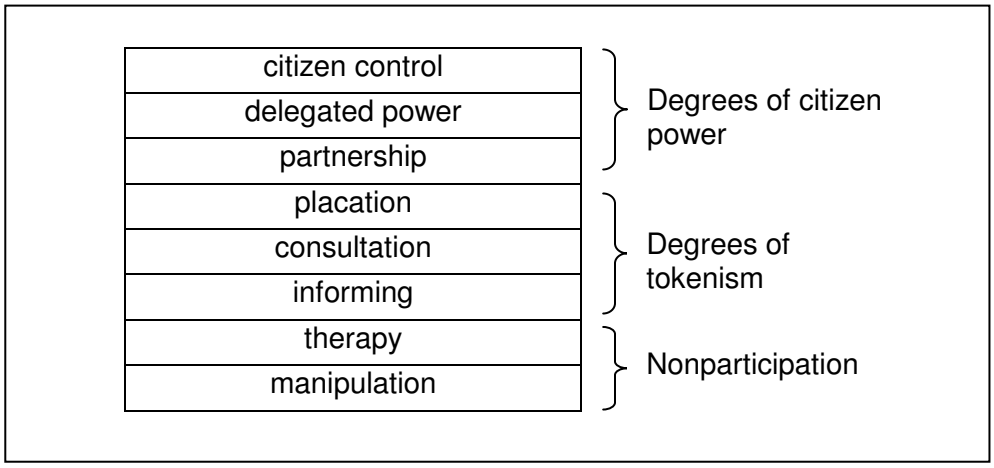


*Figure 5.* Anstein's ladder of participation (1969).

A similar, but more recent, continuum published by Health Canada (2000) shows a spectrum of public involvement that can be applied in the health policy setting (Figure 6). This continuum depicts the progression from the government gathering information from, or informing, citizens in a one-way information exchange, through to an equal

[14] An Aboriginal board which is elected by the local Aboriginal community governs each ACCHS and government controlled organisations are excluded. This allows the local Aboriginal community essentially full control over the management of the service.

partnership between government and the public in which information is shared between all stakeholders.

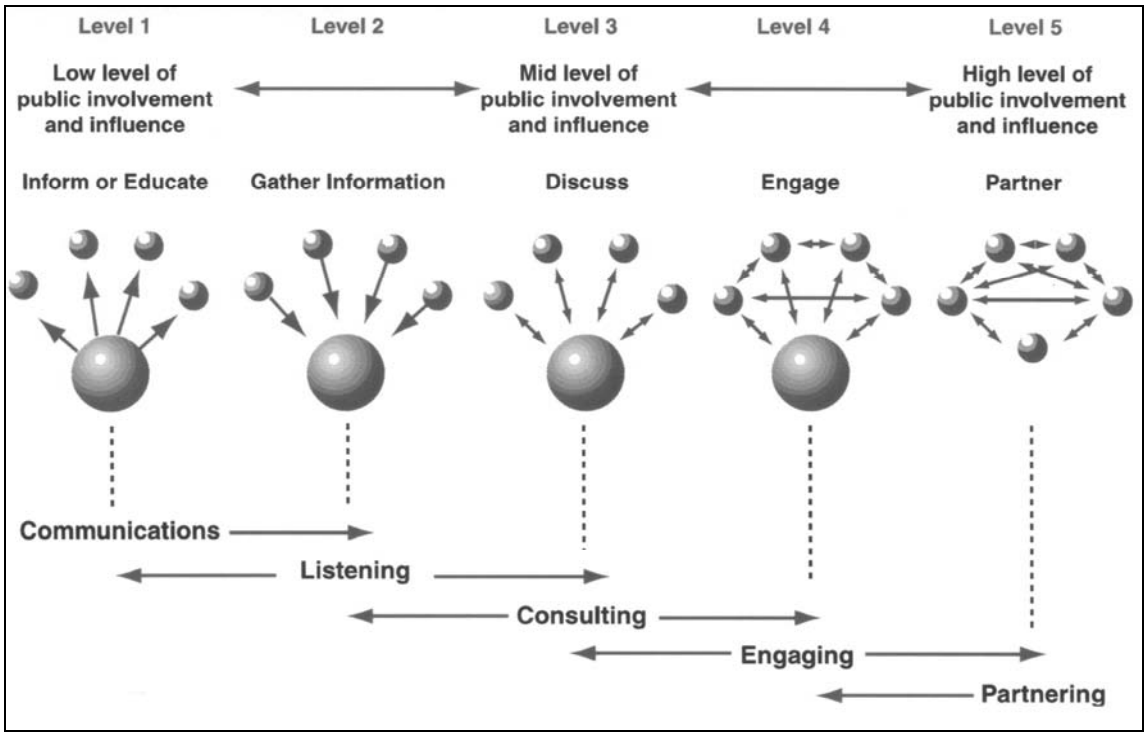


*Figure 6.* Health Canada's Public Involvement Continuum (2000, p. 12).

Recognising the ambiguity with which the term and notion of “community participation” are used in policy documents, Taylor, Wilkinson and Cheers (2008) describe four approaches to actually undertaking community participation informed by disciplines of health, social care and rural development, amongst others (Table 4). Like authors before them, Taylor et al. (2008) emphasise that the approaches are rarely discrete; in reality community participation is more likely to bring together elements of more than one of the approaches summarised in Table 4. Ideally, to fulfil expectations of both the community and government, a participatory approach should be chosen according to the goals of participation and factors of the surrounding environment; that is, what is feasible and appropriate given considerations of the community and policy environment. What these ladders, spectrums and continua highlight is that not all activities labelled as community or citizen “participation” are equal.

Table 4. *Conceptual approaches to working with communities.*

| |
|---|
| **The contributions approach**<br>The contributions approach considers participation as voluntary contributions to a project rather than decision-making about the project. Professional developers, usually external to the community concerned, lead participation. |
| **The instrumental approach**<br>The instrumental approach defines health and well-being as an end result rather than as a process. The end result is effective strategies that improve health and well-being for consumers. Consumer and community involvement are interventions designed to achieve outcomes for communities in the most equitable and effective manner. Participation is usually led by professionals. |
| **The community empowerment approach**<br>The community empowerment approach seeks to empower and support communities, individuals, and groups to take greater control over issues that affect their health and well-being. It includes notions of personal development, consciousness—raising and social action. |
| **The developmental approach**<br>The developmental approach conceptualises health and social care development as an interactive, evolutionary process, embedded in a community, in which local people have an active role. Through their involvement, tasks that they consider important are achieved. The developmental approach is underpinned by principles of social justice. |

Source: (Taylor et al., 2008, p. 88)

In the area of health, greater community involvement in policy has the advantages of increasing citizens' awareness of health and the determinants of ill health; provides greater scope for the disadvantaged or repressed within society to voice their needs and opinions; can assist in improving the accessibility and appropriateness of services; and may act to balance out the views of health professionals and other powerful interests in the health arena (Palmer & Short, 2000). In an environment where Australian rural communities are experiencing service rationalisation and withdrawal, engagement processes in health development is advocated as a means to empowering communities (Kilpatrick, 2008). A number of health policy documents in Australia advocate some degree of public participation; though generally do not mandate exactly which activities should be pursued. Yet, reporting on the outcomes of citizen engagement is scarce and it is difficult to evaluate whether the contemporary policy interest in citizen participation is translating to real changes in mainstream policy-making processes, including those in the health arena. Ultimately, there is a need for more outcomes reporting of citizen engagement innovations in order to ascertain what advantages have been realised and what barriers have been encountered in the Australian setting (Gregory, 2007, 2008a).

## 2.12 Health policy analysis

There are many possible methods for conducting a health policy analysis but little guidance as to the best way to "do" an analysis (Walt et al., 2008). Often the nature of the analysis is dictated by the particular interests and academic or professional background of the analyst. For example, an economist is more likely to be interested in the financial costs and benefits associated with a given policy, whereas a political scientist may be more concerned with the policy-making process and identifying which interest groups have prevailed. The multi-disciplinary nature has been acknowledged as benefitting the overall field of policy analysis as each discipline contributes different perspectives and expertise which, in turn, facilitates a more comprehensive understanding of policy processes, content and outcomes (Heclo, 1972).

Aside from disciplinary focus, policy analyses can vary according to the approach or the aims of the study. Figure 7 presents a method of classification proposed by Hogwood and Gunn (1984b) who suggest that policy studies are not limited to the one approach, but may move between different types of analyses within the one study.

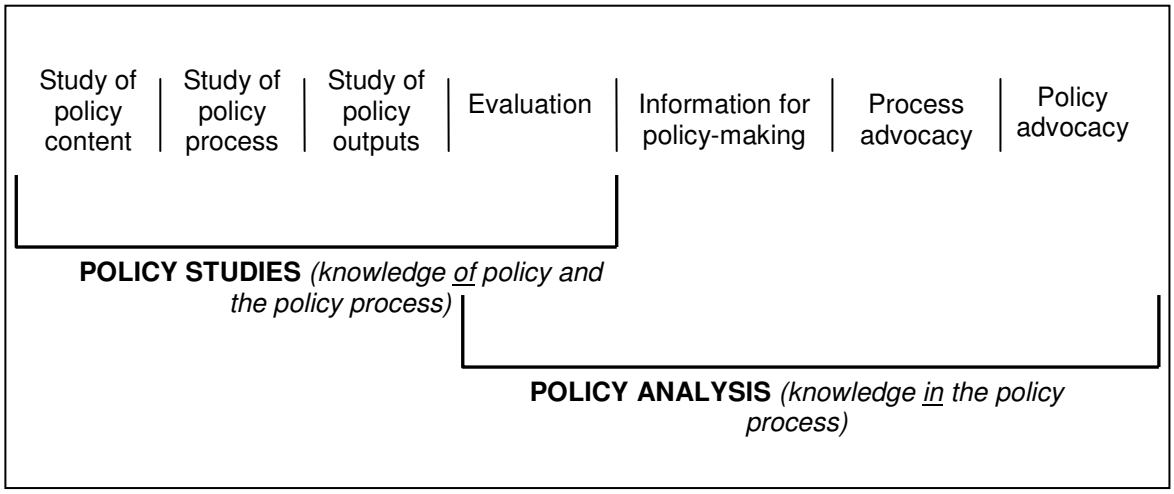


*Figure 7.* Types of public policy studies (Hogwood & Gunn, 1984a).

The present study is primarily concerned with evaluating policy outcomes and comparing these with the objectives of policy in order to inform future policy-making. According to the categorisation above, the present study would fall into the category of evaluation and also information for policy-making. Figure 7 shows that information for policy-making aims to inform subsequent policy-making, while evaluation straddles both objectives of providing information for and *of* policy.

Evaluation studies are vital to understanding to what extent policy has achieved its objectives, whether implementation has occurred as anticipated and whether a specific policy is still relevant and appropriate in environments which are always changing. Hogwood and Gunn (1984b) explain the necessity of policy evaluation by highlighting the uncertainty of policy outcomes in an always dynamic environment of implementation:

> *If we lived in a world of complete certainty and perfect administration there would be no need for evaluation: having selected the best option and put it into operation we would know in advance what its effects would be. However, we rarely have such certainty. Our understanding of many issues, especially social problems, is imperfect or even contested. . . . Our understanding of how government intervention will work and what its effect will be is therefore also limited.* (Hogwood & Gunn, 1984b, p. 219)

Although there are unmistakable benefits associated with assessing policy impact, the difficulty in actually completing policy evaluations can act as a deterrent to actually ensuring these are done. Hogwood and Gunn (1984b) describe some of the obstacles to policy evaluation, including:

- The goals of the policy are ambiguous and therefore difficult to evaluate;
- Lack of clarity regarding what outcomes would constitute success;
- Difficulty separating policy impacts from other influences, for example, other policy programs;
- The political sensitivity of evaluation outcomes; that is, government officials may not want to make public the failure of programs; and
- The relatively high cost of conducting policy evaluations that are appropriate (pp. 222-228).

If these obstacles can be overcome, and particularly if provision for evaluation is made during the initial stages of policy development, evaluations can be used to identify required changes to current policies or indicate the need to terminate policies which have become irrelevant or inappropriate. Ultimately, studies which aim to better understand the impact of policies can facilitate the development of better policy decisions and improve outcomes for citizens.

*The Queensland Policy Handbook* offers a variety of questions that may underpin policy evaluation, many of which are relevant to the present study:

- What are the connections between the policy as implemented and changes in the areas it is supposed to be influencing?
- What has been the impact of the policy?
- Has rhetoric matched reality (Queensland Government, 2000, section 7.0)?

And more specifically:

- (Access) Are clients able to take advantage of the policy?
- (Complexity) Is the policy overly complex? Do clients understand the policy? Do administrative and enforcement officers understand the policy?
- (Cost) What are the costs of the policy? Who pays them?
- (Distribution of benefits) Is there a net benefit (economic, social, legal)? Who receives it?
- (Effectiveness) Does the policy achieve the desired outcomes?
- (Equity) Are there differences from one client group to another? Are target groups properly addressed? Does the policy distribute benefits or burdens differently among groups? If so, why?
- (Policy consistency) Is the policy consistent with other policies? Does it meet other legislative and government commitments?
- (Community acceptability) Is the policy acceptable to the communities affected, with particular reference to stakeholders identified in the development? Are clients' needs met? Are other stakeholders satisfied?
- (Political acceptability) Is the policy acceptable to the government (Queensland Government, 2000, section 7.4)?

Despite the prospective benefits of conducting policy evaluation, the study of policy outcomes for the health of rural populations has been relatively neglected (Farmer & Currie, 2008). Thus, there is little understanding (beyond anecdotal evidence) of the impact produced by broad, or even specifically rural, health policies on rural citizens. Literature has also emphasised the need to assess policy discourse alongside the lived experiences of the affected citizens (Panelli et al., 2006). The aim of this study is to better understand the impact of policies, health or otherwise, on the lived experiences of rural people who access and provide rural maternity care.

A framework for the analysis of health policies in this study is drawn from a model proposed by Walt and Gilson (1994). The model contains four principal components: the actors who have influence on policy-making; the actual content of policies; the process of policy-making; and the context in which this occurs. This framework provides a simplified model for analysing a complex set of inter-relating factors

associated with health policy. Chapter 3 introduces Walt and Gilson's model and then applies this framework in an analysis of policies associated with providing maternity care in Australia and Queensland.

## 2.13 Summary of Section III

Section III has introduced the concept of health policy, the role of government within this and the inclusion of health policies under the broader umbrella of "public policy". As the literature shows no agreement regarding the definition of policy, a broad classification of health policy has been applied to the context of this thesis. That is, a number of policy forms may be identified (for example, legislation, funding programs, government announcements) and each would indicate some government intention though, equally, the absence of policy activity can be considered government policy on a health issue. It is also acknowledged that, given the many determinants of health, it can be difficult to differentiate health policies from other public policies, particularly those of a social or welfare nature.

The latter elements of Section III placed this thesis in the category of policy evaluation which contains elements of understanding policy outcomes and informing future policies. Policy evaluations are essential to identifying policy outcomes and assessing these against initial objectives. However, evaluations are a relatively neglected area within policy studies, and even more so in the area of health policies and rural populations. A paucity of studies looking specifically at the interface of health policies and outcomes by way of lived experiences for rural people is the inspiration for the present study. Section III provided a brief discussion of health policy and the need to study policy outcomes, particularly the qualitative experiences of users and providers of care. Walt and Gilson's framework as a model for analysing health policies was introduced in this section and will be expanded upon in the following chapter which looks specifically at the policies, health and otherwise, which are related to the provision of rural maternity care.

## 2.14 Chapter 2 summary

The three parts of this chapter have covered the main areas of interest in this study: (a) health, health care and rural populations; (b) maternity care; and (c) health policy. Section I discussed the holistic nature of good health and the right of all humans to

attain the highest level of health possible. There was some discussion of the present difficulties facing many health systems around the world, including that in Australia, and how this may compromise efforts to rectify problems as inequitable distribution of health services. With this in mind, the circumstances of rural Australians was reviewed, with particular emphasis on the social and economic disadvantage that currently characterises rural communities, persistent health inequalities rural populations suffer and the problematic nature of providing health services in rural regions.

Section II discussed maternity services: the content of care, how care has changed over time, the conflict in this field of health care and the nature of maternity care for rural populations. Information on the content and nature of these services provides a useful background to the case study findings contained in Chapters 5 and 6 as well as the subsequent discussion in Chapter 7. Maternity care is an important health care service for a commonly occurring event which is a significant episode in the lives of women and families. However, the centralisation of maternity services in Queensland, by circumstance or design, is having a detrimental effect on rural residents' geographical access to care during pregnancy, birthing and the postnatal period.

Section III introduced the concept of health policy as being a variant of public policy and reviewed some of the more pertinent features of such policies. In the health policy arena, the relative power of the medical profession and the emotional nature of health care issues make health policy decisions particularly difficult. Still, health policies, in whatever form they may occur (and equally the lack of policies), are the primary tool available to governments to influence the health of citizens and the health system. The paucity of studies that consider policy outcomes for rural populations is problematic and does not allow a more nuanced understanding of the interface between health policy and the lived experiences of rural populations (outcomes). A simple model for analysing health policies was introduced that will be expanded upon in the following chapter.

Chapter 3 takes a more in-depth look at the policies which have most affected the provision of maternity care in rural Queensland. The analysis will include considerations of the content of policy, the actors involved, the process and the context in which these policies were developed. This will provide the policy background with which to interpret the information arising from the case studies found in Chapters 5 and 6. Data collection in the case studies is specifically designed to explore the influence

of health policy on the experience of (a) rural families accessing maternity care and (b) rural health professionals who provide maternity care.

# Chapter 3

# Policy Study

> *This interdependence of 'health' policy and overall social and economic policy should not really surprise us for, as Rudolf Virchow argued, 'Medicine is a social science and politics nothing but medicine on a large scale'.* (Duckett, 1984, p. 965)

This chapter centres on an analysis of policies relevant to rural maternity care in Queensland. In the previous chapter Walt and Gilson's (1994) model for health policy analysis was introduced as a framework for use in this thesis. The following section provides an overview of the major components of Walt and Gilson's model and discusses how it will be used in the analysis of health policies that relate to the provision of maternity care in rural Queensland. The remainder of the chapter explores relevant policies, according to Walt and Gilson's model, in terms of their context, processes, actors and content.

## 3.1 A framework for analysing health policy

Walt and Gilson (1994) have proposed a framework for analysing health policies which considers four principal aspects: context, process, actors and content. The inter-relationship of these four components is illustrated in Figure 8. Although first proposed for use in the context of studying health care reform in developing countries, it also provides a good basis for analyses which seek a more inclusive approach to studying health policies. This model encourages analyses which consider not just the content of policies but also the variety of influences that come to bear on the highly contested field of health policy-making.

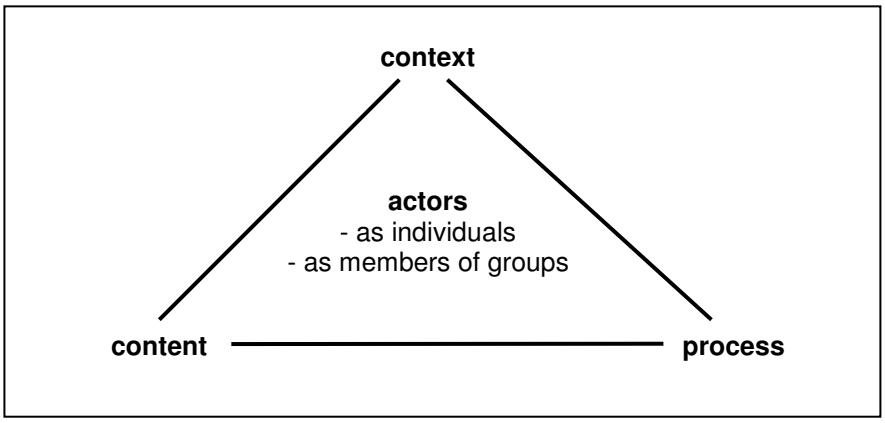


*Figure 8.* Walt and Gilson's model for health policy analysis (1994).

The context in which health policy is developed can potentially have a considerable effect at several points in the life cycle of a policy including affecting the development process, influencing the content, or disrupting implementation. In describing the contextual element of their proposed framework, Walt and Gilson discussed the need for understanding the role of government and cultural factors. Namely, does the government play a central or marginal role in policy-making and what cultural factors significantly influence health policy? Walt (1994) discussed additional elements of the policy context elsewhere and, apart from considering characteristics of governance, identified four other factors which also form part of the policy context: situational, structural, cultural and environmental factors. Situational factors may include war or other major political changes which may affect the role of the state and ability of the government to implement policy or influence change. Medical technology advancements (subsequently affecting costs of, demands for and expectations of health care), workforce patterns, performance of the national economy and social

demographics are examples of structural factors which provide contextual influence to policy-making. Culturally, trust in government, societal traditions and values may all contribute to the policy environment. Lastly, Walt also described environmental factors, mainly referring to international relations and how interdependence between states affects health policy (Walt, 1994). Using an example in developing nations, poorer countries often accept aid on conditions of instituting other reforms (economic or political) as specified by donor countries or agencies. Governance, political, situational, structural, cultural and environmental factors may all affect health policy via influencing the context in which policies are made and implemented.

Process refers to how policies are made and who has influence in this process (Walt & Gilson, 1994). Processes are closely linked with policy actors and contextual considerations. For example, policy-making processes may be quite different during times of crisis and can be fundamentally altered by resource constraints, anticipated resistance or displays of public support. Understanding policy processes can provide an insight to policies themselves.

The term actor is used by Walt and Gilson to denote anyone who influences the policy-making process. In general, policy actors in the area of health include:

- Government, for their ultimate responsibility in making policy decisions;
- Health service bureaucrats, for the significant role they play in policy development and implementation; and
- Interest groups or societal actors including consumers, business groups, trade unions and other professional organisations.

The analysis of policy content is a study of what the policy actually is and what it contains. In the present analysis, this process is informed by a method described by Humphrey et al. as “policy document analysis” (2003, p. 103): a process of analysing policy content to identify key themes via an inductive analysis. With less focus on policy detail, but more emphasis on broad content and policy trends, the policy document analysis indicates the policy directions being pursued by government.

## 3.2 Applying the framework to rural maternity care policies

The remainder of this chapter is divided into four parts, each of which contains an examination of one component of Walt and Gilson's model as it applies to the provision of rural maternity care. The context of policy is considered first and encompasses a broad perspective of government agendas and relations before narrowing in on factors that influence the environment in which rural maternity care is provided in Queensland and complex relations between maternity care stakeholders. The analysis then progresses to consider the policy process. This study does not focus on the policy process itself although in this section a model of policy-making is considered in order to provide a reference framework for subsequent discussion of the process throughout the thesis. There is also some discussion of community participation in the policy-making process which proves relevant to findings of this study. The third section reviews the policy actors involved in rural maternity care using a structural interests perspective that was developed by Alford and has previously been applied to the Australian health policy setting by Duckett (1984). The examination of each of these three components (policy context, process and actors) contributes to a better appreciation of policy content which is analysed using a thematic method in the last section of this chapter.

## 3.3 Policy context

In Australia, the Commonwealth and state governments have an accepted and central role in health policy-making. It is not within the scope of this study to examine the legitimacy of government authority in this area, only to acknowledge it. Given this, the following brief section considers the structure of Australian government, some of the values which are foundational to Australian health policy, events which may have affected the political health care environment specifically in Queensland and the context of maternity care itself. Although this is not an exhaustive list, all of these factors are considered here because of their potential to shape and influence health policy around rural maternity services.

### *3.3.1 Health care for all – universal health care coverage*

Universal health care coverage has been the focus of ideological debate between the two major political parties in Australia for some decades now and has dominated health policy discussions during this time (Swerissen & Duckett, 2002). Federal Labor parties attempted on two occasions to implement universal health insurance, first as Medibank

in 1975 (under the Prime Ministership of Gough Whitlam) and then, more successfully, in 1984 as Medicare by the Hawke Labor Government. The Liberal–National Party has traditionally preferred systems which purport to encourage individual responsibility for health care, generally favouring a privatised system where buying private health insurance is a key component of financing health care. This is evident in the dismantling of Medibank by the Fraser Liberal Government with aims to reduce government spending (Duckett, 1984). Although the first universal health insurance program, Medibank, was short-lived, Medicare is still in place today and is discussed here briefly and in more detail in Section 3.6.2.

Universal coverage is a fundamental principle underpinning the current health system in Australia, particularly via Medicare, the national health insurance scheme by which all Australians are ensured affordable access to health care (including primary health care services and free hospital care). The Pharmaceutical Benefits Scheme (PBS) is the arrangement by which the Commonwealth Government ensures, by way of subsidies, that all Australians have access to affordable medications as prescribed by a medical practitioner. Both Medicare and the PBS are administered by the Commonwealth Government through taxation revenue. These schemes have proven to be popular amongst citizens and, though incremental changes to the health system have threatened to erode the principles upon which Medicare was founded (Swerissen, 2004), universal coverage and equity remain firmly entrenched in Australia's biggest and most expensive health policies.

### *3.3.2 Intergovernmental relations and health policy*

Australia's health care system has evolved into a shared arrangement between the three levels of government (that is, local, state and federal). The Department of Health and Ageing is the Commonwealth Government health department and has primary responsibilities for funding health and medical care, medical rebate fee-setting, health insurance and education. As part of Medicare, the Commonwealth subsidises medical services and pharmaceuticals through the Medical Benefits Scheme (MBS) and the PBS, respectively, to ensure that Australians have affordable access to medical services and medications. At the state level, Queensland Health has the responsibility of providing health services for Queenslanders, including the operation of public hospitals. Local governments also play a role in health care, mostly in regional environmental health initiatives but also a small role in service provision.

Yet, the sharing of health care responsibilities between levels of government is problematic in a number of ways. Duckett (1999) has summarised some of the major problems resulting from shared government responsibilities in health. Firstly, the lack of coordination is not, of itself, the problem. It is the consequences of poor coordination that are problematic. Secondly, sharing of responsibilities in the health care system has a dissipating effect which does not facilitate government accountability. Both levels of government tend to engage in blame-shifting in times of high public dissatisfaction with health system performance. The "blame-game" is often played out in the political arena where, for example, state health ministers cite lack of funding from the Commonwealth as the cause of problems and federal counterparts are just as likely to blame the ineptitude of states and their mismanagement of funds (Abbott, 2005). Thirdly, some irrationality is bound to arise from the multitude of programs that are administered by different governments (some of which have similar objectives) and the overlapping responsibilities of Commonwealth and state governments. Fourth, shared health care responsibilities leads to cost-shifting between the states and the Commonwealth as each tries to contain costs and maintain budgets. Last, gaps remain in the provision of health care which are not addressed by either level of government, for example, in the domains of allied and community health. Overall, the problem is neatly summarised by Hancock: "there is an ongoing tension between the Commonwealth's desire for cohesive national policies on the one hand, and the states' and territories' desire for greater discretion, autonomy and flexibility on the other" (2002a, p. 49). The current political arrangement is not conducive to the development and implementation of nationwide and comprehensive health policies.

Health care funding is one of the major areas of contention and illustrates the difficult relationship between the Commonwealth and the states in the area of health. Much of the difficulty stems from the fact that the Commonwealth has far more capacity to raise revenue than the states, resulting in vertical fiscal imbalance (Garnaut & FitzGerald, 2002). The states are able to raise some funds through taxes on property, gambling and business but are heavily reliant on funding from the Commonwealth in order to provide health care services. Section 96 of the Australian Constitution makes provision for the Commonwealth to provide the states with financial assistance on whatever terms and conditions it sees fit (Australian Government Solicitor, 1997). Specific Purpose Payments (SPPs) are granted by the Commonwealth to the states to be spent in specified areas and require the states to achieve certain objectives.

The states rely on SPPs for a large proportion of their health care funds, particularly the Australian Health Care Agreements (AHCAs). The AHCAs are contractual arrangements in which the Commonwealth agrees to provide a level of co-funding for public hospitals and in return the states agree to work towards certain policy outcomes (such as operating a network of public hospitals in which citizens may access free health care). Although the AHCAs provide a method for overcoming the vertical fiscal imbalance, they are not without difficulties. One problem identified in these arrangements is the lack of built-in accountability for the states' spending through Medicare and the AHCAs (Hancock, 2002b). A second problem lies in negotiating the level of funding to be provided by the Commonwealth and policy requirements on the part of the states. Previous experience with intergovernmental financial agreements has shown that it is difficult to discern what impact increased Commonwealth funding will have on health. For example, increased federal funding had not always produced significant outcomes for hospitals, thus raising concerns that the states were reducing their share of funding as the Commonwealth increased its commitment (Duckett, 2004). Ultimately, the states would prefer funding with fewer conditions attached which would allow them greater flexibility and autonomy in their budgets (Hancock, 2002b). On the other hand, specific purpose grants allow the Commonwealth considerable leverage in health care policies and the opportunity to advance national priorities in health (Swerissen & Duckett, 2002).

### *3.3.3 Bundaberg Hospital and health care in Queensland*

The year 2005 saw a scandal emerge from Bundaberg, a regional township on the central Queensland coast, concerning serious accusations of consistent negligent medical care provided by an international medical graduate[15] (IMG) working as a senior medical officer (SMO) at the surgical department of the local public hospital. Extensive media coverage ensued and facilitated very keen public scrutiny of the public health system in Queensland. Indeed, the scandal and subsequent political pressure prompted the government to establish two external reviews of Queensland Health. The first, *The Queensland Public Hospital Commission of Inquiry* (Davies, 2005), was established to investigate the reported events at Bundaberg Hospital, particularly issues surrounding the purported actions of the doctor in question, the employment processes which allowed the doctor to practice at the hospital and the federal-state

[15] ***International Medical Graduate (IMG)*** refers to medical practitioners whose primary medical qualifications were obtained in countries other than Australia.

health care arrangements in relation to the employment of IMGs. Briefly, the inquiry found:

(i) Allocated budgets for Queensland Health services were inadequate, resource allocation and administration was defective;

(ii) There was defective "area of need registration"[16], leading to lack of screening to determine suitability of IMG applicants and not ensuring adequate supervision or imposing conditional registration subject to assessment by a privileging and credentialing committee;

(iii) No credentialing or privileging;

(iv) Inadequate monitoring of clinical performance or complaints investigation and inadequate protection for complainants;

(v) A culture of concealing facts and suppressing information from the public that was endemic at higher levels of Queensland Health management and had filtered through to lower levels (Davies, 2005).

In addition to the *Queensland Public Hospitals Commission of Inquiry*, public concern about the quality and safety of services at Queensland public hospitals placed significant pressure on the Queensland Government to fund a wider review of the performance of the state's health systems. As such, Peter Forster (experienced in bureaucratic reform) was appointed to lead the independent *Queensland Health Systems Review* (Forster, 2005).

The review considered administrative, workforce and performance management systems within the health department. Numerous recommendations were produced and spanned aspects such as corporate culture, planning and budget considerations, models of health service delivery and workforce issues. There were a number of reforms which would particularly benefit rural and remote health services including:

- Devolvement of many decision-making positions to more local levels with considerable reductions in staffing at the central office of Queensland Health. The 37 health service districts would be maintained but three area health services (northern, central, southern) would be introduced. Managers of health service districts would report to the General Manager of the respective area

[16]***"Area of need" –*** "The Minister may decide there is an area of need for a medical service if the Minister considers there are insufficient medical practitioners practicing in the State, or a part of the State, to provide the service at a level that meets the needs of people living in the State or the part of the State" ("Medical Practitioners Registration Act," 2001, p. 90).

health service; the three of whom would report directly to the Director-General for Health;

- Readjusting the MBS to increase incentives to practice in rural areas;
- Queensland and Commonwealth governments to work cooperatively to devise a universal service obligation to rural communities, thus ensuring a minimum level of service provision;
- Investigation of alternative service models, including community consultation and use of transport infrastructure, development of a generalist stream for medical practitioners, networking areas, improved remuneration and development of country rotations; and
- Enforcing adequate registration and credentialing processes.

Findings from the *Queensland Public Hospitals Commission of Inquiry* and the *Queensland Health Systems Review* were quickly followed by documents outlining the government's plans for corporate and service changes. *Action Plan: Building a Better Health Service for Queensland* (Queensland Government, 2005a) announced major funding increases for health to be used on funding sustainability reforms and increasing the number of staff and service provision. Although the funding for health is to increase to $1.5 billion in the 2010-11 State Budget, plans were also outlined to investigate the feasibility of some co-payments for very specific services and to encourage the use of private options by those patients who are appropriately covered. Major features of the action plan included recruiting 1200 extra health and medical professionals over the ensuing 18 months; funding extra medical school places in addition to those provided by the Commonwealth; providing greater incentives to decrease workforce "wastage"; bringing people back to rejoin the workforce; and upskilling; and increasing the number of rural scholarships. The action plan also indicates the department's willingness to encourage innovative approaches to service delivery as well as, importantly, supporting the Australian College of Rural and Remote Medicine (ACRRM) in its development of rural procedural skills training.

Another key element of the reform was to be the devolvement of decision-making and jobs to more local levels in an effort to remove the bureaucratic layers that impede efficiency and frustrate health professionals. There was also the expectation that this more devolved model would improve accountability. Devolvement required the Queensland Health Corporate Office to relocate a great proportion of jobs to the Area Health Service level, increasing the scope of decisions to be made closer to the point of care. Further, a new approach to clinical governance was adopted by Queensland

Health, the aims of which were summarised as "in a culture which supports improvement in patient safety and quality, to have the right person, doing the right job, with the right skills, working in high performance teams, supported by effective organisational systems" (Duckett, 2006). It is interesting to note that in late 2008, Queensland Health underwent another restructure that abolished the organisational level of Area Health Services. Instead, managers of 15 districts covering the whole state would report directly to the Director-General for Health (Queensland Health, 2008d).

The situation which emerged from Bundaberg Hospital caused a focussing of public attention on, particularly, faulty registration of IMGs, underfunding of Queensland public hospitals, workforce shortages and patient safety. The establishment of the Health Quality and Complaints Commission was also instigated out of the *Queensland Health Systems Review* and "its role is to consolidate and manage the complaints process, identify systemic issues and oversee improvements in the quality of health services" (Health Quality and Complaints Commission Select Committee, 2007, p. 6). By maximising publicity of plans to rectify the flawed organisational culture of Queensland Health and improve public health services, the state government attempted to reassure Queenslanders that they would access high-quality and safe care in the public hospital system. However, there were commentators who questioned the capacity for real change in the state health department and in health service delivery (Birrell & Schwartz, 2005; Van Der Weyden, 2005) and it remains to be seen, at this point, whether the organisational culture and service provision throughout the state has significantly improved as the state government claims.

### *3.3.4 Maternity care landscape*

Maternity care in Australia is contentious and this must be included in any deliberation on the context in which rural maternity care policy is developed and implemented. Some of the divergent beliefs in maternity care, namely the competing philosophies of care (organic and mechanic) and the ascendancy of the medical profession in this field, have already been discussed in the previous chapter (Section 2.7). The ascendancy of the medical profession in maternity care (and the subordination of midwifery) has occurred in a sphere where care has historically been community-based (midwives and mothers attending delivery) and births usually happened in the home (Tew, 1990). The medical profession highlight the vastly improved outcomes for women and babies under medical care.

Against this historical backdrop, the future direction of maternity care is debated passionately by the key interest groups in this field – obstetricians, midwives and consumers. Concerns regarding the adequacy of the obstetric workforce for future requirements using the same model, particularly in rural and remote regions, have led to lively debates about alternative models of care and roles of various health professionals. More about interest groups, their relative influence on the policy-making process in this field and their opposing claims is discussed later in this chapter (Section 3.5).

## 3.4 Policy process

The aim of the present study is to focus on instances where the policy-making process influences the provision of maternity care in rural Queensland, not to examine the policy process in detail. Thus, this section provides some background and a frame of reference with which to discuss policy-making processes. Of particular relevance to this thesis is the current interest in community participation in policy-making and hence the various opportunities for rural communities to influence the development and implementation of health policies. Some time is spent considering this aspect of the policy process which has the potential to influence the experiences of those who provide and access rural maternity care.

### *3.4.1 The Australian Policy Cycle*

Policy literature is inundated with models proposing how policies are, or should be, made. It can be extremely difficult to trace the precise development of health policies through the "black box" (Easton, 1965) of the political process. In this study, the Australian Policy Cycle provides a good starting point for considering how health policies are made. The Australian Policy Cycle is suggested in the *Queensland Policy Handbook* (Queensland Government, 2000) as a model by which policies may be developed and the same cycle is adopted in this study as a starting point for understanding policy processes in Queensland. The Australian Policy Cycle was published in *The Australian Policy Handbook* by Bridgman and Davis (2004) and was meant to be a useful guide for public servants, describing a rational set of procedural steps to be taken in developing and implementing policy (Figure 9; Table 5). An important contribution made by Bridgman and Davis through the Australian Policy Cycle, and a point particularly pertinent to this study, is the emphasis placed on the cyclical nature of policy-making and the need for constant monitoring of policy

outcomes to inform policy changes where necessary. Without delving into the debate regarding whether policy-making is inherently rational or irrational[17], by endorsing a version of the Australian Policy Cycle to its employees, it would appear that the government would prefer for their policy-making to appear as a comprehensive, ordered and essentially rational process.

Like many rational models of policy-making, policy cycles such as that proposed by Bridgman and Davis have encountered criticism. Colebatch (2005) criticises the narrow view of policy-making mechanisms included in the cycle: that the ideas originate in government, the key players are from the government and public service and the process usually culminates in a cabinet decision within government. Everett (2003) also claims that the cycle fails to acknowledge the reality of political power plays – especially in solving highly controversial public problems. Particularly in response to Everett's criticism, Bridgman and Davis explain that the Australian Policy Cycle is "an ideal type from which every reality will curve away" (Bridgman & Davis, 2003, p. 100) but that it provides an insight to a complex process for which no model could be devised for universal application to all policy problems and contexts. Of the many theoretical models of policy-making which are available, this is perhaps the most appropriate as it was developed by Australians (indeed, even Queenslanders) for the Australian context, was purportedly widely distributed throughout the Queensland Public Service (Bridgman & Davis, 2003) and is referred to as "the leading Australian policy text" (Colebatch, 2005, p. 17).

This project adopts the Australian Policy Cycle as a basis for understanding the process in which policy is made and implemented. It is not the place of this thesis to argue whether the cycle is a close representation of policy-making reality, and it is acknowledged that, due to such constraints as political requirements or resource

[17] Policy literature contains much debate regarding the rationality of policy-making. For example, advocates of rational-comprehensive processes suggest that policy-making is, and should be, highly ordered and well thought out. Opponents of the rational argument suggest the political nature of public policy and the limited rational capacity of humans prevents truly rational policy-making (Lindblom & Woodhouse, 1993; Simon, 1957): 'the mind at its best simply cannot grasp the complexity of social reality' (Lindblom & Woodhouse, 1993, p.5). Thus, they suggest that policy-making is more likely to involve the incremental changes to existing policies: a process of 'incrementalism' (Lindblom, 1959). 'Mixed scanning' (Etzioni, 1967, 1986) is proposed as a compromise between rationalist-comprehensive and incrementalist approaches: not as resource-intensive as rationalist techniques and allowing greater scope for innovative policies than allowed via incrementalist methods. Mixed scanning highlights that it is unlikely that one model of policy-making is suited to all decision situations and provides a flexible alternative (Parsons, 1995).

limitations, policy processes will not follow the procedure outlined by the Australian Policy Cycle every time, nor will the cycle explain the process the majority of the time. It is unlikely that any model could do this satisfactorily. Rather, the cycle does provide a framework for discussing the policy process and a language set with which to describe the reality which is encountered.

Table 5. *Brief Notes on the Phases of the Australian Policy Cycle.*

| **PHASE** | **NOTES** |
|---|---|
| identifying issues | There are many issues but only those that attract sufficient political interest make it to the government's agenda. |
| policy analysis | Researching the issue and understanding the problem as much as possible in order to develop logical solutions. |
| policy instruments | Choosing the means by which the government will achieve their stated goals (for example, monetary incentives, laws, community programs). Consideration must be given to what instruments are available and which are appropriate. |
| consultation | This is an opportunity for the government to "test" their preliminary decision(s) on the community and seek feedback through consultation. |
| coordination | As many modern policies are cross-departmental, coordination between departments, ministers, bureaucrats and staffers is crucial. |
| decision | Parliamentary cabinet members consider the policy proposal, inclusive of advice and policy options and deliver a judgment. |
| implementation | A good policy should include an implementation plan. A policy is meaningless without action subsequent to approval. |
| evaluation | As with implementation, a good policy will have an evaluation plan from the outset. Evaluation is necessary to ascertain the extent to which policy is achieving its goals, to highlight areas where policy adjustment may be required or to indicate whether a policy is outdated and requires an entirely new approach. Often, this step leads into a new iteration of the cycle wherein new policy approaches are sought to accommodate changes in the policy environment or inadequacies of previous policies. |

(Bridgman & Davis, 2004)

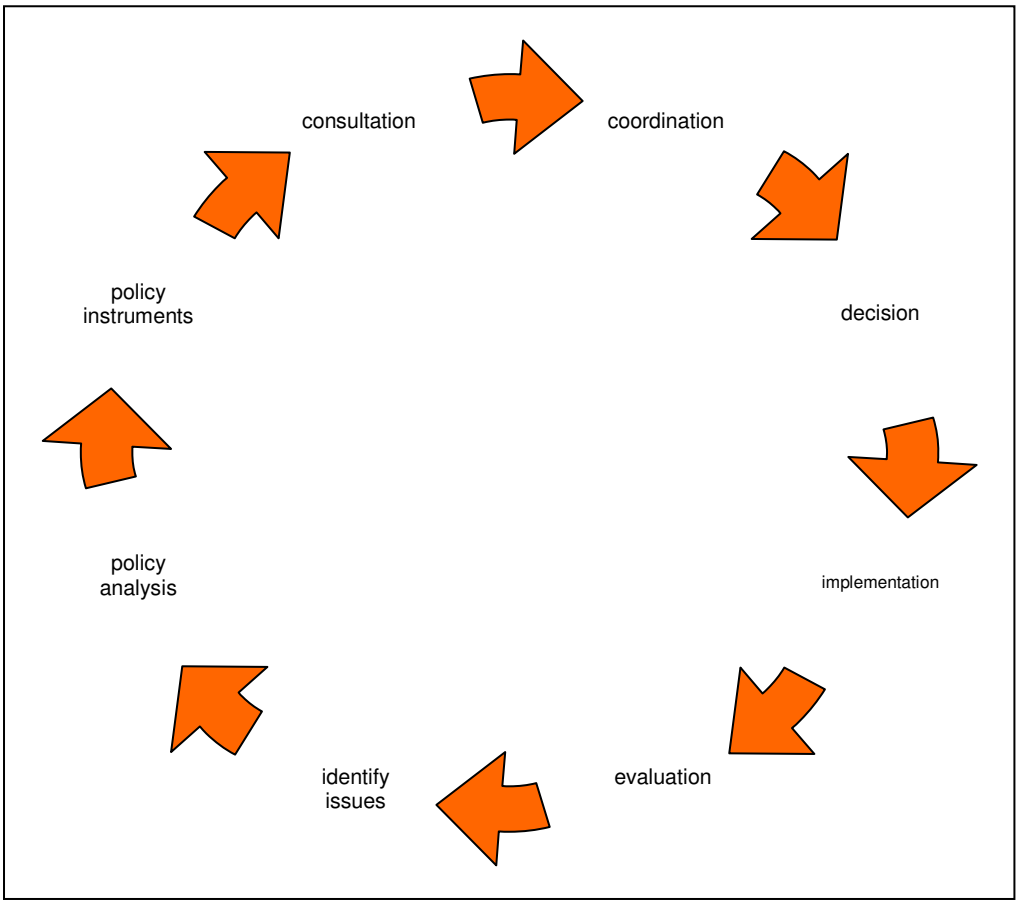


*Figure 9.* The Australian Policy Cycle (Bridgman & Davis, 2004).

### *3.4.2 Top-down or bottom-up?*

In the context of policy literature, “top-down” and “bottom-up” are key terms used in both reference to governance styles and also when discussing or analysing policy implementation. Those who adopt a top-down approach to analysing policy are primarily concerned with how well the implementation of a policy decision aligns with the original intent of the politicians and bureaucrats who made the policy decision (Matland, 1995) and so such analyses are characterised by a much greater focus on the central role of government officials and bureaucrats (Lewis, 2005b; Sabatier, 1993). The top-down perspective of the policy implementation process is described by Walt (1994) as conforming to a linear model:

> *In the case of health policy, decisions by politicians and bureaucrats within the ministry of health are communicated to planners in the health planning unit (they may or may not have been involved in policy formulation), who operationalize policies by designing appropriate programs, with guidelines, rules, and monitoring systems. These are*

> *then transferred to local health authorities (at the provincial or district level) or to health care institutions (hospitals, health centres) to be put into practice.* (p. 153)

In contrast, bottom-up approaches place greater emphasis on actors at the local, or operational, level with particular analysis of the influence these actors have on policy at the implementation phase (Hjern & Hull, 1982; Lipsky, 1971; Sabatier, 1993). As opposed to central bureaucrats or politicians, actors at an organisational level (at the service delivery interface) are in closer proximity to, and have a greater understanding of, the local situation and can effectively change policies during the implementation phase and therefore have the opportunity to alter policy outcomes accordingly (Lipsky, 1971).

The terms top-down and bottom-up also refer to two distinct approaches to governance. That is, top-down policies may be those developed and mandated by the Commonwealth or Queensland health departments whereas bottom-up policies are those which have been largely self-generated by more local-level actors. Herein, "bottom" generally refers to grassroots actors, variously incorporating service delivery personnel or the community more broadly; whereas "top" refers to government, politicians, bureaucrats or other policy elite (Organisation for Economic Cooperation and Development, 2003). In policy analyses, it is useful to consider how much power is divulged to the community in policy-making and how much policy is imposed from central government officials. In continuing with the ideas of local involvement in policy-making, it is relevant to consider the more recent focus of governments on involving community actors in the policy process. In this way, bottom-up strategies closely relate to community participation in health policy-making (see Section 2.11.3).

There are a number of public and health policies which indicate governments' awareness of public participation in health policy. Nationally, the Department of Health and Ageing lists open, constructive consultation with community groups as a core value of the department (Department of Health and Ageing, 2006). Queensland examples include the development of Health Community Councils (Queensland Health, 2008a) and Health Consumers Queensland (Queensland Health, 2008b) as well as the Community Engagement Improvement Strategy (Queensland Government, 2003b). As part of the latter strategy, the Engaging Queenslanders (2003a; Queensland Government, 2003b) manuals were designed to assist all government departments in improving community participation. Despite this apparent policy interest in

participation, Gregory (2007; 2008a) has highlighted that advantages of these processes are unclear given the lack of publications regarding outcomes.

## 3.5 Policy actors

Walt and Gilson (1994) use the term "actor" to denote anyone who influences the policy-making process. An actor may be an individual, or together, actors may form part of a much larger group. Many authors have adopted a structural perspective of actors in health policy, as first proposed by Alford (as cited in Creelman, 2002; Duckett, 2000; Gardner, 1989; Palmer & Short, 2000). This perspective describes health policy as the outcome of a constant struggle between three types of interests: dominant, challenging and repressed. Duckett (1984) describes the following interests in Australian health policy:

- The dominant interest - the medical profession; they are also known as professional monopolists. This group is best supported by the present structure of the health system where they have a relative monopoly over health and medical services. Therefore, their overarching aim is to maintain the status quo and suppress attempts at health care reform. These groups are often well organised and easily mobilised for political action and their interests are adequately voiced by the Australian Medical Association (AMA).
- The challenging interest - identified as the corporate rationalisers. Specifically, this group includes the health bureaucracy and public hospital administrators. These actors seek to implement health care reform to achieve greater efficiency and effectiveness in the health system. In this way, corporate rationalisers are also looking after the interests of their organisation and thus seeking improved career enhancement opportunities. The interests of this group of actors do not necessarily align with those of the dominant interest.
- The repressed structural interest - embodied in equal health advocates. This interest is a voice predominantly for the working middle-class who seek better access to health care. For this group, there are no other social or political institutions to advocate on their behalf. Great effort and expense is required to mobilise this group for political activity.

A structural perspective is helpful in understanding the interaction and power of the policy actors in the health sector, though it is not without critics. Some authors have argued that recent changes in society and models of service provision have lessened

the explanatory power of this theory. Palmer and Short (2000) have indicated some limitations in the Australian context particularly around the lack of influence attributed to the government, the real power of professional interest groups and the inadequate explanation provided for the sustained dominance of the medical profession. Howe (1992) has also questioned the ongoing applicability of Alford's structural perspective in Australia's aged care system going so far as to question whether the challenging and repressed interests have reached dominant status. Nonetheless, even with these criticisms in mind, the structural interests perspective provides a good basis for understanding the interaction, interests and power of each group of policy actors and, ultimately, their influence on the policy-making process. The policy actors associated with rural maternity care will be discussed below and, in keeping with the structural interests perspective, each group of actors will be identified as either a dominant, challenging or repressed interest.

### *3.5.1 Dominant interests – the medical profession*

The medical profession, primarily represented by the AMA, have enjoyed a dominant position in matters of Australian health policy for nearly a century. The essential nature of medical knowledge, the high social standing of medicine, the relative abundance of economic resources available within the profession and dedicated leadership are all factors which have contributed to the hegemony of medicine (Hunter, 1984). The medical profession has a long tradition of being culturally recognised as the keepers of medical knowledge and expertise and they have successfully projected the profession to the top of the health care hierarchy (Lewis, 2005a). The medical profession has gained much from being located at the top of this hierarchy (particularly in terms of political privileges, economic and clinical freedoms). The interests of the profession are best served by remaining in this position and so they are particularly concerned in health policy debates to resist changes in the health system and protect their dominant standing. Hunter (1984) has been a seminal contributor to the discussion around the dominance of medicine, and has highlighted the longevity of the AMA and the success it has had in government negotiations as reinforcing this dominant standing.

In contrast, theories such as de-professionalisation and proletarianisation suggest the hegemony of the medical profession is under attack and the profession's power in the health policy field is actually diminishing in developed countries (Coburn, 1988; Haug, 1976, 1988; Wolinsky, 1988). Such theories suggest a number of societal changes are acting to impinge on the dominance held by medicine by destabilising the profession's

traditional knowledge monopoly, authority, autonomy and power. A number of changes in society and in the health care system have presented challenges to the traditional notions of medicine's monopoly over knowledge, authority in health decision-making and the doctor-patient relationship. These challenges include, but are not necessarily limited to, the much more accessible nature of medical knowledge; a more educated public; the growth of consumer groups and rise of consumer rights awareness; as well as the bureaucratic organisation and increasing corporatisation of health care. The above theories suggest such changes have the potential to change the environment in which health care is provided, including the power structures within.

However, it has been argued that in the Australian context medical dominance has been maintained with little observable diminution. Regarding autonomy, Willis (1988) argued some time ago that medical professionals still control their own work and they still either directly supervise the work of others or indirectly influence the legitimacy of others so the authority of the medical profession is still intact. More recent evidence suggests that many of the trends touted as challenging the professional dominance of the medical profession are in fact "metrocentric" and that medical hegemony is far more entrenched in rural regions (Kenny, 2004; Kenny & Duckett, 2004). Regional shortages of medical practitioners have led to a greater demand for the services of rural practitioners which often leads to a monopoly over scarce resources (their knowledge and expertise) and ultimately strengthens the professional power of medicine in rural towns.

### *3.5.2 Challenging interests*

Corporate rationalisers are the "challenging interests" in health care (Duckett, 1984). These are the actors who form the bureaucratic structures that organise health care in Australia: primarily the government departments of health (Commonwealth Department of Health and Ageing and Queensland Health) as well as the management and administration responsible for hospitals and other health care services. Collectively, the aim of corporate rationalisers is to improve the efficiency and effectiveness of health care systems which, if done well, also has benefits for individuals in career advancement. Palmer and Short (2000) add that corporate rationalist interests benefit from policies which introduce health system reform as these changes increase their sphere of responsibility, such as when Medicare was introduced. Duckett (1984) uses the "efficiency" of health care regionalisation as an example of health care reform which favours corporate rationalists. The fact that the goals of this group tend to

oppose those of the dominant interests gives rise to their label as "challenging interests". Indeed, some of the theories which argue the decreasing dominance of the medical profession highlight the growth of these challenging interests. For example, some proletarianising influences such as corporatisation of private medicine (especially general practice) and managerialism in public health care potentially constrain medicine's autonomy. In both instances, practitioners become increasingly accountable to corporate rationalists (managers) and bureaucratic practices in which professional autonomy may be cut back in the pursuit of productivity gains and greater cost-efficiency (Barnett, Barnett, & Kearns, 1998; Kenny & Duckett, 2004).

In the rural health care setting, other health professionals may also be considered challenging interests. In the New Zealand setting, Barnett, Barnett and Kearns (1998) identify the emergence of health professionals, such as nurse practitioners, who are able to independently conduct tasks that were once the duty of medical professionals. The authors cite legally legitimising independent midwifery in New Zealand as an example of how other health professionals may challenge the position of medicine. As discussed in the previous chapter, the shortage of rural-based medical practitioners has partly prompted and supported other health professionals' arguments for expanded scopes of practice and/or encouraged models of practice substitution, such as employing nurse practitioners or physician assistants (Duckett, 2005; O'Connor, 2005). Nonetheless, employing nurses or other health professionals to conduct medical-related duties – though potentially filling a service gap created by the maldistribution of medical practitioners – may impinge on the monopoly of medical knowledge and expertise held by the medical profession which has traditionally opposed any such encroachment on its autonomy. Further, other health professionals have the potential to limit the growth of medical practitioners' income as they service the same patient base (Barnett et al., 1998). All of this leads to ongoing inter-professional debate about models of task substitution and delegated practice.

In maternity care, medicine has carved out a monopoly of practice and has successfully defended this position against those who might challenge. Indeed, the "subordination of midwifery" (Willis, 1983) is a good illustration of how medical practitioners have established and maintained their dominance in a field of health care. Birthing care was once the exclusive domain of laywomen. As time progressed, men also became involved, as did medical practitioners. While maternity care was, for a long time, considered disdainfully within the medical profession, general practitioners (GPs) in particular found the provision of obstetric services to be financially lucrative

and opposed the position of midwives as independent providers of maternity services, in direct competition with themselves. A successful campaign was waged by the medical profession to portray midwives as risky and inferior practitioners in maternity care with the result that modern maternity care is a highly specialised field of medicine dominated by medical specialists.

In addition, midwives have become incorporated into the nursing profession as a specialised field (a move encouraged by the medical profession), having the subsequent effect of causing midwives to be recognised as nurses in the first instance and secondarily as midwives. Moreover, this has had the effect of formally moving midwives into a subordinate position alongside nurses and therefore answerable to medical practitioners; thus completing the move of the midwifery profession from independent to subordinate practitioners. Willis (1983) notes the lack of occupational organisation or records such as professional journals as being particularly detrimental to the plight of the midwifery profession to retain their clinical independence and relative power in maternity care.

Today, with the shortage of appropriately trained GPs to lead the traditional models of rural maternity care, there is an increased interest in midwifery-led services as an alternative model of maternity care. Hence, midwives could once again be perceived as an interest which challenges the dominance of medical professionals as they fight to be legitimately recognised as competent providers of maternity care. Interestingly, the AMA's response to the increased interest in midwifery models of care has been to again emphasise the uncertainty and risk associated with midwives as alternatives to medical professionals (Australian Medical Association, 2008). Globally, there is evidence that the medical profession – which represents orthodox maternity care practices in many countries – is attempting to repress professional competitors such as midwives by portraying them as people who engage in unorthodox (that is, not medically controlled) maternity practices. The dominance of the medical profession is such that it has assumed the mantle of orthodoxy and so all non-medical practices and practitioners are characterised as unorthodox. Wagner (1995) describes the campaign as a "witch-hunt" and part of a global struggle for control of maternity services, rooted in political rather than health issues. Strategies employed as part of this endeavour include accusing non-medical health professionals of dangerous practices and attempting to associate a lack of safety with their "unorthodox" practices. Legal and professional investigations of non-mainstream practitioners (such as midwives) and the harsh treatment of the accused deters others from providing independent maternity

services which are not considered (medically) mainstream. The campaign is motivated by both financial incentives (competition for pregnant patients) and power (retaining a professional monopoly over clinical services in maternity care). However, there are negative consequences for the choice and freedom available to both consumers and health care providers who are constrained to accessing and providing only maternity care that is considered mainstream.

### *3.5.3 Repressed interests*

Duckett (1984) identifies those groups or individuals that advocate for equal health as the repressed interest in the health care system. Their collective and overarching aim is to improve access to services for all. A slightly broader definition is provided by Palmer and Short (2000) who refer to this group as the community interest which is made up of single client groups such as aged care or mental health patients but who all want to see improved health services for consumers. The authors describe the characteristics of this group that contribute to their "repressed" status:

> *Compared with the other structural interests in the Australian health care system, these groups are relatively diffuse, not well organised, poorly financed and generally lacking in bargaining power in the political arena. The community interest is not necessarily furthered in the current organisation of health care in Australia.* (Palmer & Short, 2000, pp. 42-43)

To date, the introduction of universal health insurance (known initially as Medibank, then later reintroduced as Medicare) has been the greatest victory for equal health advocates (Duckett, 1984; Gardner, 1989). At a national, and quite broad, level organisations such as the Australian Council for Social Services and the Health Issues Centre advocate for equal health and health care for all (Australian Council of Social Service, 2007; Gardner, 1989; Health Issues Centre, 2007). In the rural health setting, the National Rural Health Alliance (NRHA)[18] and each of its member organisations (National Rural Health Alliance, 2008) have an interest in rural health care and have a role in either supporting health care professionals (through education, training, professional support) and/or lobbying government for better health care services in rural Australia. Many of the numerous organisations representing rural medical, nursing, and allied health professionals are members of the NRHA, as are a smaller

[18] The NRHA receives funding from the Commonwealth Department of Health and Ageing.

number of organisations representing the views of rural health consumers such as the Health Consumers of Rural and Remote Australia (HCRRA).

While consumer groups may be receiving more consideration from government than has traditionally been the norm (Gardner, 1989), the influence of public interest groups or equal health advocates is not always straightforward. While it is true that large public interest groups may be able to influence health policy through pure numbers, the very broad nature of membership can also be a drawback in government negotiations, particularly in being able to deliver on the collective actions of their constituency (Willis, 2002). Sax (1990) has pointed out fundamental barriers which prevent successful action by public interest groups: that is, health policies tend to financially affect citizens (collectively) less than they do health care professionals, whose livelihood is often influenced by health policies. Thus, consumer groups devote less time and money to campaigning against or for policy changes while health professionals will invest more resources in fighting for policy outcomes from which they will directly benefit. Further, the non-medical membership of consumer groups makes it difficult for them to identify how policy changes will affect consumers while they also lack the resources to mobilise an effective campaign if required. However, where public interest groups have received funding assistance from the government, doubt has been cast upon their capacity to effectively represent the interests of the public without pressure from the government which provides their funding (Willis, 2002). Further reservations have been noted about the representativeness of consumer interest groups with highly restricted memberships (Browning, 1987).

### *3.5.4 Government*

As mentioned previously, Palmer and Short (2000) have criticised the structural interests perspective for insufficiently considering to the influence of government. Though not explicit in the structural interests perspective, the role of governments in the health sector should not be overlooked as this is where the responsibility for developing and implementing health policy rests. Governments must consider the conflicting demands of the dominant, challenging and repressed interests, in addition to satisfying their own political needs. Aside from moving towards the overarching aim of improving the health of citizens there are the additional, and competing, government objectives of political expediency and cost containment. In health policy, like other areas of public policy, political imperatives play an important role, and may see governments favour policy options which are more likely to appease the public and

facilitate re-election of the government (Marmor & Christianson, 1982). Furthermore, reducing, or at least containing costs is a priority for governments given spiralling health system costs (Gray, 2004). Duckett (1984) emphasised the way in which health policy has been used by previous Commonwealth governments as a tool to achieve broader social and economic aims that are on the government's agenda. This was particularly apparent during the years of the Fraser Liberal Government (national conservative political party) where none of the interests particularly benefited. Instead, health policy appeared to be a tool used to further a priority interest of the government: to reduce spending on health care. Thus, the government during this time developed a scheme to replace the old universal insurance scheme with another that reduced government funding of health care but was "inherently inequitable and inefficient" (Duckett, 1984, p. 963).

## 3.6 Policy content

Last of the four aspects of Walt and Gilson's model is the consideration of policy content. A thematic approach to content analysis has been adopted in the present study, similar to that detailed by Humphrey et al. (2003) in their analysis of the impact of human resource policies on the continuity of health care in the United Kingdom. For the purposes of the present study, "policy documents" include any publications of the Commonwealth and Queensland governments, policy frameworks, service guidelines, strategic plans, program implementation, funding announcements, legislation, communiqués and speech transcripts of government ministers or bureaucrats. Those policies most relevant to rural maternity care have been selected for inclusion in the analysis. (The types of policies included are discussed in the following Section 3.6.1.) Although many of the selected policies emanate from health departments, it was necessary from the outset to also include policies from other government departments and whole-of-government initiatives, especially given the many varied determinants of health and the way in which rural health initiatives are often subsumed within broader strategies aimed at strengthening rural communities.

A comprehensive analysis of policies affecting rural maternity care would require a review of many more policies across several disciplines (given the many determinants of good health, even during pregnancy), and across all levels of government (Commonwealth, state and local), and at the various levels of service organisation (state, district, hospital). However, it is beyond the means of the present project to

complete such an exhaustive analysis. Instead, this analysis concentrates on "macro-level" policies as other commentators have done previously, a process which provides an understanding of the values that underpin the "decisions made about resource allocation, service provision, workforce supply and networking and collaborative arrangements relating to rural health" (Humphreys, Hegney, Lipscombe, Gregory, & Chater, 2002, p. 2).

In addition to just policy documents, and unlike Humphrey at al. (2003), the present analysis also incorporates media references and interest group publications as supplementary indications of the prevailing public sentiment and perspectives of other policy actors. Similarly, government-commissioned inquiries and reviews were also considered in this analysis as they indicate some level of government interest in the findings and potential for government action on an issue as well as providing an often independent perspective on an issue.

After selecting policies for inclusion, the initial analysis focussed on issues such as the specified aims of the policy; the type of policy instrument (for example, legislation, funding, program implementation); and intended impacts on (a) rural maternity services; (b) maternity care more generally; or (c) rural health services collectively. Similar to Humphrey et al. (2003), the analysis of policy content focussed less on policy detail and more on broad content and policy trends. In this way, key themes were inductively identified and reflected the policy directions pursued by government and particular areas which lacked policy support.

The following subsections detail the prevalent themes identified. The first theme was most evident through the absence of specific policies. It details the impact of this absence on the types of policy documents that were subsequently included in the analysis. From there, detail of the findings begins with global and ideological bases for many of the "macro-level" health policies in Australia, the recognition of rural health issues and the major themes in rural health policies before progressing onto themes in service level policies (chiefly produced by Queensland Health as the states have responsibility for service provision).

### *3.6.1 Policy void and document types*

At the outset of the policy analysis, no government policies could be found specifically relating to the provision of maternity care in rural settings. More generalised policies could be found on maternity care or, broadly, on rural health services. The absence of policies, or the policy void, existed despite the calls from interest groups to address the growing scarcity of rural maternity units[19] (Australian College of Midwives, 2004a; Australian College of Rural and Remote Medicine, 2005; National Rural Health Alliance, 2006). The policy void in rural maternity care gives rise to at least two plausible effects which are relevant to this study. The first is that without specific policies, government influence on rural maternity care is greatly constrained. (Although, it could be argued that the policy void is actually an indication of governments being intentionally unsupportive of rural maternity care.) Secondly, without specific policy support, rural maternity care is vulnerable to the influence of broader policies which lack sensitivity to the rural context. Indeed, to understand the influence of government on rural maternity care, it would be necessary to turn to government policies which relate to maternity care or rural health services more generally (where it is expected that maternity care is to feature). So it is that many of the policies identified in this analysis as best denoting the governments' intentions regarding rural maternity care are not necessarily specific to maternity care in rural Queensland, but are more generalised in nature.

Most often, policy documents used in this analysis emanate from higher levels of government or Queensland Health because these appear to have influenced the scope and direction of policies at lower levels, for example, policies developed at the area health service, district or individual hospital levels. Some of the most prominent policies considered in this analysis were macro-level policies which fell into categories of strategic government policies or service guidelines. Strategic policies are typically documents which have been developed and published by either the Commonwealth or Queensland governments and may relate to either (a) directions for the whole health

[19] An exception to this lack of policy direction may be found in *Re-Birthing: Report of the Review of Maternity Services in Queensland (Hirst, 2005)*. *Re-Birthing* was published during the completion of the policy study and detailed the findings of an independent review of maternity services in Queensland. *Re-Birthing* is considered in more detail later in Section 3.6.2 as it indicates potential government interest in improving rural maternity services and an opportunity for this to be reinstated on the government's agenda. Yet, many of the initiatives proposed in *Re-Birthing* which relate to rural communities were only being explored for feasibility during the time that data were collected for this study. As such, outcomes from this review were unlikely to produce significant changes that would be observed in the case studies.

system or (b) government goals specifically for rural health care. Some examples of strategic policies include:

- *Smart State: Health 2020* (Queensland Health, 2002b) which details the Queensland government's 10 year vision for the future of the state's public health system.
- Queensland Health strategic plans (for example, Queensland Health, 2004b, 2006b) which detail specific principles of the organisation as well as the aims and objectives for the health system in the coming years.
- *National Rural Health Strategy* (Australian Health Ministers' Conference, 1994, 1996) and *Healthy Horizons* (National Rural Health Policy Forum et al., 1999) developed by the Commonwealth government in conjunction with rural health interest groups and subsequently adopted as policies at a national level. These policies articulated aspirations for rural health in Australia and priority areas for action.
- *Blueprint for the Bush* (Queensland Government et al., 2006) was developed by the state government, AgForce and the Local Government Association of Queensland in the face of increasing uncertainty for the future viability of Queensland's regions. This blueprint represents the state government's response and contains a 10-year, whole-of-government plan to enhance the sustainability of non-metropolitan areas and quality of life for rural citizens.

Service guidelines are those documents produced by Queensland Health which contain the policies and procedures which have the greatest influence on the day-to-day operation of maternity units in the rural setting. Most prominent guidelines were:

- *Primary Clinical Care Manual* (Queensland Health & Royal Flying Doctor Service, 2007) provides guidelines for clinical primary care in rural settings. It was jointly developed by the Royal Flying Doctor Service (RFDS) and Queensland Health.
- *Clinical Services Capability Framework* (CSCF, Queensland Health, 2004a) outlines the minimal resource requirements (staffing and infrastructure) expected for providing clinical services such as maternity care at primary through to tertiary level care.
- Legislation and policies which shape the scope of practice of health professionals. In the present study, particular attention is paid to the legislative restrictions placed on the practice of midwives; for example, in being able to prescribe routine medications relevant during pregnancy and labour.

In addition to strategic policies and service guidelines, findings from relevant public inquiries, commissioned by government, have also been included for consideration. The establishment of an inquiry alone indicates the government's concern in a given issue. Government interest may extend to the inquiry findings which may also be associated with a level of public accountability. Both the establishment of an inquiry and commitment to action (based on inquiry findings) can indicate government policy directions. Amongst these policies, there are also references to media items (predominantly newspaper articles) and public statements issued by rural health interest groups. These references indicate prevailing public sentiments and the policy positions held by the competing interests of this sector. Absent from the above list of policies is perhaps the largest of all in Australia: Medicare. This policy program provides the structural underpinnings of the Australian health system and the principles espoused in Medicare are often reflected in the objectives of many other health policies. The foundational values of equity and universalism that are associated with Medicare are relevant to the provision of rural health services and these themes will be considered after first reviewing the policy events which led to rural health gaining ascendancy on the Commonwealth government's agenda.

## *3.6.2 Equity*

*Medicare*

The ideology of equity in health service access is deeply rooted in one of the largest and most expensive of all Australian health policies, and one which underpins the whole health system:

> *Medicare is Australia's universal health care system introduced in 1984 to provide eligible Australian residents with affordable, accessible and high-quality health care. Medicare was established based on the understanding that all Australians should contribute to the cost of health care according to their ability to pay. It is financed through progressive income tax and an income-related Medicare levy.* (Medicare Australia, 2008)

As the above quote indicates, Medicare is founded on the principles of providing universal health care, achieving equitable distribution of costs and improving administrative efficiency (Senate Select Committee on Medicare, 2003). The stated principles of Medicare are consistent with the values of the International Covenant on Economic, Social and Cultural Rights which Australia ratified in 1976 (Office of the United Nations High Commissioner for Human Rights, 2004).

Put simply, the main functions of Medicare are to provide free hospital care as well as free or subsidised health care services and medications for all Australians. Two of the most important suppliers of health care – medical practitioners and hospitals – receive significant funding through this program which is financed through taxation revenue. Indeed, Medicare represents a considerable financial investment by the government with related expenses costing almost $20 billion in the 2002-2003 financial year (Financing and Analysis Branch, 2004). Although the government applies a "Medicare Levy" tax, the revenue from this alone is insufficient to fund the whole Medicare program. In order to fulfil the first objective and remove the financial barriers to accessing health care services (predominantly those provided by a medical practitioner), the government will provide a rebate for eligible services which the practitioner can claim directly, known as "bulk-billing"; essentially making the service free of cost for the patient. Alternatively, the practitioner may charge more than the rebate offered by the government, in which case the patient pays the whole fee and claims the rebate individually and the difference between the practitioner's fee and the government rebate becomes a cost to the individual patient.

To achieve the other principle of Medicare, that is, providing free hospital care to all Australians, the Commonwealth must work cooperatively with the states (Duckett, 2007a). Although the states have responsibility for operating hospitals, via such financial grants as the AHCAs (see Section 3.3.2) the Commonwealth is able to compel the states to build health systems and set health care objectives based on principles of equity and universalism. The guiding principles of the 2003-2008 AHCA between the Commonwealth and Queensland governments illustrates this well:

> *The primary objective of this Agreement is to secure access for the community to public hospital services based on the following principles:*
> *(a) Eligible persons are to be given the choice to receive, free of charge as public patients, health and emergency services of a kind or kinds that are currently, or were historically, provided by hospitals;*
> *(b) Access to such services by public patients free of charge is to be on the basis of clinical need and within a clinically appropriate period; and*
> *(c) Arrangements are to be in place to ensure equitable access to such services for all eligible persons, regardless of their geographic location* (*Australian Health Care Agreement between the Commonwealth of Australia and the State of Queensland 2003-2008*, 2003, p. 4).

In addition, the AHCAs provide scope for the Commonwealth and states to work cooperatively to achieve reform in other areas of health care, for example, improving mental health, aged care or increasing quality care initiatives. It is worth noting that after receiving AHCA funding, the states are entirely responsible for the operation, and budgetary requirements, of public hospitals thus providing an intrinsic incentive for the states to achieve operational and financial efficiency in this area.

The problematic implementation of a universal health care system illustrates the concerns of various structural interests. History has also shown the professional monopolists, medical practitioners, to ardently oppose the introduction of universal health care as it was expected to increase the bureaucratic control of health care, increase salaried medicine (as opposed to fee-for-service methods which allow practitioners more control over their income) and allow for greater government intervention in health care; all of these things were expected to threaten the professional authority and autonomy of medical practitioners (Duckett, 1984). On the other hand, both the repressed interests (equal health advocates) and the corporate rationalisers were in support of such a scheme, the former for the equity objectives and the latter for proposed efficiency gains.

Today there is great public support for Medicare and the affordable health care that it ensures (Swerissen, 2004). Particularly where doctors agree to bulk-bill, health care services are essentially free of cost to patients. Other safety net arrangements associated with Medicare ensure that citizens do not pay more than a specified amount in health care costs in any given year, thus protecting citizens from the burden of accumulating health care costs (Duckett, 2007a). Even medical professionals, despite traditional opposition voiced through the AMA, generally support Medicare as it provides them with a reliable source of income (Swerissen, 2004). Moreover, it is worth noting that Medicare has, in a number of ways facilitated the maintenance of medical dominance status quo by instituting Medicare related policies favouring medical practitioners. For example, Medicare provides little support for non-medical health care professionals (Duckett, 2007a) as it primarily provides rebates for services which are provided by medical practitioners, substituted providers (for example practice nurses giving immunisations), services provided under the supervision of a medical practitioner or recommended by them as part of a patient's treatment; though it is not always necessary for the medical practitioner to be present during the provision of the service. Thus, under Medicare, the medical practitioner has remained dominant and the apparent leader of the health care team.

There is some evidence to suggest that the principles of Medicare have not achieved their potential in the rural setting. Lower rates of bulk-billing in rural areas (as compared with urban localities) have been cause for concern and may be linked to fewer GPs in rural centres providing less market incentive to bulk-bill patients[20] (Department of Health and Ageing, 2003; Swerissen, 2004). Kenny and Duckett (2004) have identified other ways in which the health system, through Medicare and the AHCAs, has failed the rural residents of Victoria. In an analysis of service delivery in rural Victorian hospitals, the authors found that the professional monopoly held by rural medical practitioners (gained by virtue of workforce shortages) had contributed to circumstances where rural residents were being charged for services rendered at the emergency department of the local hospital. Where services are often provided by local GPs, local residents presenting to the emergency department can find themselves being privately billed up to $100 per visit. Such private billing is contrary to the principles of the AHCA which mandates that services provided in public hospitals should be provided free of cost to patients and access to such care should be provided regardless of geographic location (*Australian Health Care Agreement between the Commonwealth of Australia and the State of Queensland 2003-2008*, 2003). By avoiding intervention in the issue, the authors suggest that the government is condoning this unjust practice in a context where residents are already disadvantaged and facing other barriers to accessing health care (Kenny, 2004).

*Queensland Health*

At an organisational level, policy documents produced by Queensland Health are often prefaced with introductions which reiterate organisational goals that reflect equity and social justice principles. For example, the introduction for the government's directions statement *Smart State: Health 2020* (Queensland Health, 2002b) stated that the aims of the Queensland Government were to maintain good health for all Queenslanders and ensure access to high-quality, timely and appropriate services. Similarly, Queensland Health strategic plans often contain directions which are based on principles of equity, for example, "working with communities to improve health. . . .

[20] The Commonwealth Department of Health and Ageing suggested the following explanation for poorer bulk-billing rates in rural centres: "On the available evidence, it appears that bulk-billing is strongest when the local market for GP services is also strong, and there is greater competition between doctors for patients. Capital city bulk-billing rates are significantly higher than for outer metropolitan or country areas, and this trend seems to cross socio-economic boundaries. Where there are fewer doctors for patients to choose from, the market incentive for GPs and other practitioners to bulk-bill also tends to decrease." (Department of Health and Ageing, 2003, p. 83)

Responding justly and fairly to need" (Queensland Health, 2006b). The state government also reaffirms a commitment to achieving sustainable regions and engaging the community. Thus, the Commonwealth's ideology of equity of access to health care, universalism and social justice is continued in the goals of the state government through Queensland Health. At a whole-of-government level, the *Charter of Social and Fiscal Responsibility* (Queensland Government, 1999) quotes equity principles and responsibilities of the government to its citizens. For example, the government quotes its responsibilities to Queensland citizens as including "being able to afford and sustain quality public services and improve equity, while encouraging economic activity and generating jobs". Stated principles of the charter include the need for ". . . efficient and effective allocation and use of resources; equity relating to the raising of revenue, delivery of government-funded services . . ." (p. 3).

*National rural health policies*

The themes of equity and universalism have also permeated the rural health policies developed at a national level. The goals of the *National Rural Health Strategy* (Australian Health Ministers' Conference, 1994) are consistent with the principles of equity found in Medicare and reflect a desire to improve the health status and services available to rural Australians:

> *. . . guide the provision of appropriate rural health services and equitable access to them; provide a mechanism for addressing agreed rural health priorities; encourage the adoption of approaches to service delivery which are tailored to meet the special circumstances of rural Australia; and measure progress towards meeting key rural health goals* (Australian Health Ministers' Conference, 1994, p. 1).

The language and tone of the 1996 update of the *National Rural Health Strategy* (Australian Health Ministers' Conference, 1996) was also heavy with equity and social justice concerns:

> *This proposal has focused attention nationally on how best to provide services to rural communities based on principles of equity and social justice* (p. 4)
>
> *Health Authorities are taking action to reduce the inequity of funding between metropolitan and rural areas in relation to mental health services, with a consequent improvement in their provision in rural and remote communities* (p. 8)
>
> *Commonwealth, State and Territory governments should re-examine the mechanisms which currently underpin the funding arrangements for*

> *rural and remote health services. In order that funding arrangements provide equity of access for equivalent needs, greater flexibility is required to better link funding to health needs and outcomes* (p. 16) (Australian Health Ministers' Conference, 1996).

*Healthy Horizons* maintained the foundational principles of equity and social justice, containing a vision in which rural Australians would be "as healthy as other Australians and have the skills and capacity to maintain healthy communities" (National Rural Health Policy Forum et al., 1999, p. 3). This would be achieved when rural health status and access to health services had improved to a level comparative with that of metropolitan populations. The document placed a greater and more explicit focus on building capacity of rural communities in order to encourage self-reliance with regard to local health service provision.

*Blueprint for the Bush*

At a state level, the Queensland Government has also produced high-level, strategic policy documents for rural communities which also contain strong themes of equity and social justice. The latest such document, *Blueprint for the Bush* (Queensland Government et al., 2006), proposes a whole-of-government response to the challenges faced by rural communities. The blueprint commenced with a discussion paper, released in July 2005, two ministerial regional community forums and several consultative meetings held in rural Queensland towns (Queensland Government & Agforce, 2005). Although issues in several government sectors were considered in the blueprint, it was evident that health care was of particular concern for rural residents and that local health care services were important to the identity and general well-being of rural communities. Community submissions indicated that rural residents valued local health services and had identified the problematic nature of implementing city-based policies in their rural towns.

The final blueprint contained an emphasis on community capital, involvement, leadership and self-reliance. In the rural health sector, the government reiterated the difficult situation of providing health care that is accessible and of high quality to a population that is both highly dispersed and of relatively low density. Nonetheless, various strategies were proposed to improve rural health services and included specific mention of maternity services: "improving maternity services for rural and Indigenous communities, such as better access to ante- and post-natal care, flexible working conditions for midwives and improved Indigenous representation among maternity

service providers" (Queensland Government et al., 2006, p. 26). A range of other measures were also mentioned, including pledging funds for capital infrastructure, working with the Commonwealth and rural communities to determine the minimum level of health services that should be available in rural communities, innovative workforce initiatives including primary and public health care training for paramedics, developing a rural generalist training pathway, recruitment drives and other financial incentives (such as scholarships and rural career grants).

*The Re-Birthing Report*

*Re-Birthing: Report of the Review of Maternity Services in Queensland* (Hirst, 2005) details the findings of an independent but government-commissioned review of the way in which maternity care is provided throughout the state. The review itself was the fulfilment of an election promise made in response to lobbying by the Maternity Coalition (a consumer advocacy group whose ideals align closely with midwifery philosophy). The review indicated potential government interest in implementing some reform in the state's maternity care but is perhaps even more relevant for the strong themes of equity it contains and the voice it provided for repressed and challenging interests.

Better maternity outcomes for Aboriginal and Torres Strait Island populations and improving care for rural and remote populations were two of the three areas recommended for priority action, the third area being better integration of care, particularly postnatally. Outlining a way forward, *Re-Birthing* recommends the following principles as a basis for future maternity services in Queensland: (a) care is safe and feels safe; (b) care is open and honest; (c) care is local or feels local; (d) care belongs to families; and (e) carers work together and communicate. Recommended service improvements supported the plight of repressed interests who sought better quality and equitable access to health services for less advantaged sections of the community, particularly Indigenous and rural residents. Recommendations regarding the potential expansion of midwives' scope of practice and recognition as primary carers in some settings provided encouragement for midwives who could be perceived as a threat to the professional dominance of medical practitioners in the field of maternity care (Hirst, 2005).

The official government response to *Re-Birthing* was positive overall, but contained little to offer hope of rapid change (Queensland Government, 2005b). While agreeing with many of the recommendations in principle, this was tempered with the need for

planning, analysis and assessing the cost-effectiveness of proposals. Queensland Health appointed the author of the report, Cherrell Hirst, to lead the Maternity Services Steering Committee which would oversee the reform agenda and report directly to the health minister who described the formation of the steering committee as "the beginning of some very exciting changes in maternity services" (Queensland Health, 2005). One of the working parties under the steering committee was dedicated to developing a template of the rural clusters of care model, establishing demonstration projects and identifying alternative solutions where the cluster model is not appropriate[21].

### *3.6.3 Issue recognition*

The Commonwealth government has been receiving information on the state of rural health care and recommendations to improve the situation for over three decades. *A Report on Hospitals in Australia* (Hospitals and Health Services Commission, 1974) indicated that the government had been informed of the financial costs of health care for rural patients including those associated with travelling to the urban centre, lost work opportunities and accommodation expenses. Although cognisant of the inefficiency of rural hospitals at the time, there was equal awareness of strong community expectations that care would be available at their local hospital. A recommendation of that report was that more regionalised planning and administration of health services be adopted. Later, the report arising from the Inquiry into Medical Education and Medical Workforce (Committee of Inquiry into Medical Education and Medical Workforce, 1988) – commonly known as the "Doherty Inquiry" after the Chairman (Professor Ralph Doherty) - contained a number of important findings for rural medical practice. Firstly, there was acknowledgment that a geographic maldistribution of medical practitioners did exist (with three out of four working in urban localities) and that there were several financial, professional and social disincentives to rural practice which contributed to difficulties in recruiting and retaining practitioners. Medical practitioner maldistribution was found to be problematic for rural communities and recommendations were made that various stakeholder bodies "recognise the importance of an equitable geographic distribution of the Australian medical workforce and the existence of current geographic imbalance, and co-operate to increase and maintain the quality of rural practice" (1988, p. 497). Many of the recommendations made by the inquiry have since been implemented and continue to be pursued today,

[21] The current state of the inquiry is addressed in a policy postscript in Chapter 8 (Section 8.3).

particularly reforms of undergraduate medical education to improve rural practitioner recruitment, including programs to encourage medical school applications from rural high school students, greater exposure to rural practice in undergraduate programs and alteration of intake processes to include greater numbers of students from rural backgrounds.

Recognition of the rural health issue grew in the years following the release of the Doherty Inquiry's findings. Thereafter, the rural health cause was ably assisted by the formation of several professional associations including the Council of Remote Area Nurses (CRANA), Rural Doctors Association of New South Wales, and later, the Rural Doctors Association of Australia (RDAA), to lobby for political attention and additional rural health resources (Humphreys, Hegney et al., 2002). Collectively these groups would benefit from the development of the Australian Journal of Rural Health, which began publication in 1992. The mission of this academic journal was to air and discuss aspects of rural health and disseminate scholarly research in a public forum. The advent of such publications, particularly local and relevant to Australia, have been beneficial to advancing research and understanding of the intricacies and requirements of providing high-quality rural health services.

In 1991, there was a confluence of interests with the Federal Minister for Community Services and Health, Brian Howe, keen to further the Australian Labor Party's (ALP) social justice agenda in his own portfolio. Willing to listen to the increasingly organised and vocal rural health professionals' organisations and lobby groups, the minister provided funding for a national rural health conference that would act as a public forum for discussing rural health problems and potential solutions. "A Fair Go For Rural Health" was hosted in Toowoomba in 1991 and attracted a diverse range of stakeholders including rural health practitioners, politicians, health administrators, educators, policy-makers and consumer representatives to discuss action to be taken to improve health and service delivery in rural areas. The support of Brian Howe was well noted and his keynote address at the conference again reflected the ALP's social justice values:

> *At a Federal level, we have approached the issue of equity in the delivery of health services within the context of government policies that emphasise the principles of social justice against the background of major reviews of health care and related matters. . . . One of the aspects of social justice that we put particular emphasis on is access and equity.*

> *In particular, we are concerned with disadvantage relating to where one lives . . .* (Brian Howe in Craig, 1991, p. 19).
>
> *Social justice is about change. Changing the way we deliver services, but also about changing the nature of services themselves.* (Brian Howe in Craig, 1991, p. 28).

There was encouragement here for the rural community (repressed interest) and other challenging interests as the government appeared to be highly motivated to initiate reform in the rural health sector. Moreover, the Toowoomba conference signified the establishment of rural health on the government's agenda and the development of the *National Rural Health Strategy* (Australian Health Ministers' Conference, 1994) which was endorsed by the Australian Health Ministers' Conference as a national policy in 1994. The *National Rural Health Strategy* contained guidelines for rural health funding and programs and acknowledged the need to link key players at national, state and local levels. The predicament of developing a national level policy for rural health is the same today as it was at the time of developing the *National Rural Health Strategy*: how to develop a nationwide approach to rural health services when rural communities are so diverse. Despite this, a national policy framework was still perceived as essential, though it may need to be adapted according to local situations.

> *While ad hoc local responses may satisfy an immediate call for action, they are no guarantee of a long-term solution required to address the underlying causes responsible for the problem. A comprehensive national rural health policy provides a framework for ensuring that interventions designed to tackle the underlying processes are both necessary and efficient.* (Humphreys, 1997, pp. 49-50)

An update of the *National Rural Health Strategy* was undertaken in 1996 to ensure the continued relevance of the policy framework and to assess what progress had been made (Australian Health Ministers' Conference, 1996). This revision was claimed as a simpler framework, within which a more long-term, primary health care focus appeared to be evolving. In 1999, yet another national rural health policy was announced by the Australian health ministers: *Healthy Horizons*. This policy was touted as more than a strategy, but rather a "framework" that built on previous approaches and would facilitate more action and better outcomes for improving the health of rural Australians (Australian Health Ministers' Advisory Council's National Rural Health Policy Sub-committee & National Rural Health Alliance, 2003).

The development of three national policies on rural health appeared to represent great gains for the rural health issue, though not long following the release of the *National Rural Health Strategy Update,* sentiments amongst the delegates of the biennial national rural health conferences had changed from hope to cynicism regarding the rehashing of issues with little action or outcomes.

> *One of the major frustrations experienced by rural and remote health stakeholders is that many rural health issues and problems are well known, and strategies for their resolution have been clearly defined in recommendations formulated at previous meetings and conferences. Unfortunately, to date, progress in the implementation of many of these recommendations has been tragically slow* (Gregory & Humphreys, 1997, p. 172).

> *Based on current statistics relating to workforce shortages and health status indicators, it would not be difficult to adopt a pessimistic perspective focusing on the many outstanding and unresolved rural health issues that continue to impede progress towards the 1991 goal of optimal health for all people in rural and remote Australia* (Humphreys, Hegney et al., 2002, p. 9).

The authors of the above quote commented that despite the great activity and advancements in rural health over the 1990s, some barriers still remained including the "poor cousin" status still afforded to rural Australian communities in relation to metropolitan areas, reluctance of policy-makers to involve rural health consumers in the policy process and the dominance of both specialties and the medical profession to the detriment of a primary health care approach (Humphreys, Hegney et al., 2002). A similar perspective can be adopted in the case of rural maternity care; that is, though the rural health care access issues have been known for some time, rural maternity units continue to close, and thus the situation does not appear to have improved satisfactorily.

### *3.6.4 Workforce initiatives*

The *National Rural Health Strategy* and *Healthy Horizons* were both broad, national-level policies aimed at improving rural health status and health services. Since the development of these policies, a detailed inspection of Commonwealth Government initiatives in the rural health sector reveals a prominent focus on creating a viable rural health workforce, with particular emphasis on medical practitioners. As education and vocational training of health professionals are fundamental to the workforce, there have

also been several educational initiatives implemented with a view to growing the health workforce. Following is a list, and brief description, of rural health workforce and education initiatives implemented by the Commonwealth Government.

- The Rural Health Support Education and Training (RHSET) program: to improve rural residents' access to effective health services. This would be achieved through enhanced training, education and support prospects with the aim of improving recruitment and retention of health professionals in rural communities (Harvey, Webb-Pullman, & Strasser, 1999). Since the program was established it has funded over 600 programs with over $65 million spent in areas addressing workforce concerns, management and service provision, conferences, support networks, training and use of technology in a number of medical and health disciplines (Commonwealth Department of Health and Ageing, 2004).
- The establishment of rural workforce agencies in each state to address rural and remote medical workforce shortages. Rural Health Workforce Australia (RHWA) is the national body that supports and represents the seven rural workforce agencies (RWAs) in each state and the Northern Territory. RHWA and each RWA receive funding from the Commonwealth Department of Health and Ageing. The RWAs also receive some funding from their respective state governments. The collective purpose of the RWAs is to facilitate the recruitment and retention of a sustainable rural and remote health workforce, concentrating on general practice but also including support for medical specialist outreach programs and Aboriginal Community Controlled Health Services (ACCHS, Rural Health Workforce Australia, 2009).
- The General Practice Rural Incentives Program (GPRIP). The GPRIP was established to improve access to high-quality rural general practice services via support, training and better recruitment and retention of GPs in rural areas (Clark, 1995). GPRIP contained five grant initiatives which included: (i) relocation grants of $20,000 for GPs moving to identified underserved communities; (ii) training grants up to $78,000 for GPs in rural practice to upgrade their skills in rural general practice; (iii) remote area grants of up to $50,000 per year for GPs working in remote areas to improve the financial viability of practice; (iv) continuing medical education (CME)/locum grants to facilitate GPs obtaining leave to maintain or increase their rural practice skills; and (v) a series of undergraduate grants for medical schools to provide students with experience in, and an understanding of, rural practice with the hope of encouraging students into rural careers (Holub, 1995).

- The Rural Undergraduate Steering Committee (RUSC) has supported the introduction of innovative rural medical education curricula, and has led to other rural academic initiatives including the University Departments of Rural Health to support multi-disciplinary academics in rural areas and Rural Clinical Schools to support rural undergraduate education and research (Strasser, 2005).
- Opening of a new regional medical school with a mandate to produce graduates who would bolster the rural and remote medical workforce. James Cook University (JCU) School of Medicine was the first school to be opened in Australia in 25 years (Hays, 2000). Since the opening of the JCU School of Medicine (and now Dentistry), seven other medical schools have either accepted their first intake of students or are in advanced stages of opening their schools (Medical Deans Australia and New Zealand, 2008).
- A dramatic increase in the number of medical student places funded by the Commonwealth in order to increase the supply of medical practitioners. Indeed, the number of domestic medical graduates is set to rise from 1,586 in 2007 up to 2,945 in 2012 (Medical Training Review Panel, 2007).
- 100 Medical Rural Bonded Scholarships are offered annually by the Commonwealth Government. These scholarships provide medical students with a yearly tax-free stipend during student years in return for six years continuous practice in a rural area after completing vocational training (Department of Health and Ageing, 2008b).
- Similarly, 600 Bonded Medical Places are provided throughout Australian medical schools each year. These places do not have a scholarship attached though students are expected to return six years medical practice in a rural area though this can be partly fulfilled during prevocational and vocational training years (Department of Health and Ageing, 2008a).

Although not an exhaustive list of implemented policies, this list does provide some indication of the workforce focus in the Commonwealth Government's policy approach to rural health care and the variety of methods they have adopted. Workforce initiatives are one of the few policy levers available to the federal government (which lacks effective influence at the level of service delivery) and so it is not surprising that their emphasis has been on maintaining the current health workforce supply through incentives to remain in rural practice, or increasing supply by funding additional education and training positions.

Amongst workforce initiatives attempted by the Queensland Government, the Office of Rural Health lists some of the programs it runs to attract health professionals (medical, nursing and allied health) to rural practice (Queensland Health, 2009). Mostly these include a variety of scholarships that bond students to a length of rural practice or provide financial support for undertaking rural placements in rural communities (Queensland Health, 2007b). Apart from scholarships, Queensland Health also coordinates a rural locum relief program and now offers a Rural Generalist Pathway which allows medical graduates to train for a career in rural practice (Queensland Health, 2007a, 2007d). The objective of the Rural Generalist Pathway is to offer a supportive training plan that would lead to vocational recognition and a career pathway that ultimately is appropriate to and encourages rural practice (Queensland Health, 2007a). Such training options were considered important to developing a workforce capable of sustaining rural health services when the current workforce is shrinking.

### *3.6.5 Medical orientation*

Earlier in this chapter the various interest groups in rural maternity care were discussed and the medical profession identified as maintaining their dominance in this field. A number of policies reinforce this status quo. Service manuals such as the *Primary Care Clinical Manual* (Queensland Health & Royal Flying Doctor Service, 2007) and the CSCF (Queensland Health, 2004a) directly affect the way in which maternity care is practiced and also act to reinforce the leading role for medical officers and the subordinate position of midwives. Legislation and Medicare are also considered here for their roles in reinforcing the status quo.

The *Primary Clinical Care Manual* is jointly produced between Queensland Health and the RFDS. The manual contains clinical guidelines as to the practice of primary-level obstetric care in a rural context, taking into account the likely skill levels of rural and remote practitioners and the resource context. The manual contains guidelines for antenatal care (including routine antenatal tests and screening, obstetric risk assessment tool, schedule of appointments) and managing normal labour and birth. It is made clear that care should be provided in facilities which are appropriately equipped and staffed and expects that women will journey to the “receiving obstetrics facility” at 36 weeks gestation where they should have weekly antenatal appointments until delivery. There is a relatively expansive role for midwives in normal pregnancy but always with availability of medical officers for consultation in cases which deviate from normal.

The CSCF (Queensland Health, 2004a) details the staffing, safety requirements and support services which should be available as minimum requirements for providing clinical services. In this framework, amongst the requirements for a Level 1 maternity service for low-risk pregnancies and births after 37 weeks gestation there should be:

- 24 hour access to obstetric anaesthetics;
- A Level 2 surgical service and/or established guidelines for transfer with a higher level service or the flying obstetric and gynaecological service;
- Capability for elective and emergency vaginal, or assisted vaginal, deliveries;
- Capacity to perform low-risk elective caesarean section births; and
- Ability to cope with complications until transfer services arrive.

In this way, even low-risk maternity care emphasises a central and necessary role for medical officers. The framework does not make allowances for the provision of birthing services without the ready availability of medical practitioners.

Legislation which prohibits midwives from prescribing relevant medication or ordering related diagnostic tests has been identified as a hurdle to a more expansive role for midwives. In 1998, the National Health and Medical Research Council (NHMRC, 1998) identified that such legislation did not reflect actual practice in many public maternity units, that is, midwives routinely order and interpret diagnostic tests and administer medication not yet prescribed by a medical officer. In this sense, there is potential for midwives to face particularly serious legal consequences by engaging in what has become routine practice. The Australian College of Midwives (ACM) interest group has continued to call for more inclusive legislation regarding prescribing medication and ordering and interpreting tests in maternity care thus covering midwives' practice which is often routine, but not legally recognised (Australian College of Midwives, 2006, 2008).

In Queensland, the *Health (Drugs and Poisons) Regulation 1996* ("Health Act 1937," 1996) now contains allowances for midwives to administer medications under a drug therapy protocol[22] but which still does not grant midwives prescribing rights. Such rights would require access to the PBS, which is managed by the Commonwealth, thus requiring policy change at a federal level (Australian College of Midwives, 2008). Policy changes favouring greater scope of practice for midwives by the Commonwealth

[22] "***drug therapy protocol*** means a document certified by the chief executive and published by the department stating circumstances in which, and conditions under which, a person who may act under the protocol may use a stated controlled or restricted drug or poison for stated purposes." ("Health Act 1937," 1996, p. 265)

does not seem likely given the controversy surrounding recent Medicare changes in antenatal care. Medicare item number 16400 relates specifically to antenatal care provided in rural areas and allows medical practitioners with no obstetric training to claim Medicare benefits for antenatal services provided by a nurse, midwife or registered Aboriginal health worker at their practices located in designated regional, rural or remote areas (RRMA 3-7) (Commonwealth Department of Health and Ageing, 2008). The introduction of item number 16400 was criticised for encouraging the provision of antenatal care by nurses who are not specifically trained as midwives (Consensus Statement, 2006) and also for allowing medical practitioners who did not have specific training in obstetrics to be responsible for the care (Kildea et al., 2008). Perhaps most importantly, this policy move indicates the government's desire to maintain the status quo with the medical practitioner as the dominant element in the health care team, even if this is without obstetric qualifications in the case of maternity care.

> *The medical practitioner under whose supervision the antenatal service is provided retains responsibility for the health, safety and clinical outcomes of the patient. The medical practitioner must be satisfied that the midwife, nurse or registered Aboriginal Health Worker is appropriately registered, qualified and trained, and covered by indemnity insurance to undertake antenatal services.* (Commonwealth Department of Health and Ageing, 2008, online)

While midwives do not have access to Medicare for billing purposes, women accessing antenatal care exclusively through an independent midwife will be financially worse off than if they were to access care through a medical practitioner, or a midwife who is under the supervision of one. Thus, the government provides a financial incentive for women to access medical-based maternity care. Ideologically, the Commonwealth's exclusion of midwives from accessing Medicare rebates reinforces the notion that medical practitioners are best placed to provide maternity care, regardless of whether they have specific training in obstetrics. Thus, financially and ideologically, the Commonwealth has reinforced the status quo of medical dominance in maternity care.

Willis (2002) also highlights favourable policy outcomes for the medical profession in drawing attention to the fact that financial and educational support for other health professions is far lower. Apart from the Rural Pharmacy Allowance, there has been little emphasis on providing financial incentives beyond just the salaries of allied health professionals. Willis suggests that the lack of policy support for non-medical practitioners is inconsistent with what is required to rectify existing problems, given that

allied health professionals outnumber medical practitioners, nurses have taken a leading role in rural and remote health, and that GPs often cite a lack of supporting local health infrastructure as a barrier to rural practice.

Overall, various Queensland and Commonwealth government policies discourage deviations from the maternity care status quo in which the medical practitioner is central. State-based service manuals make explicit that medical officers are a necessary requirement for birthing services to operate. Legislation constrains the legal scope of practice for midwives, particularly in prescribing drugs and ordering tests relevant to maternity care. The Commonwealth has also reinforced the subordinate role of midwives by maintaining almost exclusive access to Medicare and the PBS for medical practitioners. The constraining effect on midwives' practice affected by service manuals and legislation and access to Medicare act to legally reinforce the dominant position of medical practitioners in maternity care, even in rural areas where there are well known shortages of medical practitioners.

### *3.6.6 Centralisation of services*

The centralisation of maternity services is most evident in the reality that so many rural maternity units have closed. *Re-Birthing* (Hirst, 2005) revealed that 36 of 84 maternity units have closed in the decade preceding 2005; many of these were in rural, inland areas (Figure 3). Allowing collective closures of such magnitude without notable or explicit policy intervention indicates a lack of commitment on the part of government to prevent the loss of local maternity services for rural residents.

Overall, moving rural health services, including maternity care, towards more urban centres is implicitly reinforced in policy documents such as *Smart State: Health 2020* (Queensland Health, 2002b) which cite the many challenges of providing rural-based health care. Future plans often cite the need for reshaping small rural hospitals into health centres which would provide a range of primary, emergency and residential aged care that would be supported by regional hospitals. This would occur alongside the development of super-specialist hospitals in metropolitan centres. Investigating new ways of providing health care to rural residents is a consistent theme throughout Queensland Health policy documents, though it is unclear what this would entail for rural maternity care.

### *3.6.7 Safety*

Another key objective of Queensland Health is the provision of "safe" health care. Safety themes are strong throughout many organisational strategic documents, for example: "quality, safe health services are available to people in all populations and settings. . . . Systematic use of the Clinical Skills Capability Framework to assess and prioritise infrastructure investment to address quality and safety" (Queensland Health, 2006b, p. 8); and ". . . sponsoring the development of a universal culture of safe practice and continuous improvement and implementing recognition systems for individual and collective achievements." (Queensland Health, 2002b, p. 32).

In the rural setting, this drive for safe service provision was found to be tempered with the challenges of providing safe and high-quality services in rural settings, particularly those challenges of workforce shortages and a small population base.

> *Across the state the population in rural and remote areas is both declining and ageing. This impacts on our capacity to adequately resource health services in rural locations where the demand for services is increasing, but the workforce, including that of the health sector, is declining. With the added factor of the increasing complexity of care, the challenge for Queensland Health is to provide safe, high quality services for people living in rural and remote areas.* – (Queensland Health, 2004b, p. 6)
>
> *Workforce shortages in rural areas make it even more difficult to sustain safe, high quality services.* – (Queensland Health, 2004b, p. 7)

Of particular note is the association made between small population bases and the potential for bad outcomes, for example in *Smart State: Health 2020*: "Insufficient patients do not maintain a doctor's skills and can put patients at greater risk of an adverse medical event" (Queensland Health, 2002a, p. 30). The language and tone in quotes such as this intimate that rural hospitals are likely to be unsafe and may put patients at greater risk of unacceptable outcomes.

The environmental context, affected by the high profile Bundaberg Hospital "scandal" (Duckett, 2007b; Van Der Weyden, 2005), almost certainly had a confounding effect on Queensland Health's safety focus. The sustained media coverage of the scandal facilitated public scrutiny of the performance of the state health department, especially in public hospitals. While difficult to measure, this context would likely encourage Queensland Health to adopt policies (processes and procedures) which emphasise

decreased patient exposure to adverse events. Yet, risk-averse policies are likely to have a stifling influence on the innovation required to facilitate positive change in the rural health care situation.

Regardless of the influence that the Bundaberg Hospital scandal may have had, there is an indisputable need for Queensland Health to be concerned with the safety of care provided to residents. However, the *Re-Birthing* report (Hirst, 2005) questioned the heavy emphasis that Queensland Health placed on safety and risk-aversion in their policies. Indeed, the reviewers found that many rural maternity units were closing due to their inability to comply with standards for low-risk birthing contained in the CSCF (Queensland Health, 2004a); standards which the review had been advised[23] were without a supporting evidence-base.

### *3.6.8 Cost-effectiveness*

Achieving efficiency in the provision of health services is a major concern for corporate rationalisers (Duckett, 1984) such as Queensland Health and hospital managers; even more so in the current climate of rising health care expenditures. So it is not surprising that awareness of financial costs is a prominent theme in Queensland Health strategic documents and reflected in organisational objectives: "To ensure that Queenslanders have access to appropriate, sustainable health care services and that health care is provided consistent with the principles of good financial stewardship" (Queensland Health, 2002b, p. 38). Further, *Smart State: Health 2020* (Queensland Health, 2002b) is prefaced with an acknowledgment of several challenging trends in health care provision such as the increasing prevalence of chronic conditions, an ageing population, new medical technologies and therapies, changes in public expectations regarding access to high-quality and safe services and less tolerance for medical errors; all of which the organisation recognises as likely increasing the cost of providing health care.

For rural townships, the provision of local health care services is not often associated with cost-effectiveness. Awareness of this fact is also suggested throughout strategic plans. Where the health services of rural and remote communities is explicitly mentioned, there is a stated desire for Queensland Health to provide "safe" and "high-

[23] Advised by ACRRM and the Rural Doctors Association of Queensland (RDAQ).

quality" health services to rural residents but the need for "cost-efficiency" is often raised. For example:

> *The small populations in many small rural centres create challenges for providing health care. Care needs to be accessible and yet we need to ensure that our service provision is of high quality and cost-effective. Workforce shortages in rural areas make it even more difficult to sustain safe, high quality services* (Queensland Health, 2004b, p. 7).

### *3.6.9 Policy content summary*

A number of prominent themes have been identified in this qualitative analysis of policy documents complementary media references and interest group publications. The first and most obvious theme was the absence of a specific policy on rural maternity care. There was no cohesive national or Queensland government policy direction which dealt exclusively with maternity care in rural areas, although there was substantial evidence of government awareness regarding rural health service difficulties, including problematic access to maternity care. Three important consequences of this policy void were identified: (i) the government's influence on rural maternity care is severely constrained; (ii) given the lack of specific government influence, rural maternity care is likely to be influenced by other health policies which are not specific to maternity care in the rural setting; and (iii) without policy support, rural maternity care becomes vulnerable to other environmental effects (for example, infrastructure degradation and resource neglect). In the absence of policies specific to rural maternity care, the present analysis concentrated on macro-level policies around rural health services and maternity care more generally.

The next theme to be considered was that of achieving equitable access to health care. The pursuit of equity was common across all types of health care services and was considered early in the analysis for its foundational influence in rural health. Signing international agreements such as the International Covenant on Economic, Social and Cultural Rights indicates the ideological agreement of the Australian government and society that the right to health is fundamental to all people. Domestically, the structure of the national health system, provided by Medicare, aims to facilitate equitable access to health care for all Australians by removing the financial barriers to obtaining care. Many national-level rural health policies developed throughout the 1990s reflected principles of equity, universalism and social justice. The notions of equity and

universalism permeate through to the Queensland health department and are particularly relevant to the various rural health policies which have been developed, most with the socially just aims of achieving equitable access to health care regardless of geographic location.

Rural health appeared squarely on the government agenda during the 1990s which produced policies that aimed to improve health outcomes and service delivery for rural populations. Many of the continuing policy directions in rural health are concerned with workforce initiatives particularly financial incentives and improved training and education. Still, in the intervening time, while successes have been achieved in some areas, there has been disappointment in the overall progress since the rural health issue was recognised in policy directions.

The analysis then reflected on the way in which health policies in maternity care and rural health services have acted to reinforce the status quo in which the medical profession is dominant. Service guidelines and legislation support the leadership role of medical officers and reinforce the subordinate position of other maternity care professionals such as midwives. Service centralisation was also found in the observed reality of rural maternity unit closures resulting in the concentration of services to larger, more urban, locations. Discourse in Queensland Health policy documents does appear to, at least implicitly, support trends towards service centralisation. Further, the last two themes are related to service centralisation tendencies in that they both provide some intrinsic incentive or justification for maternity services to be provided in a centralised fashion. The first, safety of care, is a prominent and consistent theme in Queensland health policy documents. While safety is an important component of health care, when referring to rural services, concern about the clinical safety of care is often associated with greater risk of adverse outcome. In this way, such associations potentially undermine community confidence in rural health care and provide justification for shifting rural services to urban locations. The last theme, cost-effectiveness of health care, was also prevalent throughout Queensland Health literature. This is not surprising as cost-effectiveness has previously been identified as a core concern for corporate rationalists. It too is linked to centralisation as economies of scale can be achieved by concentrating health service provision in fewer centres.

## 3.7 Chapter 3 summary

Chapter 3 has provided the findings of a policy analysis in the field of rural maternity care. Walt and Gilson's (1994) model provided a structure for analysing health policies in the more general areas of rural health services and maternity care, given the lack of policies specific to rural maternity care. Universal coverage, the sharing of health care responsibilities between state and Commonwealth governments, recent concerns about health care safety in Queensland hospitals and the complexity inherent in the field of maternity care were all identified as influencing contextual factors. Consideration of the policy process included an overview of the Australian Policy Cycle as commonly referred to in Australian policy literature and top-down/bottom-up processes of policy-making. The medical profession, rural health advocates, the community, other maternity care professionals, Queensland Health and other health care managers were all identified as actors in maternity care policy and were categorised according to the structural interests perspective (Duckett, 1984).

Lastly, the actual content of policies was examined using a technique similar to that detailed by Humphrey et al. (2003). The predominant themes were identified as: (i) a lack of policy direction specific to maternity care in rural areas; (ii) equity of access to health care as espoused in Medicare; (iii) recognition of the rural health issue; (iv) the workforce initiatives which dominate the Commonwealth Government's approach to rural health care; (v) the way in which policies to date have reinforced the dominance of the medical profession, making them necessary leaders of the maternity care team, despite recognised rural medical workforce shortages; (vi) the centralisation of maternity care services as evidenced by the number and location of birthing unit closures; (vii) a focus on the clinical safety of care and (viii) pursuing cost-effective provision of health services, a particular interest of corporate rationalists such as Queensland Health.

Having considered the policy discourse around rural health services and maternity care, the study now turns to discerning the lived experiences of rural north Queensland residents in both accessing and providing maternity care. The following chapter outlines the case study methodology employed to obtain data on the lived experiences of parents, health professionals and hospital management staff, which are later evaluated against the policy discourse uncovered in this policy analysis.

# Chapter 4:

# Case Study Methodology

> *". . . there is a continuous need to simultaneously read policy discourse with, and against, the experiences of those affected by policy decisions."*
> *– (Panelli et al., 2006, p. 1104)*

The premise of this study, as suggested by the above quote, is that public policy discourse should be considered alongside the lived experiences of the people affected by the policies. Having discussed the policies, environment and discourse which affect the provision of rural maternity care in the previous chapter, this chapter focuses on understanding the lived experiences of rural residents who either access or provide maternity care in north Queensland. A case study design has been used to explore the experiences of rural residents, the methods of which are addressed in the present chapter. The case study findings are outlined in Chapter 5 and 6.

## 4.1 Case studies

After reviewing relevant literature and government policies related to rural maternity care, case studies of four rural north Queensland towns were undertaken. As Panelli et al. (2006) have highlighted in their research of health service access in rural New Zealand, it is important not to analyse public policies on their own but rather, to consider policy discourse alongside outcomes for affected citizens as it ". . . connects the discursive arena of policy and politics with the lived experience of health services" (p. 1104). This study links government policies and discourse around the provision of maternity care in rural areas and the lived experiences of (a) rural north Queensland residents who access maternity care, and (b) health professionals who provide maternity care services. Case studies were chosen as a means of gaining an insight to rural residents' experiences in this area.

Case study methodology is commonly used in many research disciplines including psychology, law, medicine and political science (Creswell, Hanson, Plano, & Morales, 2007) and may be employed as a strategy within exploratory, descriptive or explanatory research projects (Yin, 1994). The case study is perhaps best characterised by the concentrated investigation of a single unit, a single bounded system (Stake, 2005). The unit of analysis in this study is the community, comprising the events, processes and people living in the local area, particularly those associated with accessing or providing maternity care. A number of recognised case study characteristics will be discussed to clarify the nature of the case studies in the current project.

Stake (2005) describes two variants in case studies that are dependent on the level of interest in the case/s under study: intrinsic and instrumental. An intrinsic case study is studied for no other reason than interest in one particular case. Instrumental case studies are used to assist in the description of an issue or phenomenon. The current study is an instrumental study because the level of interest is rural maternity service access and provision. Thus, the cases, singly and together, assist in illustrating the reality of maternity service provision and access in rural north Queensland communities.

Further, this project employs a multiple-case design which is essentially a number of single case studies that are part of a single project (Yin, 1994). Stake (2005) refers to this design as "collective case study" which is a collection of instrumental case studies;

each chosen for its potential to explain or illustrate a larger issue than just the case itself. Where resources permit, the multiple-case study strategy is particularly advantageous when independent, varying responses occur at different sites, such as in this case, where policy outcomes may vary between the four rural communities.

### *4.1.1 Case selection strategy*

There exist a number of strategies for selecting case studies. Yin (1994) describes two distinct rationales for case selection; both based on replication. The first, literal replication, involves choosing cases that will yield similar results to support a given proposition. The second, known as theoretical replication, involves the selection of cases that are expected to give differing results but for predictable reasons. In the present project, cases were chosen expecting that the chosen group of rural communities would illustrate diverse outcomes in the provision of maternity care services despite operating within the same government policy framework.

Significantly, in a collective or multiple-case study design, cases are often chosen according to their potential to provide knowledge about a given phenomenon and not necessarily their representation of typicality as "sometimes it is better to learn a lot from an atypical case than a little from a seemingly typical case" (Denzin & Lincoln, 2005, p. 451). Similarly, Creswell et al. (2007) suggest that "often, the inquirer purposefully selects multiple cases to show different perspectives on an issue" (p. 246); thus generalisability of results is not the primary selection criterion for case selection. In this project, communities were chosen for their capacity to illustrate the variety of outcomes in similar rural communities. For example, those communities that have had difficulty in recruiting and/or retaining health professionals or have recently ceased providing maternity services may be judged to be disadvantaged by policy, whereas a town in which maternity services have evolved to become more secure and stable and/or service provision has grown may be considered a community that has prospered under the past or present policy environment.

### *4.1.2 Inclusion criteria for case study sites*

Further to employing a theoretical case selection strategy, potential case study sites needed to fulfil a number of inclusion criteria to be included in this project. These were required to ensure that the chosen north Queensland rural communities were in fact considered "rural" by contemporary classifications, were located in the geographical

boundaries considered as north Queensland and had some experience of local maternity services, specifically:

- Fell within the Northern Area Health Service (NAHS)[24] boundaries as specified by Queensland Health (see Appendix 5 for a map of area health service boundaries published by Queensland Health).
- Birthing services were currently available in the township. Otherwise, local birthing options were available within two years prior to the commencement of data collection. By selecting rural towns according to this criterion, information could be obtained from a population which is familiar with the local delivery of comprehensive maternity care services. Stakeholders have services for which they can provide comment on or, at least, some memory of them to speak of. This criterion also indicated that the town was, or was previously, capable of providing maternity services (with regard to human and physical resources).
- Classified as rural or remote using the Rural, Remote and Metropolitan Areas (RRMA), the Accessibility/Remoteness Index of Australia (ARIA), and the Australian Standard Geographical Classification (ASGC) systems. That is, each town scored between 3 - 7 on the RRMA scale, 1.84 – 12 on ARIA and 2.4 – 15 on the ASGC scale (Appendix 1 contains more details of these three classification systems).

Given the availability of several recognised rural classification systems, and no consensus regarding the superiority of any one of these, guidance from three of the most prominent classification systems was sought. It is beyond the scope of the present study to enter into the debate concerning the methods of classifying rurality. Rather, by consulting these three classification systems, there is evidence of general agreement regarding the rurality of the four towns selected as case study sites in the present project.

## 4.2 Data collection

Data for each of the four case studies were obtained from a variety of sources and belonged to one of three categories:

(i) Documentary evidence;
(ii) Interviews or focus groups with key informants; or
(iii) Direct investigator observations.

[24] Area Health Services were abolished during restructuring of Queensland Health in late 2008.

Data collection at all four sites occurred concurrently rather than the researcher completing data collection at one site before moving onto the next in a sequential pattern. This process was adopted with the aim of minimising any bias, particularly that which may stem from developing conclusions about one site that may potentially influence the data collection and analysis at subsequent case study sites.

Data collection, analysis and interpretation phases occurred in an iterative manner (Grbich, 1999; Hansen, 2006; Liamputtong & Ezzy, 2005). The process involved alternating between data collection, analysis and interpretation. This allowed continuous reflection on interview data to suggest whether further sampling was required to elaborate on themes and explanations that had emerged and, if so, where further sampling should be targeted.

### *4.2.1 Collection of documentary evidence*

At each site, documentary evidence was sought on features such as local sociodemographics, health services and relevant historical events to develop a contextual background in which other case study material, closely related to rural maternity care could be interpreted. These documents also served to supplement and support the interviews conducted at each site.

Documentary evidence was obtained from a variety of sources including:

- local and regional newspapers;
- statistical data sets (for example, the Australian Bureau of Statistics [ABS] records were particularly useful for obtaining population-related information on sociodemographics and birth trends); and
- publications made by the local hospital (for example, external reviews of services, inquiry submissions and local procedural guidelines).

Searching for documentary evidence commenced during the initial stages of, and continued throughout, data collection at each site. Many documents were obtained at regional libraries, archives or via the internet. In some cases, key informants were asked for, or volunteered, pertinent documentary material that was not otherwise publicly accessible.

### *4.2.2 Recording field observations*

Observation provides a way for the investigator to see and note features of a situation or its setting (Hansen, 2006; Sofaer, 1999). In this project, the investigator's observations were focussed on obtaining information on the maternity care setting at the four case study sites. Being physically present in the towns and through interactions with the residents, the investigator observed the environment, the cultural and social characteristics of the town, its residents and the hospital. Travelling to the case study sites gave the investigator first-hand experience of the travel time required and the type of terrain to be covered by case study participants when required to attend relevant referral hospitals. All observations were recorded in a field diary and analysed alongside the documentary evidence and transcripts of interviews and focus groups with key informants.

### *4.2.3 Interviewing key informants*

A purposive sampling strategy (Neuman, 2006) was used in the first instance to identify an initial sample of key stakeholders who were expected to be most informative and knowledgeable about the research question at each case study site. Local service providers and service users were readily identified as initial key informants given that the primary objective of the case studies was to form an understanding of the experiences of those local people who provide or access maternity services. Thus, there were two categories of informants within this initial phase of sampling:

- Service providers; including procedural senior medical officers (SMOs), midwives and other relevant nursing staff, the Medical Superintendent and the Director of Nursing (DoN) at the local hospital as well as local general practitioners (GPs) who provided ante- or post-natal care or procedural medical services relevant to maternity care.
- Service users; including parents with young children.

The iterative nature of data collection and analysis facilitated the ongoing identification of key informants beyond those initially considered. Specifically, potential additional key informants were identified via:

(a) Unprompted suggestions from participants volunteered during the course of interviews; or

(b) The analysis of interviews which indicated a need to interview other individuals in key roles to further the development of themes and categories emerging from data analysis.

This sampling technique led to interviews with staff in key roles at referral hospitals and district managers. A list of the typical key informants at each case study site is found in Table 6.

Table 6. *List of Typical Key Informants at Each Case Study Site.*

| |
|---|
| ***Local service providers*** |
| GP anaesthetists |
| GP obstetricians |
| Local GPs providing antenatal care |
| Midwives |
| Child Health Nurses |
| Medical Superintendents |
| Directors of Nursing |
| ***Local service users*** |
| Parents |
| ***Other key informants*** |
| Regional support staff, for example, Regional Midwifery Coordinator |

### *4.2.4 Approaching key informants*

Permission to approach and obtain information from Queensland Health employees was sought from the relevant regional Queensland Health human research ethics committee (HREC). HRECs suggested that, at each site, written confirmation should be sought from the relevant Medical Superintendent, detailing their awareness and approval of this project to proceed in that hospital.

As such, a preliminary phone call was made to the Medical Superintendent of the hospital at each site before data collection commenced. The investigator sought their approval for the project to proceed at that hospital, and also requested the participation of the Medical Superintendent in the project as an interviewee. An information page that briefly detailed the background and purpose of the project was emailed or faxed to the Medical Superintendent (Appendix 6). In addition, the investigator requested the assistance of the Medical Superintendent in identifying other potential participants at the hospital, particularly medical practitioners based at the hospital who were, or had been, involved in local maternity care.

After written approval was received from the Medical Superintendent, the DoN at each hospital was contacted and their participation requested. Again, advice was sought from the DoN to identify other key informants, particularly amongst the nursing staff. After contacts were identified and recruitment strategies agreed upon with the Medical Superintendent and DoN, individual medical and nursing staff were contacted in relation to participating in an interview with the investigator. All prospective participants were provided with an information page and a consent form that detailed the background to the project and what to expect as a participant in an interview (Appendices 6 and 8).

Local phone books were used to identify other GPs who might provide maternity (especially antenatal) care services for women in the local area. GPs were called to ascertain the extent to which each was involved in providing maternity care and interviews were sought with a number of GPs who were (a) previously involved in local maternity care services or (b) currently had a high antenatal or postnatal care workload in their private practice. Contact was established first by phone and continued either by phone or email. Project information pages were provided to all potential GP participants (Appendix 6).

Where appropriate, the networks of the investigator's supervisors and Queensland Health mentor[25] were also used to facilitate the recruitment process; usually by way of a personal phone call or email to introduce the investigator and the purpose of the project to key informants.

Apart from the service providers, it was also important to obtain the views of families within the local community who access maternity care services. To this end, it was necessary to consult more broadly to identify those community groups whose membership was likely to include people accessing maternity care, such as parents with children, and ideally who had gone through pregnancy and childbirth within the previous three years. Service providers who were interviewed as part of the project often had local knowledge that enabled them to suggest appropriate groups. An introductory phone call was made to the nominated leader of identified groups to explain the project and to discern whether the group would be appropriate, and willing

[25] A senior Queensland Health staff member familiar with the primary issues in this study was assigned to act as a mentor for the researcher. Having a government mentor was an integral component of the Growing the Smart State PhD Funding Program through which costs of this project were funded.

to, participate in the present project. If the group appeared suitable and willing, information pages and consent forms were mailed out for circulation amongst potential participants and arrangements made for focus group time and location (Appendices 6 and 7).

### *4.2.5 Interview procedures*

Service providers were interviewed on a one-to-one basis. However, in three instances two participants (from jobs of similar descriptions) were interviewed simultaneously. As participants worked in the same team and in similar jobs, this was not considered to be potentially detrimental to the data collected. Telephone interviews were considered an option, although face-to-face interviewing was preferred. It was felt that interviewing in person would not only improve response rate but would also be conducive to more candid and detailed responses to open-ended interview questions. Further, given concerns about the power relationship between many of the health professionals and Queensland Health (employee and employer, see Section 7.1.1), individual interviews were thought to be preferable for anonymity and frank disclosure of issues and opinions.

Focus groups were conducted with parents (that is, service users) who volunteered to participate in this study. Group sizes varied from four to nine participants. As parents were speaking about their experiences and opinions regarding their access to maternity care, there were benefits associated with having this pre-formed and largely homogenous group of participants discussing issues of maternity care together. Liamputtong and Ezzy (2005) cite a number of advantages associated with focus groups including the interactive nature encouraging participants to discuss their experiences, opinions and other thoughts:

> *"The most visible strength of focus groups is their emphasis on interaction in the group in order to produce information. Participants compare and contrast their experiences and views. . . . focus groups provide valuable insights into the complex behaviours and thoughts of people that are less accessible in other types of research methods. . . . [focus groups] may help some people to discuss issues that they feel too uncomfortable or intimidated to talk about in an individual interview. . . . Hearing about other people's experiences may help to stimulate them to contribute their point of view or remind them of their own*

> *experiences which otherwise they would not have remembered."*
> (Liamputtong & Ezzy, 2005, p. 96)

Two slightly different question guides were developed; one for health professionals who provide maternity services and another for community members who use maternity care services (Appendices 9 and 10). All interviews and focus groups used a semi-structured format; the interviewer was not constrained by the question guides and was able to ask other and more probing questions according to the flow of discussion or the background experience of key informants. Guides covered similar topics including the present state of, and recent changes to, local maternity services; local versus removed birthing experiences; government policies; community engagement; practitioner training requirements; expectations and quality of care. The majority of questions in both interviews and focus groups were open-ended to encourage participants to provide as much detail of their own personal experiences and opinions as possible (Quinn Patton, 2002). Two likert-type scaled questions were included which allowed the investigator to capture a more precise impression of participants' views on certain topics.

Interviews were conducted at a location convenient for the participant. This was usually on site and in places such as a quiet room at the hospital or in a GP's office. Focus groups were held either at the usual meeting place of the community group or at another location as nominated by the group.

With the permission of each participant, all interviews were recorded using an Olympus digital voice recorder, model DS-2200. Interview and focus group recordings were transcribed in full to facilitate subsequent qualitative analyses.

## 4.3 Data analysis

Analysis of data within this project was conducted using an iterative/thematic technique (Hansen, 2006; Liamputtong & Ezzy, 2005). Being a highly inductive process, the analysis was guided by the contents of collected data rather than pre-existing suppositions. The "iterative" component of this technique refers to the repetitive and cyclical nature of collecting, processing, analysing and interpreting data, allowing discoveries from the data to contemporaneously influence the ongoing research

process. This procedure continued until the investigator found that no new information was being acquired and that data saturation had been reached.

### *4.3.1 Analysis of interviews*

In agreement with iterative/thematic analysis techniques, interview and focus group transcripts were analysed using a process of coding and formation of conceptual themes. Specifically as part of grounded methodology, Strauss and Corbin (1998) have described a coding process which incorporates stages of open, axial and selective coding. However, other authors have highlighted that similar coding procedures are also used in thematic analysis (Liamputtong & Ezzy, 2005). Indeed, Hansen (2006) describes coding as an important characteristic of iterative/thematic analysis, though not always in such a highly systematised manner as that prescribed by Strauss and Corbin.

Using a coding procedure similar to that described by Strauss and Corbin (1998) in the present project, conceptual themes were formed in an inductive manner (directly from data) which facilitated the progression towards interpretation of the data. Memos of the investigator's thoughts and ideas were noted as they arose throughout the analysis process and contributed to the development of the key themes. At the conclusion of this coding process, the thematic categories allowed participants' lived experiences to be understood and represented within this thesis. Atlas.ti (Muhr, 2004) computer software was used as an organisational aid in the analysis of data.

### *4.3.2 Synthesising data*

Data from all three sources (documentary evidence, investigator observations and key informant interviews/focus groups) were then combined to understand the local experience of providing and accessing maternity care when resident at any of the four case study sites. No one data source was preferred over another and there were complementary strengths to each type of data. For example, documentary evidence often supplemented interview data with quantitative information, investigator observations could inform the question guides used in interviews and focus groups, while interview and focus group data provided rich and personal insights to the participants' lived experiences.

### *4.3.3 Within-case and cross-case analysis*

Analysis of case studies followed a process analogous to that described by Yin (1981). Initially, data from each case was analysed to provide an explanation of providing and accessing maternity services and the lived experiences of residents at the individual towns; essentially a within-case analysis. Following this, cross-case analysis was undertaken using a case comparison approach in which the fundamental characteristics of each site were compared for similarities and, where there were differences, attempts were made to identify potential reasons. In this way, an in-depth appreciation for each site was developed before comparing and contrasting the outcomes and experiences across sites.

## 4.4 Quality in case study research designs

It has been said that "without rigor, research is worthless, becomes fiction and loses its utility" (Morse et al., 2002, p. 2). However, the quest to understand social phenomena via qualitative research methods is often plagued by doubts surrounding the relative rigour of these methods when compared with quantitative research techniques (Morse et al., 2002). Strategies to establish rigour in qualitative research projects continue to be debated, yet judging quality in qualitative research remains problematic as no universal assessment criteria exist (Mays & Pope, 2000). Regardless, there is a recognised and agreed need for qualitative researchers to demonstrate the credibility of their projects (Creswell & Miller, 2000). Indeed, a number of strategies should be implemented in order to attain a more complete understanding of the influences and factors associated with a phenomena (Grbich, 1999). Validity and reliability are two terms which feature prominently in discussions about the quality and rigour of qualitative research and the strategies employed to improve these aspects in the present study are discussed below.

### *4.4.1 Validity*

Validity in qualitative research has been variously described as plausibility (Donovan & Sanders, 2005), truthfulness, authenticity (Neuman, 2006) and "how accurately the account represents participants' realities of the social phenomena and is credible to them" (Creswell & Miller, 2000, p. 124-125). Triangulation techniques are commonly associated with improving validity of qualitative research and used as validation strategies that may improve confidence in conclusions drawn from the data (Liamputtong & Ezzy, 2005; Quinn Patton, 2002). In the case study setting, Yin (1994)

describes the collection of evidence from multiple sources as having advantages for addressing "a broader range of historical, attitudinal, and behavioural issues" but especially for developing "converging lines of inquiry" whereby the various data sources contribute to a triangulation process in which one data source can corroborate information obtained from another source or by other means (p.92). Debate surrounds the use of triangulation as a means of improving validity in a research project, but there is agreement that including triangulation in a research design is likely to lead to greater reflexivity in the research and a more thorough understanding of the studied phenomenon which is also beneficial for the quality of the research project (Donovan & Sanders, 2005; Mays & Pope, 2000).

Triangulation methods incorporated in this study included:

- Data source triangulation: a range of participant groups (medical practitioners, nursing staff, parents, administration staff) were deliberately approached to allow for a more comprehensive picture of local experiences of accessing and providing local maternity services.
- Methodological triangulation: a variety of data collection methods were undertaken to ensure the completeness of findings. Data collection techniques included (a) interviewing key informants and qualitatively analysing transcripts; (b) collecting documentary evidence from a variety of places such as newspapers, archives, statistical databases; and (c) direct observations at the case study sites which were continually noted in a field diary. Rich and in-depth data were obtained through interviews and focus groups, while the additional sources of evidence were used to confirm, and in some instances served to further elucidate, responses from key informants.

Member checking (Creswell & Miller, 2000; Neuman, 2006), or respondent validation (Mays & Pope, 2000), is another practice used to enhance the validity of research projects. When feeding back their interpretation of phenomena to participants, researchers have an opportunity to assess the proximity of their understanding to the participants' perception of reality and to thus, reduce errors in the research project (Mays & Pope, 2000). There are constraints to extensive member checking as the process could be burdensome for participants, negative cases (those participants who do not conform to the emergent understanding) are likely to oppose the emergent understanding (Donovan & Sanders, 2005) and, similarly, participants are likely to object if they perceive themselves to be portrayed in a negative light (Neuman, 2006). Thus, the term "respondent validation" is somewhat misleading as such techniques

may not necessarily provide validation, but rather, produce data of its own to be analysed and reported with the results. Nevertheless, the use of respondent validation in the present study, wherever feasible, was conducted. Individual interview transcripts were sent back to participants as requested with the opportunity to request amendments or additions as deemed necessary by the participant. In focus groups and interviews, prior to the closure of each discussion, a summary of pertinent points was presented by the investigator who could then gain verbal confirmation of these points and note any final additions from participants.

Another strategy for improving validity and avoiding claims of a biased interpretation is to "include in your write-up plenty of clear examples from the data which demonstrate the context of themes etc that the researcher has identified." (Hansen, 2006, p. 151). Accordingly, many quotes and descriptions have been included in the reporting of results in this project, particularly throughout Chapters 5 and 6. In this manner, the reader is not only allowed an enhanced insight to the collected data, but also an opportunity to judge the quality of interpretation.

### *4.4.2 Reliability*

Neuman (2006) describes reliability in qualitative research as "dependability or consistency". To enhance reliability of a project, Donovan and Sanders (2005) suggest there is a need to ensure transparency of research methods. That is, the researcher provides a thorough account of the methods used in data collection and analysis for the benefit of external reviewers to judge the appropriateness of the methods used, the likely influence of these methods on the results, and the acceptability of the conclusions drawn (Mays & Pope, 2000). Therefore, this chapter contains a comprehensive account of methods used in the present study and also considers some limitations of the chosen research design.

Often, researcher triangulation, or involving multiple researchers in the data collection and analysis processes, is advantageous; especially for minimising biases that may originate with a single researcher (Kimchi, Polivka, & Stevenson, 1991; Quinn Patton, 1999). However, it is worth noting that some have questioned the value of analyst triangulation (Barbour, 2001; Hansen, 2006) and it is uncertain whether having multiple coders does indeed improve the quality of data analysis (Donovan & Sanders, 2005). Regardless, recruiting additional researchers was not feasible in the present study given the constraints associated with conducting a PhD project, particularly those

related to the funding required to employ research assistants to assist with interviewing and coding of data.

Still, it is possible that consistent interactions between the investigator and the supervisory panel may have reduced some researcher-based biases (Barbour, 2001). Thus, the present study aimed to maximise the relationship between the investigator and supervisory panel in order to minimise researcher bias. Supervisors had ongoing access to portions of data and supervisory meetings provided opportunities for the exchange of ideas regarding data analysis, emerging themes and conclusions. The student-supervisor relationship in this project operated as somewhat of a "peer debriefing" process in which supervisors may not have acted as additional researchers in the traditional sense but were able to challenge the methods used, assumptions and interpretations made by the investigator (Creswell & Miller, 2000). Issues of researcher bias are discussed further in Section 4.5.2.

### *4.4.3 Researcher reflexivity*

The interaction of the researcher with the researched in qualitative studies is largely unavoidable but can have important consequences for the data obtained and the outcomes of data analysis. In relation to validity and credibility, most qualitative researchers agree that there is a need to explicitly consider the influence of the researcher on the studied phenomenon as well as acknowledging and disclosing their personal and intellectual assumptions, beliefs and biases (Creswell & Miller, 2000; Mays & Pope, 2000). Providing such details of the researcher's background enables external reviewers to understand ways in which the researcher may potentially influence the project or how the researcher's attributes may implicitly affect the analysis, interpretations and conclusions (Donovan & Sanders, 2005). In this study, the impact of the researcher on the researched is considered and biographical details that may influence the collection, analysis and/or understanding of data are also provided in Section 1.6, Box 1.

## 4.5 Limitations of the research design

There are potential limitations to the design of this research project which may influence the interpretation of data and the conclusions drawn from the analysis. Some potential limitations include transferability and researcher bias.

### *4.5.1 Transferability of findings*

This study was designed to understand the experiences of people who provide or access maternity care at four rural north Queensland towns so interpretation of findings needed, first, to be considered within the context of these four communities, and second, how findings might relate to other contexts and/or communities given available literature/evidence. Conclusions from this project might be limited because of (i) the time period of sampling; and (ii) selectivity of interviewees, observations and documents to be included in the sample (Quinn Patton, 1999). The latter limitation is a common drawback of purposeful sampling techniques, including theoretical sampling, where cases are chosen for their potential to yield information which is relevant to the research question.

Nonetheless, the emergent concepts and themes from this study may apply to other rural towns, maternity services and even other health care services that share similar contextual characteristics. An accepted practice in qualitative inquiry is to provide detailed information on aspects of the project to allow readers to make informed judgements about the extent to which findings are "transferrable" to other similar settings (Devers, 1999; Mays & Pope, 2000). Thus, detailed descriptions of the context, methods, sampling, analysis and conclusions are provided throughout this thesis to enable readers to discern the transferability of findings to other rural towns and associated maternity care services.

### *4.5.2 Researcher bias*

Section 4.4.2 discussed the way in which a lone researcher may produce biased outcomes in a study and what measures may counteract this bias in the present project. As sources of potential biases may originate in the researcher's personal beliefs, education and life experiences a section has been included in Section 1.6, Box 1 which discloses the background of the investigator. Thus, those external to this project may discern the potential influence of the researcher on the data and findings of this project.

### *4.5.3 Different methods for collecting data from human participants*

It is possible that the differences between methods of individual interviewing and focus group discussions could have influenced the resultant data collected from human participants; for example, the presence of others or group dynamics could have potentially inhibited participants' responses. However, as discussed above (Section

4.2.5), there were a number of reasons for choosing to interview health professionals individually and parents in groups. For health professionals, the difficulty in organising focus groups of busy clinicians and managers would likely have affected the response rate in this group. Further, it was perceived that health professionals would be more comfortable and frank in discussing issues of health service performance individually to preserve anonymity and confidentiality (as it may implicate their employer, Queensland Health).

For parents, approaching pre-established groups and subsequently interviewing in a focus group format was expected to hold considerable benefits for data collection in this project. In particular, group interaction would increase the vibrancy of discussions and encourage individuals to share their experiences, expectations and thoughts for the project (Liamputtong & Ezzy, 2005).

## 4.6 Ethical considerations

### *4.6.1 Ethics approvals*

The conduct of this research was informed by the National Statement on Ethical Conduct in Human Research (National Health and Medical Research Council, Australian Research Council, & Australian Vice-Chancellors' Committee, 2007). Ethical approval for this project was obtained from James Cook University (H2264 and H2453), Townsville Health Service District (protocol number 29/06) and Cairns Base Hospital (reference number 1/60:29:06). As per directions from the HRECs of both the Townsville Health Service District and Cairns Base Hospital, written confirmation of approval was sought from the Medical Superintendent at each case study site prior to commencing data collection at the hospitals.

### *4.6.2 Anonymity and confidentiality*

In the case of interviews, it was necessary to record only the generic position title of the interviewee (for example, Medical Superintendent, midwife), as such data were not identifiable. No identifying codes were attached to raw data nor were real names transcribed from audio recordings. The same principles applied to focus groups where only the position titles of participants were noted to avoid the recording of any identifying information. It was necessary to notify focus group participants that confidentiality was encouraged but could not be assured in such a forum. This

assurance was included on the informed consent form and information sheet for participants.

To avoid participants being identified by their quotes, a fictitious name was allocated to each case study site. For many participants, knowing their position title and the town in which they worked would be sufficient to identify respondents; for example, there is usually only one Medical Superintendent or DoN and only one hospital in each town, therefore it would be relatively easy to identify such respondents. In this way, refraining from referring to towns by actual names assisted in maintaining participants' anonymity.

### *4.6.3 Participant consent*

In accordance with ethical guidelines, all participants in this project were provided with an information page which contained a brief overview of the project and outlined the specifics of their involvement as a participant. Informed consent forms were also provided and required to be signed by each participant. It was made clear to each participant that their involvement in this project was entirely voluntary and they could withdraw their participation at any time. Copies of the information sheets and consent forms can be found in Appendices 6, 7 and 8.

## 4.7 Chapter 4 summary

Chapter 4 has outlined the methods used as part of the case study approach to data collection, analysis and interpretation. The following two chapters provide details of the case study findings before going on to discuss these results in light of the policies, environment and discourse associated with rural maternity care in Queensland. The case study findings are covered over two chapters, the first providing the contextual background for each site and the second providing a discussion of the themes regarding access to, and provision of, maternity care. Chapter 5 provides a summarised background for each site to facilitate a more nuanced appreciation of the discussion of themes in Chapter 6.

# Chapter 5

# Results – Part I

> *Many a researcher would like to tell the whole story but of course cannot; the whole story exceeds anyone's knowing and anyone's telling. Even those inclined to tell all find strong the obligation to winnow and consolidate. (Stake, 2005, p. 456)*

The above quote rings true of the researcher's experience in the present study. Certainly there was temptation to report all the case study findings in detail but it became clear that this would be impossible to achieve and tiresome for the reader. So the dilemma became how best to present the story of each case study. Ultimately, a decision was made to divide the reporting of results into two sections: the present chapter contains four vignettes providing the contextual background for each case study site while Chapter 6 describes the conceptual themes which arise from the cross-case analysis. Separating results in this manner maintains a connection to the individual cases and allows the reader to absorb relevant contextual features; thereby enhancing the appreciation of thematic findings discussed in the following chapter.

Chapter 7 contemplates these themes at a higher level and then identifies links with the policy discourse.

Thus, the purpose of this chapter is to describe the present maternity service situation at each town, highlighting the unique elements and histories of each town which have influenced the distinct outcomes seen in each case study. There are a number of sections to this chapter. The first section contains a description of the study sample, reports the response rates and discusses some common features at each of the sites. The following four sections each contain a case study report that should supply sufficient contextual background material for the reader to be familiar with the pertinent issues faced by each town. A summary of the four cases concludes this chapter.

## 5.1 Study sample

In total, there were 41 interviewees across the four sites. Table 7 indicates the number, location and category of interviewees who participated in this study. Of the total number of service providers, 16 were male (39%) and 25 were female (61%). Stakeholders located at the regional centre were also interviewed and were often employed in roles that provided support for the rural maternity units. In addition, a consumer representative resident at Farmtown was identified as a key person to interview given the contribution of the consumer movement in that particular town.

Five focus groups with parents were conducted; one at each site except Mineville in which two separate focus groups were conducted. Altogether 33 parents participated in focus groups; all but one were female. All focus groups were organised through local playgroup contacts. Four groups were conducted during the organised playgroup meeting time, while the fifth was held at an alternative time at one of the mother's homes. As all parents were recruited through the playgroups, all had pre-school age children, and thus, had need to access birthing services within at least the past five years. Not all parents who participated in these groups had lived in the local area while they had need to access maternity services. However, these parents still contributed to the group discussion by providing their opinions and descriptions of their own experiences in other towns to compare and contrast with the stories of those longer term residents.

Table 7: *Number and Categories of Interviewees at Case Study Sites*

| Category | Number of interviewees | | | | | |
|---|---|---|---|---|---|---|
| | ***TOTAL*** | **Regional centre** | **Canetown** | **Dairytown** | **Farmtown** | **Mineville** |
| **Service providers** | | | | | | |
| Director of Nursing | *3* | | 1 | 1 | - | 1 |
| Nurse Unit Manager | *3* | | n/a | 1 | 1 | 1 |
| Midwife | *14* | | 4 | 1 | 3 | 6 |
| Local General Practitioner (with or without current procedural qualifications) | *13* | | 4 | 3 | 4 | 2 |
| Medical Superintendent | *3* | | n/a | 1 | 1 | 1 |
| Senior Medical Officer | *5* | | 1 | 2 | 1 | 1 |
| **Other interviewees** | | | | | | |
| Regional Coordinator, Maternity Services | *1* | | | | | |
| Midwife | *1* | | | | | |
| Nursing, Midwifery & Operations Manager | *1* | | | | | |
| Consumer representative | *1* | | - | - | 1 | - |
| **Service users** | | | | | | |
| Parents | *33* | | 9 | 7 | 6 | 11 |

The four towns shared some common features. In accordance with the inclusion criteria, each town was categorised as rural in the various rural classification systems. Of note is that census data indicated that some level of social disadvantage was present in each of the towns. A commonly-used measure of areal social inequality in Australia is the Socio-Economic Indexes for Areas (SEIFA) classification which summarises a number of variables associated with disadvantage (Trewin, 2004). This study has used one SEIFA measure, the Index of Relative Socio-Economic

Disadvantage (IRSD), which combines variables that reflect, rather than measure specific aspects of, social disadvantage. Low IRSD scores indicate areas of relative disadvantage: "Low scores on the index occur when the area has many low-income families and people with little training who are unemployed or in unskilled occupations. It is important to understand that a high score reflects lack of disadvantage rather than advantage or high advantage" (Upham & Cowling, 2006, p. 8). A report titled *A Scan of Disadvantage in Queensland* (Upham & Cowling, 2006) used 2001 Australian Bureau of Statistics (ABS) Census of Population and Housing data to calculate the IRSD values reported here. Selected socio-economic, demographic and hospital details for each town are provided in Table 8 for quick reference and ease of comparison between sites. Where appropriate, Australian averages have been provided for comparative purposes. The proportion of each community's population identifying as Indigenous Australians is higher than in Australia as a whole. It was not the intention of this study to look at specific sub-groups of the rural population.

### *5.1.1 Levels of care*

The level of maternity care at the sites was typically classified as low-risk, as indicated by the risk assessment tools published by the Australian College of Midwives (ACM, 2004b) or in the *Primary Care Clinical Manual* (Queensland Health & Royal Flying Doctor Service, 2007, see Appendices 3 and 4). However, there was not always universal agreement within some towns, as some interviewees described the local service as low-risk while others estimated low- to medium-risk. In any case, it appeared that in addition to risk scoring tools, some level of clinical judgement also contributed to advice provided to expectant mothers about where to seek care during the antenatal period. Cases of higher risk, or which staff felt would benefit from a higher level of care were referred to the regional hospital. Women who are booked in for birthing at the regional hospital are advised to relocate there some weeks prior to the anticipated due date. It is generally expected that women will organise travel and find accommodation at the regional centre for that period of time.

> *The woman journeys to the receiving obstetrics facility at 36 weeks and attends antenatal clinic weekly until delivery.* - (Queensland Health & Royal Flying Doctor Service, 2007, p. 329)

> *They have to travel to [the regional centre] to birth. They are meant to . . . at 36, 38 weeks but hardly anyone does - simply because we're not providing them with accommodation. And you know, their families,*

*they've got schoolchildren, husbands working shift work and it's just not practical and it's expensive.* - #13 (midwife, Canetown)

Table 8. *Summary Background Data for Case Study Sites*

| | Dairytown | Mineville | Canetown | Farmtown | Australia |
|---|---|---|---|---|---|
| **Approximate population (by statistical local area[26])** | 12,000 | 8,000 | 12,000 | 19,000 | 20,701,488 |
| **Indigenous population (% of whole population)** | 5.9% | 10.4% | 6.5% | 12.6% | 2.4% |
| **Median population age** | 41 | 36 | 43 | 40 | 37 |
| **IRSD score** | 983.92 | 960.27 | 976.61 | 950.47 | 999 |
| **Rural categorisation[27] RRMA** | 5 | 5 | 5 | 5 | |
| **ARIA** | 3.87 | 4.55 | 4.3 | 3.6 | |
| **ASGC** | 3.7 | 4.49 | 5.38 | 3.43 | |
| **Hospital size** | 60 beds (+ 8 for dialysis) | 25 beds | 28-30 beds | 56 beds | |
| **Distance to regional (referral) hospital** | 110km | 135km | 110km | 70km | |

## *5.1.2 Providers of maternity care*

Local hospitals could provide almost the whole spectrum of maternity care for low-risk patients. However none of the sites which offered intrapartum care also offered antenatal ultrasound services. As such, women from Dairytown, Mineville, and Farmtown must travel to the regional hospital for these scans. Ironically, Canetown (where no intrapartum care is offered) is the only site where a fortnightly outreach ultrasound clinic was run for local women to attend.

[26] ***Statistical local areas (SLAs)*** are spatial units "based on the administrative areas of local government where these exist. Where there is no incorporated body of local government, SLAs are defined to cover the unincorporated areas." (Australian Institute of Health and Welfare, 2004, p. viii)

[27] RRMA, ARIA and ASGC rural and remote classifications are explained further in Appendix 1.

The local hospitals at Dairytown and Mineville provided maternity care in a medical obstetric model in which midwives and senior medical officers (SMOs) provide care in a team-like approach. At Farmtown, the maternity unit was staffed wholly by midwives, while the Canetown maternity unit offered antenatal and postnatal care provided by midwives and SMOs. At each site, shared care between the local and regional hospitals could be organised for women who should birth at the regional hospital but would prefer to access local care where possible. Similarly, women may share care between their local general practitioner (GP) and the hospital (either local or regional). Alternatively, women may access all their care through a specialist obstetrician, though this was only available at the regional centres. So it is that women have some choice in their maternity care provider, but this choice can be restricted according to the financial means of the family in being able to (a) obtain private care from specialists or local GPs and (b) travel as required to the regional centre.

## 5.2 Dairytown: A traditional service

> *The maternity service here in [Dairytown] is a shared care model - shared between midwives and doctors. . . . We have shared care between midwifery and medicine - so that's true teamwork. In addition we have shared care with general practice and the hospital so that some GPs can do the majority of the antenatal care and then they [patients] come into the hospital to see the midwife or the doctor. -* #32 (Medical Superintendent, Dairytown)

Dairytown exemplifies what is possible when a service has the benefit of proactive leadership and the support of the community. Consistent political pressure, active campaigning for innovative workforce policies and effective community action have all contributed to ensuring the continuance of a local maternity service at Dairytown. This case study provides a short introduction to the community of Dairytown and an account of the local health services, especially maternity care services.

### *5.2.1 The town of Dairytown*

Dairytown is a RRMA 4 settlement where agriculture is the dominant industry. Naturally fertile soils are conducive to growing the many varied fruit and vegetable crops seen throughout the area while dairy and cattle farming also feature prominently. The Dairytown statistical local area (SLA) is home to approximately 12,000 people, of

which 5.9% are Indigenous Australians[28] (Australian Bureau of Statistics, 2008). The age profile appears slightly older than the national average with higher proportions of the Dairytown population falling into age groups of 55 years and older and a mean age of 41 compared to the national average of 37 years (Australian Bureau of Statistics, 2006). The number of births[29] per year has remained somewhat consistent over the previous 10 years, hovering between 130-150 births per year (Figure 10).

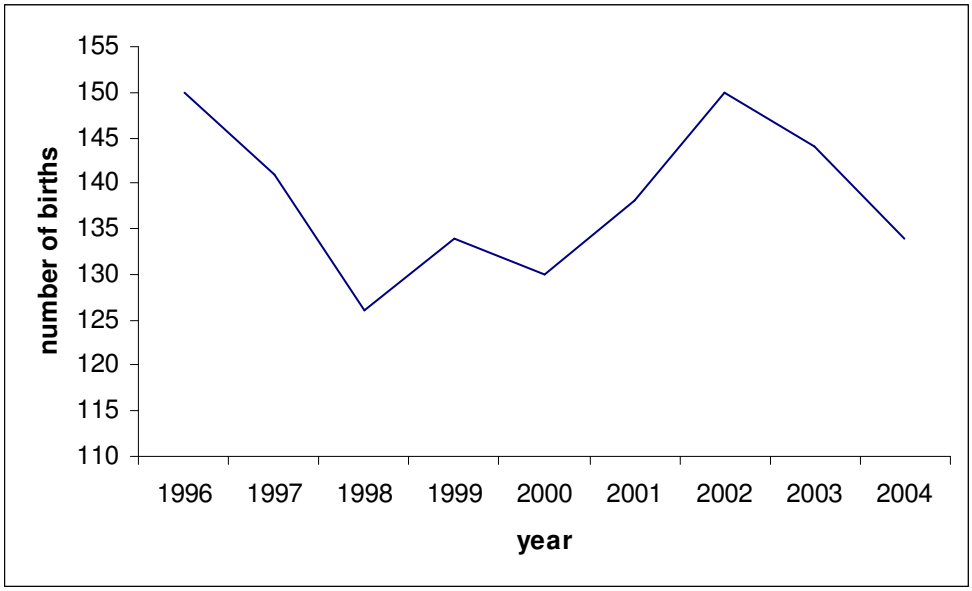


*Figure 10.* Births in Dairytown, 1996-2004
(Australian Bureau of Statistics, 1998, 1999a, 1999b, 2000, 2001, 2002, 2004a, 2004b).

Dairytown is served by a local hospital with a 60 bed capacity (plus eight beds for renal dialysis). The SMOs at the hospital are all vocationally recognised as rural GPs and the Dairytown hospital is a recognised centre for training both undergraduate medical students and postgraduate practitioners, particularly those interested in obtaining rural procedural skills.

[28] Throughout this chapter, population of Indigenous Australians is reported from the 2006 Census which defines Indigenous Australians being from Aboriginal or Torres Strait Islander descent or both.
[29] Number of births refers to the number of live births categorised according to mother's usual place of residence, regardless of where the birth occurred.

### *5.2.2 Maternity care services in Dairytown*

The model of maternity care seen at Dairytown Hospital is perhaps best described as a "shared care" model. That is, maternity care within the hospital is cooperatively provided by a medical and midwifery team with options to seek shared care with local GPs who also have admitting rights at the hospital. Dairytown Hospital currently operates a 6 bed maternity unit, considerably smaller than the 20-bed unit operating in 1980. The gradual but consistent downsizing of the maternity unit has occurred despite relative stability in number of births per year (Figure 10). Dairytown Hospital boasts quite comprehensive maternity care services, providing the majority of antenatal, birthing and postnatal care for pregnant women who are assessed as being low- to medium-risk. Higher risk pregnancies are managed by the regional hospital, 110km away from Dairytown. Ultrasounds usually require travel to the regional hospital. A private radiology firm also operates in Dairytown and offers a local ultrasound service though it was unclear from the data how this service connected with the public system and whether the cost of these private services were prohibitive for some Dairytown families.

When emergencies or complications arise during labour at Dairytown Hospital, road transfers or air retrievals can be organised to move the labouring woman and neonate to specialist care at the regional hospital. Yet transfers and retrievals are fraught with risks of their own, including dangers associated with delivery occurring, or urgent complications arising, en route. Women travelling from Dairytown to the referral centre encounter difficult terrain, and frequent rainy weather makes road travel problematic and transfers by air near impossible due to associated thick cloud cover. If it is not safe for a woman to be transferred (for example, the woman is in advanced labour or her condition is not stable) the emergency situation can be managed locally at the hospital where there is the capability to do caesarean sections if required. Specialist support at the regional hospital is available by phone at any time. "Bed block"[30] at the regional hospital (and even the next nearest regional hospital) can also prevent timely maternity patient transfers.

[30] ***"Bed block"*** refers to the difficulty in organising a patient transfer to the regional hospital due to high rates of bed occupation there.

*Good medical workforce retention*

Innovative staffing policies at the hospital are a characteristic of the Dairytown case. In addition to the Medical Superintendent, the hospital employs four SMOs and four principal house officers. For example, job-sharing was an option for Dairytown SMOs, despite the fact that this was not normally an option for Queensland Health hospital medical staff. Several Dairytown Hospital SMOs have taken up the opportunity to job-share, and have found it beneficial not only for their lifestyle and family commitments, but also to the longevity of their career.

> *Yeah and the fact that we've been able to job-share . . . I mean I wouldn't be here - I wouldn't be working in the hospital if I wasn't able to job-share because a full-time SMO position is just deadly to a family . . . . I probably would have stayed in private practice I guess if this job-sharing hadn't been an option. Or we may have moved somewhere else I guess. . . .* - #31 (SMO, Dairytown)

Job-sharing also has benefits for the hospital with content employees and increased retention rates.

It must also be said that the actions of the Dairytown Medical Superintendent had played an important role in maintaining the level and breadth of health care services at the local hospital. Interviewing the Medical Superintendent revealed the importance he placed on ensuring stable procedural staff to sustain the local maternity service, and a range of other hospital-based health services. His encouragement of flexible work policies had facilitated the retention of the workforce necessary to support this level of service provision at the hospital. The Medical Superintendent was particularly keen to ensure the Dairytown Hospital did not lose its capacity for acute care and then become predominantly an aged care facility:

> *Retention strategies are really important. So if you have somebody who says they're going to leave because they're tired and they're sick of this job and they can't see any way forward, the old attitude in Queensland Health would have been 'well, ok, see you later. Have a good retirement.' [or] 'I'm very sorry to hear that but there's nothing I can do about it.' Whereas what we tend to do here is try to resolve the problems. And some of them are stupid decisions by management about not giving people entitlements. So, I have a reputation for making sure that people get that. . . .* - #32 (Medical Superintendent, Dairytown)

Hospital staff also report that, in the aftermath of the *Queensland Health Systems Review* (Forster, 2005) *a*nd with some "considerable persuasion", four additional

registrar positions were granted to Dairytown Hospital by Queensland Health in 2006. This has led to a decrease in the on-call burden experienced by medical staff and allowed more time for staff to be involved in teaching and supervision activities.

While the current staffing level appears comparatively strong, an historical comparison of the service shows that the nature of the local workforce has changed significantly. The loss of practicing obstetric and anaesthetic proceduralists was commonly identified by SMOs and local GPs as the greatest change they had seen over the years in local maternity care. Publications from Dairytown indicate the relative wealth of procedural skills previously seen in Dairytown. During the 1980s there were at least 17 medical practitioners who were able to provide obstetric services and most of these were also able to undertake anaesthetic procedures. Today, there are two local GPs who provide obstetric services and approximately 2 full-time equivalent (FTE) proceduralists at the hospital (although this number is reported to be in constant flux). Although there has been an ebb and flow in the numbers of junior doctors (not all of whom have procedural skills), Dairytown has been fortunate in retaining a skilled quorum of SMOs. Within this group is the expertise to provide medical input to maternity care, including the capacity for caesarean sections to be performed locally. Furthermore, the hospital enjoys a good relationship with the private GP proceduralists in Dairytown who have admitting rights to the hospital, and have also actively supported the service by providing on-call support for two weekends in each month to relieve the hospital's obstetric proceduralists.

*Midwife shortage*

A slightly different situation exists for the Dairytown Hospital midwifery roster. Currently, the maternity unit comprises 9-10 FTE midwives, most of whom can also expect to be deployed around the hospital as required.

> *That the staff have the appropriate skills to work in a rural facility. We're not a tertiary hospital with obstetricians on tap, we don't have five midwives working in other parts of the hospital that we can pull in if we want to. So it's looking at how can we work in the context that we're in. . . . the majority of them are generalists. . . . my expectation of my staff is that they are multi-skilled. They have to be, because again I can't lock them away in the maternity unit. If the maternity unit's got no patients and there's two midwives down there and my surgical ward is bumping off the walls and they've got someone off sick, I have to be able to redeploy a staff member to ensure that the staffing in the*

> *surgical ward is safe, or wherever it happens to be.* – #25 (DoN, Dairytown)

Valuable midwifery staff were lost during a complex relocation of the maternity unit (discussed in more detail in Section 5.2.3) and vacancies (at least two) have been difficult to fill. The Director of Nursing (DoN) explained that there was a high dependence on the existing core group of midwives, and if recruitment difficulties continue, the increasing age and attrition of midwives will place the future of the maternity unit in considerable doubt.

*Good outcomes*

Overall, the data for the maternity unit at Dairytown indicate that, together, the practitioners provide a safe service with good outcomes. Accurate data relating to births at the Dairytown Hospital were first available in 1981 and this process of data collection laid a good foundation for the practice of auditing at the local maternity unit. The auditing process continues to this day and provides important statistical information, and allows staff to identify and discuss any critical events. Moreover, the process serves to bolster the morale of hard-working staff at the maternity unit who are assured of the good and safe service being provided by their rural maternity unit.

> *It gets down to interested doctors and midwives and that just means maintaining the morale of that service so that they feel like they're doing a good job and we've done that by - we've audited our figures every year over the last 20-25 years and we know that the service we provide is of high quality and that the outcomes are as good as anywhere else in the country. And that knowledge that you're providing a good and worthwhile service keeps people going.* - #28 (local GP, Dairytown)

While the Dairytown-developed auditing process and database is of great local importance, its value is further evident in the fact that it has been exported to other small rural hospitals in Queensland. Still, medical staff expressed some disappointment in the lack of support from Queensland Health and the difficulty they experienced in securing relatively little financial support to maintain this database.

### *5.2.3 The Dairytown maternity unit under threat*

Of note is the tenacity and organisation of the Dairytown community, ably led by the local medical practitioners, in defending their local maternity service. Events from late 2002 provide a good example of the local response to the threat of maternity unit downgrading. The maternity ward was relocated from a purpose-built building and integrated within the surgical ward, with the loss of hospital beds and a less appropriate space for maternity patients. Lead paint in the old wards was the official reason provided for moving the ward though several interviewees identified the motivation lying in the District Manager's concern regarding spending over the annual budget and pursuing costs savings. The old maternity unit building was well liked by many in the community and described as:

> *Our Maternity Ward . . . has 2 labour wards with adjoining shower and toilet allowing for privacy. There is an excellent birthing suite, which was sponsored by the women of our community. Although old, the building is sound and has a homely and non-institutional atmosphere enjoyed by mothers and staff alike. There is a private and attractive courtyard for mothers and families. All this has been lost.* – (#46, personal communication, January 20, 2003)

Although district management proposed the move was only a temporary measure while necessary restorations were made to the old ward, there was concern that the move of the maternity ward was actually meant to be permanent. A campaign was mounted by the local GP proceduralists[31] to ensure that higher levels of management at Queensland Health were aware of their concerns about the safety of the maternity unit relocation. Faced with stonewalling, the Dairytown practitioners mobilised local residents with relative ease and engaged them in a letter-writing campaign to the Queensland Premier.

> *We'd already been writing to the Minister and the Premier etcetera, to let him know that this was not good, and getting nowhere. So at that point the public got interested: public meetings started to be called. From our doctors' surgery we actually handed out a fact sheet. Every patient that came in got one of those and we requested them to write to the Premier expressing their concern. . . . At the same time it hit the media. The local press, ABC, we were doing interviews all over the*

[31] The private GP proceduralists were not bound by the Queensland Health code of conduct that prohibits employees from publicly discussing such issues.

> *place. I don't know how many letters the Premier got, only his department would know, but I bet they've never had so many. And they came from everybody - little old ladies - and that was really quite amazing. And within 2 weeks boom (fingers click) there it was - suddenly there it was: you've got a million dollars to fix your hospital. This was after saying 'no, we're not going to do a thing.'* - #46 (local GP, Dairytown)

When the practitioners sensed that Queensland Health may renege on a negotiated plan for the maternity unit, they went back to the Dairytown community. Again, local residents provided considerable support in a renewed campaign to alert the government to their concerns about health care services in Dairytown.

In the end, these events saw a net downgrading of the maternity unit, but other concessions were won for other hospital units during negotiations. Midwives were the other casualties in this story as these events reportedly triggered the resignations of some long-serving midwives and reduced the morale of the remaining nursing staff. As explained above, recruiting midwives has been problematic and the loss of these experienced midwives has not yet been overcome by ongoing recruitment attempts. Nevertheless, without the assistance of Dairytown locals, practitioners were convinced that outcomes would have been less favourable and the future of the maternity unit would have been under threat.

> *Community action is a powerful one, hey? . . . . Seeing that their service was at risk . . . being alarmed by the fact that they'd closed the old maternity unit, against advice. And the community took action. . . . they took political action. . . . They were regularly involved and consulted because we had a series of threats . . . . And we got new facilities and we got additional capital works money. . . . The community took action. . . . I mean, this was political action - literally going to the Premier and telling the Premier that you'd better do something about this. . . . The reaction of the community, in this community, to a threat to their maternity service was huge. So I think that's probably the most important thing we've got - apart from a critical mass of good clinicians . . . .* – #32 (Medical Superintendent, Dairytown)

## 5.3 Mineville: An inconsistent service

> *We are very much governed by the Clinical Services Capability Framework as to what we can do. We can only deliver low-risk women and we have to have a credentialed doctor on site, we have to be able to do an emergency caesar in order to continue that service. Things that make continuing that service difficult are things like where midwives are becoming more and more scarce; we don't have enough midwives to roster one on every shift so we have an on-call system - so we call them in and they manage delivery or whatever.* - #8 (NUM, Mineville)

The Mineville experience illustrates many of the contemporary difficulties associated with providing health services in rural Australia. A public maternity service continues to operate at the local hospital facility, but is heavily reliant on having sufficient midwives and procedural SMOs in an environment of recruitment and retention difficulties in the health workforce. Further, the ageing of the current group of long-serving midwives threatens the long-term sustainability of this service. This case study briefly describes Mineville and some contextual background before summarising maternity care options for Mineville residents and presenting a view to the future for the local maternity service.

### *5.3.1 The town of Mineville*

Mineville is an inland town, initially founded as a mining centre in the late 19$^{th}$ century. During its most prosperous times, the population of Mineville reached 25,000. However, the First World War and the increasing economic inefficiency of mining in the area caused the decline and eventual cessation of mining activity during the early 20$^{th}$ century, followed by a significant reduction in the local population. Many of the old Victorian buildings erected during those flourishing times remain in the main area of the town, serving as a reminder of the past wealth found there and now appreciated by tourists passing through.

Today, Mineville is home to approximately 8,000 residents, 10.9% of whom identify as Indigenous Australians and 6% born overseas (Australian Bureau of Statistics, 2008). The Mineville SLA covers 42km$^2$, and the whole population resides in areas classified as "outer regional" in the Australian Standard Geographical Classification (ASGC) system (Australian Bureau of Statistics, 2006). The number of births per year in Mineville has been in decline for several years now (Figure 11). Statistics published by

the ABS reveal that the number of births per year was 46% less in 2004 than it was only eight years prior in 1996.

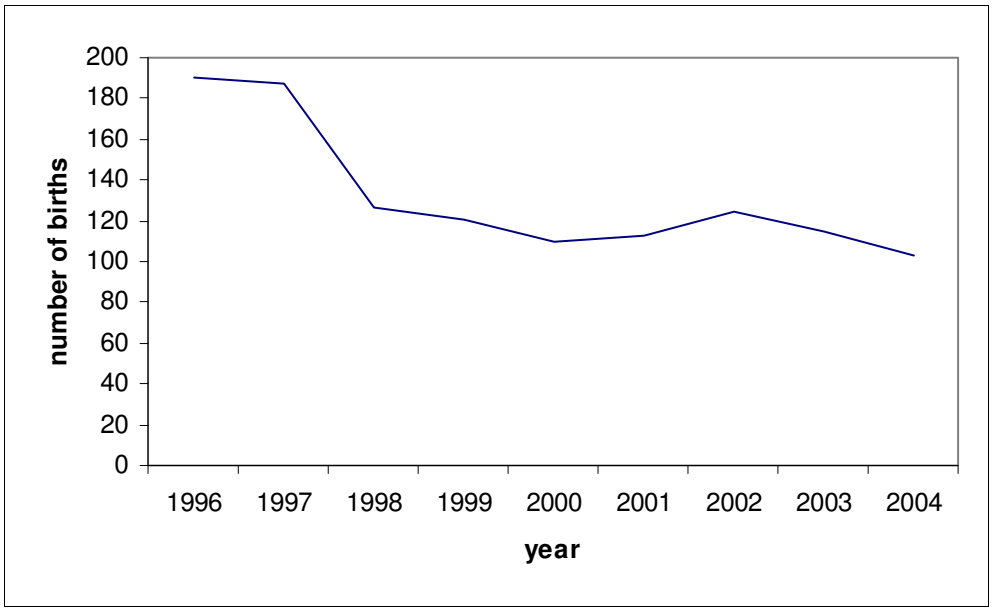


*Figure 11.* Births in Mineville, 1996-2004
(Australian Bureau of Statistics, 1998, 1999a, 1999b, 2000, 2001, 2002, 2004a, 2004b).

*Health services in Mineville*

Mineville is serviced by one hospital-like facility, formally titled a "health centre", with a 25 bed capacity[32]. This hospital employs three SMOs and, although management has had great difficulty in recruiting and retaining a consistent and reliable medical roster, the same group of three proceduralists have been retained for the past three years. Amongst them, the SMOs possess a range of procedural skills ideal for providing an obstetric service: one is credentialed to do procedural obstetrics, another to do anaesthetics and another is qualified to do both obstetrics and anaesthetics. Many interviewees acknowledged that the stability of having the same three procedurally-trained SMOs, with a favourable skill mix, has allowed greater consistency in maternity care at the hospital. Some outreach specialists visit the Mineville Hospital but access to specialist services mostly occurs at the referral hospital, a tertiary facility located approximately 135km away. The health service district to which Mineville belongs is largely managed out of this referral centre.

[32] However, for the purposes of this thesis, this facility is considered a hospital and will continue to be referred to as such throughout this thesis.

Apart from the hospital, the town is served by two private GP practices. Only one of these practices provides any significant amount of antenatal and/or postnatal care. A local shortage of GPs was noted and substantiated by the comments of some mothers who described their difficulty in obtaining a timely GP appointment for antenatal care. GPs indicated that they had experienced difficulties in recruiting new GPs to alleviate this problem.

- *And the problem with the GP is that you can never get in there either.*
- *No, we've got so few GPs. [Local GP] takes 5 weeks to get into. . . .*
- *[local GP] is 3 weeks [to get into].*
- *And their locum's a week or two [wait to get into] which is someone who can't speak English who doesn't know any of your history and . . .* –Parents group C (Mineville)

## *5.3.2 The present and future of the Mineville maternity service*

The Mineville Hospital provides a low-medium risk maternity service and averages 70-90 births per year. Antenatal clinics and educational classes are provided free at the local hospital, as is postnatal care. Women who deliver at Mineville Hospital are visited by the child health nurse prior to discharge to inform them of the services that are provided postnatally at the hospital.

*Risk management policies*

Interviews with hospital staff in management positions indicated that risk management protocols and policies introduced by Queensland Health had a constraining effect on the services offered by the hospital, including in maternity care. Although an argument is made that tools and policies will make health services safer it also serves to potentially change the behaviour of service providers or encourage continual downgrading of services.

> *I think the thing that has made the biggest impact is the fact that yeah our services have reduced and we've now become a Level 1*[33] *so when we have to look at the level nursery - because that's the only service we can provide - so anybody and anything else just goes out [to the referral hospital] regardless.* - #10 (midwife, Mineville)

[33] Level 1 service as indicated in the *Clinical Services Capability Framework* (CSCF) (Queensland Health, 2004a).

*Inconsistent service*

Inconsistency in service provision was one of the most distinguishing features of the Mineville maternity service. Unreliable staffing of SMO positions (prior to the three current SMOs) was the cause of this inconsistency. Ultimately, irregularity of service provision had a destabilising influence on both the maternity service itself and community expectations of the service. Problematic recruitment and retention of procedural SMOs often meant that vacancies would remain for some months during which the hospital was unable to provide procedural care, including birthing services. The pattern of SMO resignations became so predictable that many of the midwives and GPs came to routinely expect the service to cease at the end of each year and would prepare maternity patients to deliver at the regional hospital.

> *Now if you become pregnant in the first three months of the year then the entire pregnancy is encompassed within that calendar year. Once you go over December 31st you're then delivering in the next year. Now prior to the three doctors [SMOs] we have here, Christmas time was when doctors moved, so if somebody comes in you know in June/July saying they're pregnant and 'where should I deliver?' the answer is 'well, currently [Mineville Hospital] is able to deliver you but come Christmas time we don't know who will be available next year therefore we can't tell you whether the service will be available next year or not.'* - #41 (local GPs, Mineville)

> *. . . but every time one [SMO] leaves we can go for three or four months - minimum - of part-timers: doctors that will come for a week, two weeks at a time, [with] no [procedural] qualification.* – #10 (midwife, Mineville)

Retention of the current three SMOs has avoided major disruptions to the maternity service over the past three years, although the dependence of the maternity service on the availability of medical staff is still observed. Temporary loss of staff (for example, if SMOs are on holiday or away accessing medical training) has a crippling effect, causing the birthing service to close and requiring local women to be sent to the regional hospital for birthing.

Years of inconsistent service appear to have had a lingering effect in the collective community memory. The unreliability of the maternity service affects community perceptions and patronage of the hospital birthing service. Local mothers explained how service inconsistencies affect their decisions regarding where to birth:

- *I think that's the main problem here is that it's inconsistent. Like one minute a [birthing] service is available and the next minute it's not. . . .*
- *Yeah, I went up to the hospital two days before I was due thinking I could have my baby here and they were closed. So I had to go to [the regional hospital]. . . .*
- *One month you can have your baby, the next month you can't, depending on who's here and what's available. . . .*
- *It just makes me say well, I'll just go into [the regional centre].*
- *You've just got to do what you've got to do.* – Parents group A (Mineville)

*Ageing midwives*

The maternity service is equally reliant on the hospital midwifery staff. The current group of midwives are highly skilled with many years of experience and manage the bulk of deliveries, although always with the knowledge that medical back-up is at hand.

> *And the midwives do do the deliveries here. The medical staff are called in and they are present during the delivery if there is problems but the midwife is involved in going through the labour with the woman. They actually do the delivering and the doctor is there to assist if there becomes a problem . . .* - #4 (DoN, Mineville)

The midwives, with their greater scope of practice, play an important role in providing routine maternity care at the hospital but the short staffing of the midwifery roster is problematic. At the time of interviews, there were eight midwives who together filled 6 FTE positions. Hospital management had endeavoured to recruit more midwives, but with no success. Interviews highlighted that the hospital was not only contending with the usual difficulty of attracting nurses to rural areas but recruiting midwives in a time of apparent shortage.

Shortage of local midwives has resulted in considerable on-call responsibilities for the small group who remain. The *Clinical Services Capability Framework* (Queensland Health, 2004a) requires that a Level 1 maternity service has 24 hour on-call midwife coverage. The small group of midwives demonstrate considerable commitment to the local service by accepting greater on-call responsibilities to ensure this coverage. The crucial role played by the midwives in maintaining the birthing service was understood by the midwives themselves and those in management positions at the hospital:

> *Only because we will work the call. . . . If we wouldn't work call they couldn't have a service here.* - #3 (midwives, Mineville)
>
> *The service exists now out of the goodwill of our midwives. They do call, they do call on their days off now. If I was to lose 2 more midwives then our ability to continue a maternity service is in jeopardy, big time.* – #8 (NUM, Mineville)

Nonetheless, the collective ageing of the current group of midwives makes the present situation untenable. With only one midwife under 50 years of age, many in this group are considering retirement in the coming years. Many of the midwives reported an increasing reluctance to take on the additional on-call responsibilities that interfere with lifestyle as they get older.

> *. . . that [ageing] will hasten the resignations or whatever, because people cannot work those hours and you know I think when you start to get a bit older too you realise that really, you're passionate about your work when you're younger - and you still are when you're older - but you realise that, you know, there's life after Queensland Health, all due respect.* – #9 (midwife, Mineville)

As such, the maternity service in Mineville was often described as being on a knife edge: being unable to recruit midwives, the loss of just one midwife would put the local birthing service in jeopardy. Indeed a snowball effect is likely as when one midwife leaves the service, the on-call responsibilities will increase for those that remain and likely hasten the resignation or retirement plans of the remaining midwives.

## 5.4 Canetown: A service lost

> *. . . we lost an anaesthetist and an obstetrician in the same year and it was quite sad because your service - just bang - closes like that, you know. So you lose your midwives . . .* - #13 (midwife, Canetown)

Despite a long tradition of providing comprehensive local maternity care, Canetown has now lost its birthing service. This case study provides a brief contextual background to Canetown before reporting on how services were lost and what options are currently available to pregnant women in the area. Consideration is given to the community response to the loss of birthing services as well as the disparate stakeholder views regarding the re-starting of local birthing care in the future.

### *5.4.1 The town of Canetown*

Canetown and district has a combined population of approximately 12,000 and 6.5% identifies as Indigenous Australians (8.8% in Canetown, Australian Bureau of Statistics, 2008). Crop growing dominates the district economy, particularly sugar cane. Overall, the Canetown district population appears to be ageing with a median age of 43 years, some five years older than the Australian average. In addition, the number of births per year for the Canetown district has been slowly falling since 1996 (Figure 12).

The main township of Canetown contains two private general practice clinics and a 30-bed hospital which is visited by various, regionally-based, medical specialists. The two GP clinics offer antenatal and postnatal care but there is no birthing in Canetown. The closest option for birthing and specialist care is located at a regional centre 110km away.

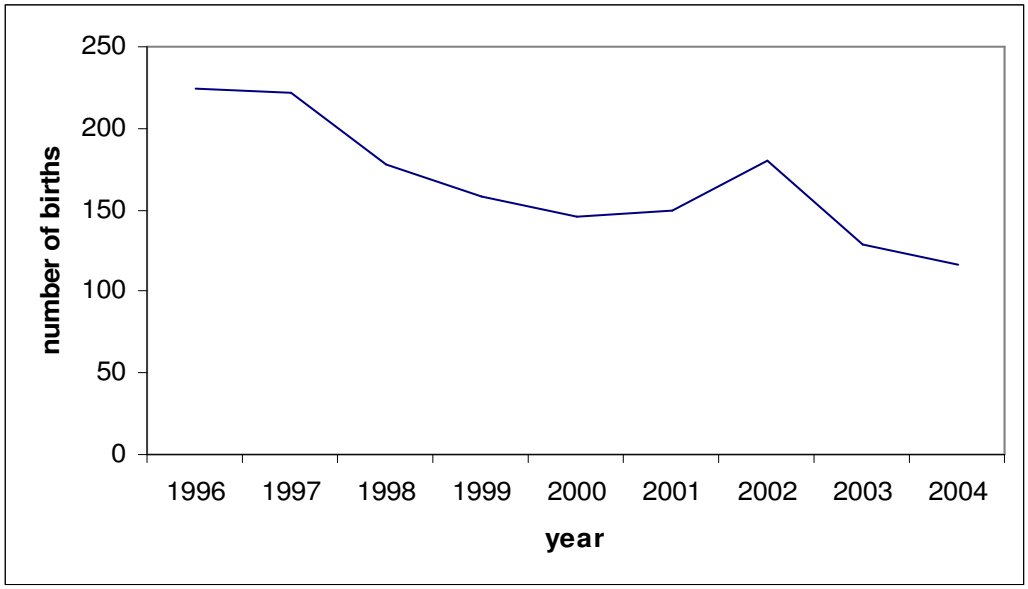


*Figure 12.* Births in Canetown, 1996 – 2004
(Australian Bureau of Statistics, 1998, 1999a, 1999b, 2000, 2001, 2002, 2004a, 2004b).

### *5.4.2 The loss of birthing services in Canetown*

Although now closed, local birthing services had a long history in Canetown. In the past, there were several local GP proceduralists providing comprehensive public and private care and it was considered unusual for women to have to travel away for any maternity care.

> *We used to cover most obstetrics here; all operative obstetrics, caesarean sections, forceps deliveries, all that sort of stuff. When I first arrived they used to have some well qualified doctors here at the hospital who used to provide the public service. We used to provide the private service and there was probably, when I first arrived, probably four or five doctors in the town who provided private obstetric services. . . . Yes, pretty comprehensive service that we provided and, in fact, the attitude of people in the town at the time was that if you had to go to [the referral hospital] to have your baby you were considered as something very peculiar. There was this attitude that when you have babies, you have them in [Canetown].* - #38 (local GP, Canetown)

*Dwindling workforce*

Nonetheless, like many other rural Australian towns, workforce shortages became a key issue in Canetown. There had been a regular waxing and waning of the local proceduralist population over the years, but the last 5-10 years had seen a marked decline. Indeed, just prior to closing, the Canetown birthing service was operating with minimal medical staff and there were ongoing concerns for the future of the diminishing local midwifery workforce. Departing midwives were not easily replaced, if they were at all.

> *[The birthing unit] was functional but in the last few years there was a period of six months where I was the only one doing it. There were periods where there was maybe only two. There were periods where there was only, and for the last few years, only one doctor practicing anaesthetics, so if you needed anaesthetic support for a theatre case like the removal of a placenta postpartum or a caesarean section then you were relying on that individual being available, all the time.* – #37 (local GP, Canetown)

> *We were running out of midwives anyway so it was probably going to be inevitable from that point of view. So if we hadn't run into the shortage of doctor manpower we would have shortly run into problems with the midwifery manpower.* - #39 (local GP, Canetown)

Despite the minimal medical staffing and decreasing midwife numbers, the Canetown unit managed to continue a comprehensive range of mostly low-risk maternity services. It appeared that the remaining GP proceduralists were particularly reluctant to see the birthing service close on their 'watch'.

> *[Canetown] has, as far as I know, been delivering babies for over 100 years. No one wanted to be the last guy responsible. I think that we'd been very lucky to have some extremely competent hospital doctors for quite some time. They're almost non-existent within state health today.* - #39 (local GP, Canetown)

*Neonatal death*

Ultimately, a neonatal death in 2004 at the Canetown Hospital appeared to trigger the cessation of local birthing.

> *. . . the final nail in the coffin here was . . . a neonatal death.* – #38 (local GP, Canetown)

The fallout of this incident saw the last remaining proceduralists withdraw from practice and so intrapartum care in Canetown ceased. Since early 2005, all births, regardless of risk level, have been referred to the regional hospital. Further, the event appeared to spark discord amongst the local GPs who split and formed two separate practices.

> *After the incident they [local GPs] separated. There's now two clinics and they won't talk to each other.* - #36 (midwife, Canetown)

Holding the Coronial Inquest[34] within Canetown must also have accentuated the impact of the neonatal death on the psyche of the small community.

> *I mean, that happens in cities everyday [neonatal deaths] but when it happens in a small town that's different, isn't it? It becomes a big issue. . . . and normally Coroner's Inquests are held in [the referral centre], for some reason this one was held in [Canetown] and the press were in every day so it was in the paper all the time. And it's very emotional when a baby dies. . . . but the outcome of the court thing was that there was no blame to happen. The [neonatolgist] from [the referral hospital] just said that wherever that baby was born the outcome was going to be the same.* - #13 (midwife, Canetown)

[34] Coroners are responsible for investigating the causes of "reportable deaths", for example, when death is not a reasonable outcome of a health procedure. "Coroners investigate the circumstances of a death with the aim of preventing similar deaths occurring in the future. These investigations do not focus on laying blame or assigning liability for the death" (Queensland Courts, 2007, para. 3).

*The community response*

Data collected at Canetown indicated there were one or two local health professionals who attempted to agitate some community action in order to avert the cessation of local birthing. However, the community apparently accepted the cessation of local birthing as inevitable, particularly after a pattern of other local service closures. Many health professionals felt that the community's tolerance for the closure of their birthing service was part of a "conditioned response" and a further indication that Canetown residents had "lost hope". Ultimately, the health professionals were unable to overcome this sense of local despair.

> *But it's funny because in [Canetown] . . . I feel like people have lost all hope. . . . Mainly because they just feel like they're beating their head against a brick wall. . . . There might have been a little bit of outcry then; now it's just 'this is the way things are' and it's a very pessimistic view that it's never going to change.* - #15 (midwife, Canetown)

> *We've tried to initiate this [community involvement] before. I've been to all the service clubs and tried to encourage people to be involved but . . . . Well, people are getting older here as well and it's just - I don't know - I guess it is too hard. People aren't organised anymore in terms of being activists in their community as often now. And I think rural people are demoralised in many aspects of their lives. . . . They absolutely expect that [service closures] - this is a conditioned response.* – #37 (local GP, Canetown)

> *There's a small group of people who bitch about things all the time and I guess they drove it for a little while - you know, went to council and they went to Q Health. But no, I don't think they're really proactive as a community. I don't think they're in there fighting all the time for various issues.* – #38 (local GP, Canetown)

Furthermore, there appeared to be some disconnect between local health services and the community that would suggest a low level of community interest. One GP explained that local residents were rather oblivious to the evolution that had occurred within the local health services.

> *Now we have periods where we can't have an x-ray here. You know, people are just really unaware of what really is evolving, what's been evolving for the last 10, 20 years.* – #37 (local GP, Canetown)

*Effect on wider maternity service*

The closure of the local birthing service appeared to precipitate a collapse in the whole maternity service. The numbers of local women seeking care, particularly antenatally, at the Canetown hospital dropped significantly after the birthing service ceased. This was perhaps due to a misconception that the entire maternity service had closed, not just the birthing component. As such, some service providers were concerned that women may be needlessly travelling to the referral centre to access care that they could receive locally at the hospital or through their GP, or else they may not be accessing ante- or postnatal advice or care at all. A renewed effort by the new SMO and the midwives at the hospital has seen some increase in the number of women accessing free public antenatal care at the hospital recently.

> *Some women don't know that they can still come to the public hospital for antenatal care, you know, they seem to think 'oh, there's no service there any more so I have to go to a private doctor' and they're paying for things they don't need to be paying for . . . . It's increasing - our antenatals . . . . and I think word takes a while, but word gets around between women that yes, you can [get antenatal care at Canetown Hospital].* - #13 (midwife, Canetown)

## *5.4.3 The future of Canetown maternity services*

*Divided views*

There was a clear divide in views amongst local service providers about the possibility of re-starting regular intrapartum care. Local GP proceduralists were unanimous in their pessimism regarding any service recommencing in Canetown.

> *No, I don't [think the service will re-open]. Not in my lifetime. . . . None of us [local GPs] want to start it up again.* - #38 (local GP, Canetown)
>
> *. . . I am absolutely pessimistic and that there is no prospect that things can improve in the future and that we're all deluding ourselves that we can make it better.* - #37 (local GP, Canetown)

In contrast, service providers who were based at the local hospital were much more motivated and hopeful that a local birthing service may be re-opened at the hospital. The relatively new SMO had a desire to re-start birthing services and aimed to start by rebuilding a strong antenatal service. The midwives had even submitted a business case for a midwifery-led service at the hospital but had become increasingly discouraged as more time went by with no action on their proposal. Mixed signals from

hospital management were reported by the midwives, who also sensed that the Acting DoN (from a metropolitan background) did not share their desire to see local birthing re-start and perhaps preferred to see the service remain closed. Certainly, the Acting DoN was non-committal about the future of the service in her interview and made no indication either way as to the possibility of local birthing services being re-opened.

> *Because we all want it. You know, the doctor who does obstetrics, he wants it up and going - he misses it. And they [hospital management] try and say how we're going to do it but you're waiting and waiting . . . -* #14 (midwife, Canetown)

> *I have to be a little bit careful because our Acting DoN is a city person and you get very mixed messages. We tried to set up a midwifery model - the business case was done . . . . One day she'll say to me we're getting very close. And then another day I'll hear her telling somebody that we'll never do obstetrics in this hospital again. So that doesn't help staff morale either. You've got nothing to work towards which is hard.* - #13 (midwife, Canetown)

*Inertia*

Midwives and GPs often identified inertia as an issue, albeit not always using the term. Inertia essentially alludes to the difficulty in re-opening a service that has been closed for some time. Two types of inertia in re-establishing services were discernible: one that can be termed "professional inertia" at an individual level, and "service inertia" which concerns the wider maternity service. Professional inertia actually begins as soon as procedural GPs and midwives cease to practice in maternity care. Re-establishing a service is difficult because of concerns about maintenance of professional competence and confidence after a period of not being involved in maternity care. The barriers associated with maintaining skills or re-skilling to work again in the future were perceived as significant. Furthermore, GPs indicated that, although they had found procedural work rewarding and satisfying, once they had withdrawn from obstetric practice they quickly became accustomed to life without the associated hassles, stress and intrusions (for example, the on-call responsibilities and burdensome community expectations).

> *Yeah, I don't have the responsibility for them [maternity patients] anymore. That's good. . . . It was very demanding. Even the anaesthetic side of it was really demanding. . . . just to be available all the time, 24 hours a day, 365 days a year and it just became a real*

> *burden in the end and . . . if I ever did leave town for whatever reason – like, I've got to have a life - there was this attitude of like 'you can't have your baby here because [I've] left town'.* - #38 (local GP, Canetown)
>
> *Um, I missed it [obstetrics] for a bit but once again, the rational side of me took over. I've got a wife and three children and . . . . - I'm not a martyr. And you know, there's this martyr mentality with a lot of people 'oh, we'll keep this going because for the sake of our community or whatever' and I was doing that for quite a while. My grieving has ended and my life is better and no one cares that I've stopped anyway.* - #37 (local GP, Canetown)

Service inertia refers to the difficulty of bringing a defunct service back to operable levels in terms of both human and physical resources. Great financial commitment is required to ensure that the physical infrastructure, necessary for a safe and high-quality service, is available and adequate. Canetown GPs were consistently disappointed with the lack of clear policy directives to support the previous obstetric birthing service. If such a model were to recommence at Canetown, unambiguous and guaranteed government support would be required:

> *If we were serious about making it [rural maternity services] better we would actually have to start again and decide where you want to have the services and then commit to supporting them or developing them. . . . At the top end you have to say 'alright there will be a birthing unit in [this rural] hospital . . . . It will have a pathology lab; it will have this many staff; you will attract them by whatever means you can; and we will actively promote this as a safe place to give birth.' And they're [Queensland Health] not prepared to do that. I've never heard anyone say that.* - #37 (local GP, Canetown)

Further, a service that has been inactive for some time will require a great effort to recruit sufficient and appropriate staff. According to local midwives, many of their qualified and experienced colleagues have left Canetown to pursue employment opportunities in other towns where they can continue midwifery and so maintain their skills. Alternatively, staff who stay in the town become de-skilled and lose confidence to later recommence any maternity work. Canetown GPs, especially GP obstetricians, are at risk of this, and the effects have already been seen amongst some of the midwives who have stayed on locally but withdrawn from maternity care due to a lack

of confidence in their midwifery skills. Thus, to re-establish a birthing service, there would have to be a successful recruitment drive to attract both experienced midwives and procedural medical officers. Local GPs were doubtful of any significant influx of rural medical proceduralists in the near future, despite the positioning of a new medical school in the nearby region. Even if new and young proceduralists were to arrive in Canetown, local GPs were concerned that these relatively inexperienced medical graduates would have no mentoring and lack the capacity to re-open a birthing service that has been closed for many years. The following quote crystallises many of the issues associated with inertia and also of the local GPs' feelings about re-starting a local birthing service.

> *How? How will it re-open? You've lost everything. You've lost all your infrastructure. This is like the foundations of a town. These are things that have been here since the town began and they're gone. How are they going to re-start? How are you going to get all the nurses? How are you going to re-open the theatre? How are you going to get to the standards that are expected? . . . How are young doctors going to come here and see that there's no birthing unit. Are they going to open it themselves? . . . . So these people are being trained to come and work here. This is now a dysfunctional hospital so they'll be coming to work in a dysfunctional hospital. They would be better to go to the third world, they would get more training and they'll get more professional satisfaction.* - #37 (local GP, Canetown)

## 5.5 Farmtown: An innovative service

> *. . . the system fundamentally aims at being able to continue to provide an obstetric service without necessarily having obstetric-trained doctors in the hospital.* - #16 (Medical Superintendent, Farmtown)

Farmtown is arguably Queensland's leading example of innovation in maternity care. After the previous obstetric service was closed due to a shortage of willing procedural medical practitioners in the community a new midwife-led model of maternity care emerged through the determination of the local midwives and the vociferous support of the Farmtown community. This is the first established trial site for a midwife-led maternity service in rural Queensland. This section introduces the Farmtown community by providing an overview of the town's sociodemographic features,

describes the quest to re-start local birthing care, highlights some features of the model and finally, explores the potential future of this innovative service.

### *5.5.1 The town of Farmtown*

The wider SLA of Farmtown contains a population of approximately 19,000 and covers a substantial area of 53,664km$^2$. The majority of the population live in outer regional areas (96%), but 3.7% and 0.3% reside in areas classified as remote and very remote, respectively. Indigenous Australians make up 12.6% of the wider Farmtown population (Australian Bureau of Statistics, 2008). The local population appears to be relatively stable with no significant reductions, nor any great rate of growth. The number of births per year in Farmtown also appeared somewhat stable, with a yearly average of 247 births over the years 1996-2004 (Figure 13).

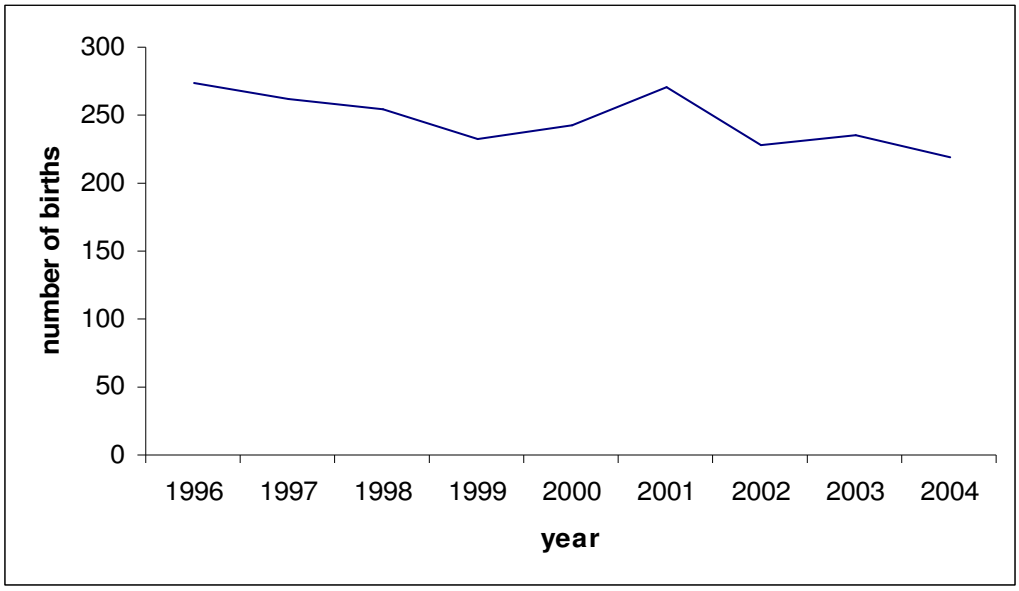


*Figure 13.* Births in Farmtown, 1996 – 2004
(Australian Bureau of Statistics, 1998, 1999a, 1999b, 2000, 2001, 2002, 2004a, 2004b).

The Farmtown Hospital has a 56 bed capacity with a 12-bed maternity unit. Local GPs provide antenatal and postnatal care, though interviewees did report a shortage of GPs in Farmtown. The closest referral hospital is located approximately 70km away, over sometimes precarious terrain.

Health services feature highly on the community agenda and tend to receive a lot of local media coverage. Indeed, during data collection at Farmtown, the local newspaper

reported on the community funds that had been raised to establish a renal dialysis unit at the local hospital. Interviewees highlighted this as an example of local residents' commitment and support of Farmtown health services.

> *The latest thing is they want renal dialysis here. And something was said that if there was $150,000 raised then they [the health service] would do it and within four weeks there was $165,000 raised and then of course the hospital, well, so far, they've reneged on it.* – #19 (midwife, Farmtown)

When hospital services appeared under threat in the past local residents were reportedly willing and easily mobilised to action in order to protect their local health services.

> *. . . there was a lot of community consultation and rallies and all that. See, the unit had been under threat - the hospital had been under threat - for years, up and down. There was always 'this is going to close' and 'this is going to close' and 'we're going to lose services'. And so the community was very used to getting together and airing their grievances and making sure it was going to be tough for them to close or reduce services.* - #18 (local GP, Farmtown)

## *5.5.2 Campaigning for an innovative model of maternity care*

Farmtown had a long history of providing obstetric care within a medical framework that relied heavily on GP proceduralist services, much like other rural centres. Local GPs had routinely cared for and attended low- to medium-risk births, including those of twins and trial of scar deliveries[35]. However, as the number of local proceduralists decreased, so did the capacity to sustain this medical model of obstetric care.

Anticipating the imminent closure of a medical model of birthing care at Farmtown and having forged strong relationships within the community, the midwives had the foresight to establish a support group; essentially an alliance of midwives and interested community members who would act to protect the maternity unit.

> *. . . it was a fairly conscious [decision] to protect the unit - we started a mothers and midwives group . . . . and the aims of that group were to be*

[35] Multiple pregnancies and trial of scar deliveries (that is, where the woman has had a previous delivery by caesarean section and a vaginal birth is being attempted) are commonly perceived to be more complex maternity care cases. The Australian College of Midwives (ACM) guidelines (2004b) suggest consult with or transfer care to a medical practitioner in these two instances. According to the *Primary Clinical Care Manual* (Queensland Health & Royal Flying Doctor Service, 2007) the presence of either of these conditions alone would elevate the woman to a medium-risk category.

> *proactive in getting maternity services improved but also as a postnatal support group for mums. And that's hooked into the wider network of the Maternity Coalition - they have an extensive email communication network. So when we [the Farmtown maternity unit] were shut down, there was a call to arms throughout the community and our group here was supported by the Brisbane group who have lots of media contacts and that sort of stuff.* - #24 (midwife, Farmtown)

As local GPs successively withdrew from providing obstetric services at the hospital, the midwives had been steadily expanding their skill base and taking on more responsibility at the maternity unit. This progression had the support of key medical staff and was designed to make up for the shortfall of qualified obstetric staff. Finally, there was only one obstetric SMO left at the hospital who provided the following account of progressive changes to the maternity service:

> *And a lot of the things were already in place because it's not like at that point there'd been half a dozen [medical practitioners] sharing the obstetrics - it had really only been me for a couple of years so more and more I was giving responsibility to the midwives and making other arrangements. . . . We were heading towards that way anyway. I mean, for our own ability to function and continue, the midwives already had most of the responsibility and made most of the decisions and if there was a problem they contacted me, otherwise that was it.* - #18 (local GP, Farmtown)

In this way, the changing from a medical to a midwifery model of maternity care was really an evolution.

The formal progression to a midwife-led model really crystallised when the last obstetric-qualified SMO left the Farmtown hospital in May 2005 and, with no replacement, the hospital was unable to operate a birthing service under the policy framework at the time. Leading up to this resignation, stakeholders had met to consider what options were available to maintain the local service. Local midwives actively promoted the idea of a group midwifery practice at the hospital. Such a model would be the first of its kind in rural Queensland and would be in contrast with policies in which medical personnel were seen as necessary actors in maternity care. Although support for this alternative model of maternity care appeared to outweigh the reservations of some stakeholders, no plans had been established prior to the SMO's

resignation thus, the birthing service was required to close and local residents had no other legitimate option but to birth at the referral centre.

At this point, the District Manager commissioned a team to investigate the feasibility of the midwives' proposal regarding a group midwifery practice. In reporting back, the review team found they were consistently confronted with three primary concerns: (i) ensuring the safety and (ii) sustainability of the service, and (iii) meeting community expectations. However, they concluded that several local factors suggested a midwife-led model of care could be successfully established at Farmtown as a pilot site. The reviewers found that a midwife-led model of care had already been operating at the hospital, if not by name. Reviewers highlighted the support of local procedural GPs; the backing of the referral hospital; the understanding and support of the community; and the local midwives' high level of clinical skill as key factors expected to contribute to the potential viability of a midwife-led maternity unit at Farmtown.

Thus, six weeks after birthing formally ceased at the hospital, a midwifery-led maternity service (incorporating low-risk intrapartum care) was opened. Policies and procedures to support the new model were to be developed in conjunction with the referral hospital over the first year of the new service model. An audit of births and review of services was to be conducted after the first 12 months of operation.

Beyond the determination, foresight and preparation of the midwives themselves, a number of other factors appeared to support the campaign for a midwife-led service. Firstly, the community action was of vital importance, drawing attention to the cause and placing pressure on the government and health authorities. Having been informed by the midwives of the proposal for a midwifery-led service, the community reaction was swift, vocal and widespread, even throughout the state. The community-based support group established by the midwives was instrumental in organising community action and attracting media coverage in newspapers and on television for the cause. Community action culminated in a street march, a visual demonstration of support for the midwives' proposal. Women who had previously been cared for by the Farmtown midwives were particularly willing to show their support by publicly sharing their experiences.

> *. . . there was tremendous public support. The public are passionate about the hospital here and they really are passionate . . . . They marched on the street, they had banners, it was in the newspaper. . . . So there was a lot of initial public pressure.* – #19 (midwife, Farmtown)

> *I think there were some key people who had delivered at [Farmtown] Hospital who were very involved with the community and therefore were quite prepared to stand up and say 'we want this unit to continue'. And the midwives were almost militant I guess but they were very proactive in getting that community support, getting out there. So, I think it was just a combination of the personalities in the midwives and that unit alongside with some personalities in the community who just worked together to really get the support . . .* – #18 (local GP, Farmtown)

Secondly, the midwives' campaign benefited from the support of key townspeople including those on the local council and the local state Member of Parliament. The Farmtown Mayor, an active encourager of local services, had a reputation for being outspoken about local issues and was widely considered influential in assisting the service to gain the coverage and momentum that it needed to re-open:

> *So he [the mayor] was very keen to make sure that [Farmtown] continued to thrive and have access to all the services.* – #18 (local GP, Farmtown)

> *I think the Shire council and the Mayor in particular has been very vocal and critical of the state government and that has unified people in wanting to continue this [maternity] service . . .* - #22 (local GP, Farmtown)

Many Farmtown interviewees attributed the re-opening of the birthing service to the magnitude of active community support.

Thirdly, the campaign benefitted from support shown by key medical personnel. In particular, the Director of Obstetrics and Gynaecology at the referral hospital expressed willingness to work with, and support, the midwives and their proposed service in Farmtown. Locally, procedural GPs agreed to be "available" to provide emergency obstetric cover, though they were not prepared to commit to a formal on-call roster. Given the relatively novel nature of this model of care, the Medical Superintendent identified the support of local GPs as a requirement for this type of model to be implemented, implying that other medical practitioners may not approve:

> *You need the procedural GPs in town who are comfortable with the model.* - #16 (Medical Superintendent, Farmtown)

Fourth, at a state-wide level, the release of the *Re-Birthing* Report (Hirst, 2005) two months prior to the Farmtown birthing unit closing, proved particularly timely. *Re-Birthing* contained the findings of an independent review of Queensland maternity services and encouraged reform of current practices. Care of pregnant women in rural and remote areas was identified as a priority area for change and added to the momentum behind the campaign to establish a midwife-led maternity unit in Farmtown.

### *5.5.3 The midwife-led service at Farmtown*

A modified caseload model operates at the unit: one midwife provides the majority of care for a woman. The service is primarily designed for women with low-risk (category A in the ACM guidelines) pregnancies, although medium-risk (category B) women have also been managed locally. All high-risk (category C) pregnancies are directed to the referral hospital.

For women with low-risk pregnancies, a fairly comprehensive maternity service is provided at the Farmtown Hospital. Antenatally, establishing appropriate procedures has been a primary focus for the midwives; especially ensuring that screening procedures accurately identify women whose elevated risk profile suggests they should be seen in conjunction with, or solely by, the referral hospital. In addition, midwives emphasised the importance of ensuring that all of their patients were fully aware of the limitations of the new and innovative service at Farmtown. This included patients being made aware that the midwives could not provide access to epidural anaesthesia and the possibility that women might be transferred to the regional hospital during pregnancy or labour if their assessed risk escalates significantly. Staff felt that clarifying the service capabilities and setting realistic patient expectations had benefits for both themselves and the women:

> *I talk to the women about what we provide and what we don't and I always give them a worst case scenario: going down in the back of an ambulance you know, in labour, this sort of stuff. They need to feel safe here and they need to feel comfortable with our service and we give them an information sheet and they need to sign a consent [form] so they understand our service capability. We don't do epidurals but we've got the bath and the shower and gas and drugs and everything else. So they need to feel safe and that's the main thing and if they don't, they shouldn't be birthing here. They shouldn't even be thinking about it.* - #21 (NUM, Farmtown)

A woman's usual midwife will attempt to be available for birthing care. Although midwives manage the majority of deliveries without incident, complications can arise which require medical intervention. Depending on the circumstances, the midwives either call on the local GP proceduralists to attend, or arrange to transfer the woman to the referral hospital for specialist obstetric care. While anaesthetic services were usually handled by one of the SMOs at the hospital, obstetric services were usually sourced from the local GPs and their support in this manner was considered crucial:

> *Our GP obstetricians in the community, they're as helpful as anything and really, it's their help that makes this unit as safe as it is. Midwives are experts in normal, but we do need help when it becomes abnormal.*
> - #19 (midwife, Farmtown)

A small number of elective caesarean sections are also done at the Farmtown hospital as GPs were keen to continue this procedure for the maintenance of their skills.

Midwives believed that women in the immediate postnatal period may derive additional benefit as in-patients at the Farmtown hospital. Being relatively free of the pressures seen in larger hospitals to vacate beds quickly, the midwives reported having more time to assist women in establishing breastfeeding and otherwise ensuring that parents are prepared and comfortable to go home with a new baby. In this way, many of the potential postnatal difficulties can be addressed while a woman is still in hospital, thereby avoiding unnecessary hospital visits after discharge.

Despite the opportunity to provide a thorough postnatal service for women in hospital, several midwives were keen to see domiciliary care formally added to their service. There is currently no home-visiting service, although those midwives who live some distance from Farmtown often visit patients who live in their home vicinity to prevent these patients having to travel long distances unnecessarily. There is no funding for this visiting service; midwives do this voluntarily and use their own private transport.

> *. . . occasionally a midwife will go into a lady's home to do say, the neonatal screen on day 4 but there isn't a costed service, it's in the midwife's private car and we actually do it for the love of the job rather than any recognised service. Personally, it should be a recognised service. It is in other areas, it is in other countries and we could make that a recognised service in this area.* – #19 (midwife, Farmtown)

*Good workforce retention*

The unit employs 14 midwives, with a FTE of 12.4. Unlike other rural towns, the maternity unit in Farmtown has a good record of recruiting and retaining sufficient midwifery staff. The local midwives suggest that it is the independent and rewarding nature of midwifery at the Farmtown unit that attracts staff. Indeed, few of the midwives actually live in the main township of Farmtown, but are willing to commute some distance to work in a unit where they perceive the level of job satisfaction to be much higher:

> *And it's a big job satisfaction, doing what we do here. As I say, I could be at [the referral hospital] in less than 10 minutes from where I live but I choose to drive for nearly an hour each way and work here. To me, that says quite a bit.* - #19 (midwife, Farmtown)

However, as a consequence of having few locally-based midwives, on-call rosters can be difficult. Thus the unit has a policy of rostering on two midwives at any time to ensure that there are adequate midwifery personnel available if an emergency situation arises.

*Regional Support*

Essentially the Farmtown midwife-led unit was designed to operate as a hub out of the regional hospital which is better equipped to provide more complex care. Thus, higher risk patients are referred to the regional hospital and midwives can access the on-call obstetric consultant at the referral hospital directly by phone any time they may need advice. When complications arise which cannot be attended to locally, and if the patient's situation permits, midwives will stabilise the patient and escort them to the referral hospital, usually in a road ambulance.

> *You ring switchboard at [the referral hospital], you say you're a midwife at [Farmtown] maternity, can I speak to the obstetrician on call and they put you straight through to the consultant. They're great. The consultant there is always helpful. . .* - #19 (midwife, Farmtown)

Further support from the referral hospital is provided in the form of an outreach obstetrician who visits the Farmtown Hospital monthly to see any patients referred by the midwives and review charts to ensure that the patients are suitable to continue receiving care at the Farmtown unit. The referral hospital also assists in educational initiatives for the midwives. Overall, the perception of Farmtown staff was that the relationship between their unit and the regional maternity unit was mutually beneficial: the regional unit supports the Farmtown midwives who in turn have potentially

alleviated some workload pressure on the regional hospital. However, the relationship took some time to develop as regional staff became familiar and comfortable with the midwives' abilities and procedures and vice versa.

> *. . . since we've been with this model and [staff at the referral hospital] have got to know us a lot better, they have a better understanding of the clients as well and they know that they won't go [to the referral hospital]. . . . the obstetrician from [referral hospital] . . . she comes up and goes through all the charts - it's more of a chart review than a case conference. And you know, it's just getting easier and easier for her. . . and they look at it and say 'well, there's no way she's going to get down there', you know, like, it's reality.* – #21 (NUM, Farmtown)

### *5.5.4 Performance of the Farmtown maternity unit*

Since its formal establishment, there has been much interest in the innovative model of rural maternity care at Farmtown. The service itself has grown and has developed processes that are appropriate for the population it serves and the practitioners who work there. Mindful of the political interest and clinician attention that this innovative model of care would surely attract, the initial review team had recommended that there should be a comprehensive audit process within the Farmtown maternity unit. This was to be conducted in conjunction with the referral hospital and reviewed after the Farmtown unit had been operating for 12 months.

The team that completed this 12-month review found that the unit had been largely successful in serving the maternity needs of many Farmtown residents. Indeed, the unit had an excellent audit record throughout its first year of operation. The unit had managed 158 deliveries with an antenatal transfer rate of 9.3%, intrapartum transfer rate of 3.8% and postnatal transfer of 1.3%. Rates of caesarean sections were approximately 6%. Additionally, the review team found that the service was acceptable to the community and enjoyed good collaboration with the local support group. Not only were outcomes favourable for the women who accessed the service, but the modified caseload model was also agreeable for the midwives who provided the services.

Overall, the 12-month review team identified the following as key factors in the successful establishment of the Farmtown maternity service.

- The midwives were dedicated to providing a local birthing service; were relatively stable; already at a high level of competence; and very experienced (most midwives had in excess of 10 years clinical experience in a variety of settings including those with limited medical support).
- The local GPs were trained and experienced in procedural obstetrics, were largely enthusiastic and supportive of the new service, and made themselves available in cases of obstetric emergencies.
- There was a high level of support from the referral hospital which provided clinical support and had an ongoing role in education, audit and review. In addition, the midwives enjoyed a particularly good relationship with the Director of Obstetrics and Gynaecology and the visiting obstetrician from the referral hospital.
- There was a high level of community support and the provision of a service with a family and consumer focus.
- The incremental progression towards a midwife-led model of care, rather than a radical and sudden change meant that many aspects of a midwife-led service were already operating prior to its formal acknowledgement. Furthermore, a gradual change allowed the hospital and the community to become familiar with the emerging midwife model and did not require more significant adjustments for this alternative model to be accepted and supported.

Many of these factors were echoed during interviews with local midwives and medical practitioners.

## 5.6 Chapter 5 summary

This chapter has outlined the context of the four case studies. The maternity units at each site shared some common characteristics around sociodemographic characteristics, the provision of generally low-risk maternity care and the variety of service providers available. Yet, the differences between the sites are perhaps more interesting. First, there was Dairytown which had been able to continue a traditional rural obstetrics service. A large part of their success is likely due to the proactive and novel approaches to medical workforce policies which enabled the recruitment and retention of a good size roster of medical proceduralists and ongoing support from the local GP proceduralists. Second, Mineville also maintained a rural obstetric unit but long-term difficulties with medical recruitment and retention had caused the birthing service to be inconsistent. This was problematic for Mineville residents and likely

affected patronage of the service even when it was fully operational. Third, Canetown had recently seen their birthing service close. Since the cessation of local birthing, residents' access to care was clearly reduced and the unit was slowly losing its capacity as midwives were leaving town or withdrawing from maternity care and GP proceduralists no longer practiced obstetrics. This had important implications for the future of the local birthing service, about which there was divided opinion. Finally, there was the midwife-led maternity unit in Farmtown, the first of its kind being trialled in rural Queensland. Intense community support and timely stakeholder support were instrumental in establishing such an innovative service. Outcomes after the first 12 months of operation appeared favourable.

Having knowledge of the history and characteristics of each site is important for maintaining a link to the actual case studies. This also contextualises the themes that arose from the inductive thematic analysis of data from the four sites. Chapter 6 will detail these major themes, which have been grouped into four main areas: workforce; quality of care; safety and community aspects.

# Chapter 6

# Results – Part II

> *It can also be difficult to 'tell the story', without getting immersed in detail. Researchers have to find ways of organizing their analysis so that it provides a lens that represents but also explains a highly complex environment.* - (Walt et al., 2008, p. 310)

There are many challenges to providing a comprehensive suite of rural maternity services in the present health system environment. The vignettes contained in the previous chapter present four north Queensland towns which, although facing similar challenges, experienced quite diverse outcomes in the sustainability of local maternity services. Canetown had succumbed to the demands of maintaining rural birthing. Mineville struggled to provide a consistent birthing service. Farmtown actively pursued an innovative model of maternity care service provision, while practitioners in Dairytown were proactive in finding novel strategies which would continue to support their traditional medical model of rural obstetric care. While the outcomes differed between the four sites, a number of common themes were identified through analysis of the collective data. This is not to say that the themes or concepts were experienced

in the same way by each of the towns; indeed, the diversity within a single theme can expand the understanding of a given issue.

Themes have intentionally been grouped into the categories of (a) workforce; (b) quality of care; (c) safety; and (d) rural communities. Each section in this chapter examines one thematic category in greater detail, wherein the experiences of each town are compared and contrasted to highlight consistencies, variances and examples of innovation. Collectively, these thematic categories consider the significance of rural maternity care, the challenges faced in maintaining these services and perceptions of outcomes for rural maternity care as a result of various policies and circumstances.

## 6.1 Workforce

Workforce-related issues proved to be a prevalent theme in most interviews, namely the shortage of appropriately trained medical proceduralists and midwives. Though affected to varying degrees, no unit had been untouched by the effects of medical and midwifery shortages. Indeed, workforce shortages were a primary threat to the sustainability of each maternity unit in this study.

### *6.1.1 Medical workforce shortages*

Without exception, local health professionals reported shortages of appropriately trained medical staff and the straining effects of these shortages were evident across the four towns. At one extreme, Canetown had already succumbed to medical workforce shortages and had ceased all local birthing. The Farmtown service could have shared the same fate with a lack of willing general practitioner (GP) obstetricians forcing the closure of the original birthing service, though a midwife-led model of birthing care has been successfully established. Inconsistency in the availability of birthing services, reflecting unreliable medical coverage, was characteristic of Mineville and, to a lesser extent, Dairytown. A distinguishing feature of the Dairytown case was the innovative use of industrial policies to encourage retention of procedural senior medical officers (SMOs), thus benefitting the hospital and local community. Two themes associated with the medical workforce will be considered here: (i) the inconsistency in service provision caused by medical workforce difficulties; and (ii) leadership and innovative approaches to workforce policies.

*Inconsistency in service provision*

Inconsistency in service provision was a characteristic of the Mineville because the service was particularly dependent on the availability of its medical officers. Problematic retention of procedural medical staff and subsequent cessation of procedural services led to inconsistent and irregular birthing service availability. This inconsistency served to undermine the local maternity service because many local health professionals and community members preferred to plan for a birth at the larger, and therefore more dependable, regional maternity unit. Despite having retained three procedural SMOs at the hospital for approximately three years and providing a comparatively more reliable service, previous inconsistencies still affected community perceptions and patronage of the local maternity service.

> *Well it [the local birthing service] hasn't been consistent - that's the first problem. Queensland Health has been unable to maintain procedurally skilled doctors to staff [local] hospital and, presumably, lots of other hospitals. So because the population sees a service is being offered then suddenly the service is not being offered anymore - and that's what they perceive: [that local hospital] can't deliver anymore. . . that's bad advertising. Then when the service is resumed again well, there's no advertising to say well this service is now available again so people still have the impression that you can't deliver in [Mineville hospital]. . . . they need to know where they're delivering because they've got to plan stuff. . . . So a number of women have delivered in [the referral hospital] because they were unsure the [local] service would be available when it comes time for their birth.* - #41 (local GPs, Mineville)

> *The service, in a way, I don't think it's good if it flip-flops between being on-again, off-again, on-again, off-again. If it becomes unpredictable I think it creates a level of anxiety in the community because they're not quite sure how they should be planning their lives, you know. Like, whether they should be here or whether they should be in [the referral centre].* - #4 (DoN, Mineville)

Even Dairytown was vulnerable to the absence of sufficient and appropriate medical staff, despite maintaining a much larger SMO roster and having support from local GP proceduralists. Daily workforce assessments had to be made to determine the level of intrapartum care that could be safely provided.

> *And then on a day by day basis, we've got to decide at what level we're operating. Depending on who's in town. There is wide variety of skills in town and sometimes we don't have obstetric cover for a range of reasons but largely because of safe rostering so we don't have always both an anaesthetist and an obstetrician on every night. So again, we have to manage the cases and decide whether we're fully opened, midwife-level only - no doctor, or whether we're going to transfer everybody.* - #32 (Medical Superintendent, Dairytown)

In the absence of procedural medical support, birthing care can be provided by midwives, but only with the informed consent of the patient. Nonetheless, this situation can cause anxiety to both the midwife and the patient, knowing that if complications were to arise then an uncomfortable and risk-laden transfer to the regional hospital may be required.

> *So they come in, there's no procedural obstetric cover if something should go wrong and so the women are told that and given the option of delivering here with the uneasy feeling that if something goes wrong then they may be in for a very messy, awkward transfer in the middle of a disaster, or being transferred to [the regional hospital] in labour.* – #28 (local GP, Dairytown)

*Innovation and leadership in workforce policies*

The Dairytown vignette (Section 5.2) highlighted the comparatively good medical workforce recruitment and retention at the hospital. In fact, Dairytown had the strongest medical roster of all the sites (although this did not make them immune from workforce strain that affected service provision as discussed above) and it was interesting to note the workforce strategies employed. Such strategies did not feature strongly at the other sites. Firstly, management at the hospital did not shy away from innovative approaches to workforce policies. The job-sharing that occurred between medical SMOs at the hospital was reportedly first brought in by Dairytown staff, many of whom have taken up the opportunity. Those who job-share report enjoying a better work-life balance while the hospital benefits from having contented and stable staff. Further, having management willing to fight for the entitlements of staff must also play a key role in staff satisfaction.

> *. . . out of one full-time equivalent . . . you end up with two fresh people who are prepared to do more, who do more teaching, who do more*

> *development, who are more available. There's a constant tension about understanding that it's two people in one job, but I manage that.* - #32 (Medical Superintendent, Dairytown)

Second, the hospital has been heavily involved in rural-based medical education, at both undergraduate and postgraduate levels. Any postgraduate trainees placed at the Dairytown Hospital further bolster the hospital's staff roster.

> *. . . we've been working very hard on training for years and we're sort of a political hot spot for rural training. So we've tried very hard to make sure that we keep our staff and that we train them in obstetrics when they come here.* – #32 (Medical Superintendent, Dairytown)

Third, it was clear that much of the energy regarding workforce recruitment and retention strategies originated with the Medical Superintendent who not only saw the importance of staff retention but also had a passion for seeing the Dairytown Hospital retain the range and level of services that it presently had.

The innovative use of policies has been successful in retaining the quorum of proceduralists required to provide low-medium risk intrapartum care in Dairytown, although this was seen to only encourage stability in the short-term. Health professionals portrayed the local workforce situation as precarious and were concerned about good succession planning. The loss of even one proceduralist had the potential to end the provision of local intrapartum care. Thus, the local maternity service was highly reliant on the current proceduralists to continue their practice in Dairytown.

### *6.1.2 Midwifery shortages*

All of the hospitals, except Farmtown, indicated they had a critical shortage of midwives; each reporting that they operated with barely sufficient midwives. The scenario was similar at each site: the midwives were experienced and highly skilled, but there just weren't enough of them. Dairytown and Mineville units both reported having difficulty filling existing vacancies for appropriately qualified midwives. Since the closure of the birthing service in Canetown, there had been a steady exodus of experienced midwives seeking to maintain their skills in other towns. This further exacerbated the recruitment difficulties as, without a complete maternity service, the Canetown hospital was unlikely to attract new midwives.

> *But of course, when your service closes you lose your midwives to other towns so that's the crunch.* - #13 (midwife, Canetown)

The recruitment difficulties experienced by these hospitals were reported as symptoms of the current nationwide undersupply of nurses (particularly in non-metropolitan areas), and the shortage of midwives within the wider nursing profession.

> *I think there's a state-wide shortage. There's a shortage of nurses and then there's another shortage of midwives. Like, agency nurses I use a lot of, and I ask that a midwife would be preferable. I've never had a midwife in 3 years that I've been requesting agency staff. . . . They're just not there.* - #8 (NUM, Mineville)

Nurses openly volunteered their opinions regarding the factors which had contributed to the present shortage of midwives. Foremost amongst these were the difficulties associated with obtaining midwifery education and the changes seen in the typical career structure of nurses. The first, educational barriers, were cited by many of the midwives who felt that modern, university-based midwifery training was unattainable or unattractive for many nursing graduates. With the training delivered by universities, travel or moving was often required to access this education. Further, unlike in the past, nurses are not necessarily employed by hospitals, but rather must sacrifice their working income while they obtain their midwifery qualifications.

> *. . . attracting staff is very, very difficult. Particularly with the midwifery staff. You know, midwives would once do their hospital training and then one certificate that somebody would do after they'd finished their training would be midwifery and another would be child health. . . . Well, they go to university to do it [midwifery training], so it becomes another thing, whereas before you'd do it and you'd be paid to do it. It would go for a year and you would be paid to do midwifery and you would get a certificate at the end. So now that's changed. It's not as accessible, I don't think, as it maybe has been in the past. That's not to say that it's not better now but I just don't think that it's mainly as accessible as a career option for people.* -#4 (DoN, Mineville)

Secondly, the traditional nursing career structure was perceived to have undergone significant change. In the past, specialisation or further training options were generally limited to midwifery and child health, so the vast majority of nurses would go on to obtain midwifery, and then perhaps child health, registration after they had become Registered Nurses. However, interviewees felt this was no longer the norm as nursing graduates now have many more specialisation options available to them, for example,

emergency care or rehabilitation nursing. Thus, fewer nursing graduates were seen to be entering midwifery.

> *. . . I've had one [midwife] leave a couple of weeks ago and I won't replace her. . . . It's an ongoing problem. I mean, the private sector down in [regional town] is crying out for midwives too. . . . because people aren't doing obstetrics. Once upon a time you would do your general and then you would do obstetrics however there's so much diversification within the nursing practice these days. You can do a whole heap of stuff and then keep going and doing different things. . . .* - #17 (NUM, Dairytown)

Whatever the causes of the current midwife shortage, recruitment difficulties have led to a situation in which the maternity units in this study (except for Farmtown) are now (a) staffed by an ageing group of midwives; and (b) increasingly dependent on a small core group of existing midwives. The ageing nature of midwives was most noticeable in Mineville, although it exemplifies a situation that was also apparent in Canetown and Dairytown. In Mineville, only one of the midwives was aged under 50 years and most confessed to considering retirement in the coming years. It was not uncommon for interviewees to suggest that the loss of just one or two midwives would put the whole maternity service in jeopardy.

The rural maternity units seen in this study were increasingly dependent on a shrinking group of midwives. Yet, midwives remained an integral component of rural maternity units; being responsible for a large component of service delivery and required by the *Clinical Services Capability Framework*[36] (CSCF, Queensland Health, 2004a). In a number of interviews, the survival of the maternity units was attributed to the goodwill of midwives who participated in an onerous on-call roster. However, this reliance on a small and mostly ageing group of midwives was not sustainable in the long-term. Already, on-call duties were considered burdensome by the midwives and, as several Mineville midwives explained, their willingness to participate in such an onerous on-call roster decreased as they got older. As midwives are lost from the staffing roster, on-call duties increase for those who remain, potentially accelerating retirement of ageing midwives.

[36] The CSCF requires that a midwife should be available on-call 24 hours a day when one is not present on shift at the hospital.

> *. . . it makes their lives very, very difficult if they're constantly on call . . . . and they get tired, you know, nurses get tired and because you've got so few there's a huge risk of burning them out.* - #8 (NUM, Mineville)

In contrast, Farmtown did not experience midwife recruitment problems. Staff there reported constantly fielding expressions of interest from qualified and motivated midwives seeking work at the Farmtown unit. It was suggested that the independent nature of work and the model of care that had been implemented has turned the Farmtown unit into somewhat of an "employer of choice" for midwives seeking an alternative to the busy nature of urban practice.

> *. . . we haven't had the same sort of staffing issues as other places because midwives get to practice their midwifery and you know, it's not that hair-raising, chasing your tail . . . sort of scenario. You actually have the time to sit with somebody who's having breastfeeding difficulties and that sort of stuff whereas in your bigger centres and even a lot of the smaller ones that don't have that there just isn't that time for that sort of midwifery work. You know, there's only time for changing drips and giving drugs . . . .* - #24 (midwife, Farmtown)

Few of the locally employed midwives actually live in the Farmtown area but they are willing to commute some distance to work in a unit where they perceive job satisfaction to be much higher.

Nonetheless, not even Farmtown is immune from problems associated with the ageing midwifery workforce. The 12-month review of the Farmtown service indicated that the unit must be mindful of good succession planning and student training plans to ensure smooth transitions and quality staffing into the future. This was echoed by the midwives themselves:

> *. . . there's a few of us who won't be working in five years and I'm one of them . . . . and you need to be able to attract people for the service who are going to want to come and work here and stay and live in the community . . . . You just need to look after it for your community. I mean, the community have given a lot of support and that and we have a lot of young families right through the area and if we lost this service . . . they lose a choice.* - #23 (midwife, Farmtown)

## 6.2 Quality of care

Observations and recurrent themes associated with the quality of maternity care, as perceived by rural service providers and community members, is the focus of this section. These themes are built on the perceptions of service providers and other community members regarding what constitutes high-quality maternity care. The trend to centralise maternity services is considered before describing the largely detrimental consequences, as experienced by rural communities. The decreasing accessibility of maternity care has led to (a) poorer continuity of care; (b) fewer choices available to rural families, in selecting both the type of carer(s) and the nature of care; and (c) negative implications for the financial accessibility of maternity services. Finally, an insight to community members' perceptions of rural maternity unit facilities is reported.

### *6.2.1 Geographic accessibility of care*

It was clear, even from the four rural towns in this study, that services throughout the spectrum of maternity care were being progressively transferred away from rural providers and settings. In Canetown, the cessation of local birthing and transfer of all birthing care to the regional hospital, approximately 110km away, had obvious consequences for the physical accessibility of maternity care.

> *I can think of another sister-in-law that would like to have children in the future and she's got to go through that dilemma of having to go to [the regional hospital] all the time.* – Parents group B (Canetown)

The other case study sites were providing mostly low-risk birthing services. As such, low-medium and medium-risk pregnant women were now required to birth and obtain at least some of their antenatal care at the regional centre, despite such pregnancies being competently cared for and managed locally in the past. Even low-risk pregnant women at these rural towns were increasingly required to access components of their antenatal care (for example, ultrasounds) at the distant regional hospitals. Various reasons can be attributed to this including the deterioration and subsequent unavailability of the correct equipment or a lack of expertise to provide the necessary care in the rural towns. An illustration of this situation was found in Dairytown where the necessary expertise and equipment for conducting ultrasounds was available locally via a GP obstetrician, but staff at the regional hospital insisted that patients should attend that hospital for at least one of the antenatal scans, due to the potential for litigation.

> *. . . they have to go to [the referral hospital] for the 18 week morphology scan which could be done here [but] the specialists reporting those feel happier if they're done in [the referral hospital] under direct supervision because of the risk of litigation if a malformation is missed.* - #28 (local GP, Dairytown)

Shared care for higher risk patients can often be organised between staff at the local and referral hospitals but, in addition to relocating for birthing, women would still be required to attend some antenatal appointments at the regional hospital. At a minimum, pregnant women would routinely be required to attend the referral maternity unit to initially book-in, then have up to two ultrasounds some time during the first and second trimesters and one to two visits during the last month of pregnancy. Complications that may arise during pregnancy would likely necessitate additional antenatal visits. Rural residents of towns in this study would travel by road for over an hour to reach a regional hospital, except from Farmtown where road travel to the regional centre would average approximately 40 minutes. Thus, it was apparent at each of the four sites that elements of maternity care, such as antenatal and intrapartum services, were being removed from rural towns, thus requiring pregnant women to access varying amounts of their maternity care some distance from their home town. The consequences of additional travel had evident implications for other aspects of quality care, especially the continuity, choice and financial accessibility of maternity care for rural residents.

### *6.2.2 Continuity of care*

Continuity of care was recognised by most interviewees as a major advantage of accessing local maternity care. Being able to access all, or the majority of, maternity care in one's home town had many benefits. Foremost amongst these was the opportunity for the expectant couple to develop a rapport with their carers and to become accustomed to the maternity unit environment which was believed by many health professionals to enhance the birthing experience for the couple, especially the mother. Relationship-building between staff and patients was facilitated by the reality that rural hospitals employ fewer staff and there is a general familiarity amongst local residents that comes from living within a small, rural population. In Farmtown, the modified caseload model of care was specifically designed to enhance the continuity of patient care and facilitate rapport-building between women and their midwife carers throughout pregnancy, and also over consecutive pregnancies. Developing a rapport

with local hospital staff was likely to encourage patients to return with health concerns of any type during the later postnatal and early childhood periods or even later.

> *. . . because their child is born there, they become familiar with the staff at the hospital. They feel comfortable at the hospital. If they have a problem, whether it's with their child or social problems, they feel more confident in seeking out help from those areas. So it has benefits and we're starting to see now, especially with the lower socio-economic clients with the domestic violence, the child abuse and all those neglect issues. If you've got them delivering in the hospital and they feel confident if they're having problems, they're more likely to go back there and get something.* - #18 (local GP, Farmtown)

> *. . . it means that they're being delivered by people they know. So, people that they've been able to develop a relationship with through antenatal care, antenatal classes or whatever, or the fact that they might have had babies here previously. We don't have so many midwives on staff that they can have a stranger you know, they're going to have familiar faces. It might be people that they know from the community or they've met people in passing while they've been here. So there's that advantage. . . . And follow-up care is the other thing that for postnatal care and for women who might have problems after discharge with anything from breastfeeding problems to parenting problems to postnatal depression, whatever, they again can deal with people that they know that have their history, that understand the context of where they live. Often people in [the regional centre] don't have any idea of what it's like to live. . . in the bush. . .* – #25 (DoN, Dairytown)

> *. . . they do try to keep women with the same midwife, which is continuity of care and a lot of the midwives will come in and deliver their own patients even if they're not actually working that day. And that's got to improve the outcome. Not only improves the whole sort of medical outcomes but it improves the experience of the women as well and how they perceive the pregnancy, the delivery and everything.* - #26 (SMO, Farmtown)

There was additional evidence which supported the view that rural hospitals offer greater continuity of care, though it should also be noted that there were some dissenting opinions in focus group discussions with parents. That is, even though care

may be available locally, high turnover of medical and nursing staff may prevent patients from enjoying continuity in their relationships with hospital-based SMOs, midwives or local GPs. Women valued continuity of carers and some of their comments reflected their experiences of having seen several carers during a pregnancy:

> *- they're [doctors] just floating through . . . .*
> *- And I always like to see a doctor that knows my history. Not just that can look at it on a computer screen but actually saw me-*
> *- Yeah . . . saw before you were pregnant and then while you were pregnant . . .* – Parents group C (Mineville)

> *. . . you go once you could only see that doctor once and then next week it will probably be someone totally different. So then you start all over again.* – Parents group C (Mineville)

*Increasing fragmentation of care*

Although continuity was seen as an advantage of rural-based care, the removal of rural maternity services has a detrimental effect on continuity of care for rural women. Centralising services in urban localities results in rural pregnant women often accessing their maternity care in a variety of facilities (local hospitals, local general practice, regional hospital) and by a variety of carers (SMOs, midwives, GPs, obstetricians). The increased number of potential carers and facilities has a fragmenting effect on the maternity care received by rural women. Canetown experienced this most profoundly with the closure of local birthing which now necessitates travelling to the regional centre to access care. The confusion of Canetown health professionals underscores the fragmentation of maternity care available to Canetown residents:

> *But by and large rural services have been closing systematically over the last five or 10 years and there aren't any services in most places to have any continuity of care or carer.* – #1 (regional health professionals, regional centre)

> *At the moment, from what I can gather, we're trying to get a policy together and it's not working. . . . they come to us antenatally, deliver down here and then come back to us [for postnatal care]. That's a lot of mucking around so a lot don't come back to us, or there's been complications and caesareans have been a problem so they stay in [the referral centre] longer and then go back to [Canetown] so we don't get to*

> *see them. And that's hard too because then we don't pick them up in the community either as midwives.* - #36 (midwife, Canetown)

*Increasing the number of carers*

Increasing the number of health professionals involved in a woman's maternity care appeared to be particularly problematic, especially if shared care is arranged. Although shared care between local and regional maternity carers might be more convenient and remove the need for unnecessary travel, disrupted continuity can present problems with information-sharing and quality of care. For example, rural health professionals consistently reported problems in communicating with regional hospitals regarding rural maternity patients particularly as shared documentation between the regional and rural hospital was either limited or non-existent. It appears that the systems in place at the time were not capable of facilitating efficient information exchange in shared care situations.

> *So they [women] see [referral hospital] and we see them as well in the interim, but we basically don't get any of their antenatal information from [the referral hospital]. . . . the communication is not the best. . . . So that could be improved. We're not getting any documentation of what they've done and I guess we don't give them any documentation either.* - #27 (midwife, Dairytown)

Sharing information between health professionals in different towns was difficult but it was also problematic for local GPs and rural hospital staff. In Canetown, limited communication between the local GPs and hospital staff regarding current antenatal patients had potentially critical implications.

> *. . . you know quite often they [local GPs] won't even tell the hospital that they're looking after an antenate. . . . So we don't even know there are some pregnant people out there who could use our services. And we have discussed it with the GPs there but they're not . . . I mean these women have come in the middle of the night - GPs are closed - come to the hospital and we've got no information at all, didn't even know they were pregnant, haven't even got a chart, haven't got any blood results, have nothing on them. . . . so it puts us in a bit of a compromised [situation] sometimes.* - #36 (midwife, Canetown)

Likewise, the clinical information-sharing between Dairytown hospital staff and local GPs were not well developed.

> *There used to be shared care cards and - which were very useful because women carried them with them . . . . GPs filled them in, they brought them along to their antenatal visit. We filled them in with anything we wanted the GP to do and it went back to the GP and the woman carried it with her. . . . It just got phased out - because GPs went to computers. . . . so that everyone computerised their records. . . . So you can't come to the hospital and expect to get the same record. If I want to tell the GP what happened, on that particular note I have to sit down and write something - write a letter. And then that piece of paper could go missing. . . . it is a very imperfect process and it leads to errors. . . . Now we have four or five sheets of paper, you have to stream through a chart to try and locate information, it adds time.* - #30 (SMO, Dairytown)

*"Losing" patients*

"Losing" patients was another consequence of service centralisation and poor continuity of care. This was most evident in Canetown where midwives and GPs reported that they tended to lose track of pregnant women, as they access more maternity care at the regional centre. Fragmented antenatal and intrapartum care was perceived by carers to result in discontinuous care through the postnatal and early childhood periods. These health professionals suggested that receiving rural maternity patients' discharge summaries from the referral hospital would allow Canetown midwives and GPs to follow up women postnatally which may improve outcomes and provide women with child health reminders.

> *I've pushed for the birthing units to notify us of deliveries of our children rather than the child health nurse because, up until very recently, we used to do the vast majority of the vaccinations. We do have very high vaccination rates in [Canetown] so we do lose contacts with our ladies and our babies . . . .* – #39 (local GP, Canetown)

> *I think I'd like to see that they stay under the care of a midwife until they're at least up to their six week [postnatal] check up would be good. So that if [the regional hospital] said you're discharged here on day five then at least notify the hospital to say you know Mary Smith has been discharged, her home details . . . . It is pretty, simple it's . . . communication.* – #36 (midwife, Canetown)

A similar trend of losing patients postnatally was evident at the other sites. Some health professionals surmised that women themselves are seeking continuity of carers and prefer to continue travelling to the referral centre postnatally to see the same carer(s), particularly if there were complications during pregnancy or delivery.

> *. . . quite often if they are ready to come home early and they're uncomplicated they do come back to [Canetown Hospital] but if there's any complications or anything at all they tend to stay and do their postnatal care [at the referral hospital] and then once they get back to the community they don't think to come back to the [local] hospital, they're discharged so they don't have to . . . . And we sort of lose track of them that way.* – #36 (midwife, Canetown)

*Continuity of care in the postnatal period*

To improve continuity of care into the postnatal period, midwives (particularly in Farmtown and Canetown) expressed a desire to implement a postnatal home-visiting service for maternity patients. Home-visits were seen as a way of providing care that (a) was convenient for the woman; and (b) would improve health outcomes, quality and continuity of care in the postnatal period. Farmtown midwives were already conducting some home-visiting on an informal basis (see Section 5.5.3), but midwives believed that this would be an important addition to the service they provided and should be formalised and funded accordingly.

> *One of the things I think we really would benefit from here is the domiciliary service. . . . there's some of our clients that can go home and [could] probably do with a little bit of follow-up in their home environment because you know they're not going to come back here [to the hospital] if they hit a problem or they're going home basically unsure or nervous. There's things that you just pick up on . . . you can make the phone calls but it's not the same as walking into the home and seeing what's actually happening. . . . I think it's really badly needed . . . . There's a few of us who do follow-up postnatal checks later but it probably needs to be a little bit wider . . . . A bit more formalised. It would be really nice to see us get into that position but you know we've got a budget that we have to work within so . . . . It comes down to money all the time.* – #23 (midwife, Farmtown)

In Canetown, the midwives felt that providing a home-visiting service to women after they'd returned home from the referral centre would improve postnatal outcomes.

Alternatively, the midwives welcome women to be admitted to the hospital if they've any concerns or difficulties in the postnatal period.

> *If [the referral hospital] could contact [Canetown Hospital] and say Mrs Smith's delivered, here's her details and you know to within 24 hours to contact her at home and say 'hi it's [midwife's name]. How are you going? Are you happy if we come and visit you tomorrow sometime and here's some times.' I think home-visits are very, very important. . . . I mean the Child Health Nurse often picks them up, but then that's a couple of weeks before she sees them. Sometimes their feeding's fallen by the way and things like that. . . . And maybe there are things there where we could be of benefit. So it would just be a case of [referral hospital] notifying the [Canetown] hospital to say that Mary Smith has gone home with a baby, this is what she did - even just the facts to say you know, a simple discharge summary or something like that and then we could at least know that they've delivered, know they've gone home and what they're up to.* – #36 (midwife, Canetown)

Mothers at Mineville presented another perspective on the lack of continuity in postnatal maternity care. Upon discharge from the referral maternity unit, women were provided with paperwork containing information about how to access a wealth of postnatal care services but all of these were based in the regional town. These services do no outreach to Mineville and no information is provided about services in their home town.

> *-They definitely don't have as much support here as they do in [the referral centre] because when you're in [the referral hospital] and you've had your baby, they give you this brochure and 'this is the number you can ring and they'll come and see you about breastfeeding' and they give you that.*
>
> *- Whereas here [in Mineville], there's none of that.*
>
> *- Yeah, your whole little book is full of numbers to ring for [the regional town].*
>
> *- And they're not going to make it out here for you.* – Parents group A (Mineville)
>
> *- A disadvantage of having it in [referral hospital] was if you lived in [in the referral centre] you got the postnatal care - they would go out and visit*

*you. But living here you missed out. Because if you lived there you could leave the day after and they would go and visit you and.*

*- They expect you to go up there [to the regional town]*

*- Whereas having it in [the referral hospital] and coming home on your third day, you've got no support at home.* – Parents group A (Mineville)

It is possible for women to access postnatal care from the Mineville Hospital, though some women who had birthed at the referral hospital reported feeling unwelcome there after they had birthed at the regional hospital.

*- But I found their attitude towards me after having it [the baby] in [the regional hospital] was a bit like 'oh, well you come up here for this sort of thing'. I felt a real -*

*- Guilty.*

*- Yeah. They made me feel guilty for-*

*- [that] you should have relied on their service.* – Parents group A (Mineville)

### *6.2.3 Choice of care*

It was apparent that the loss of local services had reduced the choice of maternity carers and the types of care available to rural women and their families. The available maternity carer options were closely linked with the model of care operating at the local hospital. Even where low-risk birthing services were still offered locally, choices between specialist, non-specialist and midwife carers had become increasingly limited. The availability of private care for birthing was almost non-existent at the sites. Dairytown was the exception where two local GP obstetricians had admitting rights to the local hospital and provided the whole scope maternity care for a small proportion of women as private patients. The loss of locally-based private obstetric services was consistently identified across all four sites as one of the major changes in local maternity care services. No specialist obstetricians worked at any of the four case study sites. Although outreach specialist services were run out of some regional public hospitals, these were not openly available; instead they operated on referral from local hospital staff (SMOs, midwives). Hence, specialist services were only available some distance away at regional centres.

With no local birthing service, Canetown had perhaps the least options for local maternity care. Elsewhere, both Mineville and Dairytown provided local birthing services, which operated within the medical model. The establishment of a midwife-led

unit ensured that Farmtown women retained at least one option for local birthing care, though this choice also had its restrictions, being low-intervention.

> *The midwives run the unit saying that they are empowering women . . . . I'm not sure the women are getting empowered. They're getting a delivery in their home town which is a wonderful thing. . . . they're getting less medical procedures happening to them and that is a good thing but they are not being given the option between limiting their labour by medical means to a set time or just letting nature take its course.* - #22 (local GP, Farmtown)

### *6.2.4 Financial costs*

The removal of many maternity services to larger urban centres placed financial strain on many of the rural families. Each antenatal appointment at the regional hospital was associated with travelling costs and lost work time (as a return trip to the regional centre takes most of the working day). But birthing at the regional centre was even more costly. Respondents reported that referral hospitals sometimes recommend that non-local patients relocate to the referral centre two to three weeks prior to their due date. For many women this proposition was highly impractical, especially for those with a working partner and other young children to care for. Moreover, such extensive relocation also imposed a large financial burden. The financial costs mounted quickly and included those associated with travel to the regional centre (in private transport, if available, or public transport), accommodation and food expenses while staying at the regional centre. Respondents noted that costs were even higher if pregnant women were accompanied by partners or family; especially when lost work time is taken into account. Some also believed that additional expenses may prevent some women's families from accompanying them to the regional town, thus leading to social isolation at a very important time.

> *. . . leaving the other kids is really hard and just the pure costs of it. Like, to drive from here to [the referral hospital], it's $20 in an average car. . . . So, if they're going down there to visit the family everyday - because the partners can't stay down there unless they pay for accommodation which is equivalent to a tank of petrol anyway, if not, more - it all adds up. And it's just the general upheaval and hassle for the rest of the family - especially if you've got kids at school. . .* - #21 (NUM, Farmtown)

Many women reportedly avoid relocating until quite late in their pregnancies or at the first signs of labour, in an effort to minimise the associated costs. However, this has implications for safety, such as birthing beside the road en route to the regional hospital. Safety considerations are discussed further in Section 6.3.

Financial assistance is offered by the government to families who must travel to access health care under a scheme known as the Patient Travel Subsidy Scheme (PTSS). However, awareness of this scheme was not widespread amongst the mothers who participated in focus groups. Even so, those who had accessed funding through the PTSS, along with medical and midwifery staff, were in agreement that the assistance provided was not nearly sufficient to off-set the costs incurred in travelling to the referral centre several times during pregnancy, or the costs of accommodation and food for some weeks prior to birthing.

> *- It's a contribution; it definitely doesn't cover the cost.*
> *- Oh no, it doesn't.*
> *- They obviously don't make it [the PTSS] very well known because we'd never heard anything about it.*
> *- I think you're meant to be able to claim it because the services aren't available here.*
> *- They should publicise that.* – Parents group A (Mineville)

### *6.2.5 Physical amenities*

There was a mixture of opinions regarding the physical amenities at the various maternity units. On the one hand, some parents, and certainly the health professionals, felt that rural units provided a friendlier atmosphere and were more accommodating and welcoming of family at the hospital (both in a personal sense and through the provision of appropriate physical infrastructure). These comments were often made in comparison with urban hospitals which were described as cold and impersonal.

On the other hand, some women felt that the facilities in their home town were somewhat more dilapidated or less appropriate than those available in larger centres. However, these opinions were inconsistent across the sites. There was a perception amongst Mineville participants that, although local care may be preferable for some, the referral hospital's facilities were far superior. The view was so strong as to reportedly influence some Mineville women to overlook maternity care at the local

hospital in favour of travelling to the regional hospital despite the associated inconvenience and difficulties.

> *- I just had a friend who had a baby at the [regional hospital] and went and visited her. There's no comparison in the facilities either. Like, if you're only going to be in there for a day or two, I guess it's not too bad but it's newer in [the regional hospital] and cleaner. I don't know, it's just appears to because it is newer. Whereas here it looks really dodgy.*
> *- It looks old and dumpy, yeah.* – Parents group A (Mineville)

The situation was slightly different for Dairytown women who compared the present maternity ward with the ward that operated prior to the unit being moved to within the main hospital building (relocation of the Dairytown maternity ward is discussed in Section 5.2.3). It was fairly unanimous amongst parents, and even suggested by the local GPs, that the current maternity ward was far less suitable than the previous ward:

> *. . . it's still not as ideal as the service where we had a stand alone unit where the noise didn't travel around all the other wards and there was enough space to move around. And the other thing is that they didn't put a bath into the new [ward]. When they redeveloped that bit of the ward they basically just didn't do up the bathroom . . .* - #28 (local GP)

> *- My sister had her baby here 7 years ago and they had the old maternity ward and it was beautiful actually because they had individual rooms and the old verandas and stuff.*
> *- It was quiet.*
> *- It was nice. But they [moved it] so it's more modern but it's like a walk-through now.* – Parents group D (Dairytown)

## 6.3 Safety of care

This section considers the theme of "safety" and comprises the wide ranging concerns of both the providers and users of maternity services regarding safety of maternity care in the rural setting. It starts by describing health care providers' perceptions of the increasing pressure placed on rural maternity units to maintain organisational and community confidence in the local birthing service. Strategies to manage clinical risks are then explored, before considering the impact that these strategies have on the health professionals who provide rural maternity services, and the concerns of community members regarding their access to safe maternity care. The effect of

distance to specialist care is examined, before reporting on community members' fears for the safety of pregnant women if local birthing services were to cease.

### *6.3.1 Increasing pressure on rural maternity units*

Health professionals were particularly aware that patients expect more of health care services and are less tolerant of bad outcomes than ever before. These perceptions appear to be reinforced by increasing exposure to malpractice litigation.

> *Patient's expectations. . . . I think it's just the way life goes: patients don't expect to die anymore. . . . You know, I think expectations have gone up a bit but I don't think that anything else has moved with it. . . . I think patient expectations are tough, but they're reasonable . . .* - #32 (medical superintendent, Dairytown)

> *. . . in the age of increasing litigation and increasing accountability and the community is not accepting poor outcomes or bad outcomes . . . you just have to manage that risk.* – #4 (DoN, Mineville)

The rise in community expectations was a cause for concern amongst health professionals who also understood the inevitability of adverse outcomes in obstetric practice. A "law of numbers" was consistently mentioned, and referred to the reality that there will always be some unavoidable adverse outcomes in obstetrics regardless of where birthing occurs. Indeed, there was no birthing unit, regardless of size, that would be immune from having to deal with the occurrence of a bad outcome at some point. Following this logic, these health professionals inferred that the more deliveries which occur at a single maternity unit, the greater the chance that a bad outcome will eventually occur there. Reconciling patient expectations and their understanding of the law of numbers was a cause for anxiety amongst health professionals.

> *. . . you know, things still go wrong in obstetrics and it's not necessarily that anyone's done anything wrong. The process of giving birth is inherently dangerous . . .* - #39 (local GP, Canetown)

> *It's law of numbers. Provided we work within our guidelines, then some things will just happen. As I said, it's not no-risk, it's low-risk. And even low-risk women can go wrong. . . there's always a risk.* - #21 (NUM, Farmtown)

> *Most people haven't got a . . . clue about what goes on in obstetrics. There's the perception out there that perfect mothers get perfect babies. I'm sorry - reality - that ain't obstetrics. Things go wrong in obstetrics all*

> *the time. Mothers die, babies die, there are bad outcomes. And that's obstetric reality. It's not the model that you see on television and people are led to believe happens.* - #38 (local GP, Canetown)

Although every birthing service expected to manage the consequences of bad obstetric outcomes occasionally, there was consensus amongst the sites that adverse outcomes have a much greater effect in a small rural hospital than in a large tertiary hospital. It was believed that a bad outcome was likely to be obscured by the sheer volume of births that occur in a large hospital, whereas an adverse event was likely to have a much more destabilising effect on staff in a small rural hospital. Health professionals also anticipated that reports of adverse outcomes would circulate rapidly through small communities, with the consequent loss of community confidence then exacerbating any other negative consequences for the maternity unit.

> *And you're going to have a bad outcome and a bad outcome has a big knock-on effect. Not only for the staff but for the community as well. Well, if you have a bad outcome in [the regional hospital] - unless it's in the paper - no one would know. If you have a bad outcome in [Mineville] - baby dies - everybody knows about it. And it puts pressure on the midwives and it puts pressure on the administration.* – #4 (DoN, Mineville)

> *I guess we're only one bad outcome away from reassessing the situation. I would be, anyway. You know, if I got called up to do a caesar and, for whatever reason, the baby or the mother died or something - no matter if it was my fault or no one's fault or the maternity unit's fault - I would reconsider my involvement, just for my own well-being. That would be a major factor.* - #22 (local GP, Farmtown)

> *They probably don't hear about bad outcomes from the unit in [the referral town]. . . . because they are more removed from that, but here in a smaller community . . . . Everyone knows everything, you know. News travels fast so they'd be more aware of any negative outcomes.* - #6 (local GP, Canetown)

Thus, rural maternity units were effectively working in an environment where adverse events were a reality but patients' expectations were rising and there was less tolerance of bad outcomes. Consequently, many of the rural maternity care providers interviewed in this study perceived that rural maternity units were under increasing pressure to reduce risks, avoid bad outcomes and maintain organisational (Queensland Health) and community confidence in the local birthing service.

Canetown, the only case study site without an operational birthing service, provides a good illustration of the detrimental and distressing impact that an adverse event can have on a small rural maternity service (Section 5.4.2). Some medical practitioners withdrew their services and birthing ceased not long after.

> *I think that it's potentially an extremely litigious and very bitter sort of area to work in. . . . It's [an] emotionally charged area. It has a lot of people involved in the group care of a patient and when things go pear-shaped there's a lot of anger and disharmony within that group. I think the barrister called it 'the razor law' or the 'scalpel law', I can't remember what the terminology was but it's essentially it's if you basically get a group of people and you accuse all of them then you separate them up and then they begin to accuse each other and that's when you wait to see what falls out basically. And that's a standard approach. Now that's potentially the worst case scenario because it starts team members on each other and it just destroys that unit completely. So there has to be a lot of trust and faith in that unit to make it work as well.* - #39 (local GP, Canetown)

### *6.3.2 Risk management strategies*

Appreciating that scrutiny and negative consequences (potential litigation, decreased community confidence, service closure) are likely to follow a bad outcome, many of the interviewees reflected on the need for managing clinical risk in their own rural maternity units and the demand to do so from higher levels of the state health service. Health professionals openly acknowledged that some adverse events will happen regardless of the interventions or procedures in place, yet there was still a pervading perception that risk management procedures provided a degree of protection for the hospital, and the individual providers of maternity care. This was particularly so where procedures had been prescribed by Queensland Health at a state level. Thus, in the event of a bad outcome, the care that had been provided could be justified and the consequences mitigated to some extent.

> *I think it's good in a way in that you've got something that's supposedly objective. It's bad in that I don't know how evidence-based some of those tools are. . . . But they're tools that Queensland Health corporately adopts so you're obliged to and . . . . you just be very careful you don't step out of that. . . . It's hard to argue. If you follow policies and procedures and something goes wrong but you're within policies and procedures it's a defensible position. But if you're out doing something on a high-risk*

> *patient you really should have sent to [the referral hospital] three weeks ago - why? The question will be 'why?' and since the Dr Patel, that whole thing happened in Bundaberg, there's even a greater sense of a closer scrutiny of any misadventure or mishap or death in that they talk about death audits, investigations . . .* - #4 (DoN, Mineville)

Issues associated with risk management featured prominently in discussions with most health professionals at Dairytown, Farmtown and Mineville (where local birthing services were still operational). For example, in Dairytown, the 18-week ultrasound scans can be done locally by a private GP obstetrician who is qualified, and has the necessary equipment. However, it is reported that regional specialists prefer scans to be performed at the regional hospital owing to the risk of litigation if a malformation is missed. Managing risk was especially important for the midwife-led unit in Farmtown. Here, the staff felt the weight of extra scrutiny due to the innovative model of care in which they worked. Being the first trial of a midwife-led maternity unit in Queensland, the midwives and district management staff felt that risk management strategies and clear operating procedures were required to guarantee transparency of the service and to defend the model of care to potential critics and those who were resistant to innovative models of maternity care.

> *I think our uniqueness - because we're odd, we're not mainstream, we get extra scrutiny. If we had a loss of community confidence or not just community, organisational confidence because of some outcome we would not be as protected as if the same scenario happened in a tertiary model . . . . and there's a lot of hoping and wishing that we will fall in a heap. . . . It's a huge responsibility.* – #24 (midwife, Farmtown)

> *There's choices and you've got to make choices that are safe, that are not going to land you in a court of law . . . . Of course you're under scrutiny - we're the only rural model in Queensland. You're under constant scrutiny so you've gotta - it's gotta look good. And legitimate - you've got to look like you know you've got everything in place you're offering a safe and sustainable service . . . . And anyone who wants to step outside the guidelines and the best practice evidence and all that – well, they do so with a risk of discrediting the service if something goes wrong.* - #23 (midwife, Farmtown)

Overall, a number of risk management strategies were observed across the sites and are discussed below. Many of these strategies are produced by Queensland Health and have had an influence on the maternity services seen at these towns.

*Clinical Services Capability Framework*

The CSCF (Queensland Health, 2004a) is a document published by Queensland Health which recommends the minimum resource requirements for each level of maternity service provided at a Queensland Health facility. Curiously, although the framework is for state-wide application, interviewees at some sites appeared completely unaware of this policy. In Canetown, this is likely to be due to the fact that there is no operational birthing service and the framework, being based on the medical model of care, is likely to be less relevant to the innovative midwife-led model in Farmtown. Nonetheless, the CSCF had strong influence on the maternity service in Mineville (Section 5.3.2).

> *There's the Services Capability Framework which is a written document which says that you can only provide a maternity service, and a Level 1 maternity service, if you have this, this and this in place.* - #8 (NUM, Mineville)

The application of the CSCF at the Mineville hospital was seen to have both positive and negative impacts. In a positive sense, the framework has assisted in standardising the quality and safety of patient care by prescribing that particular health professionals and resources should be available. Previously, there were fewer formal guidelines on the extent of care that could be provided by various health professionals and less prescriptive dialogue about what resources should be available to provide certain services.

> *It ensures that they're getting safe care and that the services are there in case something goes wrong. But from that perspective yes, it has ensured that they are looked after by qualified, competent midwives and medical officers.* – #8 (NUM, Mineville)

On the other hand, risk management policies such as the CSCF were also seen to constrain the range of services provided by rural hospitals.

> *We have tools now. We have things like risk management tool, integrative risk management tool, [with] which we identify our risks. . . . So, we're accountable for what's out there in the public space, in terms of what we can do. There's other things called [Clinical] Service Capability Framework, a planning framework. Which is . . . like a risk management*

> *tool. . . . I think they've become more prescriptive in what you can do and what you don't do. . . .* – #4 (DoN, Mineville)

This highlights one of the negative effects of risk management procedures: limiting the scope of health care services provided within rural towns, including those which the community may have accessed for years. Often, local residents may not appreciate the reasoning behind the discontinuation of hospital services but just perceive a continual downsizing of their local hospital.

> *. . . there may have been medical officers practicing outside their scope that we may not have been aware of until something went wrong. So I think that the [Clinical] Services Capability Framework is a great risk management tool and a necessary evil from a safety perspective. But getting that message across to the general public is really difficult - they don't understand the rationale behind it all.* - #8 (NUM, Mineville)

*Assessing risk*

Each unit with a birthing service assessed patients' risk profiles using either guidelines developed by the Australian College of Midwives (ACM, 2004b), or the tool published in the *Primary Clinical Care Manual* (Queensland Health & Royal Flying Doctor Service, 2007). In this way, health professionals could identify higher risk patients who should receive care at the regional hospital. Although the use of risk assessment tools was common across the sites, health professionals emphasised that these instruments did not remove the risks associated with birthing. Several midwives and proceduralists explained that regardless of risk assessment procedures, pregnancy and labour are still highly unpredictable and even low-risk pregnancies can quickly develop complications which require emergency medical intervention.

> *No matter how good your intentions are, low-risk births can turn to a high-risk very quickly . . .* - #13 (midwife, Canetown)

> *They can change in labour. They can change in a period of a week. So, just because you're low-risk today doesn't mean you're not high-risk tomorrow.* - #32 (Medical Superintendent, Dairytown)

Although these risk assessment tools aim to raise awareness of potential adverse outcomes in each pregnancy, clearly distinguishing between categories can be difficult. Thus, using risk assessment tools as the basis for categorising patients, and determining where they should receive care, can be problematic. Some, particularly

more experienced, health professionals at the rural sites admitted that despite using risk assessment tools, clinical judgements were often relied upon to decide how appropriate it is for a woman to continue receiving maternity care at the local unit exclusively.

> *. . . the obstetric risk score . . . has different components. Some are psychosocial, some are actually obstetric scores and it's a clinical call on behalf of the doctor and midwife in terms of what weighting they give that at times. . . . it's what they're comfortable with and what conversation and discussions happen with the actual family and the woman that's involved and how the risks have been viewed and understood.* – #4 (DoN, Mineville)

> *. . . I think they're also starting to use more of the maternity risk score. But at the end of the day it's a clinical judgement. . . . There are risks to everything. It's a question of balancing and managing the risk and not ignoring risk. . . . A lot of good clinical calls to be made.* - #32 (Medical Superintendent, Dairytown)

*Retrievals*

Each site had plans in place to ensure that women and neonates could access specialist medical care in the event of complications or emergencies. Women and neonates could be transferred either to the regional hospital or a specialist retrieval team might be sent to provide care in the rural setting, depending on the nature of the emergency situation. Although retrievals by air were possible, and cover the distance in the shortest amount of time, the maternity units wouldn't use this option very often. Unpredictable transfer times were likely to be a large deterrent as, although the travel time may be short, organising the retrieval and waiting on aircraft availability could critically prolong the time taken to obtain specialist medical attention.

> *And it's alright to say you know, [the regional hospital] always say the chopper's twenty minutes away or the plane is an hour away, less than that, but it's not. . . . we notify [the regional hospital] who then calls the chopper, the chopper then goes to the hospital in [the referral centre] right, picks up whoever they're going to bring, their midwife and doctor, their team and then they fly out to us. So we can wait for a chopper for an hour, hour and a half minimum. You know a chopper might be in the air for twenty minutes and then land on the strip, and that's fine. But in*

> *reality it's two hours. Hour and a half, two hours without worrying. But, you know, is it safer to wait for the plane?* – #10 (midwife, Mineville)

Thus, when more specialised medical services are required, patients are most often transferred to the referral hospital by road ambulance. Midwives are required to escort any labouring women being transferred by road. In Farmtown, the first year of operation saw eight patient transfers to the regional hospital, all by road ambulance (Section 5.5.4). Canetown midwives are frequently involved in ambulance transfers because there is no operational birthing service there, suggesting potentially increased risks for rural women in communities with no birthing facilities.

In addition, midwives recognise that a number of barriers encourage women to delay their relocation to the regional centre until the first signs of labour. (Some financial barriers are discussed in Section 6.2.4 and some social barriers in Section 6.4.2.) As a safety measure, local midwives could provide advice regarding whether (a) it is safe for the women to continue travelling to the referral centre in private transport; (b) labour has progressed significantly to warrant a road ambulance transfer with a midwife escort in case she delivers en route to the hospital; or (c) labour is so far advanced that it would be safer for the woman to remain at the rural maternity unit for birthing as there would be insufficient time to deliver en route to the referral hospital.

> *. . . [the referral hospital] requests that they are in [the referral centre] I think it's 37 or 38 weeks, might be 38 weeks. But realistically, we acknowledge the fact that a lot of women won't do that and so we advise them to present for assessment when they think they are in labour. So and from that we make a decision as to whether they go down by themselves or whether they need to go down in an ambulance. So I suppose another service is we do ambulance escorts to [the referral hospital] fairly regularly . . .* - #15 (midwife, Canetown)

Interviews across the sites revealed that retrievals, particularly by road, were problematic for a number of reasons. Firstly, the recent change to a centralised system of organising retrievals appeared to be less efficient for transfers originating at rural hospitals.

> *The retrieval service is complex because the retrieval services are based around the state-wide retrieval system. [It] is something that's evolving and obstetrics - they're not good at it really, yet. They're very good at*

*trauma and that sort of stuff; obstetrics is a bit problematic.* #16 (Medical Superintendent, Farmtown)

Secondly, road safety can be an issue for transfers made via road ambulance. In addition to the usual dangers associated with driving at high speeds, night time transfers were fraught with even further dangers.

*. . . that's an hour and a half to [the referral hospital] and if it's night time, you know there's cattle, there's kangaroos, you blow a tyre or something you know.* – #9 (midwife, Mineville)

Furthermore, seasonal weather conditions seen in north Queensland can make road transfers even more problematic. Prolonged rain periods, as seen during the wet season or summer months, can flood the only highways that link rural towns to their referral centre where specialised medical attention is available.

*But the safety on the whole, because they'd then have to travel in labour and often too far, and often could be heavy rain, cyclone weather. The ambulance service wouldn't be able to cope with it.* – #19 (midwife, Farmtown)

*Well, if you look at the big picture, patient safety is worse because just travelling to [the referral hospital] in labour, the weather's bad and whatever.* - #37 (local GP, Canetown)

Thirdly, and a particularly pressing concern for midwives, road ambulance retrievals cause added discomfort for labouring women. Midwives argued that lying down in the back of an ambulance was less than ideal for a labouring woman as there is no freedom to move around, pain relief options are limited and the rough roads make the transfer quite uncomfortable.

*But it's the worst place for a woman [in the back of an ambulance]. Okay, she's tied down, she's bouncing around, those beds are only wide enough for your legs let alone your bottom and there's no pain relief. You know, so it's most inappropriate for women. . .* - #36 (midwife, Canetown)

*The other thing is that if you're in [Canetown] and you're in labour and you're in a car and having to sit while you're in labour is not a pleasant position to be in. You don't want to be sitting like this - you don't even want to lay down when you're in labour - you want to stand up and walk*

*around. You don't want to sit in a car for an hour!* – Parents group B (Canetown)

Apart from being uncomfortable for women, midwives also expressed apprehension about escorting labouring women for fear that the baby may have to be delivered on the roadside without any of the resources or support that would ordinarily be available even at their rural hospital. Often, the paramedic driving the ambulance can assist the midwife during the delivery but there is not the support from medical officers or midwives that would be available at the hospital, nor the equipment or medication that may be necessary postpartum. Indeed, several of the midwives who were interviewed held strong views about escorting labouring women in an ambulance and explained that the experience was not only unpleasant for the labouring women, but also an anxious time for themselves.

*. . . at least I've got light, I've got drugs, I've got a heater for the baby [at the hospital] - I've got those things that I don't have in an ambulance.* - #36 (midwife, Canetown)

*. . . it's not the safest experience. You're better off having it here in [Canetown] - at least you've got the back-up and, like I said, you've got that private anaesthetist around in the back of your head - you shouldn't - but you know he's there.* – #14 (midwife, Canetown)

*And also I think you'll find every midwife that is here at the moment has delivered between here and [the referral hospital], which to me is not good. . . . And that just increases risk you know. . . . They can walk out the front gate here and the membranes go and the baby will be there. . . . it is a big risk to get in an ambulance. You know, it's alright to say it's only an hour and a quarter, hour and a half, away but it's a long time when you're in the back [of an ambulance].* - #10 (midwife, Mineville)

*We do have problems in [Dairytown] where we don't always have procedural staff available . . . so there are incidents where you might have to transfer a lady who is in labour. And I have had a couple of not very nice - being the midwife on and being told that the woman has to go to [the regional hospital] but I felt that she didn't need to. You always examine them - do a vaginal examination before they go in an ambulance with a midwife - we always transfer them with a midwife in. . . . If they are too far dilated we won't risk [it] - we will keep them here in [Dairytown] and the midwife will deliver them with the doctor who may*

> *not be procedural but will be there to help. . . . It's not very pleasant, no. But that's the sort of situation that's been placed on us here.* – #27 (midwife, Dairytown)

Transfer protocols were a necessary part of operating procedures at each rural maternity unit. However, given the problematic nature of retrievals, a constant tension existed between the responsibility that midwives had in caring for labouring women and the protocols which required them to transfer the woman to the referral hospital. Though midwives at all four sites displayed a genuine reluctance to send labouring women to the referral hospital in the back of an ambulance, they felt forced into taking that action due to the reality that local women were delaying their relocation and there is little policy to support any other decision. A small window of discretion may be available to midwives when they are assessing labouring women who are on their way to the regional hospital. That is, clinical judgement of advanced labour may be sufficient justification for allowing the woman to birth at the rural hospital. Yet most midwives professed a preference for risk-averse approaches that could be supported by Queensland Health district policy if an adverse event should occur.

> *If I keep her and she hasn't delivered by morning, I'm going to be in big trouble because I kept her. It's her third baby, there's a risk she'll be quite quick. But anyway I thought I have to do the right thing and I called an ambulance and we got to [the referral hospital] at 12:30 in the morning and she delivered her baby by 1:45. She was in full established labour all the way down, on a stretcher, lying down with no pain relief. What can you - you can't do anything and women should not be lying on a bed in labour on a bumpy highway with no pain relief, you know? So it's hard and I hate it and I felt really sad that I had, in the end, brought her you know? But what do you do? You're in a no-win situation.* - #13 (midwife, Canetown)

> *Yeah, mostly we end up taking them in the ambulance and it's a pest sometimes. The last thing you feel like doing at times but you think 'oh well, better that then at least there's someone with them if something happens.'* – #14 (midwife, Canetown)

*Other risk management strategies*

A supportive relationship with the referral hospital was observed to be integral to each rural hospital's risk management plan. Timely access to specialist medical advice via telephone can be vital. Alternatively, efficient organisation of specialist teams to attend the rural site can be equally important. In collaboration with the relevant referral hospital, each site had also developed strategies for managing situations involving unplanned deliveries. Unplanned deliveries may be the result of an unexpected pre-term delivery, complications during pregnancy, or when women deliberately attempted to avoid travelling to the referral hospital by presenting at the local hospital in advanced labour. Some of these unplanned deliveries might be straightforward and relatively uneventful, some might require verbal advice from specialists at the referral centre while other cases might require transfer to the referral hospital. In Canetown, these plans were especially important as there was no operational birthing service.

Regional hospitals can also provide risk management support to rural hospitals by providing a specialist outreach service, as happens in Farmtown where the midwives welcome a monthly visit from a specialist who conducts case reviews and assesses patients who are referred by a midwife. In addition, the role that regional hospitals play in the skill maintenance of medical practitioners and midwives can be crucial. Many health professionals were keen to highlight the benefits derived from spending periods of time working at larger referral hospitals, refreshing skills in high-risk cases and emergency situations and generally increasing the volume of deliveries with which they assist.

Maintaining skills and participating in programs such as The Advanced Life Support in Obstetrics course were identified as essential by health professionals at each of the sites. Maintaining emergency obstetric skills was seen as vital in even a low-risk setting where such skills may be needed infrequently, but proficiency was crucial when the need arose.

> *. . . we have a memorandum of understanding with the birth suite in [the referral hospital] where our midwives go there to upskill. They do a minimum of 5 days a year there . . . because [Mineville], on average, does about 80-90 births a year. If you've got eight midwives and you divide that into that number, the number of deliveries that those people actually handle is not that many. So, to have a broader range of skills they need to be in touch with more deliveries.* – #4 (DoN, Mineville)

> *. . . you need to keep up your skills because you need to be comfortable to do them in an emergency, plus there's a lot of changes happened with management of various things so people need to stay up to date with the current evidence-based medicine . . . . whether it's going to conferences, whether it's going to a tertiary centre and doing hands on practice regularly . . .* – #26 (SMO, Farmtown)

### *6.3.3 Effects of closing a rural maternity unit*

Closure of a rural birthing service was expected to have a devastating effect on the safety of care for rural patients in a number of ways: (i) reduced accessibility leads patients to adopt risky strategies to obtain care; (ii) local de-skilling in maternity care; and (iii) de-skilling in wider procedural capabilities. If the opportunity to practice obstetrics or midwifery was removed, GP proceduralists and midwives would either move to locations where they could continue practicing or eventually become de-skilled if they were to stay (being less inclined to maintain their skills where they are not required).

*Reduced access to care leads to risky strategies*

Previous sections of this chapter have discussed some of the barriers women face regarding timely relocation to the regional centre for intrapartum care (See Section 6.2.4 for financial barriers and Section 6.4.2 for social barriers). Midwives acknowledged delaying relocation until the onset of labour as a common practice amongst local pregnant women but this practice nonetheless carried with it the very real risk of birthing en route to the regional hospital, by the roadside, with no help from health professionals. Further, road safety concerns were raised as women explained how their partners, in the situation of transporting a woman in labour, were understandably eager to get to the regional hospital as fast as possible.

> *- Well, imagine being in labour [and driving to the referral centre].*
> *- Most of the husbands are having to drive even faster -*
> *- Because they're freaking out*
> *- The wife is in labour.*
> *- So it's being in danger.*
> *- We live just over here and I had 3 contractions in the car with my first [child] just to get to [Canetown] hospital. My husband, if he went any faster -*
> *- Yeah, you get to town so quick.*

> - *You think 'this is ridiculous' but you have no choice.* – Parents group B (Canetown)

*Local de-skilling in maternity care*

Loss of local maternity services carries with it the risk that local maternity care professionals will either gradually de-skill or move away to continue practicing. Loss of maternity care skills would have safety repercussions for the local management of any obstetric cases as rural hospitals lose the capacity to deal with uncomplicated obstetric situations, let alone women who present requiring emergency obstetric care. Obstetric emergencies are by nature spontaneous, unintentional and cannot be controlled for via risk assessment procedures. There is always the potential for such emergencies to arise whenever there are pregnant women in the town.

> *. . . I think there were five who wouldn't have had, who presented less than an hour and a half from recognition of a problem to birth and they were things like sudden and calamitous APH, premature, and foetal distress on presentation. So all those ones were inevitable, whether there had been a service here in town or not, they would have ended up on the doorstep. . . . your perinatal mortality, morbidity increases when you lose those services for exactly that reason, you know, you lose your skilled staff if you don't have a dedicated [maternity service] because the midwives wouldn't stay here if we didn't have a maternity service. . . .* – #24 (midwife, Farmtown)

Localised de-skilling was already being experienced in Canetown. Although the birthing service had not long been closed, the local hospital had experienced a dramatic decrease in maternity care providers, with qualified and experienced midwives leaving and GP proceduralists no longer practicing in obstetrics and anaesthetics. One of the midwives discussed her concern about the ability of the local hospital to continue managing emergency obstetric cases:

> *Yeah, you have to have some sort of service for emergency obstetrics don't you? And if you have no midwives in the town - and what might happen is you might be left with one or two that have gone so many years with no midwifery experience and they'll say 'I'm not doing it anymore.'* - #13 (midwife, Canetown)

It remains to be seen what effect this progressive de-skilling will have when emergency cases, such as that described by one Canetown mother, occur in the future:

> *When I had him, I was lucky, I had him here. I went into labour at quarter to 3 in the morning . . . . So we went to the [Canetown] hospital and he was born at 10 to 4. Now, if they had of sent me [to the referral hospital], there was no way I would have made it. And he was born with a cardiac defect that nobody knew about and he needed medical help immediately. He had to be put into an incubator and had to have oxygen on him, he had an injection given to him as well and had to transfer. Now, if I had to transfer and halfway along the road had had him . . . like, we knew nothing was wrong with him before he was delivered and he came quick. There was no waiting for him.* - Parents group B (Canetown)

Lack of local maternity skills also poses safety concerns for a small proportion of maternity patients who avoid birthing at the regional hospital by turning up at the local maternity unit in advanced labour[37]. At the time of the study, Dairytown, Farmtown and Mineville were restricted to doing only low-risk planned births, and no planned birthing occurred in Canetown. Hence, it was expected that there would always be some patients who could not deliver at these units, even if they wanted to. The narratives provided by health professionals indicated that they perceived women to intentionally disregard advice to obtain care at the regional centre, though some suggested that perhaps women do not fully comprehend the risks associated with their choices.

> *. . . they're only trying to do low-risk women here. There is a component of the population here that have high-risk factors for poor obstetrics outcomes and they know they have to go to [the referral hospital] at a certain time in their pregnancy and they don't go and they turn up here for delivery. Or alternatively they don't access antenatal care at all . . . a very limited amount of antenatal care or none and they turn up . . . . they turn up here to deliver. . . .* - #11 (midwife, Mineville)

> *. . . we know we have a percentage of clients who are very non-compliant and it wouldn't matter if you said they had to deliver in [the regional town] or not and whether we were still operating as a birthing unit - a unit that could do births - they would rock up on the doorstep*

[37] The more advanced labour is, the less likely the rural health professionals were to transfer the woman given the higher risk of birthing during the transfer.

> *because they would leave it as long as possible so they could not be transferred.* - #23 (midwife, Farmtown)

In the end, stories of women presenting to these rural hospitals in advanced labour were often told to illustrate the point that regardless of whether there was an operational birthing unit or not. There was always the potential for obstetric emergencies and some women would continue to turn up at the local maternity unit in advanced labour to avoid the regional hospital. Ideally, it would be better to have some skilled maternity carers available to attend to these situations, whether it is to deliver the baby or stabilise the woman for retrieval, than to have no local expertise. Thus, these scenarios were widely acknowledged as further motivation for maintaining a low-risk maternity unit and retaining some maternity care expertise.

> *The other thing is that from a safety point of view, obstetric disasters happen at any time of the day or night and whether they're planned or not and sometimes you simply have to deal with them on site if you're going to salvage people's lives and if you haven't got that skill set in use and being practiced then people don't survive. They do die.* - #28 (local GP, Dairytown)

> *Well, the hassles are when somebody comes in, in labour, and has to deliver. If you have an emergency that needs to be dealt with now. If you're not maintaining that skill, there's a problem. The most dangerous thing is to try and do something that you're not competent to do. So I think it's important for the safety of mothers and babies that the service is maintained. Because it [the referral hospital] is an hour and a half [away] . . .* – #41 (local GPs, Mineville)

*Effects on wider spectrum of health services*

Furthermore, maternity care, particularly birthing, was perceived to have an interdependent relationship with the other procedural services provided at the hospital. The provision of obstetric services attracts not only medical staff with obstetric skills, but also anaesthetic staff who have skills that are valuable and transferable to other hospital-based services, such as emergency care. Thus, the de-skilling associated with the loss of a birthing service not only reduces the capacity of rural hospitals to deal with obstetric cases, but also the ability of the hospital to provide a larger range of services, particularly emergency care, that are dependent on procedural skills.

> *If you have a procedural obstetric service then it means that you've also got anaesthetics available and emergency medicine available because the skills set that you use for obstetrics is transferable to those situations so you maintain the skills of the people in town. . . .* – #28 (local GP, Dairytown)

The concerns about both the de-skilling in maternity care and the threat that the loss of maternity care poses to other procedural services is well summed up in the following quote from the Dairytown Hospital Medical Superintendent:

> *It [birthing] is the guts of what we do. . . . We'll lose staff [if the birthing service closes]. First of all, you'd lose some of our clinical doctors who like to provide a broad service. But de-skilling them puts women at risk. So if we lose their skills, people are still going to turn up in labour - that's going to put people at serious risk. Like they did at [another rural location] where they had no midwives and no doctors who knew anything and a normal delivery ran into problems which didn't need to if the person had had any experience in obstetrics at all. And in the same sense we would de-skill our midwives which would put our women at risk as well because whether you're opened or closed, you're still going to have a significant number of women deliver here, in the car park. You'll get hidden deliveries, hidden pregnancies. . . . Antenatal care would be suboptimal because we haven't got the skills anymore. So the risk management's not going to be there. . . . But the bottom line is we're going to de-skill and put people at risk because people aren't informed. They're going to just lob up expecting [Dairytown Hospital] to admit them. . . . they've always delivered in [Dairytown], they're just going to keep lobbing up. . . . If we close they still come in. . . . We know that if you close a maternity unit - if you look at the Hirst review, people are still delivering, so you're putting them at risk. I don't think it's an optional extra.* – #32 (Medical Superintendent, Dairytown)

## 6.4 Maternity care and rural communities

This section explores the various interactions between maternity services, particularly birthing, and rural communities. It begins by exploring community members' and health professionals' perceptions of the importance of such services for their own

towns. The advantages of locally-based care for rural families and the social significance for the towns more generally are then discussed in more detail. The remainder of this section then deals with aspects of community involvement in planning for local maternity services.

## *6.4.1 Importance of local birthing for rural towns*

When asked to rate, on a scale of 1 to 10, the importance of having a local birthing service in rural towns such as their own (where 10 equates to "most important" and 1, "not important"), respondents overwhelmingly indicated numbers towards the "most important" end of the scale (that is, numbers close to and including 10). Interviewees were then asked why they felt such a service was important. The majority of responses were related to patient interests, for example, minimising the travel and financial costs of pregnancy and birthing for rural women and their families, not removing women from their social support network, and improving the continuity of care. Many of these responses reflected issues of expectation and equity such as:

> *It's a matter of equity. Social and health justice. This is not a big ask. We're not talking about neurosurgery or liver transplants, we're talking about a basic human right in terms of health care: that a woman can be delivered close to her community and family.* - #46 (local GP, Dairytown)

The next most commonly reported issues related to social capital and the importance of a local birthing service in maintaining the viability of rural towns. A number of interviewees in more senior medical and nursing administrative roles noted the importance of birthing for local procedural services, and hence, local medical care more generally if birthing was not offered locally. This is discussed in more detail in Section 6.3.3. The following sections detail the advantages of local birthing for rural families and the significance of local services for rural towns.

## *6.4.2 Advantages and disadvantages of local birthing for patients*

*Advantages*

When discussing the various advantages and disadvantages of birthing locally as opposed to birthing at regional hospitals, participants were far more likely to emphasise the benefits of obtaining care locally. Much less time was spent discussing the negative aspects of local care; these thoughts often required prompting or were added as a brief afterthought. Health professionals and community members broadly noted the same benefits associated with local birthing: (a) greater continuity of care; (b) less

disruption to the family unit; (c) advantages of accessing care in smaller rural hospitals; (d) less travel requirements; (e) perceptions of safer care and (f) reduced financial costs. Many of these benefits have already been considered in other sections of this chapter. The consistent theme of continuity of care was discussed in Section 6.2.2. The smaller financial burden associated with accessing rural maternity care has been discussed in Section 6.2.4 and Section 6.3 has examined perceptions of enhanced safety of maternity care when local services are maintained.

One group of issues not previously discussed relates to the social advantages and practicalities of local birthing. Respondents reported that being able to access local birthing care meant that there was far less disruption to the family unit, particularly during the late antenatal through to the immediate postnatal periods; by which time pregnant women are expected to have relocated to the regional town. Many interviewees acknowledged that having a woman's family and extended social support network around can have a positive effect on the woman and is important for family bonding. However, practicalities may prevent a woman's family from accompanying her during this time or even from attending the birth. Work commitments and unsympathetic employers may prevent spouses from accompanying the pregnant woman, plus the additional complications if childminding must be organised for other children. Stories of women delaying their relocation to prevent major family disruption and to avoid being removed from their family and friends for prolonged periods were not uncommon.

> *You've got children here to go to school, you've got children that are at home that need to be looked after, your husband's got to go to work. Who's going to pay for your accommodation? Even if you've got family [to help], you've still got everything else to worry about.* – Parents group B (Canetown)

> *My doctor told me to come 6 weeks before I was due because [child's name] was born 5 weeks early and I was organising [to go] and I would [say] 'I'll go next week'; 'I'll go next week' 'I'll go next week' and I eventually went [to the regional hospital] on the day that I went into labour. I just couldn't stomach going away from home. I just couldn't imagine . . . . I was going to stay with relatives and you're not comfortable in somebody else's house. . . . and you're in a really awkward state* - Parents group C (Mineville)

> *And here, they leave their children behind here with their partner and they have huge worries, wondering what's going on with the kids and stuff like that, which must affect [them].* – #11 (midwife, Mineville)

> *The other thing is that some people don't have vehicles so if we're taking the woman in labour down - quite often she's there unsupported on her own if no one else can come down with her. So that's, well you can say that the partner can come down but, where's he going to stay when he's down there? He's got no car to drive anywhere and they'll look after the women but yeah. I've taken women down on their own and I feel really sorry for them.* – #14 (midwife, Canetown)

*Disadvantages*

Interviewees were more reluctant to identify any disadvantages associated with local care. Health professionals mostly agreed that for women of appropriate risk categories, there were few disadvantages to delivering at a rural hospital. However, when pressed, health professionals commonly cited long distance from specialist care as the chief drawback to local maternity care. Regardless of the antenatal risk assessment procedures, complications could arise for any woman and even women assessed as being low-risk might require emergency intrapartum transfer for specialist medical intervention. Some women might prefer to deliver at the referral hospital to be safe in the knowledge that these services were at hand if complications were to arise during labour.

> *Mainly, you've got the guaranteed access to specialist help [at a regional hospital], whether it's a paediatrician for a sick baby or the consultant obstetrician, the anaesthetist, you've got all those services there. They will always run the risk up here that if something happens - and that's because obstetrics is very unpredictable - that there is no guarantee that there's going to be a doctor available who can help.* – #18 (local GP, Farmtown)

Another noted shortcoming of local birthing was not intrinsic to the hospital, but rather, a feature of rural towns in general. That is, there is less anonymity in rural towns than in urban centres. Women who prefer a high level of privacy and confidentiality may prefer to birth at the referral hospital where there is less likelihood of knowing those around them, including their carers. Though this may be of concern for some, others might see it as an advantage to local birthing, enhancing continuity of care.

> *I think disadvantage is privacy. I think privacy is always compromised in smaller communities because smaller communities have a sense of knowing everything and in small communities - the hospital is the community. Like, that staff that work here are actually from the community so there's very little differentiation between. But it means that if privacy is an issue, I think that sometimes that could be difficult for people. It just depends on what their sense of personal space is. . . . or what sits around their lives, you know? Like some stuff is not meant to be shared, you know?* - #4 (DoN, Mineville)

Another potential disadvantage of local birthing, for parents, lay in the aged nature of facilities at many of the local rural hospitals. The impression of parents regarding the physical state of rural hospitals was discussed in more detail in Section 6.2.5.

### *6.4.3 Social importance of local birthing services for rural towns*

Many health service providers across the four sites suggested that their rural communities had a great sense of ownership of their local health services, including maternity services. This sense of ownership was mostly evidenced by a local community's uproar and vocal response to threatened service closures in the past or their expectation of this in the future. Community fundraising to support local health services also illustrates the commitment of rural towns to local health care services (see Section 5.5.1).

> *. . . well, that's the case in lots of little country towns, isn't it? And each one guards their services rather jealously.* - #16 (Medical Superintendent, Farmtown)

> *. . . there's a very strong sense of ownership of the services here by the community. So yeah, if it's shut down that would be a big thing. . . .* - #4 (DoN, Mineville)

If local birthing services were to close, many interviewees felt that there would be many important, but negative, social repercussions for individual rural communities. Firstly, as discussed in the previous section, there were the social aspects of pregnant women being removed from their support network for birthing and concerns regarding family disruptions during this time.

Secondly, the cessation of local birthing was expected to have a devastating effect on the viability of rural towns. Many respondents felt that the closure of local birthing

services would project a negative image of a failing town. Respondents outlined a series of flow-on effects, beginning with young families and people of childbearing age leaving, or being deterred from moving to their town because of the difficulty in accessing maternity care. Subsequently, with no influx of young people, rural towns would stop thriving and the population would become progressively older, with no population renewal. Thus, a persistent theme throughout interviews linked closure of maternity services towns losing vitality and viability.

> *. . . because if they don't have a birthing service in a town of that size, a town of that size is threatened for its very future because young people can't move there or they move away, people having babies don't want to stay.* – #1 (regional health professionals, regional centre)

> *I think that there's the hidden costs on the person and their families with all the travel and so on required and I think it's a very big negative towards living in country areas for a lot of young people.* - #39 (local GP, Canetown)

> *. . . if you start moving people around, people know they have to leave town to have their baby, it discourages some people from moving to your town. So the towns tend to be less attractive to a whole range of people and so it tends to make the rural people less likely to grow and thrive.* - #28 (local GP, Dairytown)

Thirdly, retaining local birthing services was seen as significant to the identity of rural towns. Health professionals were particularly inclined to highlight the public pride associated with having an operational birthing service. The local availability of such services was related to a sense of community well-being whereas the closure of birthing services was believed to have a demoralising effect on the community.

> *The town's identity and self-image depends a lot on how well its hospital works. . . . if they lose a major service like the maternity unit, people see that as a large downgrading, backward step for their town. . . . the town's identity hinges on how well its hospital works too.* – #22 (local GP, Farmtown)

> *I think it's important for this community to know that if they're pregnant they can have their baby here in [Dairytown]. You know I think it gives the community a great sense of pride to know that they have a high-quality obstetric service.* - #30 (SMO, Dairytown)

Finally, and particularly for towns where there are multi-generational linkages, birthing in the home town has extra significance. For some families, having their children born in the same town as their ancestors is of great personal importance and the removal of local birthing services often signals the end of long-standing family traditions.

> *It's the thread that weaves - birthing is a thing that keeps a community together - alive. People talk about 'where were you born?' It's an important thing. Certainly for Indigenous people, where they are born is central to who they are and without those threads, it falls apart.* – #1 (regional health professionals, regional centre)

> *A lot of families have - well, the ladies have been born here themselves. They've grown up in the town, they've married in the town and they want their babies in the town and the grandmothers were there, their children were there . . .* - #19 (midwife, Farmtown)

Not only did operational maternity services hold significance for the communities, but it also affected the working life of health professionals. The loss of maternity services was associated with decreased staff morale regarding the inability to provide comprehensive health services and a working environment that lacked the richness and vibrancy associated with having new life in the hospital. This was particularly evident in Canetown where intrapartum care had recently ceased:

> *Do you know how much it lifts staff morale in a small hospital where you are mainly aged care. . . we've lost that service where we have women and babies. To have one born that day, as I said, she got so spoilt by the nursing staff and you can feel the lift. . . . Yes, and it [staff morale] is important because it's how you retain your staff . . . staff morale is really poor at the moment. . . . A lot of that reason is because this [maternity care] is a service that went. Because it's a small hospital, everybody is a part of it and they all could do some postnatal care and stuff like that. We're all a part of it [maternity care] and now it's not there.* - #13 (midwife, Canetown)

> *It'd be nice to have [a local birthing service] and I think it would give both a feeling of fulfilment and completion to the doctors and the nurses in the town as well to the patients - they feel that they have got a complete hospital, rather than really a defacto aged care facility.* – #39 (local GP, Canetown)

### *6.4.4 Observations of community involvement*

It was interesting to note the varying levels to which communities could be mobilised for causes associated with their local health services. There were examples of very active communities, and also quite discouraged communities. Dairytown and Farmtown provide two examples of successful community action when their local services were threatened with closure.

In Farmtown, the midwives, their community support group and local politicians effectively organised and led the community in vocal action against the closure of local birthing. The community action attracted media attention and placed pressure on the government and, as reported by interviewees, this was instrumental in ensuring a birthing service was re-opened in Farmtown (see Section 5.5.2). Dairytown also illustrated vocal community reaction sparked by the suspected future downgrading of the local maternity unit. The Dairytown community was readily mobilised and exerted political pressure when their health services appeared to be at risk. Nevertheless, the town lacked formal mechanisms by which the community could provide meaningful input to local health services.

In contrast to the situations of Farmtown and Dairytown, the Canetown community appeared far less active, even when the local birthing service was under threat (Section 5.4.2). Not surprisingly, Canetown lacked structured, ongoing means by which to engage in local health service planning and there was apparently little interest from within the community to change this situation.

> *They've never been involved in how this health service actually works. –* #5 (Acting DoN, Canetown)

In common with Canetown, Mineville showed few signs of community activism. There was little sign of organised community input or any indication that the community was active in their support of local services, such as those at the hospital.

### *6.4.5 Attitudes towards community engagement*

Although Dairytown and Farmtown displayed a propensity for being active, overall there appeared to be a general lack of formalised and ongoing processes for any of the communities to contribute meaningfully to the planning or organisation of local health services. There was occasional mention of community representation on a health council or a similar group, wherein community representatives were a "good sounding board" but were unlikely to have great influence on maternity services:

> *And the people who are usually represented on the district health council are usually mature-aged people - they're not people of childbearing age. They're people who have a passion about being on a committee, you know. They're a voice but I don't know who hears that . . .* – #8 (NUM, Mineville)

> *. . . they have the health executive which is a poor attempt at a hospital board and all these poor do-gooders go along to the meetings and the policy's already there and whatever you tell us, rubber stamp this and bang. So, I think community consultation isn't working.* - #22 (local GP, Farmtown)

In Farmtown, the midwives made the strategic move to establish a community group which would support their imminent battle to see a midwife-led service set up at the local hospital. However, since the traditional model of obstetric care has closed and a midwife-led maternity service has been successfully established, the activities of the community group have dwindled considerably and meetings are quite irregular.

*Perceived benefits*

Although examples of ongoing community engagement processes were generally lacking, it was clear that interviewees were conscious of the many benefits that would follow on from community involvement in service planning. Health professionals, in particular, felt that by meaningfully engaging the community, consumers have a true voice with which to protect their interest in local health services. It was possible that community members could identify novel solutions that would normally be overlooked by clinicians. Respondents also felt that consumer input had the potential to counterbalance the sometimes ill-informed decisions made by far-removed decision-makers in Brisbane. Further, community engagement processes were believed to enhance a community's sense of service ownership; improve their understanding of the underlying reasons for changes; while also sharing the responsibility for outcomes, be they good or bad.

> *. . . if you do engage them and they feel as if they're engaged and things do go wrong, they own it as well. . . . That's really critical because then they protect the staff, not protect them but support the staff, because there is that collective 'when it's good it's good, when it's bad well, you know, we won't point the finger' and that's critical.* - #4 (DoN, Mineville)

Patient education, or increasing patient awareness of services, was also cited as a benefit of community involvement. Although education may not be the primary motive for initiating community engagement projects, it would nevertheless have positive flow-on effects such as (a) encouraging patients to have more realistic expectations of local health services; (b) greater patient cooperation as patients better understand the service and its constraints; and (c) keeping patients "on-side" may decrease negative publicity for the health service.

*Barriers*

Overall, attitudes towards community engagement were encouraging and positive. However, these affirmative attitudes were frequently tempered by perceptions that community engagement processes are inherently difficult and problematic. The main problems identified by interviewees can be grouped into three main categories: (i) concerns about the representativeness of community members who participate; (ii) initial capacity of the general community to become involved in health service planning; and (iii) overcoming the scepticism that has become associated with community engagement schemes. These issues are discussed in more detail below.

*Representativeness*

Many health professionals recognised that there is a limited segment of the population who will be genuinely interested in local maternity care services at a given time. People who are presently having children, or planning to, and their parents (as grandparents) are the people most likely to be interested in maternity care services as this directly affects them. Yet, the proportion of a town's population which falls into this category is rarely substantial and, as such, there are relatively few people from which to draw community representatives for planning forums.

> *The thing that we find is that community members' interest in birthing has a very definite time frame. It's when you're going through it yourself. After you've been through it, you lose your interest because your focus then moves onto educating your kids once you've got them. . . . You often can't get people to engage in maternity services unless they're pregnant or unless they've got children who are pregnant. You know, if they're grandparent-type people.* - #25 (midwife, Mineville)

> *It just shows you that health only really affects voters when it affects them really in a personal way and technically that isn't a big percentage of the population . . . . There are only so many women who deliver, so for the*

> *rest of the population who don't have to drive up to [the regional centre] things are ok or 'they don't affect me'.* – #37 (local GP, Canetown)

Focus group discussions with parents reinforced the perceptions and concerns of health professionals. Parents explained that they were quite ignorant of local maternity service issues prior to the time when they were having children of their own and when it directly affected them.

> *I think there was a petition a few years ago . . . I wasn't having babies then so it didn't really affect me because I didn't have any interest in it.* – Parents group C (Mineville)

Furthermore, health professionals were concerned that community members who do become community representatives may be motivated by their own, individual, experiences and subsequently "have a barrow to push". Wider community interests are not necessarily accurately represented or effectively championed by such people.

> *. . . but the issue with community members is that they bring their own barrow to push so often they don't have the skills to talk from a broader experience. They talk from 'my own experience' or 'my birth experience' and if it was good or if it was bad is going to colour the way that they might participate and contribute.* – #25 (DoN, Dairytown)

Community representation may prove even more problematic if factions exist within the community and each is not represented appropriately in engagement processes.

> *. . . [communities] aren't always as fully informed as what they should be and communities have little factions within them that, over the years, change and you know, they'll have their own agendas.* – #39 (local GP, Canetown)

*Community capacity*

There was widespread concern amongst interviewees across the sites that many community members may not have a minimum level of knowledge required to meaningfully engage in discussions about health services and planning. Many felt that the community would have to be educated about the intricacies of the health system and the realistic constraints on local health services. Lacking this knowledge may be what leads community members to make unrealistic demands of their local health service.

> *You know there needs to be a fair degree of understanding to be able to comprehend how this system works . . . . Some people would just be overwhelmed as to the complexities of how you run this health system, or this hospital and . . . I don't know if they would be able to understand why you can't do this particular thing or why you can do this particular thing. . . .* – #30 (SMO, Dairytown)

> *I would go to these meetings - people have got no idea of health care . . . . I remember going to one [a public meeting] once: 'we should have a liver transplant unit up here!' and I'm thinking 'they've got no concept of [providing health services]' . . . . and I think even this thing on the renal dialysis unit - I can understand where they're coming from but they've got no concept of how much it costs to run and to shift and to get the staff - the skills! . . . . well you have to get people's opinions, but sometimes I think you pretend to get their opinions and then you do what you think - you get the experts in to have a look at it and do what you think is feasible.* – #18 (local GP, Farmtown)

Patient expectations, apart from being unrealistic, may also deviate from other obligations of a health service. Some service providers felt that consumers' concerns would be focussed on the social impacts of closing a birthing service whereas hospital management was anxious to ensure the provision of a safe birthing service.

*Overcoming community scepticism*

Past efforts to involve communities (either as imposed by the health department or ground-up action by local residents) have not exemplified true community engagement at the four towns, the majority being perceived as rubber stamping activities which paid only "lip service" to community engagement. Examples were provided of public information meetings where residents are told of impending changes to their health services but had no means by which to alter or contribute to these proposals. Consequently, consumer involvement initiatives had acquired a poor image and health professionals explained the frustration of local communities in being involved in "community consultation" that yielded them no power to be truly engaged.

> *Well, there's the District Management Committee, I think it is called. But I'm a bit inclined to agree with [the mayor] who was asked to be on that and refused . . . because it tends to be a bit of a rubber stamping exercise for the Queensland Health policy . . . . and it's kind of displacement*

> *activity to disseminate, to keep people busy doing things . . . . they don't have teeth. They don't have a mechanism for dissent, and unless that occurs then you don't really have meaningful community involvement, you just have a sounding board.* - #16 (Medical Superintendent, Farmtown)

## 6.5 Chapter 6 summary

This chapter has described the four thematic categories which emerged through inductive thematic analysis of all the data collected. The "workforce" theme described the way in which workforce insufficiency remained the biggest threat to local maternity services but an area in which innovative approaches to workforce retention holds great potential for sustainable rural health services. The two themes on quality and safety discuss chief outcomes for rural maternity care as perceived by the rural residents and health professionals of the four towns. The last section described the importance of local birthing to (a) the viability of the rural towns; (b) local residents' access to care; and (c) the sustainability of other health care services in the town. This theme also considered the role of local champions and the wider community in supporting local services as well as the perceived benefits and barriers to community engagement initiatives. Chapter 7 discusses the significance of these themes for contemporary rural maternity care. This discussion also positions the themes amongst the policy discourse considered in Chapter 3.

# Chapter 7:

# Discussion

The research questions for this thesis were to (a) identify policies which influence rural maternity care in Queensland; and (b) to understand the impact of these policies on rural residents and particularly how these experiences compare with the discourse in influential policies. In seeking answers to these questions, this thesis has considered the policy environment and discourse alongside the lived experiences of rural residents and maternity care professionals. The following discussion brings together these two areas to highlight how policy has influenced experiences of rural maternity care at the four towns while also considering how these findings relate to the existing literature. The discussion starts by establishing that rural residents value good quality local maternity care and then considers, at the broadest level, how policy has influenced outcomes seen for rural maternity services. The chapter then reflects on how these outcomes affect the lived experiences of rural-based health professionals involved in the delivery of maternity care and rural residents who access these services. The chapter concludes by looking at the interaction of the policy environment and rural health services in a wider sense. To begin, the following section describes some factors relevant to the interpretation and transferability of results.

## 7.1 Study limitations and strengths

There are a number of factors related to the design and conduct of this study which might limit the transferability of findings to other settings. There are also some features of the study, particularly in the methodological design, which might act to strengthen the basis of the findings.

### *7.1.1 Limitations*

Limitations of the research design were addressed in Chapter 4 and included the transferability of findings (Section 4.5.1) and biases associated with being, essentially, a lone researcher (Sections 4.5.2 and 4.4.3). Other limitations associated with sampling and power relationships became more obvious after data collection had commenced. Firstly, it is possible that recruiting parents to focus groups via local play groups resulted in obtaining a sample of parents who belonged to middle to high socio-economic groups in the local area. Thus, it is possible that the findings of this study do not adequately reflect the experiences of parents from low socio-economic backgrounds for whom the access barriers would be exacerbated by inability to afford care (for example, financial constraints, travel costs, lack of own transport).

Secondly, the recruitment and participation methods most likely resulted in little to no Indigenous representation in these focus groups which means that the sample of parents interviewed did not properly reflect the proportion of Indigenous Australians that are found in rural areas. It was not possible to discern the extent of either effect as information on socio-economic status or Indigenous identification was not collected from parents. The outcomes of maternity service downgrading in rural areas for the Indigenous population warrants dedicated study.

Thirdly, there is the possibility that responses from health professionals at hospitals were constrained due to the fact that they were effectively commenting on the performance of their employer, Queensland Health. The risk of this power relationship affecting interviewees' responses was recognised at the outset of the study. Hence, it was clear on participant consent and information forms that responses would remain confidential and anonymous (see Appendices 6 and 8). This, along with the assurance that Queensland Health had provided ethics approval for the project, was further reiterated at the beginning of each interview. In retrospect, some Queensland Health employees were conceivably more guarded in their responses, provided less detail about previous problems, or glossed over past troubles when compared with those who

were not ever, or were no longer employed by Queensland Health and who were perhaps more candid in their responses. This is not to say that any interviewees were untruthful or overly biased, only that their focus during interviews was slightly different. In any case, the effect of this potential limitation is likely to be small as information required to fill any perceived gaps in narratives was easily and less sensitively obtained from interviewees not affiliated with Queensland Health.

### *7.1.2 Strengths*

Several features of this study added strength to the study design and therefore raise confidence in the findings. Methodological strengths were addressed in Chapter 4 and included strategies to improve the quality and rigour of the study such as data source and methodological triangulation, member checking, and providing ample contextual detail (Section 4.4.1). Furthermore, at the completion of data collection, it is possible to say confidently that the 16 months spent in the field (in an iterative cycle of sampling, data collection and analysis) allowed for immersion in the issues and context of maternity services in the four towns.

## 7.2 Rural residents still value local maternity care

It is important to establish at the outset of this discussion that many rural communities actually do desire to have locally-based maternity services (Hirst, 2005). Knowing this justifies the campaigning for such services to be supported and preserved. It is clear that each rural community in this study placed great value on having a local maternity service that included, at least, low-risk birthing. Health professionals and community members alike identified advantages of local care for expectant mothers and their families, as well as for the town itself (Sections 6.4.1 through to 6.4.3). The advantages for rural families were not insignificant: greater continuity of care; less disruption to the family unit; fewer travel requirements and perceptions of enhanced safety of care. These advantages resonate with the existing literature which espouses local care for the social and emotional well-being of the mother and the family unit (Iglesias, Grzybowski, Klein, Gagné, & Lalonde, 1998; Sutherns, 2004; Waldenstrom, 1999). The importance of locally accessible care is emphasised in the *Re-Birthing* report which recommends care which is local or feels local as one of the principles upon which future maternity services should be founded (Hirst, 2005).

Local maternity services held benefits for rural towns as well. Health professionals and laypeople believed that comprehensive primary-level maternity services enhanced the sustainability of their town population, particularly in childbearing age brackets. There is some consensus in the literature that access to local health services, and the presence of health care professionals to enable local access, contributes to the viability and social capital of rural towns (Birrell, Dibden, & Wainer, 2000; Farmer, Lauder, Richards, & Sharkey, 2003). Conclusions reached by Kearns and Joseph (1997) in their study of New Zealand rural communities undergoing health service restructuring appear to apply here as well: the symbolic importance of rural hospitals may equal, or even outweigh, their value in actually providing health care services. In the current study, local birthing services symbolised the town's vitality and prosperity and this symbolic importance was viewed by many interviewees as being almost equal to the actual care that residents would obtain from it.

## 7.3 Sustainability of rural maternity units under threat

All four maternity units in this study had experienced some degree of service downgrading. Section 6.2.1 discussed the way in which, at one extreme, Canetown had their intrapartum care cease and how the other units had also experienced downgrading in their services. Rural women were increasingly required to access elements of their care outside their home towns. The direct consequence of downgrading maternity units in this way was service centralisation in regional centres. Centralisation had negative consequences for both health professionals and community members in the case study towns. Before considering these consequences, the factors that encourage service centralisation will be addressed.

### *7.3.1 Policy environment*

Chapter 3 identified a number of factors in the policy environment that were likely to have a significant impact on the provision of rural maternity care in Queensland. The government inquiries and public concern about the safety of health services that resulted from events at Bundaberg Hospital in 2005 were a public relations nightmare for the state government. Subsequently, a number of policies were put in place to mitigate a perception of Queensland Health mismanagement that was being popularly portrayed. More importantly, these events were contemporary factors that likely contributed to elevating the level of risk-aversion amongst policy-makers and, subsequently, the environment in which health professionals practice. This risk-averse environment itself has had an indirect but detrimental effect on rural maternity units and

is likely to have been a catalyst for the three most significant policy-based influences on rural maternity services: encouraging centralisation of services; lack of policy support for rural maternity services; and an approach to service provision which appeared to prioritise risk-aversion.

The policy review demonstrated a tendency towards the centralisation of maternity services. Figure 3 plainly showed the drifting of functional units away from rural areas and towards major urban centres. This suggested at least three possible scenarios: (i) there was no substantial policy effort in place to address this situation; (ii) there was a specific policy direction encouraging the centralisation of maternity services; or (iii) implemented policies aimed at creating an equitable distribution of care were failing. Further inspection of broad Queensland Health policies showed a bias towards the building up of large super-specialised facilities in metropolitan areas and a relative downgrading of smaller rural hospital facilities to health centre status[38] with no clear strategy for rural maternity units (Queensland Health, 2002b). There was an observed paucity of policy support for rural maternity services as relatively few policies could be found on rural health, let alone what level of maternity care should be provided in these areas. Many of the cues for the direction of rural maternity care were subsumed within broader, centrally-imposed policies which did not necessarily take into account differences found in the rural hospital setting. Consequently, such policies were likely to be inappropriate and damaging to birthing services in rural towns.

Further, many centrally-imposed, top-down policies and procedural documents were heavily focussed on clinical risks: identifying, assessing and managing the potential for adverse outcomes. The rural maternity units studied in this project were operating in a high-pressure environment where ever-growing patient expectations of care and the reality of adverse outcomes appeared to engender a reliance on Queensland Health policies and protocols to justify the scope of their practice. Yet the apparent risk-averse approach found in many Queensland Health documents did not support rural maternity care as it has traditionally existed and appeared to have permeated the practice of clinicians (see Section 7.4.3). Rural maternity units have consequently been closing or downgrading their services due to concerns about the safety of care they can provide, despite many low-volume maternity units having a record of good

[38] *The Smart State: Health 2020 Directions Statement* describes health centres as facilities where primary care, emergency care and residential aged care services are co-located and supported by a network based around a regional hospital.

outcomes and safe care (Cameron, 1998; Cameron & Cameron, 2001; Tracy et al., 2006). Ironically, although rural maternity units appeared to be closing due to safety concerns, the closure of units may have even greater consequences for the safety of expectant women and newborns (see Sections 7.5.4 and 7.5.5). Ultimately, the lack of specific policies to support the provision of maternity care in rural areas, service centralisation tendencies and risk-avoidance all appeared to play significant roles in the downgrading of maternity services provided by rural hospitals in this study.

### *7.3.2 Workforce remains the biggest challenge*

Aside from the policy environment, workforce shortage was the largest threat to the sustainability of rural maternity services at the four case study sites. Medical workforce shortages contributed significantly to the service outcomes at each of the sites:

- At Canetown this contributed to the closure of the birthing service;
- In Farmtown this led to establishing the midwife-led service;
- A history of workforce difficulties had caused the Mineville service to be particularly inconsistent; and
- The Dairytown service also reported being a day-to-day proposition due to their dependence on the availability of appropriate medical officers, despite maintaining the healthiest senior medical officer (SMO) roster of all sites.

Yet, recruiting and retaining medical professionals in rural areas of Australia is a long-standing problem (Committee of Inquiry into Medical Education and Medical Workforce, 1988). Over the years, a large amount of policy effort, and financial resources, have been concentrated on rectifying the distribution and volume of the medical workforce to fortify non-metropolitan health care services. Chapter 3 (Section 3.6.4) described the many initiatives that have been implemented, from rural-bonded medical school scholarships to allowances paid to rural proceduralists for skill maintenance. While there was uptake of various incentives, most practitioners agreed that these were not enough to keep them in rural procedural practice. There was little indication that these government policies had had any great effect on the retention of medical staff as recruitment and retention of procedural medical staff was reported by hospital management to still be a pressing concern. In this way, government policy initiatives have failed to make a lasting impact on the greatest challenge to rural maternity care.

Nonetheless, medical practitioners and hospital management at the four sites were relatively confident, or at least hopeful, that recent large-scale policies would provide

the solutions that have been sought for so long. These policies include: increasing medical student quotas; opening more medical schools and locating some in regional rather than metropolitan cities; and the development of a rural generalist pathway for medical graduates. Although each of these policies has a relatively long lag time, we are now poised to see early outcomes of these policies. For example, the James Cook University (JCU) School of Medicine (now School of Medicine and Dentistry), the first new medical school in Australia in 25 years, has graduated three cohorts of students and has met the objective of retaining graduates in regional Queensland and in non-metropolitan areas (Sen Gupta, Hays, & Murray, 2007; Veitch, Underhill, & Hays, 2006). The opening of other medical schools is also expected to make a considerable contribution as their graduates move into the system. With no further changes to funding of medical student places, almost 3000 graduates will enter internship in Australia every year from 2012 onwards; a significant increase from the 1,544 domestic graduates in 2007 (Medical Training Review Panel, 2009). It is the hope of many rural proceduralists and those in hospital management positions interviewed in this study that some of this new medical workforce will choose rural practice as a career. However, even if the growth of graduates triggers an increase in the number of medical professionals entering rural practice, these effects will still not be seen for nearly a decade. Moreover, entry of graduates into rural practice is dependent on sufficient opportunities for them to undertake postgraduate medical training that is appropriate for rural and regional areas. The rural generalist pathway endorsed by Queensland Health (Queensland Health, 2007a, 2007d) will form an integral part of the strategy to see growth in the rural medical workforce and should see trainees in the rural setting in the coming years. All of these medical workforce policies represent a considerable financial investment and are perhaps the last hopes for succession planning amongst many remaining rural proceduralists. It is important that the outcomes of these initiatives are monitored to understand the impact on rural procedural practice.

The shortage of midwives was equally pressing. Although there is no definition of “midwife shortage”, each unit did report being short of midwives to the point where it threatened the ongoing sustainability of the local service. Dairytown and Mineville both reported difficulty in filling existing vacancies for qualified midwives and Canetown was at risk of losing their remaining midwives while no intrapartum care was offered locally. The exception to this was Farmtown where, unlike the other towns, staff were dedicated solely to the maternity unit. Dairytown, Canetown and Mineville all employed midwives who would also be considered generalist nurses, often working in other units of the hospital such as the surgery ward or the emergency department.

The case studies demonstrated that a shortage of midwives limits maternity service provision just as much as the medical workforce shortage. Midwives were responsible for much of the maternity care workload at the four hospitals and for covering 24 hour on-call responsibilities as required of Level 1 maternity units in such documents as the *Clinical Services Capability Framework* (CSCF, Queensland Health, 2004a). Factors contributing to the shortage of midwives as suggested by interviewees (Section 6.1.2) are largely supported by the literature, particularly the reported ageing of the workforce (Australian Institute of Health and Welfare, 2008c) and difficulties accessing contemporary midwifery education (Tracy et al., 2000). Despite the very real threat that the forecast midwife shortage will have on the future of rural maternity services, little has been done to reverse the decline. Section 3.6.4 listed many policy initiatives to counteract medical workforce shortages, but noticeably less policy literature could be found on initiatives which address the shortage of rural nurses and midwives. Given that Queensland Health policy documents acknowledge midwives as an essential component of a maternity unit, government strategies are required to address the future shortage of midwives and hence, the sustainability of rural maternity units.

### *7.3.3 Rural sites as "incubators" of innovation*

Although workforce shortages presented serious threats to the maternity units in this study, there were at least two illustrations of innovative approaches to improving service sustainability. The environment of need created by the persistent shortage of appropriately qualified health professionals saw the hospitals in Dairytown and Farmtown become proactive in lobbying for and advocating innovative ways of managing the constraints and threats imposed on them by workforce shortage. This is consistent with the Productivity Commission's findings that rural and remote Australian towns act as incubators of health service innovation out of necessity (Productivity Commission, 2005a).

For Dairytown, one solution has been to create job-sharing opportunities for SMOs (Sections 5.2.2 and 6.1.1). Job-sharing options have been taken up by several SMOs and Dairytown Hospital now boasts an enviable roster of procedural medical practitioners. The Farmtown case study illustrated how, in the face of a long-term decline in general practitioner (GP) obstetricians working at the hospital, practitioners actively prepared for an alternative model of maternity care in which midwives have led service provision. Farmtown Hospital was the site of the first trial of a midwife-led service in Queensland and appears to have enjoyed relatively good outcomes during

the first year of operation. Nonetheless, the importance of good relationships with their local referral hospital and having local medical back-up for such a service should not be overlooked. Midwives admitted they are experts in "normal" pregnancy and labour care and, without exception, valued and acknowledged the need for medical support and intervention in emergency situations.

Both of these cases illustrate ground-up approaches to solving workforce dilemmas that endanger rural maternity units and which top-down policies have failed to address. These local-level strategies also demonstrate how pressing need can promote innovative solutions out of necessity. These examples have provided remedies for maintaining local birthing services for their respective communities, as well as demonstrating new options for other rural towns in Queensland and beyond. For example, the recent publication of an implementation guide for midwife-led models of care in Queensland[39] (Queensland Government, 2008) indicates that the Farmtown maternity unit trial has gained some acceptance. Midwife-led models may now represent a legitimate option for other rural towns. However, they should not be considered a panacea for the provision of rural maternity care in all settings. The long evolution and individual factors which combined to make the Farmtown model so successful (Section 5.5.2) may not be present in all other rural towns. Furthermore, there is a need to negotiate the implementation of such models with regional and local obstetric staff to ensure the provision of emergency obstetric care in the rural setting, when required. Ensuring the quality and safety of care is an important function of all health services, but government policy-makers need to recognise and accept the valuable contributions that rural communities can make in leading service provision innovations and ensure that policies do not inhibit creative solution-making.

Elsewhere, other promising advances are being made in investigating the appropriateness of task substitution, delegation and diversifying roles of health practitioners. Throughout the country, nursing practice has been extended through nurse practitioner roles. A trial of physician assistants throughout Queensland is due to start in the clinical disciplines of emergency, primary health and interventional cardiology (Queensland Health, 2008c), the former two being trialled in rural and

[39] This implementation guide, or any similar document, was not available when data collection was undertaken at Farmtown. Many of the midwives expressed a need for such documentation as policy support and government endorsement for the service that they provided, particularly in the face of scrutiny and opposition from those who were concerned about changing the status quo.

remote Queensland towns. The formation of a Graduate Certificate of Rural and Remote Paramedic Practice has also facilitated the expansion of paramedics' primary health care skills to meet the needs of their communities (Mount Isa Centre for Rural and Remote Health, 2008). These are innovations that challenge the status quo and may have some relevance for rural maternity units facing difficulties.

### *7.3.4 Midwives as challenging interests*

Models of substituted and delegated practice raise questions about the changing landscape of health care provision and have implications for the policy actors considered in Section 3.5. The Farmtown midwife-led unit, in particular, is innovative because it moves away from the conventional models of medical practitioner-led maternity care. Traditionally, midwives have been perceived as being "subordinated" into a role answerable to medical practitioners (Barnett et al., 1998; Willis, 1983). Alford's structural interests model (as cited in Creelman, 2002; Duckett, 2000; Gardner, 1989; Palmer & Short, 2000), depicts the medical profession as the dominant interest that benefits most from the present structure of the health system. Section 3.5.2 of this thesis argued that midwives could now be considered "challenging interests" in this model due to their strengthening claims to be recognised as legitimate independent carers. The Farmtown case appears to support this proposition.

By necessity, the Farmtown community has adopted an innovative model which does not conform to the status quo where medical professionals lead care. The Farmtown maternity service illustrates a situation in which midwives are legitimate primary care-givers for low-risk pregnant women and do not work under the supervision of medical practitioners (albeit with some practice constraints in prescribing and ordering medical tests). In terms of Alford's model, this service would represent a challenge to the dominant interests (obstetricians, including GP obstetricians) and their monopoly over technical knowledge in maternity care. By becoming competitors (albeit indirectly, as there are no resident obstetricians in the community) for low-risk maternity patients the service potentially encroaches on the earning capacity of medical professionals in maternity care. Similar threats to the dominance of the medical profession have been identified in New Zealand where midwives have been recognised as independent practitioners (Barnett et al., 1998).

The perceived challenge posed by midwives has heightened inter-professional tensions between organisations representing midwives and medicine and is often

reported in the media (Cresswell, 2009; MacColl, 2008). The Australian Medical Association (AMA) submission to the recent nationwide *Maternity Services Review* (2008) exemplifies the hostilities. The submission emphasises the excellent outcomes seen in mothers and newborns under the current medical model of care in Australia. Conversely, the AMA submission depicts the New Zealand situation as an example of potential adverse outcomes directly associated with allowing midwives the authority to work independently of medical practitioners. The AMA argues that trends are emerging which show increasing maternal and perinatal death rates and they draw attention to the dramatic reduction in practicing GP obstetricians (less than 20 nationwide) which has contributed to decreased access for rural populations. Counterclaims supporting midwifery tend to emphasise the increase in interventions under the medical control of maternity care (Page, 2007; Wagner, 2001).

This said, it is important to clarify that individual midwives in this study did not display the inter-professional competition that the above literature may suggest. While this literature may describe the professional relations at a meta-level, on the ground at the four case study sites, midwives openly acknowledged their need for medical support in their work. Even in Farmtown, where midwives were most autonomous, the support of both local and regional medical practitioners were important factors in establishing this innovative service. Ultimately, the inter-professional teamwork between midwives, nurses and medical practitioners is likely to be one of the major factors that contribute to the success and sustainability of many rural health services.

In the end, the policy environment offered no significant support for rural maternity units in Queensland. Without the reinforcement that clear and concrete government policy offers, rural maternity services are vulnerable to the detrimental effects of centrally-developed policies which appear to emphasise risk-aversion and service centralisation in urban localities. This, in turn, appeals to another noted objective of health policy which is to achieve cost-efficiencies in service provision. Centralising services is believed to produce financial savings for the state health department as it can better achieve economies of scale when delivering services in fewer centres. Furthermore, poor policy support from government also leaves rural maternity units vulnerable to factors in the health care environment which threaten the sustainability of rural maternity services. Such environmental factors include workforce shortages or public reaction to adverse events. In a setting lacking policy support, this study identified some examples of innovation in service delivery and maintenance that were forged out

of necessity and that have contributed significantly to the sustainability of individual maternity units.

## 7.4 Outcomes for health professionals

Evidence was sought throughout the case studies to better understand the lived experiences of rural health professionals who provided rural maternity care. Although health professionals and managers tended to focus their discussion on local patients' experiences, nonetheless, policy and the downgrading of maternity units had perceptible effects on rural maternity care providers. The professional pressure health practitioners experienced, the changes to their practice and collective demoralisation that resulted from service downgrading were particularly notable.

### *7.4.1 De-skilling*

As birthing services are withdrawn from rural towns, there is an accompanying de-skilling and loss of local maternity care skills. Maternity unit closures and downgrades lead, over time, to fewer local professionals who are proficient or have maintained skills in obstetric or midwifery care. Literature shows that low caseloads can cause problems for the confidence that both midwives and medical proceduralists have in their clinical skills (Australian College of Rural and Remote Medicine, 2002; Hegney, 1996; Poggio, 2002). In Canetown, the cessation of local intrapartum care was followed by GP proceduralists withdrawing from obstetric practice and midwives moving to other locations in order to maintain their skills or else withdrawing from maternity care due to lack of confidence in their unused skills. Section 7.5.5 discusses the potential risks for the community that are associated with de-skilling of individual professionals.

### *7.4.2 Increased workload*

The shortage of qualified maternity care staff in rural areas (discussed earlier in Section 7.3.2) had the flow-on effect of placing greater pressure on the staff who remained. GP proceduralists in all four rural communities commented on the excessive and intrusive workload they experienced in the present climate of rural workforce shortage. This is consistent with what has previously been documented about the barriers for rural medical practitioners to continue procedural practice (Australian College of Rural and Remote Medicine, 2002; Hays et al., 1997). Canetown proceduralists who had formerly worked so hard to maintain the local maternity service now agreed that they preferred their new lifestyles which were not

constantly interrupted by their procedural work, but which were far more family-friendly and afforded them a better quality of life.

Shortages of midwives meant that maternity units, particularly in Mineville and Dairytown, were reliant on a small number of ageing midwives to sustain the maternity service and to cover requirements prescribed by the CSCF (Queensland Health, 2004a). The loss of one or two midwives was expected to cause a snowball effect much like the "dynamics of attrition" referred to by Pashen et al. (2007). That is, in an environment of problematic recruitment, the loss of one GP obstetrician, or midwife in this scenario, places increased on-call demands on the remaining workforce which subsequently causes them to also withdraw from maternity practice. Mineville is a case in point, where the onerous on-call responsibilities left to the few remaining midwives were likely to hasten resignations and accelerate attrition.

### *7.4.3 Risk aware practice*

The actual practice of medical officers and midwives was also considerably affected by policies perceived to be focussed on avoiding clinical risks, the continuing litigious environment, and lack of high-level policy support. Sections 6.3.1 and 6.3.2 illustrated interviewees' acute awareness that repercussions of adverse outcomes would be worse in their communities, because such events become public knowledge very quickly in small populations. Risks identified by practitioners in this study are similar to findings reported by Kornelsen and Grzybowski (2008) regarding the social risks perceived by maternity care providers practicing in low-resource settings of rural Canada. Practitioners reported personal emotional risks associated with being involved with a "near-miss" or adverse outcome, the effect on their self-confidence and the negative effects that are unique to small rural communities. It can be difficult for practitioners to reconcile patient expectations with risks associated with birthing in low-resource settings and subsequent professional, social and emotional risks.

Working in a model which challenged the status quo of maternity care, and health services more broadly, the Farmtown midwives were particularly conscious that a bad outcome could cause the service to appear unsafe and lead to calls for the unit to be closed. Interviews with providers of care across sites highlighted an awareness that some bad obstetric events are unavoidable and an understanding that ramifications of adverse events would be worse in their rural communities (Section 6.3.1).

In other areas, the tension between patient care, awareness of risk and desiring to practice within the guidelines set by Queensland Health policies and protocols also caused anxiety for clinicians. This was best illustrated in the midwives' management of patients in labour who delayed presenting at rural hospitals, despite being considered unsuitable for birthing there (often due to downgrading of the maternity unit). One example (discussed in Section 6.3.2) is when women stop by the hospital to be assessed by a midwife before travelling to the regional hospital to birth. Here, midwives often felt that their decisions to transfer labouring women by ambulance to the regional centre were motivated by considerations of avoiding personal and professional risks rather than the best interests of the patient. Other studies on rural maternity care have reported similar tensions amongst health professionals regarding decisions to transfer (Tucker et al., 2005) and have identified that decisions to transfer are most often motivated by concerns of pre-term birth (Roberts, Henderson-Smart, Ellwood, & The High Risk Obstetric and Perinatal Advisory Working Group, 2000).

### *7.4.4 Demoralisation*

The damaging effect that maternity unit downgrades and closures have on staff at rural hospitals cannot be underestimated. Section 6.4.3 described the social impacts of downgrading rural maternity services and how staff became demoralised as birthing services were lost and the scope of services becomes increasingly restricted. Opportunity to practice procedural services and providing continuity of patient care have been identified as important factors in rural proceduralists' professional satisfaction (Hays, Wynd, Veitch, & Crossland, 2003; Kamien, 1998). However, being increasingly constrained in their capacity to provide complete, continuous, high-quality maternity care services for the local community was a source of discouragement for local midwives and medical officers in this study. In Canetown, where birthing had recently ceased, staff morale was reported to be low and the general hospital environment was perceived as lacking vibrancy as most work comprised aged care and mental health with none of the new "life" that comes with hospital-based birthing services. In other centres, where units were constantly under threat but birthing services were still provided, this type of attitude was not reported but professionals were conscious of the potential for such an outcome.

## 7.5 Outcomes for rural residents and communities

The consequences of downgraded services for rural residents in this study were multi-faceted, with quality and safety emerging as the two areas of care in which the greatest changes had been experienced. Narratives from rural residents illustrated the trickle-down effect of the unsupportive policy environment and subsequent loss of local maternity services.

### *7.5.1 Reduced access*

Foremost among the outcomes for rural residents was the reduced accessibility to care, though there are additional negative consequences which flow on from this including greater inconvenience and family disruption, increased costs and decreased continuity of care for patients. Maternity unit closures or downgrading reduces the equitable distribution of services. Changes in the way that care is accessed when a rural maternity unit is closed or downgraded and the subsequent adverse outcomes for the quality and safety of care for rural people is represented in Figure 14. Issues of decreased safety are most pressing during the intrapartum period, while increased financial costs, reduced accessibility and decreased continuity of care span almost the entire spectrum of care.

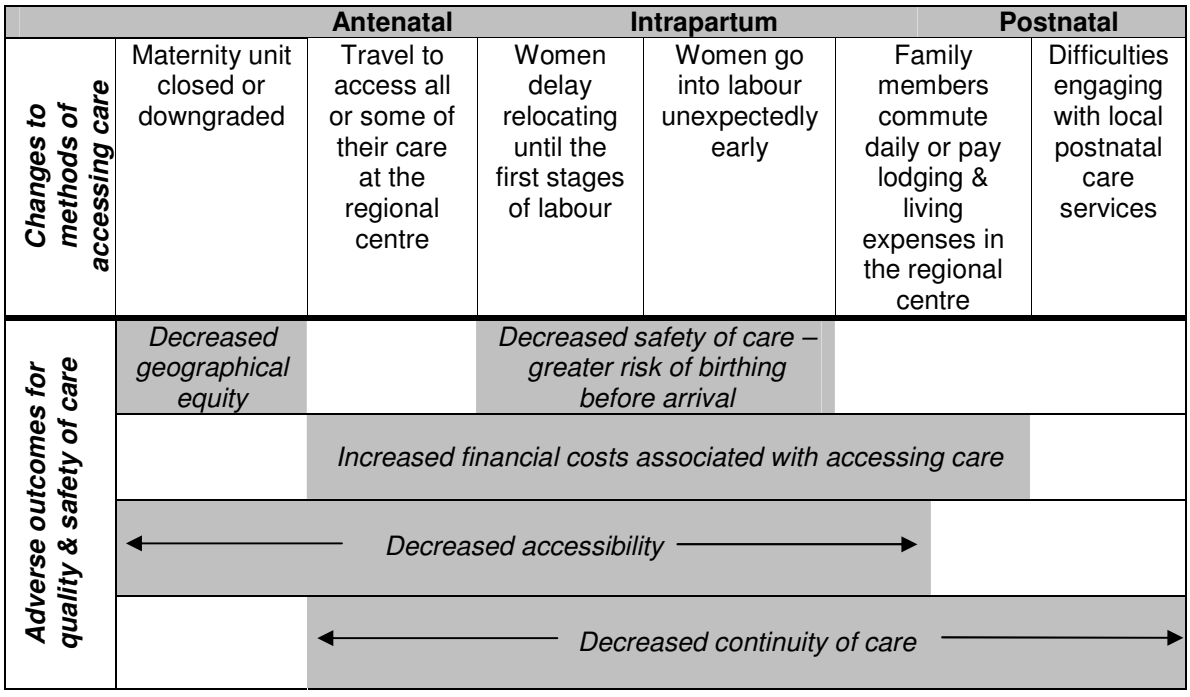


*Figure 14.* Effects of rural maternity unit downgrading on accessibility, quality and safety of care.

Accessibility is a core component of most, if not all, conceptualisations of health care quality; indeed, it can be seen as a precondition to assuring good quality of care given that without access, care cannot be obtained (Donabedian, 1989). At a population level, accessibility is concerned with the extent to which all individuals access the care that they need (Campbell, Roland, & Buetow, 2000) and is closely entwined with the notion of equity. In this sense, equity is fundamentally concerned with equal opportunity to use a service; regardless of whether the service is utilised (Mooney, 1995). At an individual level, accessibility, at its most basic, is about physical or geographic access to care. The case study data showed that as more elements of maternity services were removed from the rural towns, the opportunity to access care decreased; the physical distance to care increased and various associated barriers arose between rural residents and regionally-based care. Thus, the findings of this study suggest that the service centralisation that is being seen across Queensland is likely an ever-growing barrier to accessing maternity care.

### *7.5.2 Financial barriers to accessing care*

The loss of local services necessitated far more travel than was previously required, particularly during the antenatal and intrapartum periods. The extra travel required was a recurring issue across the four sites. For some community members, this travel was merely an inconvenience, while for others the cost of regularly driving to the regional centre was a concern that rose with the cost of petrol. But for others still, their socio-economic disadvantage precluded them from affording a motor vehicle or even meeting the expense of regular travel to the regional centre on public transport (if any public transport was available). For people without the means to travel to and from the regional centre, there was a greater likelihood of inadequate antenatal care and consequently, the potential for poorer outcomes. Literature has long shown associations between factors of rurality, greater travel time and low socio-economic status with lower rates of prenatal care utilisation (Kornelsen & Grzybowski, 2006; McDonald & Coburn, 1988) and increased potential for poorer maternity care outcomes (Nesbitt et al., 1990).

The attendant costs of additional travel impose a financial barrier to accessing adequate, good quality maternity care. Gulliford et al. (2002) describe the dependent relationship between accessibility and affordability, physical accessibility, acceptability and service availability. Increasing costs (or decreasing affordability of care) can impede access for some groups who do not have the capacity to pay the material and

opportunity costs (Campbell et al., 2000) of obtaining otherwise “free” health care. The material costs for rural residents seeking maternity care were seen to be increasing as they travelled to the regional centre for increasingly more components of their antenatal care and/or, lived in the regional centre for weeks prior to delivery of their baby. Opportunity costs of accessing distant care should also be considered. That is, the income that rural residents forego as antenatal appointments at the regional centre become a whole-day affair, requiring time off work, and partners may require several days off work to accompany expectant women during their relocation to the regional centre.

The Patient Travel Subsidy Scheme (PTSS) was implemented by the Queensland Government to lessen the financial barriers to accessing distant care by subsidising the costs (travel, accommodation and living) associated with obtaining health services unavailable within 50km of a patient’s hometown (Queensland Health, 2001). This complies, to some extent, with the principles of the Medicare Agreement which emphasise that while not all hospitals are required to provide all types of health care, the states should ensure that all eligible citizens have access to necessary care, regardless of geographic location ("Medicare Agreements Act, 1992," section 6). However, PTSS rates did not adequately subsidise expenses incurred by rural residents who obtained non-local maternity care and therefore did not compensate for decreased distributional equity of services. Furthermore, awareness of the scheme amongst community members in this study was variable: some had accessed PTSS subsidies while others had not even heard of such support. Government passivity has facilitated the downgrading of maternity units and also fails to support rural people in overcoming distributional inequity of maternity services. Ultimately, this inaction contradicts policy discourse regarding the achievement of equity in health care access.

### *7.5.3 Decreased continuity of care*

Continuity of care also deteriorated as a result of the downgrading of rural maternity units. This occurred because the additional facilities and health professionals introduced throughout the spectrum of maternity care caused increasing fragmentation (Section 6.2.2). Women often discussed their frustration with the lack of carer continuity, having to repeat their history at each new appointment and being unable to form durable relationships with a given care team. Health professionals also expressed concern about the problematic nature of information-sharing amongst carers or between facilities. Poor continuity in health care can be detrimental for patient

satisfaction (Cleary & McNeil, 1988; Hays, Evans et al., 2005; Hodnett, 2000; Homer, 2006) and patient safety, potentially introducing more medical errors and hospital re-admissions (Gandhi et al., 2000; Kripalani et al., 2007; Moore, Wisnivesky, Williams, & McGinn, 2003). Problematic discharge processes (especially the availability and completion of patient discharge summaries) or lack of communication between primary care and hospital-based providers of care are common challenges (Bodenheimer, 2008; Kripalani et al., 2007).

Difficulties in coordinating health care are not unique to Queensland, or even Australia (Schoen et al., 2004), but there is a growing consensus that where health systems result in fragmented care there must be efforts to counteract the associated negative outcomes for patients. In recognition of this, the health care literature contains many suggested initiatives for improving the coordination of care (Bodenheimer, 2008; Kripalani et al., 2007). Innovations in information technology appear to be most promising, especially those which allow patient information to flow seamlessly between providers in different settings (community general practice, hospital) and in different geographic locations. Chapter 8 will address potential interventions, derived from the literature, which could be trialled for efficacy in rural Queensland (see Section 8.1.6).

Amongst midwives in this study, postnatal domiciliary care was the leading suggestion for improving rural maternity services but budgetary constraints prevented the implementation of routine home-visiting programs. Home-visits by midwives are relatively commonplace in urban centres, and rural midwives felt strongly that rural families would benefit even more as domiciliary care could be used to overcome geographical access barriers that often prevent women from seeking adequate postnatal care and support. Rural women interviewed also indicated that home-visits by midwives would assist them greatly during the postnatal period where they often felt isolated upon returning home from the hospital.

Nonetheless, the majority, if not all, of these suggested initiatives require financial resources and concerted effort for successful establishment and evaluation. The findings of this study contain little evidence of programs or funding which encourage better coordination of maternity care between facilities and practitioners. This suggests that a new view is required amongst policy-makers and others in the state health department; a perspective which acknowledges the reality of fragmented care and harmful outcomes for rural residents and which prioritises coordinated care initiatives to counteract this.

### *7.5.4 Rural patients bear risks of maternity care*

Many of the risks that emerge for rural patients can be related to the removal of local services which subsequently lead to greater travel requirements (Section 6.2.1) and increased financial costs (Sections 6.2.4 and 7.5.2). Financial and social barriers can encourage women to adopt riskier strategies for accessing care (especially those who do not have the capacity to bear increased costs). For example, women may forego aspects of their care that require travel and/or delay their relocation to the regional centre until the onset of labour (Section 6.3.3). Travelling long distances has its own hazards, including increased risk of vehicle accidents, especially during seasonal wet weather. These hazards are exacerbated when women undertake this travel while in labour with further risks associated with potentially delivering the baby en route. Even ambulance transfer to regional hospitals is not without its own risks, particularly if the baby must be delivered on the roadside (Section 6.3.2). Almost parallel experiences were described of rural women in New South Wales who endured painful and risky car trips in labour to reach the larger towns where they were to birth (Dietsch, Davies, Shackleton, Alston, & MacLeod, 2008).

More extreme action was taken by women desiring to avoid the regional hospital altogether. Higher risk women, although advised to birth at the referral hospital, would "go into hiding", even miss later antenatal appointments, and deliberately present at the hospital in advanced labour conscious that staff will not transfer them to the referral hospital at such a late stage due to safety concerns. Motivations for such non-compliance were not discussed directly in this study. Although it is feasible that the impracticalities, financial and cultural barriers (fear of relocating to, and birthing in, an unfamiliar environment, and a strong desire to birth "on country" for some Indigenous women) may prove too great for some. Strategies associated with community resistance to service closures and the determination of some women to deliver in or near their home town have previously been observed in rural New South Wales towns where obstetric units had closed (Woollard & Hays, 1993) and amongst rural Canadian populations (Kornelsen & Grzybowski, 2006).

### *7.5.5 Safety of care for the community*

At a broader level, the downgrading and closure of rural maternity units points to a number of safety implications for each community. Three principal safety concerns for rural populations emerged from the data: (i) risks associated with de-skilling in

maternity care; (ii) de-skilling and inability to sustain essential procedural services; and (iii) community resistance to birthing unit closures.

As birthing services were withdrawn from rural towns, there was an accompanying risk associated with de-skilling of the local maternity services workforce. Local maternity care de-skilling can have significant safety implications for routine maternity presentations at a rural hospital, let alone when an obstetric emergency occurs which does not permit a transfer to a regional hospital. Women in early onset labour, or facing emergency obstetric complications, are spontaneous and unexpected scenarios, which will nonetheless continue to present at local hospitals seeking professional help (Woollard & Hays, 1993). Hence, the maintenance of at least a low-risk service will ensure some procedural obstetric and midwifery skills are available as a safety net for the community.

Medical staff across the sites expressed concerns about the effect that closing maternity units would have on rural hospitals' abilities to continue providing procedural services generally. The medical skills that are required in maternity care, particularly anaesthetics, are also important in other procedural services and emergency care. Thus, medical officers were concerned that the closure of birthing services would lead to more generalised procedural de-skilling that would cause rural hospitals to discontinue most, if not all, local procedural services and create problems for emergency services provision. In this sense, maternity services, particularly birthing, can be seen as part of a supportive environment which contributes to the skill base required for a broader range of local procedural and essential emergency services.

Finally, there is the safety of care for the segment of the community which resists service closures by presenting at the hospital as discussed in the above section (Section 7.5.4). This resistance suggests that while local birthing may close, the flow of women presenting to the hospital in labour would not always cease completely.

The reality of obstetric emergencies, together with community resistance to birth unit closures, raises legitimate safety concerns for pregnant women and their families who live in communities where birthing services have ceased and local health care is threatened by subsequent de-skilling. Such safety concerns give rise to the question: is it safer for rural communities to have no local birthing service, or to maintain a low-risk birthing service in which practitioners can maintain procedural skills and provide routine and emergency maternity services for local residents? Legitimate threats to

community safety should weigh heavily in deliberations about the support that should be provided to rural hospitals in order for functional birthing services to be maintained.

Findings from the four case studies demonstrate that, overall, quality and safety of maternity care have suffered in an environment which has been generally unsupportive of rural birthing care. Closures and downgrading of local maternity services have changed the way that rural residents access maternity care, and the scope of rural practitioners' practice. The most significant changes to quality and safety of care that rural residents access (financial costs, continuity of care) is inadequately addressed by Queensland Health policy and little support could be found for local, bottom-up initiatives such as the provision of domiciliary care to improve access to postnatal care and improve continuity. While the health department has a role to play in ensuring the quality and safety of patient care, the *Re-Birthing* report stated: "decisions to close maternity service units are based on a narrow view of risk which really only considers exposure to litigation and works to transfer risk from the carer to the cared for. Because they relocate women face new risks which the health system has no way of mitigating and takes no responsibility for" (Hirst, 2005, p. 21).

### *7.5.6 Community engagement – all talk?*

Public participation has remained a priority in government policy discourse (*Australia 2020 Summit: Final Report*, 2008; Crawford, Rutter, & Thelwall, 2003; Queensland Government, 2003a, 2003b), but the results of this study indicate that little meaningful community engagement was taking place on the ground. There were two prominent examples of communities rallying to support their local maternity units which were at risk of being closed. The mothers and midwives group in Farmtown, showed promise as an example of an ongoing relationship forged by service providers and formed with the intent of providing citizens with input to the future of a local health service. In a similar way, a perceived threat to the Dairytown maternity unit saw the local private practitioners take it upon themselves to ensure the community was informed and encourage citizens to take political action by way of a letter-writing campaign.

*Action not participation*

In both cases, the observed community activity was a response to perceived threats of maternity unit closures and was reported as instrumental in the survival of the respective birthing services. Here, it is important to distinguish between public action and community involvement. Community involvement is "seen as being initiated and

controlled by governments to gain support for decisions already made, or to develop discussion and consultation on issues yet to be decided" whereas, in contrast, public action is "action initiated by members of the public and controlled by them for purposes they determine" (Bates & Linder-Pelz, 1990, p. 166). The examples at Farmtown and Dairytown are good illustrations of public action: initiated and controlled by the local community for their own purposes, in these cases, creating political pressure to retain local birthing services. However, the community action seen in these two towns was not invited by government and ultimately, neither case exemplifies true participatory partnerships as no ongoing relationship between local citizens and policy-makers emerged. Citizen groups essentially disbanded after the issue was resolved and no lasting structure was established by which citizens could have input into local health services beyond that episode.

*Community helplessness*

Discussions at Mineville and Canetown revealed residents had little inclination to participate and there was a stronger perception of helplessness in these towns. Interviewees' comments implied notions of despondency about the future of their towns which are not unlike concerns held for the viability of many other rural communities throughout Australia (Birrell et al., 2000; Queensland Government et al., 2006; Reddel, 2002), and even world-wide (Farmer et al., 2003). It is possible that these collective attitudes were learned from the history of losing other local services (Veitch & Grant, 2004).

*Barriers*

In common with other findings (Lowndes, Pratchett, & Stoker, 2001), health professionals and administrators felt that community participation was likely to hold many benefits, but they were also forthright about the associated barriers. Concerns about community participation were grouped into three broad domains: (i) the scepticism that had grown about public participation; (ii) ensuring the representativeness of those who participate; and (iii) whether community members, as laypeople, had the capacity to influence decisions (see Section 6.4.5). The barriers that were identified by interviewees in this study are not dissimilar to those which have been described in the literature (Abelson et al., 2003; Crawford et al., 2003; Lowndes et al., 2001; Martin, 2008; Palmer & Short, 2000; Veitch & Grant, 2004). Reflecting specifically on experiences in rural and remote Queensland settings, Veitch and Grant (2004) found additional barriers to community involvement including the unsupportive organisation of the health system, the uncooperative attitude of some parties, wariness

from past experiences and the tendency for top-down approaches to be imposed but which are not locally appropriate. Overall, though, these barriers should be considered "challenges to be overcome" (Lowndes et al., 2001, p. 213) rather than obstacles which prevent governments or local authorities from attempting to increase public participation.

*But there are benefits*

If these barriers could be overcome, rural communities and health services stand to benefit in several ways. Advantages of community participation include the potential for empowering communities, improving the health of citizens, better policies, improved outcomes from health programs, increasing public support for health authorities, a more informed public, inclusion of minority groups in decisions that affect them, development of sustainable rural health services and more citizen-focussed, responsive health departments (Arnstein, 1969; Health Canada, 2000; Morgan, 2001; Veitch & Grant, 2004). In addition, these benefits may be easier to attain in small rural communities where developing cooperative partnerships can be easily and efficiently facilitated because health care professionals and government officials have more direct contact within these small communities.

The level of activity shown in Dairytown and Farmtown suggests community willingness and fertile ground for the implementation of public participation activities in health planning and policy-making. In such situations, there is potential for realising many of the benefits associated with public participation such as a more informed, supportive community and a more responsive local health service. Moreover, generating public participation is perhaps even more important in rural areas such as Mineville and Canetown where citizens perceive a bleak future for their town. Ongoing participation structures, "developmental" or "community empowerment" approaches (Taylor et al., 2008) or "participation as an end" (Oakley, 1989), have been advocated as methods for empowering disadvantaged communities. If communities such as Canetown and Mineville can be persuaded of the benefits of actively engaging in local service planning, then the objectives of community empowerment and self-determination may be an equal, if not more valuable, outcome than gaining input to local planning.

## 7.6 The bigger picture – equity of health care

Each of the themes discussed in Chapter 6 (workforce, community, quality and safety) has policy implications as discussed above. However, the themes also have broader ramifications for the ideological principle of achieving equity of health care access. The inequitable outcomes and inter-relationship of the policy environment and thematic results can be conceptualised diagrammatically (Figure 15). The figure demonstrates the inter-relationship between the predominant policy influences identified in Chapter 3 - a lack of policy support, risk-awareness in policies and the tendency towards service centralisation – and how they can directly and indirectly influence rural maternity unit closures and accelerate centralisation of services. The process is unsympathetic to the needs and desires of rural women, local maternity services and rural health services generally. In turn, downgraded or closed local services force rural women to access some or all of their maternity care in regional centres, thus further accelerating the centralisation of services. Furthermore, the less equitable geographic distribution of care has negative implications for rural communities as a whole, particularly for the quality and safety of care that they receive.

The adverse outcomes for the quality and safety of care for rural residents are particularly noteworthy. Quality and safety are closely related and include considerations of physical access, financial costs, safety and risk. Compromised access to care has implications that lead to greater financial costs for rural women and their families. Although maternity services may be “free” at the point of receiving care there are opportunity (lost income) and material (travel to, accommodation in, and living expenses at the regional centre) costs associated with accessing care which is no longer available locally. These costs can be substantial and residents are offered little financial compensation for the removal of local services via the PTSS.

Further, the removal of local services can also increase the risk rural families are exposed to during pregnancy, birthing and postnatal periods. As birthing services close, maternity care professionals (medical and midwifery) gradually de-skill or lose confidence in their skills, or will move to locations with operational birthing services. Both scenarios have implications for the safety of pregnant women as the town loses the skills to manage normal pregnancy and labour, let alone obstetric emergencies. The financial and social barriers associated with the removal of services from rural towns also encourage women to engage in risky behaviours when seeking maternity care, particularly delaying their relocation to a regional hospital for birthing. Thus, the

overall outcome is that the costs and risks of obtaining maternity care are transferred from the health system to rural families. In short, rural women and their families are faced with a "catch-22" dilemma: either accept the potential risks associated with relocating to the regional centre at the onset of birth (unassisted birthing on the roadside or birthing in facilities which are ill-equipped); or accept the costs (financial and social) associated with travel to larger regional facilities which are appropriately appointed and staffed. All of this occurs in an environment of rural medical and midwifery shortages (as indicated by the circle in the background of the diagram).

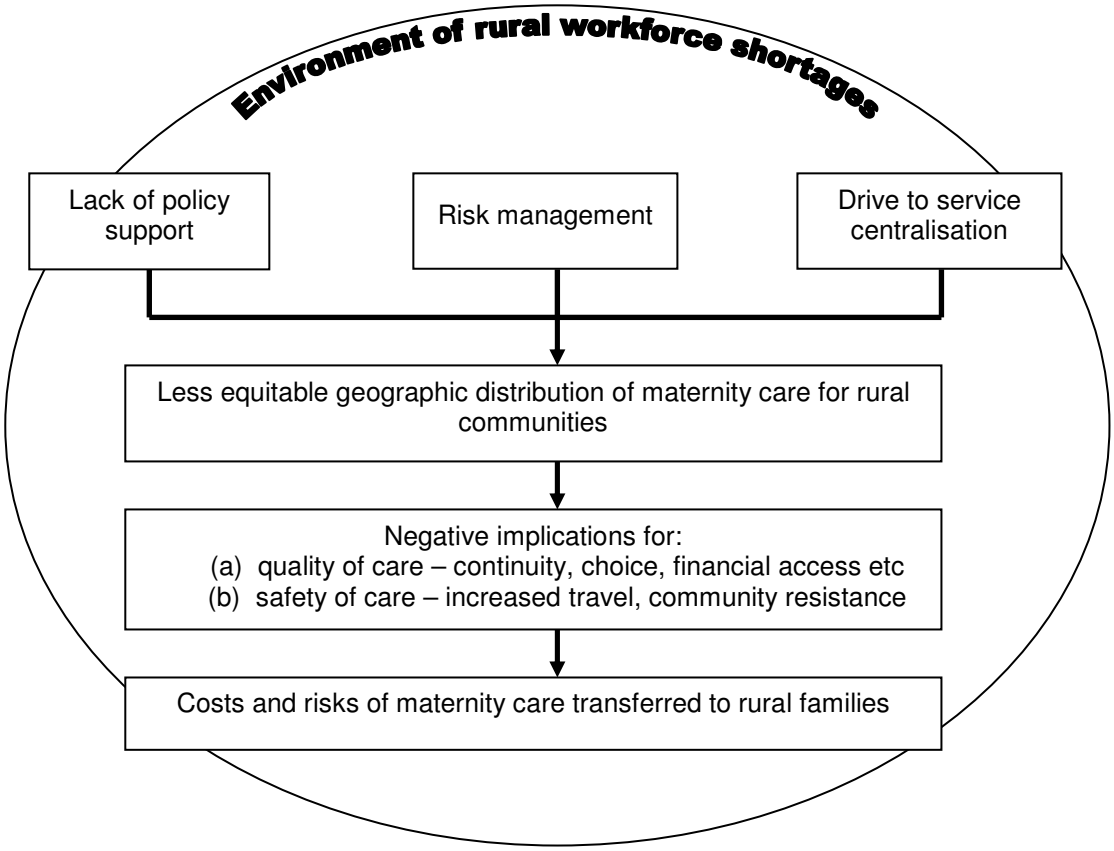


*Figure 15.* Inter-relationship of themes and outcome for equity of health care access.

## 7.7 Implications for rural health services

Maternity care is not the only rural health service under threat in Australia. While the focus of this study was on maternity services in rural areas of north Queensland, it is worth considering what significance the findings of this study have for other health services that have hitherto been routinely provided at rural hospitals (for example, local imaging or pathology services, surgery, anaesthetics). The results of the case studies

essentially apply only to maternity services and in the four included towns, but a number of consistent themes emerged from both this study and the literature that might be transferable to similar rural settings and other rural health service types.

In general terms, most rural-based hospital services face similar challenges in sustaining the provision of safe, high-quality care. Firstly, ensuring an appropriately skilled and adequate workforce in rural areas is a problem seen around the world (Wonca, 1999). Within Australia, there is both a shortage of maternity carers (GP obstetricians and midwives), and a maldistribution of medical specialists, dentists and some allied health professionals in favour of major urban areas (Productivity Commission, 2005a). Secondly, the unsupportive nature of the policy environment for providing maternity care in rural areas is likely to adversely affect the provision of other types of rural health service. Unless policies are developed which support specific types of services, rural health care will be constrained by similar policies, particularly those which emphasise the avoidance of clinical risks. Thirdly, the trend towards service centralisation is unlikely to apply exclusively to maternity services. Achieving economies of scale and economic rationalism are significant motivators for encouraging the consolidation of health services in larger regional and metropolitan centres. However, the focus on these outcomes ignores the impact on people living in rural areas which this study so clearly demonstrated.

Where services cannot be maintained and increasing components of care are removed from a rural hospital, there are likely to be negative consequences for the health professionals and residents of that town. Increasing the distance to maternity care presented rural residents with a variety of additional barriers to accessing appropriate antenatal, birthing and postnatal care. Financial costs to access any type of health service will increase with distance. Further, as various aspects of care are removed from the local hospital, care becomes increasingly fragmented and more thoughtful strategies are required to ensure the coordination of care. Patients with other health conditions might be similarly affected by the withdrawal of health services, so sacrifice aspects of their care or delay their presentation until symptoms become quite severe, as demonstrated by Veitch (1995). Sections 7.5.2 and 7.5.4 discussed how the removal of local maternity services produced a number of barriers which ultimately caused many of the costs and risks of accessing care to be transferred from the health system to rural residents. In the same way, accessing any type of non-local health care has obvious costs associated with travelling and lost work which, in turn, may encourage riskier health behaviours amongst rural residents.

For health care practitioners, the removal of health services from rural hospitals is also likely to have negative consequences, regardless of what specific health service is lost. As was seen with the loss of birthing services, the cessation of various other health services is likely accompanied by a loss of some important skills in that particular rural facility. Either practitioners leave to practice in another town or remaining practitioners de-skill as they find it difficult to maintain their higher level skills. Both scenarios exacerbate the rural health workforce shortage. Further, demoralisation of hospital staff is seen as aspects of maternity care are progressively removed to regional centres. The cessation of other types of health services follows and the opportunity for staff to provide a good quality, holistic service to local residents becomes increasingly limited.

## 7.8 Looking ahead

Having established that decreased access to primary-level health services such as maternity care has inequitable outcomes for rural residents, some important questions are raised. For example, is the allocation of resources, which favours urban-dwellers, fair? Given the spread of the population, is reduced access really unjust? What degree of access inequity is acceptable for rural residents? There are many possible answers to these questions, but these can essentially be reduced to two basic views: to accept this situation and do little to rectify it or, on the other hand, recognise the inequity in health service distribution and genuinely seek to correct the disparity.

According to the former perspective, the uneven distribution of services should be accepted as an unavoidable situation and little could be gained from attempting to remedy this. If people place a high priority on access to health services they are more likely to live where they can easily access good quality health care services. It is understandable that for some Australians, while they value good health, the benefits of a rural lifestyle outweigh any issues with health care access. If people decide to live outside of a metropolitan area, then they have also essentially chosen to bear the additional burdens of living some distance from health services. However, there are a number of assumptions and drawbacks to this perspective. Firstly, there is an assumption that all Australians have a genuine choice in where they live and have the financial means to move if they choose. Secondly, withdrawing health services seems somewhat inconsistent with stated government objectives of sustaining regional areas and associated industries. Thirdly, the extra load for urban infrastructure must become

an important consideration if the rural population moves to obtain better access to health services. The additional influx of residents will place pressure not only on urban health services and hospitals that are already reportedly overstretched, but population growth may present challenges for town planners and councils who must provide for the everyday needs of this additional population (for example, increased school places, traffic infrastructure, adequate housing).

The alternative view proposes that, as a society, there should be an acceptance that (a) the present trend of health service centralisation is inequitable; and (b) sincere endeavours should be made to redress this problem and improve access to health care for all Australians. This perspective was consistent with the views of the majority of respondents in this study who felt that basic health services, such as low-risk birthing, should be locally available.

An undertaking to provide truly equitable health care for rural residents must be beyond party politics and needs a bi-partisan approach in which the needs of regions and rural towns of Australia are prioritised. Significant financial resources are required as there is no avoiding the fact that there is little economy of scale associated with the provision of rural health care services. Corporate rationalists must concede that one of their key interests, cost-efficiency, will not be attained in providing equitable health care for rural Australia. This brings into question issues of resource allocation and how much value the Australian society places on the nation's rural areas. It is true that rural health services have been on the national agenda for well over a decade (Section 3.6.3), and although much deliberation has taken place, very little of the desired change has actually been realised. Only a genuine, concerted effort will bring about true change for rural health care in Australia and avoid this social justice perspective from becoming yet more rhetoric.

## 7.9 Chapter 7 summary

This chapter has discussed the results of this study in light of the research questions posed in Chapter 1. The findings have shown that the rural communities very much valued local birthing services. However, without explicit policy support from government, maternity units in this study were left vulnerable to the influences of service centralisation, workforce shortages and risk-avoidance. The trickle-down effect of an unsupportive policy environment and systematic downgrading of non-

metropolitan maternity units has had a profound and multi-faceted effect on rural residents' access to maternity care. Detrimental changes to the quality and safety of maternity services for rural people were most notable and ultimately saw rural residents take on much of the risks and financial costs associated with obtaining non-local maternity care. Access to good quality, safe maternity care has become biased towards urban centres and raises legitimate concerns about the principle of equity of access to health care. It was evident that the four communities were underutilised resources in the support and future development of rural maternity services, and local health services more generally. The connection between these findings and the provision of other health services, suggestions for further study, recommendations and implications for future policy-making are taken up in the following chapter.

# Chapter 8:

# Conclusion

> *I think we have done a lot over the years to help, but in the end it's not what you do that counts, it's why you do it. And we must deliver better health services to country Australians because they deserve to share in the benefits of being Australian every bit as much as everyone else. There is a fundamental question of justice here. It is simply unjust not to have reasonable health delivery, reasonable health access for country Australians.* - the Hon. Tony Abbott, then Federal Minister for Health (2007)

Governments at both state and Commonwealth levels have continued to declare, through policies, their pursuit of equity in health: to achieve good health for all and to improve all Australians' access to health services. Yet, rural maternity units have been under threat for many years now and a steady rate of unit closures across Australia and Queensland has ensued. Centralisation of maternity services in regional and urban areas has resulted, raising concerns about rural people's access to these services.

An analysis of the policy environment and content around rural maternity care (Chapter 3) identified one of the most influential factors was the lack of government policies to provide explicit support for these services. Furthermore, without the security of clear government support for rural maternity services, many units were vulnerable to the damaging influence of other centrally-developed policies that were perceived to emphasise risk-aversion, service centralisation and cost-effectiveness. That is, rural maternity care does not always fit well into risk management strategies and maintaining smaller maternity units is likely to be seen as less economical than moving services to larger centres to achieve economies of scale. Ultimately, little could be found in the policy environment that positively influenced the sustainability of rural maternity units and this lack of policy eventually led to the closure of units. The loss of operational rural maternity units reinforces the trend towards service centralisation and thus, raises even greater concerns for rural Australians' access to safe maternity services.

Case study data (Chapters 5 and 6) demonstrated that when components of maternity care were unavailable locally, health professionals and rural residents experience negative outcomes which were incongruent with proclaimed policy themes of equity and safe care for all. Amongst maternity care practitioners, policy influence was most evident in increasingly risk-conscious practices and, when services were downgraded, the resulting professional demoralisation and risk of de-skilling. For rural pregnant women, care was found to be inequitable in several ways. Rural women must travel to the regional centre to access aspects of care which have been withdrawn locally. This poses significant social barriers and financial costs which are not adequately compensated by government either in financial terms or with physical assistance. Furthermore, while maternity services provided at regional hospitals are considered "safe", rural residents appear to take more risks as they attempt to avoid greater costs and the unpleasant experiences associated with being socially removed. In this way, the government has effectively transferred the costs and risks that would ordinarily be borne by the health system (via local hospitals) onto rural residents. In contrast, urban women have comparatively better care, more choice, greater convenience and less financial costs.

This study has demonstrated that, in north Queensland, the removal of some rural maternity services has resulted in rural residents (a) obtaining care that is harder to access; (b) having less continuous maternity care; and (c) being forced to take on more costs and risks to access maternity care. As urban residents have a higher quality of care readily available and are not required to bear the same costs or risks as rural

residents, these outcomes illustrate just one facet of inequitable health care access experienced by rural Australians. The presence of this inequity and lack of policy or other government action to address this raises some fundamental and philosophical questions about the value governments and the wider community put on rural Australian communities and the priority that we place on equity in health. The questions are fundamentally rooted in the concept of social justice. Do we, as a national society, value rural communities? In the final analysis, the results of this study raise questions about what is socially just for rural communities. Do we value equity of health care access? What health services should be available locally? Does this fulfil the "right to health care" espoused by governments locally, nationally and internationally?

The present policy situation and the lived experiences identified at the case study sites are not convincing evidence that rural communities are valued and supported. Changes are required in the willingness of governments to make the financial investment necessary to sustain these towns and to provide good quality of life to their residents. If rural residents should not expect this care, then uneven access to maternity and other rural health services should be properly reflected in government documents. There should be no pretence of striving towards equitable access to health services for all, including rural, Australians.

## 8.1 Recommendations for future policy-making

The desire to inform future policy-making was a fundamental stimulus for this study. Emphasis has been placed on developing recommendations aimed at improving the sustainability and delivery of rural maternity services. The following list is structured such that broader policy recommendations are made before progressing to suggestions aimed at the level of local service delivery.

### *8.1.1 Provide policy support specific to rural maternity services*

Unambiguous statements of government support, particularly by Queensland Health, for the provision of maternity care at rural centres would provide reinforcement for an area of rural health care so often under threat. The staff of maternity units in this study felt quite vulnerable to bad publicity, particularly that which results from an adverse event which might subsequently lead to public concerns about the safety and quality of rural maternity care. Clear government support for the provision of birthing services in

rural areas would alleviate some of the feelings of isolation and vulnerability felt by rural practitioners, especially in the face of claims of unsafe practice by others in the public.

### *8.1.2 Health policies required to include rural impact assessment*

Centralised policy-makers, often based in distant metropolitan cities, may not fully appreciate the differences in providing various health services, such as maternity care, in a rural setting. Thus, top-down policy-making risks being seen as irrelevant and even harmful in non-urban centres. Findings from this study have shown how rurally-insensitive policies have contributed to constraint of maternity services (in some cases unnecessarily) and downgrading of rural maternity units. Thus, a requirement to assess the impact of new policies specifically in the rural context might minimise the detrimental impacts of top-down policies on communities such as those in this study.

In response to the negative impacts of policies on rural communities in the United Kingdom, the Countryside Agency developed a Rural-Proofing Kit. The kit has been adopted by the United Kingdom Parliament and mandates that policy-makers anticipate the potential impact of all government policies in rural areas (Department for Environment Food and Rural Affairs, 2007). It imposes a systematic methodology on the policy-making process wherein a compulsory assessment of policy impact in rural areas is undertaken, and appropriate adjustments and solutions for the rural setting are provided where required. Building on this, the Institute of Rural Health in the United Kingdom has produced a toolkit for rural-proofing specifically in health policy (Swindlehurst, 2005; Swindlehurst, Deaville, Wynn-Jones, & Mitchinson, 2005). This toolkit is a guide for Primary Care Organisations to ensure that the needs of rural communities are considered and that all new policies are “rurally-sensitive”. The very concept of rural-proofing acknowledges that the context and needs of rural communities are different from those of urban areas. Policy-makers are required to consider the needs of rural residents and the consequences of proposed policies for the health and well-being of rural communities prior to implementation. Rural-proofing might facilitate the development of health policies that are more effective and rurally-sensitive in the Australian and Queensland contexts as well.

### *8.1.3 Investigate initiatives to redress rural midwifery shortage*

Except for Farmtown, the shortage of midwives was a major concern and a real threat to local maternity services in the other three towns. The autonomous nature of work appeared to attract an abundance of staff to the Farmtown unit. But at other sites

where midwives often had other generalist nursing duties alongside specific midwifery responsibilities, a number of explanations were offered for the difficulty in recruiting midwives (Section 6.1.2).

An integrated approach is required to improve rural midwifery recruitment and thereby support the sustainability of rural maternity units. Long-term strategies must remove barriers to midwife education and training to increase the pool of potential employees. There are a number of barriers to gaining traditional postgraduate midwifery qualifications. One is financial with nursing graduates required to take time off paid work to complete coursework and practical placements. Changing the structure of additional study requirements and providing more financial stability for those undertaking postgraduate midwifery courses might increase the number of people who enter training. Bonded midwifery scholarships that require midwifery graduates to provide a return of service at a nominated rural hospital might be particularly beneficial. New direct-entry undergraduate midwifery courses, distinct from traditional nursing courses, are a good innovation which might increase the number of trainee midwives. However, the lack of general nurse training in these courses is likely to be problematic and of little benefit to rural hospitals which often require midwives to contribute to general nursing tasks alongside their midwifery duties. A better option might be to support the development of an undergraduate degree which combines general nursing and midwifery.

In the short-term, rural midwifery posts must be made more attractive to compete with urban centres which are also looking to recruit more midwives. Incentives akin to those implemented for rural medical proceduralists might assist rural midwives to stay in practice and make rural midwifery a more attractive proposition. Higher wages provide a good starting point and income could be augmented by subsidising a car or accommodation or providing a rural location allowance. The strategies used in the General Practice Rural Incentives Program[40] (GPRIP) for the medical workforce could support the same workforce and training objectives in midwifery (Holub, 1995). For example, relocation grants to encourage midwives to move and practice in underserved areas; training grants for rural midwives to upgrade or maintain relevant

[40] The GPRIP was implemented by the Commonwealth Government with objectives to address the shortage of GPs in rural and remote Australia and to encourage undergraduate training and CME appropriate for rural practice. Main components of the strategy included grants for relocation, training, remote area practice, and undergraduate grants to Medical Faculties to encourage a rural focus in curricula (Holub, 1995).

clinical skills; remote area grants which supplement income in economically marginal areas; and continuing postgraduate education and/or locum grants aim to facilitate leave to increase their skills. Re-entry schemes, scholarships or other training options might encourage mature nurses to obtain midwifery qualifications while they are employed at a rural hospital. Overall, policy strategies need to remove barriers to midwifery training and provide financial incentives which demonstrate that midwives are a valued and essential component of rural maternity units.

### *8.1.4 Community participation in rural health services and policy*

The pursuit of public participation within the policy discourse appears to be justified: the literature encourages it and results from this project indicate there is room for improvement in how it is implemented. Certainly the policy discourse has embraced the notion of engaging the community in many sectors of public life. The potential advantages for the health of citizens and the empowerment of rural communities make the concept of participatory processes very attractive. Improving health, increasing levels of self-determination and strengthening the community are just some potential benefits of community participation which have particular relevance to contemporary rural Australian communities.

However, the community action such as that described in the Farmtown and Dairytown case studies does not reflect true community participation because it occurred in response to health service decisions made without consultation. Perhaps a reassessment of government commitment to community engagement in health is required. Governments need to reaffirm and demonstrate their desire to truly engage citizens, so that the level of involvement in rural areas can be increased. Strategies which seek to engage rural citizens should consider the concerns that were voiced in this project, such as: how to overcome the scepticism that has developed about engagement activities; how to ensure representativeness of participants; and how to build the capacity of lay citizens to meaningfully participate in policy-making processes, particularly at a local level. It is also important to note that successful community participation is more likely with careful planning and preparation, to ensure that techniques and process used are the most appropriate for the context (Palmer & Short, 2000).

### *8.1.5 Better financial support for accessing remote care*

This study showed that when aspects of care are removed, particularly birthing, there are great financial barriers to accessing appropriate and timely care. Regularly travelling to a regional centre and having to relocate for birthing was both inconvenient and prohibitively expensive for some families. Financial costs were one barrier that led to women not accessing adequate antenatal care and leaving relocation to the regional centre until in the first stages of labour. Both courses of action increase risks for the mother and baby.

The Patient Travel Subsidy Scheme (PTSS) currently operated by the Queensland Government does not adequately off-set the financial costs associated with accessing maternity care at regional centres or relocating there prior to delivery. Increasing the amount of financial assistance provided through the PTSS would go some way to improving rural women's access to distant maternity care, and so reduce the risks that have been transferred to rural residents. Furthermore, the PTSS should be better publicised to rural maternity patients to ensure that they obtain the maximum support possible.

### *8.1.6 Fund initiatives aimed at improving coordination of care*

There needs to be a committed approach to increasing the coordination of care in increasingly fragmented rural maternity services. As each rural community is unique, individualised bottom-up approaches might be more appropriate for developing locally-responsive strategies for coordinating care throughout pregnancy, birthing and the postnatal period. Unlike imposed top-down strategies, bottom-up approaches will allow local knowledge to inform initiatives which will be most acceptable, and of greatest benefit, in various local contexts. Section 8.2 below discusses future research opportunities and lists some potential interventions to achieve this end.

### *8.1.7 Support for postnatal domiciliary care in rural areas*

A postnatal home-visiting service enhances the quality of care available to rural women by improving the timeliness and continuity of their care. This is an intervention which already functions in many regional and urban areas of north Queensland but is, as yet, largely unfunded and therefore unsupported in rural areas where it is just as, or perhaps more, necessary. Amongst midwives in this study, the introduction of a postnatal home-visiting program was the leading suggestion for improving present maternity services. Having a midwife visit a woman in her home removes the barriers

of (a) geographic distance; (b) inconvenience for the mother during the immediate postnatal period where the demanding nature of caring for a newborn, sometimes in addition to caring for other children, can prevent women from accessing appropriate and timely assistance; and (c) financial costs incurred by some rural women who must travel considerable distances to the local hospital.

If this service could be linked with the maternity unit in a regional centre, timely information on the discharge of local women from the referral hospital would assist rural midwives in providing this service to local women. Consequently, a postnatal home-visiting service would have additional benefits by way of re-engaging rural women with their local health services, overcoming the dislocating effects of obtaining antenatal and birthing care at the regional centre.

## 8.2 Future research and rural health policy

This study has provided some insights into the influence of government policy on the outcomes of four rural north Queensland maternity units and the impact of this on the lived experiences of those rural residents and maternity carers. The process of obtaining these findings has created questions which merit further enquiry. In the closing stages of this thesis, it is appropriate to consider some areas of potential research that have been highlighted in the present study.

### *8.2.1 Understanding patients' perception of acceptable obstetric risk*

Perceptions of risk and safety figure prominently in governments' decisions about the provision of health services and also in consumers' actions when seeking care. The government demonstrates this through a perceived policy emphasis on avoiding clinical risk and publishing strict frameworks for service provision. For rural residents, their health help-seeking behaviour shows a different perception of risk and safety. For example, women commonly travelled to the regional hospital while in labour, despite the danger of delivering en route. The findings showed a discrepancy between the levels of risk that Queensland Health and rural residents are willing to take in providing and accessing maternity care. If one subscribes to the belief that it is each person's fundamental right to choose the level of risk that they are willing to accept, then there is a need to understand what that acceptable level of risk is according to rural residents and to inform policy-making and local health services accordingly. It is unlikely that every rural community will share exactly the same view, but community engagement

techniques could provide a useful method for informing health services of local communities' collective perception of acceptable risk.

### *8.2.2 Interviewing policy makers*

While beyond the scope of this study, interviewing policy-makers such as Queensland Health and Commonwealth Department of Health and Ageing officials, legislators, and government ministers, would elucidate the justification for influential policies identified in this study and reasons for lack of policy in other areas. A dedicated of the policy background from this perspective would complement the findings of this study which describe the outcomes of policies for selected rural citizens.

### *8.2.3 Investigate citizens' preferences for engaging with policy*

The literature around community engagement in health policy is growing and there is considerable interest in engaging the community in health policy-making both in Australia and within Queensland. The potential advantages of engaging communities are numerous and can benefit entire populations of rural towns. However, given the many barriers to successful community engagement, it is important to find techniques which are appropriate to the context and most acceptable to citizens. There is a large range of activities across the spectrum of public involvement with varying degrees of true engagement. Further, citizens can be engaged anywhere from the making of broad health policy (for example, policy decisions made at the state or Commonwealth level), right down to being involved in service delivery decisions at a more grass-roots level. Future research projects should investigate the feasibility of various public involvement techniques in rural health, bearing in mind that future engagement activities should make clear to citizens the aim of engagement and, realistically, what impact citizen input will have. Scepticism regarding community engagement was widespread amongst participants in this study due to previous experiences which had left them frustrated and disappointed. To encourage a more positive perception of community engagement, participatory activities should be properly labelled according to their purpose (for example, information-sharing or consulting on policy decisions).

Given that the sustainability of many rural towns is increasingly being challenged and that rural health services in Queensland appear to be on the verge of great change in service models and care providers, there is scope for trialling community engagement projects at this time. For example, projects could assess what engagement techniques are most favourable and efficient for both government and rural communities; whether

engagement facilitates the implementation of changes in local health services; if the employment of engagement techniques over time produces community perceptions of a more responsive health system. It might also be appropriate to investigate what role the newly formed Health Community Councils and their parent body, Health Consumers Queensland, play in engagement initiatives.

### *8.2.4 Establishing and evaluating coordination of care interventions*

Results of this study demonstrated that one of the predominant outcomes of maternity service downgrading has been the detrimental effect on quality, particularly as a result of the increasing fragmentation of maternity care (Section 6.2.2). International literature in this area suggests several good starting points for introducing interventions to enhance the coordination of maternity care for rural residents throughout Queensland:

- Introducing computer-generated discharge summaries to encourage more timely availability of patient information for rural practitioners (Kripalani et al., 2007).
- Electronic referral for specialist care that does not require a specialist to see the patient in person. Primary carers provide sufficient patient information (for example, patient history and test results) to allow a specialist obstetrician to make a patient assessment remotely.
- Referral agreements between primary care givers and specialists at a referral facility in which both parties agree on which conditions are best seen in the primary care or hospital settings; what tests should be completed prior to referral for various conditions; and an obligation for the specialist to see referred patients as soon as possible, addressing the questions of the primary care provider and providing advice in a timely manner.
- The employment of nurses, or other appropriate health professionals, whose role is dedicated to improving coordination of care. A midwife can “coach” patients and their families to be independent and facilitate coordinated care for themselves. Alternatively, a midwife may be appointed as a continuous carer: visiting the patient in hospital, at their home after discharge and be available for phone consultations if required. (Bodenheimer, 2008)
- The introduction of patient-held medical records. In this case, women carry information applicable to their own pregnancy and childbirth and are responsible for presenting it to health professionals at each maternity care appointment (Brown & Smith, 2004). Health professionals add relevant information to the women-held records at each appointment.

### *8.2.5 Explore outcomes for rural Indigenous populations*

The focus of this study on mainstream maternity services possibly resulted in a lack of Indigenous representation amongst participants, many of whom use Aboriginal Medical Services and urban maternity units. As Indigenous Australians comprise a greater proportion of the population in rural areas compared with urban areas, it is important to understand the constraints this places on interpreting results in this respect, and to acknowledge the need for similar work to be undertaken which focuses on the outcomes for Indigenous rural residents. The lived experiences of the mostly non-Indigenous participants in this study may differ from those of Indigenous residents in the same locality. Obtaining this information is important for constructing rural maternity services which are responsive, appropriate and acceptable for all rural Australians.

### *8.2.6 Auditing birth location and travel distance for rural residents.*

There was no reliable Queensland Health data which indicated the percentage of residents who accessed maternity care, including birthing, away from their hometown. Pitchforth et al. (2008) have demonstrated that women may bypass local care for other options up to a certain distance from home in order to access preferred models of care. Though beyond the scope of this study, this information would be particularly beneficial for gaining a greater insight to what proportion of residents are bypassing appropriate local services to access care at a regional centre and the reasoning behind such choices.

Further research should address some of the unknowns in this area. How many rural women access local maternity care when it is available? For what reasons do women choose to bypass appropriate local maternity services? Are those women who choose to access maternity care locally predominantly from low socio-economic backgrounds? If so, this would support the work of Bronstein and Morrisey (1990) who found the removal of maternity services in rural America placed a greater and unequal burden on low socio-economic status families. This information would greatly assist service planning and may highlight local service issues that require consumer education.

### *8.2.7 Monitoring outcomes of medical workforce policies*

Recent government policies aimed at addressing medical workforce imbalances hold great potential and were the greatest source of hope for many rural proceduralists concerned about succession planning. Large-scale workforce policies represent a

serious government strategy to increase the supply of medical practitioners and recognition for rural practice but, in light of outcome and evaluation studies being traditionally neglected in policy research, emphasis should be placed on monitoring the impact of these policies and then disseminating the findings widely. In the short-term, the ongoing appropriateness of these strategies should be assessed. For example, what is the level of uptake in the rural generalist training pathway? What changes are required to the postgraduate and specialist training infrastructure in order to meet the training needs of the growing yearly cohort of medical graduates? In the long-term, there needs to be some exploration of what influence these policies have for the supply of appropriately skilled practitioners in non-metropolitan settings and, hence, what contribution is made to the sustainability of health care throughout regional, rural and remote Australia.

### *8.2.8 Understanding other influential factors*

The variety of outcomes observed in the four case studies, that essentially operated within the same policy framework, illustrates the fact that policy is likely to be only one of many factors which influence the sustainability of any individual rural maternity service. Indeed, government policies appeared to provide the parameters within which units could operate and it is likely that several other factors may influence outcomes of rural maternity care; for example, the presence of a "local champion" or the social capital associated with a community. More research is required to identify other important factors and the extent of influence that these individual factors may have on services.

## 8.3 Policy postscript

It seems appropriate and timely to include here a postscript regarding the current policy environment relating to maternity care. Since this thesis manuscript was drafted, there have been some interesting developments in the field of maternity care and some which have specific implications for rural services. Firstly, The Maternity Services Steering Committee which was formed after the release of the *Re-Birthing* report (Hirst, 2005) has seen out its term and has now disbanded. The last communiqué of the committee announced $7 million funding for the establishment of a Cooperative Centre for Mothers and Families (Maternity Services Steering Committee, 2007). The main purposes of the centre will be to provide consumer information and to advise the

government on best practice in provision of Queensland maternity services (Queensland Health, 2007c).

Secondly, the publication of the *Queensland Statewide Health Services Plan 2007-2012 (Queensland Government, 2007)* has identified a framework for the future provision of health care throughout the state. One of the aims refers specifically to rural maternity services: "Action 2.3.3: Maintain maternity services in rural communities including a mix of enhanced payments to procedural general practitioners and midwifery led models within a safe and sustainable framework" (Queensland Government, 2007, p. 18). The explanatory notes indicate the informative role that the Cooperative Centre for Mothers and Families will have in developing appropriate rural models. The inclusion of midwifery models of care is worthy of note and suggests a greater acceptance of maternity services outside of the traditional medical model. Since the publication of the services plan, Queensland Health has also published *Midwifery Models of Care: Implementation Guide* (Queensland Government, 2008), further reinforcing the idea that midwifery-led models of maternity care are legitimate options in the Queensland health system. Further expansion of such models will benefit from engagement with medical professional groups[41] and individual rural GPs to negotiate medical support for local midwife-led models.

Thirdly, the final report of the nationwide Review of Maternity Services was published recently (Department of Health and Ageing, 2009). The final report contains a number of recommendations that are pertinent to maternity care for rural populations. There was recognition that maternity services in rural areas are often constrained by concerns of safety and quality of care, as seen in this study, however they highlight that these concerns should not stand in the way of innovation and improvements in maternity care. There was also great support for the expansion of midwifery practice and calls for indemnity insurance and financial support (that is, access to the Medical Benefits Scheme and the Pharmaceutical Benefits Scheme) to facilitate this. Indeed, and although not yet passed, the most recent Australian Government budget includes considerable provisions for midwives as independent practitioners. Although yet to be approved by the Senate, budget documents indicate midwife access to service subsidies through the Medical Benefits Schedule and authority to prescribe

[41] Such as the Rural Doctors Association of Australia (RDAA), the Australian College of Rural and Remote Medicine (ACRRM), Australian Medical Association (AMA) and the Royal Australian College of General Practitioners.

medications. The budget also indicated the government would subsidise medical indemnity costs for midwives in hospital and health care settings and further support multi-disciplinary maternity care outreach programs to rural and remote areas (Commonwealth of Australia, 2009). If passed by the Senate, these budget measures would provide a significant turning point for the midwifery profession with greater access to Medicare subsidies and government support for indemnity and professional independence.

In addition, it remains unclear what effect the state government's community engagement initiatives will have for rural residents. A recent independent review recommended the abolition of the 37 Health Community Councils due to concerns that the councils were an ineffective mechanism for involving the community in directly advising on, and monitoring, health service delivery in their district (Webbe & Weller, 2009). The reviewers were particularly concerned that Health Community Councils lacked the "capability, resources and guidance" (p. 184) to effectively undertake community engagement activities.

Overall, there appears to be increasing acceptance of midwifery-led models and contemporary recognition of the need for change in maternity care within both Queensland and national reviews. The convergence of these elements provides good reason for optimism that change is imminent and there may be a reversal of the inequitable access to maternity services experienced by rural communities. However, close monitoring of the policy environment in the coming months and years is required to understand what change is possible and successful in this contested arena. In her review of maternity services in Queensland, Hirst wrote of the regularity in which reviews of maternity care had been undertaken in Queensland[42]: "recommendations for changes in maternity care have piled one on top of the other over the last ten years with few changes of any consequence in care provided. . . ." and feared that the *Re-Birthing* report "would become number 20 on the pile of reports that have been done on maternity services over the past decade" (p. 40). Regardless of what models actually eventuate, change is imperative to improve rural residents' access to maternity care. With the scene set for change, it is as Hirst has suggested: this opportunity should not be wasted and these most recent reports should trigger real change for rural maternity care, lest future reviews find the same conclusions.

[42] Nineteen reviews of maternity care had been completed in the 10 years prior to the Re-Birthing review commenced.

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# APPENDICES

# Appendix 1: Remoteness classifications

There are three major remoteness classifications used in Australia; each developed via different methodologies and with various strengths and weaknesses (Australian Institute of Health and Welfare, 2004). The following is a brief summary of the three classification systems, primarily informed by two references: *Rural, Regional and Remote Health: A Guide to Remoteness Classifications* (Australian Institute of Health and Welfare, 2004) and *Measuring Remoteness: Accessibility/Remoteness Index of Australia* (Department of Health and Ageing, 2001).

## *Rural, Remote and Metropolitan Areas classification*

The Rural, Remote and Metropolitan Areas (RRMA) classification was the first of the three classification systems to be developed. RRMA consists of seven classes categorised into three zones (metropolitan, rural and remote; Table 9). RRMA measures are based on distance to service centres as well as distance from other people or population centres. Distances from service centres are based on straight line measures from the centroid of a locality to the centroid of the service centre. "Personal distance" considers factors based on population density.

Table 9: *Rural, Remote and Metropolitan Area Classification*

| Zone | Class |
|---|---|
| Metropolitan zone | Capital cities |
| | Other metropolitan centres (urban centre population ≥100,000) |
| Rural zone | Large rural centres (urban centre population 25,000-99,999) |
| | Small rural centres (urban centre population 10,000 – 24,999) |
| | Other rural areas (urban centre population <10,000) |
| Remote zone | Remote centres (urban centre population ≥5,000) |
| | Other remote centres (urban centre population <5,000) |

Source: *Rural, regional and remote health: A guide to remoteness classifications. (Australian Institute of Health and Welfare, 2004, p. 5)*

## *Accessibility/Remoteness Index of Australia*

The Accessibility/Remoteness Index of Australia (ARIA) is a geographical approach to classifying remoteness of locations. It does not consider socio-economic, rural/urban or population size factors. The ARIA system is based largely on distance to service centres as measured by minimum road distance (as opposed to straight line measures used in the RRMA system). Locations are given values ranging from 0 to 12 which then correspond with one of five remoteness classes. Labels, values and a brief description of each of the five classes are provided in Table 10.

Table 10: *Accessibility/Remoteness Index of Australia Classification*

| Class | Index value range | Description |
|---|---|---|
| Highly accessible | 0 – 1.84 | Relatively unrestricted accessibility to a wide range of goods and services and opportunities for social interaction. |
| Accessible | >1.84 – 3.51 | Some restrictions to accessibility of some goods, services and opportunities for social interaction. |
| Moderately accessible | >3.51 – 5.80 | Significantly restricted accessibility of goods, services and opportunities for social interaction. |
| Remote | >5.80 – 9.08 | Very restricted accessibility of goods, services and opportunities for social interaction. |
| Very remote | >9.08 - 12 | Very little accessibility of goods, services and opportunities for social interaction. |

Source: Measuring remoteness: Accessibility/remoteness index of Australia (ARIA*).(Department of Health and Ageing, 2001, p. 3)*

## *Australian Standard Geographical Classification*

The Australian Standard Geographical Classification (ASGC) is based on the ARIA+ system which is similar to the ARIA methodology with some differences, particularly that Tasmania is treated differently and there are five categories of service centres rather than four as in ARIA. Localities are allocated values ranging between 0 to 15 which correspond with one of 5 classes as outlined in Table 11.

Table 11: *Australian Standard Geographic Classification Classes*

| Class | Index value range |
|---|---|
| Major cities of Australia | 0 - 0.2 |
| Inner regional Australia | >0.2 - 2.4 |
| Outer regional Australia | >2.4 - 5.92 |
| Remote Australia | >5.92 - 10.53 |
| Very remote Australia | >10.53 - 15 |
| Migratory | Off-shore, shipping and migratory areas |

Source: *Rural, regional and remote health: A guide to remoteness classifications. (Australian Institute of Health and Welfare, 2004, p. 11)*

# Appendix 2: Antenatal screening tests recommended by the Royal Australian and New Zealand College of Obstetricians and Gynaecologists

Table 12: *RANZCOG recommended antenatal screening tests*

| **At the first antenatal visit:** |
|---|
| Blood group and antibody screen |
| Full blood examination |
| Rubella antibody status |
| Syphilis serology |
| Midstream urine |
| Hepatitis B serology |
| Human Immunodeficiency Virus (HIV) |
| Hepatitis C serology |
| Vitamin D deficiency |
| **Other tests that may be considered at first antenatal visit:** |
| Cervical cytology |
| Screening for Haemoglobinopathies |
| Screening for varicella antibodies |
| **Screening tests that may be offered or considered in subsequent antenatal visits:** |
| Obstetric ultrasound scanning (for foetal morphology, placental localisation, confirm/assess due date) |
| Down Syndrome screening |
| Gestational diabetes |
| Group B Streptococcus |
| Blood group antibody testing |
| Iron deficiency |
| Cytomegalovirus/Toxoplasmosis (for women at greatly increased risk of acquiring infection and have not been tested prior to pregnancy) |
| Syphilis screening (in high-risk populations) |
| Late pregnancy tests of foetal well-being |
| Chlamydia (for those at increased risk) |

Source: (The Royal Australian and New Zealand College of Obstetricians and Gynaecologists, 2006)

# Appendix 3: Australian College of Midwives referral guidelines

The Australian College of Midwives (ACM) publication *National Midwifery Guidelines for Consultation and Referral* (2004b) is used by some maternity units as a tool to facilitate assessment of risk in pregnant women. A list of indications is used to guide decisions as to the most appropriate locations and providers of maternity care. Codes of A, B and C are used to denote the varying levels of care:

Table 13: *Summary of codes used for maternity care providers*

| Code | Description | Care provider |
|---|---|---|
| A<br>Primary maternity care | The responsibility for maternity care in the situation described is with the midwife. | Midwife |
| B<br>Consultation and possible transfer of care to medical practitioner | Evaluation involving both primary and secondary care needs. Under the item concerned, the individual situation of the woman will be evaluated and agreements will be made about the responsibility for maternity care. | Medical practitioner and/or midwife depending on agreements |
| C<br>Transfer of care to medical practitioner | This is a situation requiring medical care at a secondary or tertiary level for as long as the situation exists. | Medical practitioner (where appropriate the midwife continues to provide midwifery care or support) |

Source: *National Midwifery Guidelines for Consultation and Referral* (Australian College of Midwives, 2004b, p. 14).

The following pages contain the risk scoring tool as taken from *National Midwifery Guidelines for Consultation and Referral* by the ACM (2004b).

# 6. Indications At Booking

The following are specific indications for discussion, consultation and/or transfer of care when first discussing a woman's needs during a booking visit. The main purpose of the indication list is to provide a guide for risk-selection.



The Codes in the Tables for A Discussion, B Consultation and C Transfer of Care are explained in Part 4 of these *Guidelines*.

### 6.1. Medical Conditions

| | | |
|---|---|---|
| 6.1.1 | Anaesthetic difficulties<br>• Previous failure or complication (e.g. difficult intubation, failed epidural)<br>• Malignant hyperthermia or neuromuscular disease | B/C<br><br>C |
| 6.1.2 | Autoimmune disease | B/C |
| 6.1.3 | Cardiovascular disease<br>• A heart condition with haemodynamic consequences.<br>Hypertension<br>• Chronic hypertension, with or without medication | C<br><br>C |
| 6.1.4 | Drug dependence or abuse<br>• Use of alcohol and other drugs<br>• Medicine use: the effect of drugs on the pregnant woman and the unborn child, lactation and/or neonate<br>Information is available from - Mothersafe 1800 647 848 | B/C<br>B/C |
| 6.1.5 | Endocrine<br>Diabetes mellitus<br>• Pre-existing insulin dependent or non insulin dependent<br>• Gestational diabetes requiring insulin<br>Thyroid disease<br>• Hypothyroidism<br>• Hyperthyroidism<br>Addison's Disease; Cushing's Disease or other endocrine disorder requiring treatment | <br><br>B/C<br>C<br><br>B/C<br>B/C<br>C |
| 6.1.6 | Gastroenterology<br>• Hepatitis B with positive serology (Hbs-AG+)<br>• Hepatitis C<br>• Inflammatory Bowel Disease<br>This includes ulcerative colitis and Crohn's disease. | B/C<br>B/C<br>B/C |



# ... at booking

| | | |
|---|---|---|
| 6.1.7 | Genetic – any condition | B/C |
| 6.1.8 | Haematological<br>• Thrombo-embolic process. Of importance is the underlying pathology and the presence of a positive family medical history.<br>• Coagulation disorders<br>• Anaemia, due to a lack of iron. Anaemia is defined as Hb<90g/l not responding to treatment and that has existed for some time.<br>• Anaemia, other - this includes the haemoglobinopathies. | <br>C<br><br>C<br>B/C<br><br>C |
| 6.1.9 | Infectious Diseases<br>• HIV-infection<br>• Rubella<br>• Toxoplasmosis<br>• Cytomegalovirus<br>• Parvo virus infection<br>• Varicella/Zoster virus infection<br>Tuberculosis<br>• This refers to an active tuberculous process<br>• Tuberculosis, non-active<br>Herpes genitalis<br>• Primary infection<br>• Recurrent<br>Syphilis<br>• Positive serology and treated<br>• Positive serology and not yet treated<br>• Primary infection | <br>C<br>B/C<br>B/C<br>B/C<br>B/C<br>C<br><br>C<br>B/C<br><br>B/C<br>B/C<br><br>A/B<br>B/C<br>B/C |
| 6.1.10 | Neurological<br>• Epilepsy, without medication<br>• Epilepsy, with medication<br>• Subarachnoid haemorrhage, aneurysms<br>• Multiple sclerosis<br>• AV malformations<br>• Myasthenia gravis<br>• Spinal cord lesion<br>• Muscular dystrophy or Myotonic Dystrophy | <br>A<br>B/C<br>C<br>B/C<br>C<br>C<br>C<br>C |
| 6.1.11 | Psychiatric disorders<br>• Care during pregnancy and birth will depend on the severity and extent of the psychiatric disorder. | B/C |

| | | |
|---|---|---|
| 6.1.12 | Renal function disorders<br>• Disorder in renal function, with or without dialysis<br>• Urinary tract infections<br>• Pyelitis | <br>C<br>B/C<br>B/C |
| 6.1.13 | Respiratory Disease<br>• Asthma Mild<br>• Moderate (i.e. oral steroids in the last year and maintenance therapy)<br>• Severe<br>Lung function disorder | <br>A/B<br>B/C<br><br>C<br>C |
| 6.1.14 | System/connective tissue diseases<br>• These include rare maternal disorders such as systemic lupus erythematosus (SLE), anti-phospholipid syndrome (APS), scleroderma, rheumatoid arthritis, periarteritis nodosa, Marfan's syndrome, Raynaud's disease and other systemic and rare disorders. | C |

**6.2. Pre-existing gynaecological disorders**

| | | |
|---|---|---|
| 6.2.1 | Pelvic floor reconstruction<br>• This refers to colpo-suspension following prolapse, fistula and previous rupture. | B/C |
| 6.2.2 | Cervical Abnormalities<br>• Cervical amputation<br>• Cervical cone biopsy<br>• Cervical surgery with or without subsequent vaginal birth<br>• Abnormalities in cervix cytology (diagnostics, follow-up) | <br>C<br>B/C<br>A/B<br>A/B |
| 6.2.3 | Myomectomy /hysterotomy | B/C |
| 6.2.4 | IUD in situ | B/C |
| 6.2.5 | Infertility treatment | B |
| 6.2.6 | Pelvic deformities (trauma, symphysis rupture, rachitis) | B/C |
| 6.2.7 | Female Genital Cutting (Mutilation/Incision) | B/C |





**6.3 Previous Obstetric history**

| | | |
|---|---|---|
| 6.3.1 | Active blood group incompatibility (Rh, Kell, Duffy, Kidd) | C |
| 6.3.2 | ABO-incompatibility | B |
| 6.3.3 | Hypertension in the previous pregnancy | A/B |
| 6.3.4 | Pre-eclampsia in the previous pregnancy | B/C |
| 6.3.5 | Eclampsia | C |
| 6.3.6 | Recurrent miscarriage (3 or more times) | A/B |
| 6.3.7 | Pre-term birth (<37 weeks) in a previous pregnancy | A/B |
| 6.3.8 | Cervical incompetence (and/or Shirodkar-procedure) | C |
| 6.3.9 | Placental abruption | B/C |
| 6.3.10 | Forceps or vacuum extraction | A/B |
| 6.3.11 | Caesarean section | B/C |
| 6.3.12 | Foetal growth restriction | B/C |
| 6.3.13 | Asphyxia (Defined as an APGAR score of <7 at 5 minutes) | B/C |
| 6.3.14 | Perinatal death | B/C |
| 6.3.15 | Prior child with congenital and/or hereditary disorder | B |
| 6.3.16 | Postpartum haemorrhage as a result of<br>• episiotomy<br>• cervical tear<br>• other causes (>1000 ml) | <br>A<br>C<br>B/C |
| 6.3.17 | Manual removal of placenta | A |
| 6.3.18 | Placenta accreta | C |
| 6.3.19 | 3rd or 4th degree perineal laceration<br>• functional recovery<br>• no/poor function recovery | <br>B<br>C |
| 6.3.20 | Symphysis pubis dysfunction | A/C |
| 6.3.21 | Postpartum depression<br>(There maybe no added value to managing pregnancy or birth at secondary care level in cases with a history of p.p.d. ) | A/B |
| 6.3.22 | Postpartum psychosis | C |
| 6.3.23 | Grand multiparity - defined as parity >5. | A/B |

# 7. Indications Developed / Discovered During Pregnancy

The following are specific indications for discussion, consultation and/or transfer of care in response to conditions or abnormalities that are identified during pregnancy. The main purpose of the indication list is to provide a guide for risk-selection.

The Codes in the Tables for A Discussion, B Consultation and C Transfer of Care are explained in Part 4 of these *Guidelines*.

| | | |
|---|---|---|
| 7.1.1 | Uncertain duration of pregnancy by amenorrhoea >20 weeks<br>• Consultation is required when the duration of pregnancy is uncertain after 20 weeks amenorrhoea. The primary care provider has access to sufficient additional diagnostic tools in the first 20 weeks. | B/C |
| 7.1.2 | Laparotomy during pregnancy | C |
| 7.1.3 | Cervix cytology CIN III or higher<br>CIN 1 & 2 | C<br>B |
| 7.1.4 | Psychiatric disorders (neuroses/psychoses) | B/C |
| 7.1.5 | Hyperemesis gravidarum<br>• Referral to secondary care is necessary for treatment of this condition. After recovery the pregnancy and birth can take place at primary care level. | B/C |
| 7.1.6 | Ectopic pregnancy | C |
| 7.1.7 | Antenatal screening<br>• Attention should be given to the presence of risk factors for congenital abnormalities. If no abnormalities can be found, then further care may take place at a primary level. | A/C |
| 7.1.8 | (Suspected) fetal abnormailities | A/C |
| 7.1.9 | Pre-term rupture of membranes (<37 weeks amenorrhoea) | C |
| 7.1.10 | Gestational Hypertension (GH):<br>• average SBP > 140mmHg and/or DBP >90 mmHg (after overnight rest, or after completion of a day assessment visit), developing after 20 weeks gestation, without any evidence of multisystem dysfunction. GH resolves within 3 months postpartum. | B/C |
| 7.1.11 | Preeclampsia (PE):<br>• development of SBP > 140mmHg and/or DBP >90 mmHg after 20 weeks gestation in women with no previous history of hypertension, cardiac or renal plus evidence of other organ involvement (eg proteinurea, renal insufficiency, liver disease, neurological problems, haematological disturbances, fetal growth restriction.) It resolves within 3 months postpartum. | C |
| 7.1.12 | Eclampsia | C |



# ... during pregnancy

| | | |
|---|---|---|
| 7.1.13 | Chronic Hypertension:<br>• Hypertension that is present in the pre-conception period or the first half of pregnancy. It may be essential where there is no apparent cause or secondary where the hypertension is associated with renal, renovascular, endocrine disorder and aortic coarctation.<br>• Diastolic pressure should be recorded as Point V Korotkoff (K5) (ie the point of disappearance of sounds) | C |
| 7.1.14 | Blood group incompatibility | C |
| 7.1.15 | Coagulation disorders | B |
| 7.1.16 | Recurring vaginal blood loss prior to 16 weeks | A/B |
| 7.1.17 | Vaginal blood loss at or after 16 weeks | B/C |
| 7.1.18 | Placental abruption | C |
| 7.1.19 | Size / date discrepancy: Small for dates. Large for dates.<br>(Defn: Symphysis fundal height >3cm or <3cm from gestational age) | B/C |
| 7.1.20 | Post-term pregnancy<br>(This refers to amenorrhoea lasting longer than 42 completed weeks or 294 days.) | B/C |
| 7.1.21 | Threat of, or actual, pre-term birth. | B/C |
| 7.1.22 | Incompetent cervix | C |
| 7.1.23 | Symphysis pubis dysfunction (pelvic instability) | A |
| 7.1.24 | Multiple pregnancy | C |
| 7.1.25 | Abnormal presentation at full term<br>Breech presentation (refer for ECV at 37 weeks) | C<br>C |
| 7.1.26 | Failure of head to engage at full term<br>• If at full term there is a suspected cephalo-pelvic disproportion, placenta praevia or comparable pathology, consultation is indicated. | B/C |
| 7.1.27 | No prior prenatal care (± full term) | B/C |
| 7.1.28 | Baby for adoption. | A/C |
| 7.1.29 | Fetal death in utero. | C |
| 7.1.30 | Fibroids | B |

## ... during pregnancy

| | | |
|---|---|---|
| 7.1.31 | Endocrine<br>Diabetes mellitus<br>• Gestational diabetes requiring insulin<br>Thyroid disease<br>• Hypothyroidism<br>• Hyperthyroidism<br>Addison's Disease; Cushing's Disease or other endocrine disorder requiring treatment. | <br><br>C<br><br>B/C<br>B/C<br>C |
| 7.1.32 | Gastroenterology<br>• Hepatitis B with positive serology (Hbs-AG+)<br>• Hepatitis C<br>• Inflammatory Bowel Disease<br>This includes ulcerative colitis and Crohn's disease. | <br>B/C<br>B/C<br>B/C |
| 7.1.33 | Hernia nuclei pulposi (slipped disc) | B/C |
| 7.1.34 | Haematological<br>• Thrombosis<br>• Coagulation disorders<br>• Anaemia | <br>C<br>C<br>B/C |
| 7.1.35 | Infectious Diseases<br>• HIV-infection<br>• Rubella<br>• Toxoplasmosis<br>• Cytomegalovirus<br>• Parvo virus infection<br>• Varicella/Zoster virus infection<br>Tuberculosis<br>This refers to an active tuberculous process<br>Herpes genitalis<br>• Primary infection<br>• Recurrent<br>Syphilis<br>• Positive serology and treated<br>• Positive serology and not yet treated<br>• Primary infection | <br>C<br>B/C<br>B/C<br>B/C<br>B/C<br>C<br><br>C<br><br>B/C<br>B/C<br><br>A/B<br>B/C<br>B/C |
| 7.1.36 | Renal function disorders<br>• Urinary tract infections<br>• Pyelitis | <br>B/C<br>B/C |
| 7.1.37 | Respiratory Disease<br>• Asthma | <br>A/B |



## 8. Indications During Labour and Birth

The following are specific indications for discussion, consultation and/or transfer of care in response to conditions or abnormalities that are identified during labour and birth. The main purpose of the indication list is to provide a guide for risk-selection.

The Codes in the Tables for A Discussion, B Consultation and C Transfer of Care are explained in Part 4 of these *Guidelines*.

| | | |
|---|---|---|
| 8.1.1 | Gestational hypertension (GH) | C |
| 8.1.2 | Preterm labour < 36 completed weeks | C |
| 8.1.3 | Preterm pre-labour rupture of membranes (PROM) before 36 completed weeks | C |
| 8.1.4 | Prolonged rupture of membranes (PROM) | B/C |
| 8.1.5 | Abnormal presentation | C |
| 8.1.6 | Breech Presentation | C |
| 8.1.7 | Meconium stained liquor | A/C |
| 8.1.8 | Suspected placenta abruption and/or previa | C |
| 8.1.9 | Pre-eclampsia | C |
| 8.1.10 | Pyrexia | C |
| 8.1.11 | Active genital herpes at time of labour | C |
| 8.1.12 | Multiple pregnancy | C |
| 8.1.13 | Confirmed non-reassuring fetal heart patterns | C |
| 8.1.14 | Prolonged active phase | B/C |
| 8.1.15 | Prolonged second stage | B/C |
| 8.1.16 | Unengaged head in active labour in primipara | B/C |
| 8.1.17 | Prolapsed cord or cord presentation | C |
| 8.1.18 | Vasa praevia | C |
| 8.1.19 | Shoulder dystocia | C |
| 8.1.20 | Uterine rupture | C |
| 8.1.21 | Third or fourth degree perineal tear | C |
| 8.1.22 | Retained placenta | B/C |
| 8.1.23 | Uterine inversion | C |
| 8.1.24 | Post partum haemorrhage >1000mls | C |
| 8.1.25 | Fetal death during labour | C |
| 8.1.26 | Shock | C |

# 9. Indications During the Post-partum Period

The following are specific indications for discussion, consultation and/or transfer of care in response to conditions or abnormalities that are identified in the mother or baby in the early weeks after the birth. The main purpose of the indication list is to provide a guide for risk-selection.

The Codes in the Tables for A Discussion, B Consultation and C Transfer of Care are explained in Part 4 of these *Guidelines*.

### 9.1 Indications: Postpartum (Maternal)

| | | |
|---|---|---|
| 9.1.1 | Suspected maternal infection e.g. breast, abdomen, wound, uterine, urinary tract, perineum | B/C |
| 9.1.2 | Temperature over 38C on more than one occasion | B/C |
| 9.1.3 | Persistent hypertension | B/C |
| 9.1.4 | Serious psychological problems | B/C |
| 9.1.5 | Haemorrhage > 1000mls | C |
| 9.1.6 | Postpartum eclampsia | C |
| 9.1.7 | Thrombophlebitis or thromboembolism | C |
| 9.1.8 | Uterine prolapse | C |

### 9.2 Indications: Postpartum (Infant)

| | | |
|---|---|---|
| 9.2.1 | Apgar lower than 7 at 5 minutes | C |
| 9.2.2 | < 37 weeks gestational age | B/C |
| 9.2.3 | Infant less than 2,500 g | B/C |
| 9.2.4 | Less than 3 vessels in umbilical cord | B/C |
| 9.2.5 | Excessive moulding and cephalhematoma | B/C |
| 9.2.6 | Abnormal findings on physical exam | B/C |
| 9.2.7 | Excessive bruising, abrasions, unusual pigmentation and/or lesions | C |
| 9.2.8 | Birth injury requiring investigation | B/C |
| 9.2.9 | Birth trauma | B/C |
| 9.2.10 | Congenital abnormalities, for example: cleft lip or palate, congenital dislocation of hip, ambiguous genitalia | C |
| 9.2.11 | Major congenital anomaly requiring immediate intervention, for example: omphalocele, myelomeningocele | C |
| 9.2.12 | Abnormal heart rate or pattern | B/C |
| 9.2.13 | Abnormal cry | B/C |
| 9.2.14 | Persistent abnormal respiratory rate and/or pattern | B/C |



# ... during post-partum

| | | |
|---|---|---|
| 9.2.15 | Persistent cyanosis or pallor | B/C |
| 9.2.16 | Jaundice in first 24 hours | B/C |
| 9.2.17 | Suspected pathological jaundice after 24 hours | B/C |
| 9.2.18 | Temperature instability | C |
| 9.2.19 | Temperature less than 36° C, unresponsive to therapy | B/C |
| 9.2.20 | Temperature more than 37.4° C, axillary, unresponsive to non-pharmaceutical therapy | C |
| 9.2.21 | Vomiting or diarrhea | C |
| 9.2.22 | Infection of umbilical stump site | B/C |
| 9.2.23 | Feeding problems | A/C |
| 9.2.24 | Significant weight loss in the first week (usually more than 10% of body weight)<br>Failure to regain birth weight in three weeks | B/C<br>B/C |
| 9.2.25 | Failure to thrive | B/C |
| 9.2.26 | Failure to pass urine or meconium within 24 hours of birth | A/C |
| 9.2.27 | Failure to pass urine or meconium within 36 hours of birth | B/C |
| 9.2.28 | Suspected clinical dehydration | B/C |
| 9.2.29 | Suspected seizure activity | C |

# Appendix 4: Obstetric risk scoring tool from the Primary Clinical Care Manual

A number of interview participants made reference to the obstetric risk scoring tool out of the *Primary Clinical Care Manual* developed by Queensland Health and the Royal Flying Doctor Service (RFDS), Queensland Branch (Queensland Health & Royal Flying Doctor Service, 2007). It was sometimes referred to as the "RFDS risk scoring tool". The tool as published in the *Primary Clinical Care Manual 2007* is shown below (p. 330).

**Primary Clinical Care Manual 2007** **Antenatal Care**

## OBSTETRIC RISK SCORE

| | |
|---|---|
| **Maternal Age:** | |
| Less than 20 | 1 |
| 20-29 | 0 |
| 30-34 | 1 |
| 35 or more | 2 |
| **Parity:** | |
| 0 | 1 |
| 1-2 | 0 |
| 3 | 1 |
| 4 or more | 2 |
| **Social Factors:** | |
| Family Income Entirely Social Security | 1 |
| Unsupported Mother (No stable union) | 1 |
| **Past Obstetric History:** | |
| Stillbirth | 4 |
| Neonatal death | 4 |
| Preterm Birth (<34 weeks) | 2 |
| Low Birth Weight Infant (<2500 g) | 2 |
| 2 or more Terminations | 2 |
| Caesarean Sections | 4 |
| Antepartum Haemorrhage | 4 |
| Postpartum Haemorrhage | 4 |
| **Past or Present Medical History:** | |
| Established Diabetes | 4 |
| Gestational Diabetes | 2 |
| Cardiac Disease | 4 |
| Chronic Respiratory Disease | 4 |
| Chronic Renal Disease | 4 |
| Recurrent UTIs | 1 |
| Endocrine Disease | 4 |
| Anaemia (Hb <100g/dL) | 2 |
| Blood Group Antibodies | 2 |
| Cervical Cone Biopsy | 4 |
| **Present Pregnancy:** | |
| Height <157.5 cm (62") | 1 |
| Weight >90 kg | 1 |
| Weight <50 kg | 1 |
| Smokes 4 Cigs or more/day | 1 |
| Drinks Alcohol >1drink twice weekly | 1 |
| Multiple Pregnancy | 4 |
| Breech after 34 weeks | 4 |
| Vaginal bleeding after 13 weeks gestation | 2 |
| Blood Pressure | |
| 140+/90+ before 20 weeks | 4 |
| 140+/90+ after 20 weeks | 2 |
| 160+/100+ after 20 weeks | 4 |

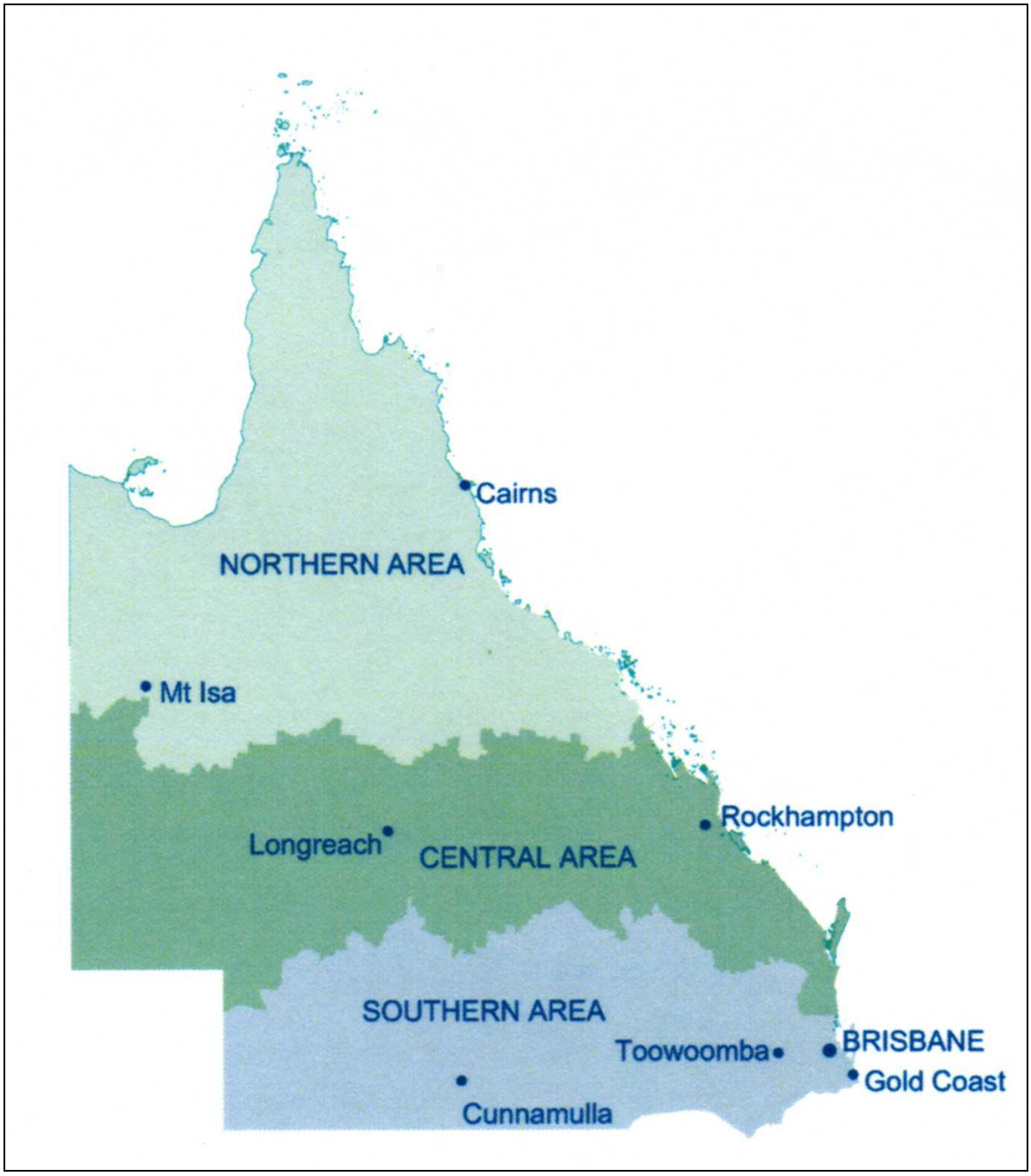
**SCORE AT FIRST VISIT _____**

| | |
|---|---|
| High Risk | = 8 or more |
| Medium Risk | = 3 to 7 |
| Low Risk | = 0 to 2 |

**A Risk Score less than 8 does not indicate an absence of risk.**

The Obstetric Risk Score acts as a reminder of many of the health problems present and past, which may indicate th the woman may need specialised healthcare during her pregnancy. Wome with high risk scores should be seen by Obstetrician as early as possible in pregnancy, and by the MO every two weeks.

## Appendix 5: Northern Area Health Service boundaries




Source: *The Health of Queenslanders 2006. Report of the Chief Health Officer, Queensland.* (Queensland Health, 2006a, p. 3)

# Appendix 6: Participant information sheet

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## Procedural Care in North Queensland: a policy analysis

### Information sheet for participants at [insert town name]

The aim of this project is to understand the impact of government policy on the care that rural women receive while they are pregnant and when they give birth in rural areas. There are two stages to this project:

(i) Policy analysis: identifying and researching policies related to rural birthing services.

(ii) Case studies: four north Queensland towns will be chosen as case study sites. At each town there will be a number of interviews with people who provide and use birthing services. The information collected at each town will help to show the experiences that people have in providing and using local birthing services.

At the conclusion of the project, suggestions will be made for providing rural birthing services that are effective and acceptable to all involved.

Any interviews or focus groups will be audio-recorded and may be transcribed. No names or other information that may identify participants will be included on any interview transcripts or publications arising from this project.

This project is part of the researcher's PhD at James Cook University. Information from the interviews will be combined and will be included in the researcher's thesis. Articles may also be published in academic journals. When the project is completed, a short summary of results will be printed. If you would like a copy of this, please indicate this by circling 'yes' to this question at the bottom of the consent form and provide your mailing address. If you would like more information or have any questions about the project please contact the principal researcher.

***Rebecca Evans*: Principal Researcher, PhD student (phone) 4796 3384, (fax) 4796 3399; (mail) School of Medicine, James Cook University Mailroom, IMB 71, Townsville QLD 4811**

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***Richard Hays*: Supervisor (email) richard.hays@jcu.edu.au**

If you have any concerns regarding the ethical conduct of this research you may also contact the following Ethics Administrators:

***Tina Langford*: James Cook University Ethics Administrator (phone) 4781 4342, (fax) 4781 5521**

***Dr Jill Newland:* The Cairns Base Hospital Ethics Committee Chairperson (phone) 4050 6525**

***Carolyn Schmidt:* Townsville Health Service District Human Research Ethics Administrator (phone) 4796 1140, (fax) 4796 1051, (email) carolyn_schmidt@health.qld.gov.au**

If you find that talking about your birthing experiences during this project causes you any concern, please contact the following professionals who can provide you with counselling support.

***[insert details of local contact]***

Please note that participants will not receive payment for their participation.

*This project is partly funded by the QLD Government Department of the Premier & Cabinet under the Growing the Smart State PhD Funding Program.

Townsville Cairns Mackay

# Appendix 7: Community member consent form

JAMES COOK UNIVERSITY
TOWNSVILLE Queensland 4811 Australia Telephone: (07) 4781 4111

**INFORMED CONSENT FORM for local community members**

**PRINCIPAL INVESTIGATOR** *Rebecca Evans*

**PROJECT TITLE:** ***Health systems and procedural care in north Queensland: a policy analysis***

**SCHOOL** *JCU School of Medicine*

**CONTACT DETAILS** *Phone:* (07) 4796 3384 *Fax:* (07) 4796 3399
*Email*: rebecca.evans@jcu.edu.au

This study aims to explore the influence of particular policies on the provision of pregnancy, birthing and post-natal health care in rural areas of north Queensland. As part of the study, interviews will be sought with key stakeholders who can provide some insight into the experience of receiving or providing local care or, in some other way, have an interest in local maternity care.

Your participation in this study is entirely voluntary and you can end the interview any time you wish. Consenting participants will engage in an interview with the principal investigator, Rebecca Evans. If there are a number of participants, interviews may be done in a small group instead. Interviews will be recorded, and may be transcribed to facilitate qualitative analysis. If you would like a copy of the interview transcript, please indicate this below. All data from individual interviews will be kept confidential and deidentified. Confidentiality cannot be guaranteed for interviews in which there is more than one interviewee, although all data will be deidentified. Individual interviews will last around 40-50 minutes and group interviews may last up to 60 minutes. Follow-up interviews may be arranged to discuss more specific issues, but only if you agree.

The findings of this study should serve to provide a greater understanding of the interaction between policy, its implementation and outcomes for rural birthing care. The outcomes of this project will contribute to the principal investigator's PhD thesis and publications will be sought in peer-reviewed academic journals. A summary of the project results will be produced at the conclusion of the study. If you would like a copy of this, please indicate this below. Raw data will be retained in a locked cupboard at the James Cook University School of Medicine for at least 5 years. Please note that participants will not receive payment for their participation.

The aims of this study have been clearly explained to me and I understand what is wanted of me. I know that taking part in this study is voluntary and I am aware that I can stop taking part in it at any time and may refuse to answer any questions.

I understand that any information I give will be kept strictly confidential and that no names will be used to identify me with this study without my approval. Confidentiality cannot be guaranteed for interviews with more than one participant although every effort will still be made to de-identify any data.

Please circle where appropriate:

| | |
|---|---|
| Yes / No | I agree to be interviewed. |
| Yes / No | I agree to have the interview audio-taped for transcription. |
| Yes / No | I would like a copy of the interview transcript. If yes, please also provide a mailing address _____ |
| Yes / No | I understand that follow-up interview(s) may be requested. |
| Yes / No | I would like a copy of the project results. If yes, please provide mailing address: _____ |

| | |
|---|---|
| **Name:** *(printed)* | |
| **Signature:** | **Date:** |

*This project is partly funded by the QLD Government Department of the Premier & Cabinet under the Growing the Smart State PhD Funding Program.

Campuses at - TOWNSVILLE (07) 4781 4111 CAIRNS (07) 4042 1111 MACKAY (07) 4957 6048

# Appendix 8: Health professional consent form

JAMES COOK UNIVERSITY
TOWNSVILLE Queensland 4811 Australia Telephone: (07) 4781 4111

**INFORMED CONSENT FORM for health professionals**

**PRINCIPAL INVESTIGATOR** *Rebecca Evans*

**PROJECT TITLE:** ***Health systems and procedural care in north Queensland: a policy analysis***

**SCHOOL** *JCU School of Medicine*

**CONTACT DETAILS** *Phone:* (07) 4796 3384 *Fax:* (07) 4796 3399
*Email*: rebecca.evans@jcu.edu.au

This study aims to explore the outcomes of particular policies as they pertain to the provision of pregnancy, birthing care and post-natal health care in rural areas of north Queensland. As part of the study, interviews will be sought with key stakeholders who can provide some insight into the experience of receiving or providing local care or, in some other way, have some interest in the local birthing care.

Your participation in this study is entirely voluntary and you may terminate the interview at any time. Consenting participants will engage in an interview with the primary investigator, preferably in person, but otherwise via telephone. Interviews will be recorded, and may be transcribed to facilitate qualitative analysis. All data from individual interviews will be kept confidential and deidentified. Confidentiality cannot be guaranteed for interviews in which there is more than one interviewee, although all data will be deidentified. Raw data will be retained in a locked cupboard at the James Cook University School of Medicine for at least 5 years.

Interviews will range in length according to the quantity of information offered by the participant but should not exceed 40-50 minutes for interviews and approximately 60 minutes for focus groups. Follow-up interviews may be arranged to pursue more focussed aspects of the participant's responses, but only with the agreement of the participant.

The findings of this study should serve to provide a greater understanding of the interaction between policy, its implementation and outcomes. Research outcomes will contribute to the principal investigator's PhD thesis and publications will be sought in peer-reviewed academic journals. Please note that participants will not receive payment for their participation.

The aims of this study have been clearly explained to me and I understand what is wanted of me. I know that taking part in this study is voluntary and I am aware that I can stop taking part in it at any time and may refuse to answer any questions.

I understand that any information I give will be kept strictly confidential and that no names will be used to identify me with this study without my approval. Confidentiality cannot be guaranteed for interviews with more than one participant although every effort will still be made to de-identify any data.

Please tick where appropriate:

| | |
|---|---|
| Yes / No | I agree to be interviewed. |
| Yes / No | I agree to have the interview audio-taped for transcription. |
| Yes / No | I would like a copy of the interview transcript. If yes, please also provide a mailing address _____ |
| Yes / No | I understand that follow-up interview(s) may be requested. |
| Yes / No | I would like a copy of the project results. If so, please provide mailing address: _____ |

| | |
|---|---|
| **Name:** *(printed)* | |
| **Signature:** | **Date:** |

*This project is partly funded by the QLD Government Department of the Premier & Cabinet under the Growing the Smart State PhD Funding Program.

Campuses at - TOWNSVILLE (07) 4781 4111 CAIRNS (07) 4042 1111 MACKAY (07) 4957 6048

# Appendix 9: Question Guide for Health Professionals

The following is a list of questions used in interviews with health professionals involved in providing maternity care. Some questions were accompanied by an explanation of key aspects of the question, for example, what "policy" may encompass. A semi-structured questioning format allowed for probing questions to explore of participants' responses in greater depth. This list of questions represents the core questions which were asked at most interviews. Given the varying backgrounds, locations and work roles of the participating health professionals, additional relevant questions were added to individual interview guides where appropriate, though these are not listed below.

- Could you describe the present situation here in [insert town name] with regard to maternity services (including birthing, ante- and post-natal care)? (Prompts: What services are available locally? Do any services require travel/relocation? What professionals provide which services? Does this system work well for all involved?)
- Have there been many changes to the local maternity service in the past 5/10/15 years? (Depending on how long participant has lived in the local area.)
    - If changes reported: how have these changes in birthing services affected the local maternity service or your practice?
- For those women who deliver locally:
    - What are the advantages?
    - Are there any disadvantages to birthing in [insert town name]?
- For those women who do not birth locally:
    - What are the advantages?
    - What are the disadvantages?
- Are there aspects of the local maternity service that could be improved?
    - If yes: What aspects? How can these be achieved? Is there any traction or motivation to see these changes made?
- In your opinion, and from what you have seen locally:
    - What factors support the local maternity service? What can be done to promote these supportive factors to improve the sustainability of local birthing services?
    - What factors threaten the local maternity service? What can be done to counter these negative factors to improve the sustainability of the local maternity service?
- On a scale of 1-10, how important is it to have a local service here in [insert town name] an in towns of similar sizes (10 being most important)?

- If highly valued, why is important to have local services?
- If not highly valued, why is it not so important to have local services? What are the alternatives to having a local service and is this better?

- On a scale of 1-10, how helpful do you think Queensland Health has been in supporting the maintenance and/or growth of rural birthing services?
  - Do you think the Commonwealth Government has been any more or less supportive?
- Are you aware of any government or local policies that have had either a positive or negative impact on the provision of local birthing services?
  - What policies and what was the nature of their impacts? [prompts: origins of the policy; intent; content; people involved; implementation of the policy; top-down/bottom-up]
  - Any policies not implemented but which had potential?
- Are you aware of the National Rural Health Strategy and/or Healthy Horizons?
  - If yes: What do you know about it and what impact has it had on local services?
  - The policy states that its aim is to provide equitable access to effective health care for rural (and remote) communities through: provision of appropriate services; measures to maximise health status; strategies to decrease barriers to the delivery of effective health care. Do you think this is being achieved here?
- Have you been involved in providing input to planning for, or assisting, local birthing services?
  - If yes: What is the nature of this involvement? Do you think this input had had a positive impact?
- Do you think there is a place for people such as yourselves to provide input to planning for or assisting local obstetric services?
  - If yes: In what way? Who should be involved (E.g. mothers, health professionals)?
  - Could the community be more involved in the planning of local health/obstetrics services?
  - If no: Why not?
- Do you think it is necessary for a doctor to meet and maintain minimum training standards to continue practising in birthing care?
  - If yes: What sort of standards do you think there should be? (E.g. Do you think that a doctor needs to deliver a minimum number of babies per year, to maintain competency?) Why do you think this is necessary?

- If no: Why are such requirements unnecessary?

- Do you think these policies have influenced the quality of obstetric care that women receive here? [RECAP POLICIES mentioned earlier.]
    - How do you think quality of birthing care should be measured? (I.e. what are the important aspects of pregnancy, birthing and post-natal care that should be considered when deciding whether this care is of high-quality.)
- Do you have any other comments you would like to add?

# Appendix 10: Question Guide for Community Members (Parents)

The following list of questions was used in focus groups with local parents at the four case study sites. Some questions were accompanied by an explanation of key aspects of the question, for example, what "policy" may encompass. A semi-structured questioning format allowed for probing questions to explore of participants' responses in greater depth which are not listed below. This list of questions represents the core questions which were asked at all focus groups. Given the varying backgrounds and locations of community members, additional relevant questions were asked where appropriate, though these are not listed below.

- Description of present maternity services
- Changes to the local maternity service in the past 5/10/15 years. (Depending on how long participants have lived in the local area.)
- For women that had birthed locally: were they happy with outcomes? (Prompts: access to care; choice; information; participation; respect; safety.)
    - Advantages of birthing locally
    - Disadvantages to local birthing
- For women that had not birthed locally: were they happy with outcomes? (Prompts: access to care; choice; information; participation; respect; safety.)
    - Were there reasons for not birthing locally?
    - Advantages of birthing out of town?
    - Disadvantages of birthing out of town?
    - At what stage do you relocate to the regional centre for birthing?

a) Are there aspects of the local maternity service that could be improved?
    - If yes, how?
    - Does the local service adequately meet your needs associated with having a baby?

b) On a scale of 1-10, how important is it to have a local maternity service here in [insert town name] and towns of similar sizes (10 being most important)?
    - If highly valued, why is important to have local services?
    - If not highly valued, why is it not so important to have local services? What are the alternatives to having a local service and is this better?

c) In your opinion, and from what you have seen locally:
    - What factors support the local maternity service? What can be done to promote these supportive factors to improve the sustainability of local birthing services?

- What factors threaten the local maternity service? What can be done to counter these negative factors to improve the sustainability of the local maternity service?

d) On a scale of 1-10, how helpful do you think Queensland Health has been in supporting the maintenance and/or growth of rural birthing services?
   - Do you think the Commonwealth Government has been any more or less supportive?

e) Are you aware of government policies which have had either a positive or negative impact on the provision of maternity services in rural areas?
   - If yes, what policies and what is the nature of their impacts?
   - Are you aware of any local initiatives of factors that have influenced local birthing services (for better or worse)?

f) Are you aware of any government policies of programs that have influenced local birthing services?
   - If yes, what do you know about it and what impact has it had on local services?
   - If no, some policies state an aim to improve rural people's access to health care and their health. Do you believe that is being achieved here in [insert town name]?

g) Have you been involved in providing input to planning for or assisting local birthing services?
   - What is the nature of this involvement?
   - Do you think this input had a positive impact?

h) Do you think there is place for people such as yourselves to provide input to planning and assisting local maternity services?
   - If yes: In what way? Who should be involved? Could the community be more involved in the planning of local health/maternity services?
   - If no: Why not?

i) Do you think it is necessary for a doctor to meet and maintain minimum training standards to continue practising in birthing care?
   - If yes: What sort of standards do you think there should be? (E.g. Do you think that a doctor needs to deliver a minimum number of babies per year, to maintain competency?) Why do you think this is necessary?
   - If no: Why are such requirements unnecessary?

j) Other comments?