Perceptions of the roles and skills of primary health care professionals: Implications for innovative and sustainable rural primary health care delivery

Thesis submitted in fulfilment of the degree of

Doctor of Philosophy

Lisa Jayne Crossland

March, 2011

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Supervisors:

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Abstract

Background

A report completed by the Australian National Hospital and Health Care Reform Commission made recommendations for reform of the primary health care system, including the need to ensure health care organisation is underpinned by the inclusion of the views of all Australians and the sustainability of rural service delivery through innovative workforce models. Previous research has concluded that it is unrealistic to introduce new approaches to health care delivery, particularly in relation to workforce reform, without first understanding how patients perceive the current roles of primary health care professionals. This study explores the perceptions patients have of their rural primary health care professionals and explores the impact of this in relation to innovative approaches to achieve sustainable rural primary health care delivery.

Aims and objectives

The key aim of this study is to explore individual patient perceptions of existing primary health care professionals (general practitioners, nurses, allied health professionals and ambulance paramedics) in four discrete rural and remote service locations (RRMA 5-7). The services represent the four main variants of primary health care delivery in north Queensland and include both GP and non-GP led models of care. The objectives are the identification and investigation of:

(i) individual patient perceptions of existing health care professionals; and the perceptions of the PHC professionals themselves, in four rural communities;

(ii) broad differences and similarities between rural patients' perceptions of PHC professionals and the key factors that contribute to these differences (with particular focus on the role of patient experience and the context of service delivery);

(iii) patient perceptions of the broad archetypal views of the health care professions; and

(iv) how these perceptions may impact on the development and introduction of innovative approaches to primary health care delivery.

Methods

The study design has two stages: (i) development of detailed case study profiles for each of four health care services and rural communities; including in-depth interviews with a total of 16 primary health care professionals; and (ii) in-depth semi-structured interviews with 43 patients. Stage two is informed by findings from a review of the national and international literature relating to patient perceptions. Interviews explore perceptions of health care professionals from patients' 'lived experiences' of these roles. In addition, patient perceptions of primary health care profession stereotypes are also investigated.

An adapted organisational change theory approach is used as the theoretical basis for data analysis. Data are managed using QSR NVivo7 software and emergent themes relating to patient perceptions of their primary health care professionals are compared and contrasted across all interviews. Findings are then explored in the context of the case study profiles.

Results

Patient perceptions of health care professionals are identified that are common to all interviews, regardless of service type. These are that the health care professional (i) 'knows' the patient well; (ii) 'has and imparts confidence'; and (iii) 'refers' when necessary. In contrast to this, patients of non-GP led models of care are more likely to equate their primary health care professional as doing 'everything a doctor does'. Patients of solo GP services are more likely to perceive the GP as a leader and the 'essential care professional' and nurses as 'assistants'. However, patients of the Multipurpose Health Service place less emphasis on the skills and roles of the GPs. They also appear to perceive nursing roles in terms of diversity and flexibility, rather than in relation to key skills. Stereotypical beliefs of health professions are GPs as 'leaders', nurses as 'Florence Nightingales' and ambulance paramedics as the 'bearers'. However, it appears that patients only apply them in relation to the GP-led service models.

Discussion

There are several strengths and limitations to the data. Strengths include the development of detailed and data rich case studies with strategies to ensure the trustworthiness of the findings within the present policy environment. Limitations relate to small numbers of interviews and the uniqueness of the Queensland health care delivery context. These factors may limit the transferability of the findings to other rural settings. Patient perceptions are influenced by three factors: (i) the age and gender of the participant; (ii) the longevity of the professional in the community; and (iii) the way in which care is organised and delivered. The roles and skills of allied health professionals and ambulance paramedics are not well understood by rural patients; regardless of their exposure to these groups. Findings suggest that patients appear to value primary health care professionals who are long-term residents in the community, regardless of discipline. In addition, patients do not appear to apply beliefs of a medical hierarchy to their perceptions of the skills and roles

of their primary health professionals. Health systems and primary health care professionals themselves may thus act to maintain medical hierarchies which patients do not perceive.

Conclusions

While GPs continue to provide the necessary clinical support, they are not necessarily perceived as the essential resident health care professional. This has important implications for the development, introduction and sustainability of innovative workforce approaches and team-based health care delivery in rural settings. Trials of innovative workforce roles may have increased success if they are matched to the characteristics of local communities. Further research is needed to identify and support existing team-based approaches that may already exist in many rural and remote primary health care services.

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NRGPS	National Rural General Practice Studies
OSO	Operational Services Officer

PA	Physician Assistant
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Chapter 1
Introduction

1.1 Background

The impact of geography on the health of Australians first emerged as a policy issue under the Whitlam Labour government in the early 1970s. These policies were based on beliefs that 'where' and not simply 'how' Australians lived influenced their health and wellbeing. Specific health policies and programs focused on regional and rural populations. These programs sought to promote regional development and address access and equity issues. Since these early beginnings, there has been increasing emphasis attached to developing rural health policies and programs to address these issues. The 1970s focus on service provision and funding arrangements, gave way to that of workforce support and funding for rural health services in the 1980s and 1990s. The 1990s also saw a refocus on the problem of the unmet health needs of rural populations and by 2000 the issue had been framed in terms of the failure of the broader health system to support appropriate service provision in rural and remote areas.

Rural health workforce issues (shortage and maldistribution) have remained a common feature of policy and program focus from the 1980s to the present day. From the 1990s, influential lobby groups such as the Rural Doctors Association of Australia (established in the late 1980s) and the Australian Medical Association have driven policies and programs to address issues of remuneration and support, specifically for regional and rural medical practitioners. In addition, the establishment of the National Rural Health Alliance (NRHA) in 1999 provided a framework for activity addressing issues of rural and remote health, including patient advocacy. Following this, respective governments sought the wider inclusion of consumer views in the development of flexible and sustainable health care services. However, there is still limited understanding about the role of consumer input to health care

service planning and delivery. In 2008 the Federal government proposed a major review of the Australian health care system. This resulted in the National Health and Hospitals Reform Commission (NHHRC) Report, the recommendations of which were underpinned by principles of particular relevance to this study. These included the incorporation of the views of consumers in the planning and delivery of sustainable approaches to health care (National Health and Hospitals Reform Commission, 2009). This thesis builds on the tradition of rural workforce focus, as well as the growing emphasis on including consumer views in health review.

This study investigates rural and remote patients' perceptions of the role and skills of their health care primary health care (PHC) professionals, within the context of their local health service. The results presented in the following thesis provide timely input into the recommendations made by the NHHRC, particularly in the development and introduction of sustainable and innovation in rural care delivery. An understanding of patient perceptions of health professional roles may assist both the development, and introduction of innovative PHC professional roles in rural areas. For example, physician assistants (PAs) are soon to be introduced into some rural communities in Queensland. Community members will have no knowledge or experience of what PAs can do. Understandably, many may therefore be reluctant to attend PA clinics for this reason alone. One way to ensure appropriate uptake of these services will be through targeted information campaigns. To be most effective, education campaigns need to focus on a lack of public knowledge, inappropriate perceptions and unrealistic expectations. Thus, a sound understanding of community members' current knowledge, perceptions and expectations of health professionals is required. Similarly, such information may also inform the design and implementation of expanded roles to contribute to a sustainable rural workforce, such as nurse practitioners (NPs) and expanded primary health care paramedics.

1.2 Development of the research question

During eleven years in rural and remote primary health care research in Australia, particularly in Queensland, I have assisted research teams in two main areas: (i) investigating workforce issues such as the recruitment and retention of general practitioners in rural and remote communities; and (ii) investigating and evaluating models of rural primary health care delivery.

My research experience and the forecast rural health workforce shortage awakened a keen interest in how both innovative and more conventional[1] approaches might fit with existing PHC professionals and the contextual complexities in which they work. These issues are not unique to rural and remote Australia. They are also being grappled with in the United Kingdom, where I previously worked for several years.

Earlier research in which I had been directly involved alluded to the largely unexplored flexibility and innovation present in rural and remote primary health care practice. These studies also investigated the potential impact of these modes of health care delivery on patient perceptions and service usage. Many studies conducted during the past two decades have focused on professional issues. Consequently, much less is known about consumer issues and particularly how communities and specifically patients of local health care services understand the roles of their health care professionals and the care they experience. This is particularly interesting given their potential exposure to already innovative and flexible primary health care service delivery.

Recent literature reveals an emerging focus on research into the skills, roles and functions of PHC professionals. Specific attention has been given to general practitioners (GPs), practice nurses (PNs) and allied health professionals (AHPs). However, these roles have been described in broad terms and not from the context of the service delivery model. In addition, they have

[1] In this thesis the term ‘conventional’ primary health care services refers to solo or small groups of GPs working in isolation.

been investigated within discrete health care disciplines, and with limited focus on patient perceptions of these roles and how such perceptions may be formed.

1.2.1 Why not ask patients?

Gaps in the literature raised several questions; most specifically why not ask residents of rural and remote areas about their understanding of the roles and skills of health care professionals in the context of their 'lived experience'? Also, what key roles do patients associate with their local health care professionals and primary health care disciplines? How do those perceptions match with those that the PHC professionals themselves have of their own roles? What are the implications of such perceptions on the development and implementation of new approaches to primary health care delivery in rural communities?

Exploring the perceptions of rural patients in relation to health care professional roles has applications in: (i) service development and implementation; (ii) developing community-wide education strategies in relation to new approaches to primary care delivery; and (iii) improving understanding of consumer notions of quality of care and how the introduction of new PHC professionals and service delivery approaches may influence each of these areas. Most obviously patient perceptions of the roles of PHC professionals have a direct bearing on how and when patients use those health professionals. This, in turn, influences the evolution of those roles.

1.3 Thesis outline

This thesis describes patients' perceptions of the roles and skills of their PHC professionals resulting from their lived experiences of these roles. It also discusses the implications of such perceptions in relation to rural health workforce innovation and recommendations for health care reform. The study approach and outcomes are presented in ten chapters. The opening chapters provide the definitions, context and describe the research question and methodology (Chapters 2-4). The next chapters describe PHC service models

studied and results of qualitative data analysis (Chapters 5-8). The final chapters provide a discussion of the key findings, conclusions and recommendations (Chapters 9-10). A detailed outline of each chapter follows.

Chapters 2-4

Working definitions and key concepts used in this study are presented in Chapter 2. This chapter identifies the characteristics of rural primary health care and provides working definitions of the health care professionals included in this study. Chapter 3 provides a global description of the current international and national literature on rural and remote health service delivery with respect to innovation and a brief summary of previous studies relating to patient perceptions. Chapter 4 describes the research design. This chapter defines the key research questions of the study along with the case study methodology and data analysis techniques.

Chapters 5-8

Chapter 5 details each of the four service types and the broad community and regional context within which they function. The following chapters contain the results from in-depth interviews about roles and skills of the local PHC professionals as described by the PHC professionals themselves (Chapter 6) and patients from each of the case study services (Chapters 7 and 8). Chapter 8 also explores patients' perceptions of the PHC professions in general and those broad attributes associated with each discipline. These attributes are compared with the perceptions of PHC professional roles resulting from patients' lived experiences.

Chapters 9-10

Chapter 9 discusses these results in relation to the research questions and implications in light of the key issues identified from the literature. It also addresses the strengths and limitations of the study with respect to the transferability of the results and outlines the application of the findings with respect to innovative workforce approaches, the principles espoused in the NHHRC review. Finally, Chapter 10 summarises the key findings of this study,

makes broad recommendations with respect to existing and innovative primary health care in rural and remote areas and discusses the implications for future research.

1.4 Conclusion

This thesis addresses the emerging policy debate about consumer-centred health care and the role of communities in the development of rural health care services. It also addresses issues raised in the NHHRC Report. In particular, the health care challenges faced by those living in rural and remote areas; the need to incorporate the views of all Australians about health system and health care reform; the move toward team-based primary health care services and the need for a sustainable workforce (National Health and Hospitals Reform Commission, 2009).

Chapter 2

Key concepts and working definitions

2.1 Introduction

This chapter describes the characteristics of current rural versus urban primary health care delivery and the context of research into community perceptions, expectations of, and preferences for, existing primary care professionals. Specific focus is given to defining the concepts and current research relating to community perceptions of PHC professionals in rural areas and defining key terms as used in this thesis.

Identifying and implementing new approaches to primary health care is of growing significance in current policy discussion in Australia. This is particularly so within the context of providing appropriate, effective, efficient and sustainable primary health care to rural and remote areas. Thus, the movement towards new models of rural primary health care in Australia appears to be inevitable. Indeed evidence suggests that changes in relation to primary health care delivery, especially in remote Australia, may already be underway (Taylor, Blue, & Misan, 2001; Togno, Strasser, Veitch, Worley, & Hays, 1998; Wakerman, Humphreys, & Wells, 2006). However, in spite of moves to explore innovation in the primary health care workforce in Australia and internationally, Black et al argue that it is unrealistic to do so without first understanding how the general public perceives the role of existing professionals (Black, Rafferty A, West, & Gough, 2004). While there is a growing body of literature on patient preferences for, and expectations of, health care professionals, there is little evidence of how rural communities understand the roles of their current health care professionals and the factors that may affect this.

Existing research focuses primarily on issues such as patient perceptions of quality care, and satisfaction with health care professionals (Bourke, 2001;

Cheek et al., 2002; Cheraghi-Sohi et al., 2006; Haggman-Laitila & Astedt-Kurki, 1994; Hundley & Ryan, 2004; Lee & Young-Hee, 2007). Research is also often conducted within clinical or disease-specific frameworks; for example chronic diseases such as diabetes (Hundley & Ryan, 2004; Infante et al., 2004). There is a significant gap in the understanding of community perceptions of the role and function of existing health service professionals, and the criteria upon which these perceptions are based (Black et al., 2004). In general, an understanding of the perceptions community members have of their existing health care professionals will contribute to understanding health care behaviour in relation to current services. It will also assist in the introduction of new models of primary health care.

2.2 Sustainability and innovation

The concept of service 'sustainability' underpins the current focus on innovative approaches to rural primary care delivery. However, the word sustainability is itself a complex and problematic term with a variety of meanings. The problem of defining sustainability in relation to health care delivery is not new and is being tackled in a number of countries. However, as noted in the title of Palmer et al's paper, it remains a problematic and ill-defined 'fuzzy buzzword' (Palmer, Cooper, & van der Vorst, 1997 p. 88)

As a starting point, the Macquarie Concise Dictionary defines sustainability and sustainable development as:

> *'… economic development designed to meet present needs while also taking into account future costs including costs to the environment and depletion of natural resources'*. The verb *'to sustain'* is defined as *'to keep something up or going as an action or process*'(Delbridge & Bernard, 1998).

The term 'sustainability' first emerged during the Brundtland Commission (World Commission on Environment and Development, an international commission appointed by the United Nations) in 1986. In this context the term

implied consideration of social, environmental and economic impacts of actions with a view to not threatening future situations. The Commission highlighted sustainable development as that which *'meets the needs of the present without compromising the ability of future generations to meet their own needs'* (United Nations, 1987 p.8). Bridger and Luloff acknowledge sustainability as a *'hotly contested concept'* (Bridger & Luloff, 1999 p.378). They give two views on the meaning of sustainable development: firstly, a focus on the term in relation to the maintenance of existing and future resources; and secondly, as encapsulating the idea of economic growth or the pursuit of growth subject to environmental constraints such that there is little or no impact on the environment. The authors argue that the concept of intergenerational equity is the fundamental principle underpinning both definitions (Bridger & Luloff, 1999).

The broadening acceptance of the term is a consequence of the rise of the environmental movement, the increasing media awareness of issues such as climate change and the need to identify renewable energy sources. Bridger and Luloff (1999) argue that it is the very vagueness of the term that has contributed to its growing popularity with international development agencies, policymakers, academics and environmental activists.

There remains the question of who should set the definition for both the circumstance and context of sustainability, particularly in relation to community development and participation. More specifically, should definitions come 'top-down' from government, or 'bottom-up' from the 'grass-roots' local level? Bridger and Luloff give a number of arguments as to why it should come from local level, including that it allows sustainability to move from a concept to an actual process. As such the community can contribute to sustainability by putting measures in place to create concrete examples of sustainable development. In addition, implementation can and should be flexible in order to meet local requirements where a 'one size fits all' approach is not ultimately appropriate or tenable.

The business community also became interested in the idea of ‘sustainability’. Business excellence no longer encompassed sound fiscal management and good environmental performance, but also elements of social well-being. Thus, the concept of sustainable development and the definition of sustainability indicators became linked with efforts to increase societal participation. Ekins states that it was at the 1992 Rio Earth Summit that the worldwide heads of government embraced the concept of sustainable development (Ekins, 2000). As a result of this, the Commission on Sustainable Development was established with the role of monitoring and reporting on the implementation of Rio Earth Summit agreements. These aims were reaffirmed at the World Summit on Sustainable Development, in Johannesburg 2002, where measuring and monitoring sustainable development became an internationally accepted and endorsed concept. Following on from this, the concepts of ‘sustainability’ and measurable ‘sustainable development’ became widely used in fields such as corporate business, the environmental movement and in a range of government policies nationally and internationally.

2.2.1 Sustainability in relation to primary health care delivery

In the health literature, the terms ‘sustainability’ and ‘sustainable development’ encapsulate a variety of meanings, across a range of health care contexts. The growing focus is on the terms’ use in relation to community-based service delivery. In this sense, the role of the community or patient is often seen as a participant in ensuring aspects of health care ‘sustainability’. However, Bridger and Luloff (1999) describe the growing use of the term allied to ‘sustainable communities’ and ‘sustainable community development’ as a type of organising framework for thinking about local contexts. The authors concluded that while there had been much written about the concept of sustainability, much of it was unclear and often based on substituting the word ‘sustainable’ for terms such as ‘nice’ or ‘desirable’ (Bridger & Luloff, 1999).

In a policy context, the term is most commonly used in relation to the idea of 'social sustainability' and in reference to the minimisation of the impact of aged care needs on future generations, particularly in relation to taxation, additional financial burdens and care burdens (Garces, Rodenas, & Sanjose, 2003). However, this focus on economic viability is seemingly to the exclusion of other social principles of sustainability (Garces et al., 2003).

While the term has been used prominently in recent Australian and UK primary health care literature and policy documents, there is still little concordance between its meaning and function. One common underlying feature in the use of the word is the implication that 'sustainability' includes community need for, and expectations of service provision and even service design. This can be seen most specifically in relation to the notion of rural primary health care service sustainability being achieved through the active participation of the community in recruiting and retaining GPs within the traditional model of GP-led health care (Veitch & Grant, 2004; Veitch, Harte, Hays, Pashen, & Clark, 1997).

The concepts of sustainability and viability are often linked in terms of common criteria. Both include the elements of community expectations, perceptions of quality care and broad community characteristics (Togno et al., 1998). A sustainable service meets:

> *'particular medical needs of a community by providing appropriate services in a way that takes into account the financial and personal costs to both the practitioner and community at large'* (Jones, Humphreys, & Adena, 2004 p.4).

In the rural context: *'sustainability refers to ability of a health service to provide ongoing access to appropriate quality care in a cost-effective and health effective manner'* and is ultimately achieved when a service or system is able to monitor and adjust to changing needs, to forward plan, ensure

workforce succession and gain support from other services in the health system (Humphreys, Wakerman, & Wells, 2006 p.33).

Investigations of sustainable rural general practice identified seven key elements for workforce sustainability. These elements were divided into professional and personal factors. Professional factors were: (i) maintenance of a critical mass of health professionals; (ii) organisation of after hours care (iii) interface of state health, private and public service providers and non-government organisations; and (iv) use of existing resources. The personal factors were: (i) personal and/or family support networks; (ii) support from community, local government, divisions of general practice and/or rural workforce agencies; and (iii) practice ownership (Togno et al., 1998; Veitch & Battye, 2008).

Following these findings, Humphreys et al proposed a conceptual framework which highlights the interrelated roles of economic, professional, organisational, social and environmental dimensions of service sustainability. In addition, this framework includes elements of workforce sustainability, defined as 'the ability to recruit and retain practitioners (itself a function of the nature and attractiveness of activity, remuneration and the practice environment, training skills and maintenance of relief arrangements)' (Humphreys et al., 2006 p.34). Contributing to this has been the ruralising of the undergraduate medical curriculum through several strategies. These have included recruiting medical trainees from rural and remote communities as well as providing targeted training and support to rural and remote medical graduates. Hays et al (1995) identified the importance of consulting with stakeholders, including community members. Participants were invited to discuss ways of maximising the recruitment of rural GPs through rural training placement experiences. Results of this consultation suggested that recruitment might be enhanced by the direct inclusion of local rural organisations to support rural medical graduates on training placements (Hays, Price, Jelbart, & Saltman, 1995).

In this sense, the concept of community involvement is passive and closely associated with workforce considerations; where the implication is that patient characteristics (essentially disease models) determine the workforce employed (Strasser, Worley, Hays, & Togno, 1999). Smith (2004) describe this as a biomedical model of service provision, indicative of a 'top down' approach to sustainable health service development. Conversely, Humphreys et al also introduce the idea that a sustainable service model must not be one that is so:

> '*dependent on any one key element (such as a GP)… that the entire health service is placed at risk, or significant health needs remain unmet, when that person leaves. Nor is it one that is 'propped up' by goodwill gestures by the community or continual use of locums*' (Humphreys et al., 2006 p.34).

The role of community in the development and control of new service models and the effect of new services on communities has been raised respectively by Taylor et al (2001) in an Australian trial of an innovative model and Farmer et al (2003) in a discussion about the effect of the introduction of new models of care on communities in rural Scotland. In a trial of a new primary health care service delivery model in rural South Australia, the key sustainability elements included organisational linkages (for improved education and training of health care professionals), integrated service delivery (primary, secondary and tertiary for more effective use of workforce and coordinated care) underpinned by community participation. The role of the community in determining and then controlling the model was established early with the service designed as a community-controlled company. The element of 'community control' was also designed to instil a sense of community ownership and social capital (Taylor et al., 2001).

The idea of the service and the role of community as 'social capital' are also discussed by Farmer in the context of rural Scotland. Farmer argues that PHC professionals in rural and remote Scotland, specifically GPs, have an important role in the ongoing 'viability' of the community in terms of their role in the

community and the social capital they provide (Farmer, Lauder, Richards, & Sharkey, 2003). Understanding these aspects may also assist better definition of the practical aspects of the role communities can play in sustainable service provision. However, more research is necessary in order to fully understand the role of health care professionals, existing and new models of service provision and the complex effect of these on rural communities as a whole.

Crossland and Veitch (2005) developed a functional definition of sustainability in relation to after hours primary health care service delivery. This arose from the requirement to investigate a range of after hours primary health care delivery models and to assess the overall sustainability of each service. Three key elements were found: (i) the longevity of the service; (ii) its financial viability; and (iii) its ability to deliver appropriate and acceptable after hours primary health care. This final element included aspects such as the available workforce. Patients' understanding and appropriate use of a service contributed to each of the three elements (Crossland & Veitch, 2005).

2.2.2 Sustainability and innovation in primary health care

A 2005 supplement issue of the Medical Journal of Australia was dedicated to identifying and discussing the elements of sustainability in relation to complex innovation in primary health care services. The edition's focus was on innovative health care service delivery, encapsulated in Greenhalgh's definition of innovation as:

> *'a novel set of behaviours, routines and ways of working that are directed at improving health outcomes, administrative efficiency, cost effectiveness or user's experience and that are implemented by planned and coordinated actions'* (Greenhalgh, Robert, & McFarlane, 2004 p.582).

Sibthorpe et al (2005) identify six domains of sustainability in relation to innovative health care delivery: political sustainability; institutional sustainability; financial sustainability; economic sustainability; client sustainability; and finally, workforce sustainability (Sibthorpe, Glasgow, & Wells, 2005). Factors within each of these domains facilitate or inhibit the sustainability of initiatives (innovations) in primary health care. Most notable are 'client' and 'workforce' sustainability. The 'client sustainability' domain includes factors such as where 'clients' sought care; the acceptability of the role of the health care professional to 'clients'; how well the service was embedded in its client community and, finally, the financial costs to clients of receiving care. The domain 'workforce sustainability' includes the factors of staffing (that is, the available workforce), and the skills and motivations of the workforce associated with innovation in health care delivery. Underpinning all of this is the importance of what Sibthorpe et al describe as *'the very human nature of organisational change… social relationships, networks and champions'* (p. S78). These were identified as emergent themes which ultimately facilitated or hindered sustainable innovation in primary health care delivery (Sibthorpe et al., 2005).

2.2.3 Sustainability in this study

In this thesis I use a definition of sustainability which encompasses the key elements of sustainability as outlined by Taylor et al (2001), Farmer et al (2003) and Sibthorpe et al (2005) and Humphreys et al (2006) and Crossland and Veitch (Crossland & Veitch, 2005; Humphreys et al., 2006; Sibthorpe et al., 2005; Taylor et al., 2001). It takes account of the broader context in which health professionals' work. Factors such as organisational linkages (for the clinical and non-clinical support of health care professionals), and integrated service delivery (primary, secondary and tertiary networks for the effective use of workforce and coordination of care) will be included. The key element underpinning this definition is the knowledge and understanding that the community has of the existing health care professional roles. Sustainability is thus defined as the interaction of a complex range of factors and their combined impact on primary health care service delivery. These factors

are: political systems (at State and Federal level); community profiles; service organisation (including aspects such as team-based care); workforce (including the PHC professionals and support structures); and patient perceptions and expectations.

2.3 Primary health care professionals and health care context

Many issues relating to the recruitment and retention of rural primary health care practitioners are reported commonly across international literature. These include complex and high clinical workloads; professional isolation; the availability of continuing professional development; and the overall sustainability of practices (Humphreys et al., 2006). There are also marked differences in both the roles of rural PHC professionals; namely general practice, nursing and allied health (characterised here by the professions of physiotherapy, occupational therapy and podiatry) and the type of individuals attracted to this working environment, with some studies suggesting the existence of a distinct professional personality type (Hays, Veitch, Crossland, & Cheers, 1997; Strasser, Hays, Kamien, & Carson, 2001; Taylor, Wilkinson, & Cheers, 2006). A broad overview of each of these roles and the health care context in which they practise is provided in the following sections.

2.3.1 General Practice

There are few problems with defining GPs (termed family physician in the American context) as a specific group of health care professionals. Rosser (2002) distils a definition from a broad range of international literature and states that:

> *'family medicine is a well-defined discipline that requires a specific knowledge and skill-set and that focuses on the physician-patient relationship, population health, health promotion and meeting community needs'* (Rosser, 2002 p.1419).

For the purposes of this thesis, GPs are defined within the common dictionary usage as those medical professionals trained to deliver a broad spectrum of

community based health care (Delbridge & Bernard, 1998). Previous research has highlighted the personal factors that define those GPs who have become rural practitioners. They often display a desire for autonomy by citing a preference for solo practise (Hays et al., 1997), have a strong interest in procedural work and see their role as acute care providers (Strasser et al., 2001). In conjunction with these professional interests, those practitioners who have stayed three or more years in a single rural practice often display strong links with their community. They become an integral part of 'community functioning' (Cutchin, 1997; Farmer et al., 2003; Veitch & Crossland, 2002). Rural and remote general practice thus presents a unique environment, the features of which are outlined below.

In Australia, evidence from the Australian Institute of Health and Welfare (AIHW) and Health Workforce Queensland demonstrate clear differences between rural and metropolitan general practice care with greater procedural and acute care delivery (particularly in rural, rather than remote areas) and significantly less prevention and health promotion work when compared with urban practice (Britt, Miller, & Valenti, 2001; Health Workforce Queensland, 2006). Overall, rural and remote locations influence the complexity of general practice, with rural practitioners tending to have a wider skills base and operate in greater professional isolation (Humphreys et al., 2006; Strasser et al., 2001). For example, a lack of local referral services often requires rural GPs to fulfil a greater role in the administration of cytotoxic drugs and the delivery of palliative care (Britt et al., 2001; Health Workforce Queensland, 2006).

2.3.2 Practice Nursing

Australian nursing literature describes the evolving and changing nature of the practice nurse (PN) role, including the emergence of categories such as remote area nursing (RAN) specialists and the Queensland-specific Rural Isolated Practice Endorsed Registered Nurse (RIPERN). However, there is a lack of clinical evidence to specifically document the role of rural nurses which may cover the spectrum from education, health promotion and prevention activities through to procedural work (Britt et al., 2001; Health Workforce Queensland,

2006). For the purposes of this thesis, the term PN is used to denote both enrolled or registered nurses and RIPERN nurses working in primary health care settings. Further details regarding the rural context in which these roles operate is provided below.

Impending nursing workforce shortages have been characterised in ways similar to those of GPs. This includes forecasts of an ageing and retiring workforce and corresponding low numbers of nurses working in primary health care, and specifically working in rural practice (Hegney, McCarthy, Rogers-Clark, & Gorman, 2002). Indeed, there is evidence that proportionally fewer registered nurses are employed in Australian general practice as practice nurses when compared to both the UK and US (Association for Australian Rural Nurses, 2001; Australian Productivity Commission, 2005; Hegney et al., 2002; Jenkins-Clarke & Car-Hill, 2001; Tolhurst, Madjar, Schultz, & Schmidt, 2004).

There has been open discussion in recent national nursing literature about the expanded roles nurses are required to play in rural settings (Hegney, Price, Patterson, Martin-MacDonald, & Rees, 2004; Tolhurst et al., 2004). Hegney et al argue that nurses trained in wholly metropolitan areas are poorly prepared for the demands of rural nursing, and that there are pronounced differences in relation to clinical care provision and the roles nurses assume in rural practice. The authors cite the main difference as that of the advanced or expanded nursing role – the *'jack of all trades and master of none'* (Hegney et al., 2002 p.179). However, this role is frequently one that nurses assume in rural practice and is influenced by the lower health status and increased chronic and complex care requirements of rural communities. Rural and remote nurses have high levels of job satisfaction and they deal with more acute care situations; particularly in areas of limited medical and allied health professional support (Hegney et al., 2002).

Tolhurst et al describe most PNs as fulfilling a supportive or delegated role with some nurses working in what the paper loosely defines as an ‘extended role’ (Tolhurst et al., 2004). The extended role in this instance includes education and health promotion in relation to diabetes and asthma; as well as provision of family planning education. The authors acknowledge that the variety of work for PNs in rural areas is enormous and list factors influencing the scope of practice as: the patient population; the PN’s experience and skills; and the geographic location of the practice. The authors outline the impact of rurality on PN roles where patients may present for everything from emergency treatment to general practice care. In these areas PNs are fulfilling roles in triage, first aid and as assistants in procedural treatments. The lack of specialised referral services such as diabetes education centres and aged care support has also meant that rural PNs have to adopt a broader role. In rural areas, this may involve functioning at a higher level such as PNs fulfilling roles such as directors or coordinators of clinical care, monitors of patients with chronic conditions and providers of home visits to frail elderly if required. The authors conclude that these factors combine in rural areas to make a more collaborative model of practice. Tolhurst et al propose that nurses could take a greater share of the workload in general practice-based primary care due to the acknowledged GP shortage (Tolhurst et al., 2004). In rural and remote Queensland, Rural Isolated Practice Endorsed Registered Nurses (RIPERN) fulfil roles akin to those of advanced nurse practitioners, operating as solo practitioners in areas where there are no resident GPs. These nurses undertake health care delivery ranging from health promotion and basic primary health care to emergency and trauma care. RIPERNs are generally supported by visiting primary health care services and usually have close links with visiting outreach GP services such as the Royal Flying Doctor Service (RFDS).

2.3.3 Allied Health Services

Hornsby et al (2000) state that the roles of many AHPs are poorly understood and poorly defined by both the professions themselves and by patients. A specific issue is that of the flexible inclusion and exclusion of professions grouped under the definition ‘allied health’. The authors identify the key issue

as being that of 'identification' and 'identity'; and state that '*confusion can lead to difficulties in relation to AHPs own identity and the perception of their identity by others'* (Hornsby & Fitzgerald, 2000 p.2). Lowe et al (2007) defined AHPs by exclusion from other professions. They were seen as those practitioners falling outside the medical, nursing, public health or oral health professions. Following this, the authors sought to define key criteria by which the AHP workforce could be defined. Criteria included: '*tertiary qualifications permitting state or territory registration'*, the application of specific '*skills and knowledge to restore and maintain optimal physical, sensory, psychological, cognitive and social function'* and '*use clinical reasoning skills in working directly with patients to restore and optimise function on an individual basis'* (Lowe, Adams, & A, 2007 p.5). In this thesis, AHPs are almost exclusively physiotherapists or occupational therapists and dietitians working in community settings, rather than in hospital services.

The literature identifies a range of common issues which characterise rural allied health care delivery, namely high levels of cross cultural service delivery; large clinical caseloads; service to, and across, large geographic areas; diverse service provision; the need for a broad skill base and experience; professional isolation; and finally, perceptions of the paucity of management support when compared with more urbanised areas. Keane et al (2008) note that people living in outer regional centres have '*access to only half as many AHPs' as residents of metropolitan centres and decreasing numbers of AHPs are associated with increasing rurality'* (Keane, Smith TN, Lincoln, & Wagner, 2008 p.3). Research suggests that rural and remote Australia lacks an adequate number and distribution of AHPs with physiotherapy services being the third most sought after health profession following medical practitioners and nurses (Arthur, Sheppard, & Dare, 2005; Battye & McTaggert, 2003; Bent, 1999; Keane et al., 2008).

In Queensland, publicly funded allied health services are provided by the state health department. The majority of AHPs are, however, based in hospitals in larger centres, with low population densities in many rural Queensland areas leading to outreach models of allied health service delivery. Battye and McTaggart (2003) describe primary health care as operating across a continuum from health education, promotion, early intervention, primary prevention, treatment and secondary prevention to chronic disease management. However, they also argue that, historically, AHPs operate in only the latter parts of the continuum (that is, in treatment, secondary prevention and chronic disease management) with few AHPs participating in public health or primary health care activities (Battye & McTaggert, 2003).

In comparison to their urban counterparts, who generally develop in-depth knowledge and skills particular to their specialised area of care, rural and remote AHPs commonly provide a diverse range of care services, and are thus considered as 'specialist generalists'. As in rural general practice, there is a call for the scope of rural and remote allied health practice (where triage, skilled diagnosis and discharge planning are essential skills) to be acknowledged as advanced allied health service delivery. There is also an identified need for the re-conceptualisation and recognition of rural and remote allied health. (specifically rural physiotherapy as a specialty area) and for further research to define such roles (Arthur et al., 2005).

An extensive survey of rural and remote AHPs raised identity and identification as major issues facing the profession. The survey raised the incongruence between how allied health professionals are identified as a 'single' group and the ways in which allied health professionals themselves develop their identity as health practitioners. It is postulated that this mismatch leads to confusion about the identity and role of AHPs by the local community and also by other health care practitioners (Hornsby & Fitzgerald, 2000).

2.3.4 Ambulance Paramedics

The role of the ambulance paramedic in delivering pre-hospital emergency care is well documented and understood by other health care professionals (Chilton, 2004). A recent study suggests that although ambulance paramedics are a valuable resource in the rural and remote communities in which they work, they remain an underused section of the workforce (Reeve, Pashen, Mumme, De La Rue, & Cheffins, 2008).

In this thesis ambulance paramedics are 'pre-hospital practitioners' providing emergency care within the context of the emergency medical service systems. (Chilton, 2004 p.1). Ambulance paramedics are included in this group of PHC professionals because some anecdotal evidence suggests they may have a wide and varied role in rural communities (Gaskin, 2007). Most recently the role of ambulance paramedics has been explored in Queensland in its potential to provide primary health care support to rural and remote communities. However, such systems are essentially seen as separate from the community-based health care provided by GPs and many barriers (system and community-based) must be overcome if such roles are to be implemented effectively.

2.4 Communities, consumers or patients?

The criticism of 'sustainability' as a 'fuzzy buzzword' (Palmer et al., 1997), could be equally levelled at the use of the terms 'community', 'consumer' and 'patient' in relation to health care research, policy and planning. Much research and discussion has already been published in this area and it is not the aim of this section to attempt to unravel the complexities of these arguments. Rather, it provides a summary of the main issues surrounding the use of these terms and seeks to clarify the definitions used in this thesis in the context of rural and remote health care.

Before the 1960s the term 'consumer' was used only in reference to individuals who consumed goods and services produced by industry and the commercial sector. The concept of 'consumers' as those who sought the advice and assistance of health care professionals emerged in the late 1960s. Since then,

the term ‘health care consumer’ became widely used across the political spectrum and continued to carry with it connotations of individuals acting within a ‘free-market economy’ (Grbich, 1999; Lupton, Donaldson, & Lloyd, 1991). Grbich notes that previous research identifies three key problems with this economic-based notion of the individual as ‘consumer’. Firstly, people are both ‘producers’ of their own health and not simply ‘consumers’ of health care. Secondly, the notion of the individual as a health care ‘consumer’ includes the assumption that individuals have the power, ability and motivation to make informed choices when seeking health care. Finally, Grbich points out that ‘consumerist behaviour’ also assumes that there is a choice of provider and/or treatment and that the individual may therefore routinely exercise the ability to change their preferences (Grbich, 1999).

While the term ‘consumer’ defines individuals empowered in relation to their own health care, the term ‘patient’ embodies the exact opposite in meaning. Originating from the Greek word to ‘suffer’ or ‘endure’, the use of the word patient has declined both in policy and practice. The dictionary definition of the noun is *‘one who receives medical attention, care or treatment’* (Delbridge & Bernard, 1998). Lupton et al (1991) link the notion of behaviour which defines the ‘patient’ as distinct from the ‘consumer’ to Parson’s original 1951 theory of the sick role behaviour. In this theory, the patient embodies the role of the emotionally vulnerable, seeking care and direction from the expert practitioner (Lupton et al., 1991).

Overall, there is less evidence of rural and remote residents adopting consumer type behaviours. There is also some evidence to suggest a more traditional view of the GP-patient relationship may prevail in rural and remote areas. This relationship is defined by a close and sometimes shared approach to health care decision-making due to a lack of access to other health care professionals (Fitzgerald, Pearson, & McCutcheon, 2001). Thus, in relation to rural and remote health care there appears to be significantly more barriers to individuals adopting a clear consumer-like approach to health and health care seeking.

For the purposes of this thesis, the term ‘community’ is used to define residents in the particular geographic area under study. Given the limited or complete lack of alternative health care services in the communities used in this study, the term ‘patient’ is used in place of ‘consumer’. Following this, the word ‘patient’ is used specifically to identify those individual service-users in each community who consent to participate in the research interviews.

2.5 Community perceptions of services: Knowledge and gaps

There is little research which specifically explores the concepts of health professional role identity. Where this literature exists, it has generally been used to highlight the continued preferences, particularly in rural communities, for maintaining the conventional medical model; that is, a GP as the preferred, or most acceptable PHC professional. This has been achieved, in some instances, by comparing rural hospitals, with rural conventional general practice, paramedic or emergency services and pharmacies (Smith et al., 2004). It seemingly ignores the lack of knowledge about the criteria patients use to make these judgments and if these criteria are, indeed, consistently applied across different services.

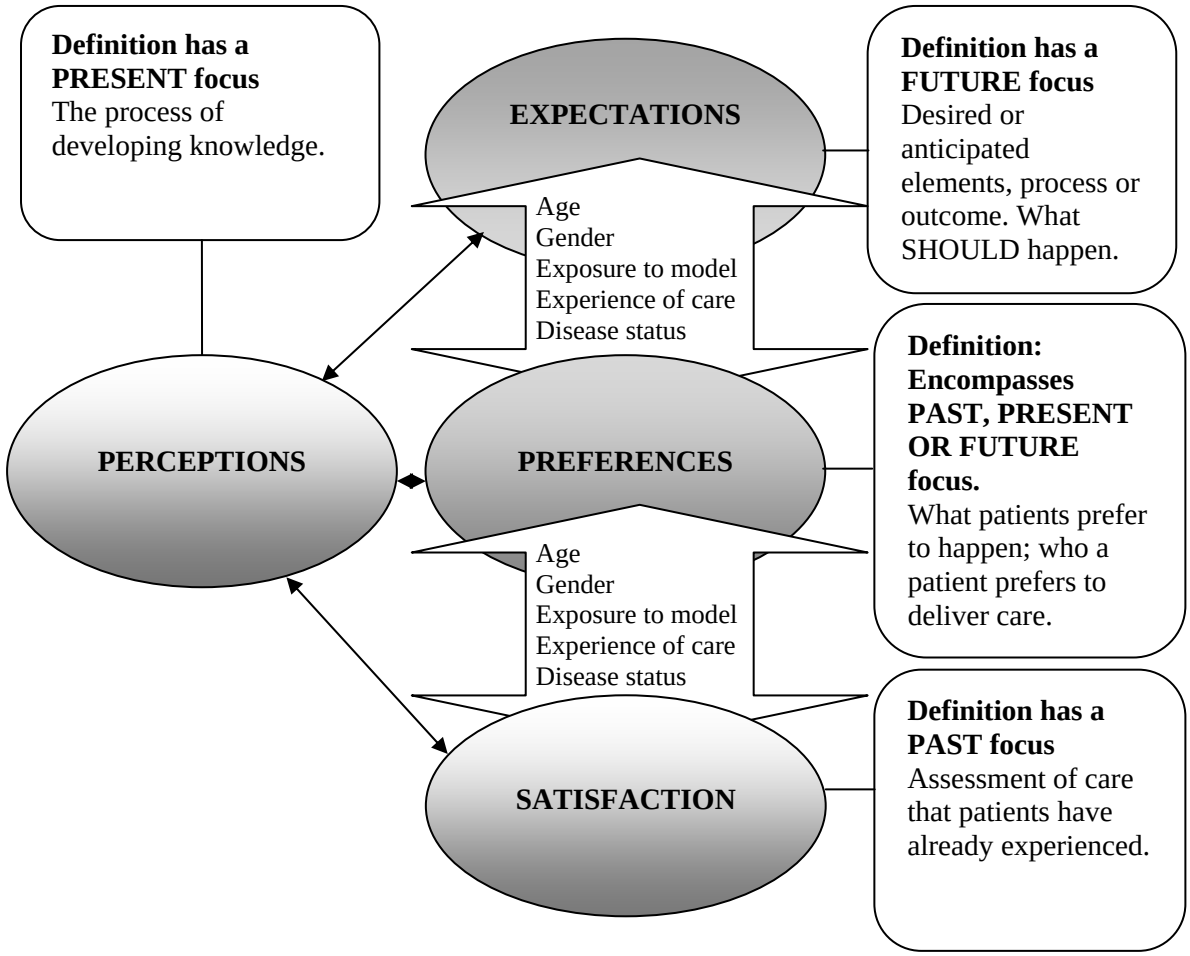
Much of the existing research on community or patient perceptions has been conducted in conjunction with research into patient or community expectations. While there is a significant amount of research related to individuals’ expectations in the field of psychology, patient expectation in relation to broader health care is a growth area with the rise of new journals expanding and exploring theory and application in primary health care. The concept of patient expectations of health care appears to encapsulate a number of overlapping research themes, including patient preferences, the patient or community perceptions, attitudes to, satisfaction with, and acceptance of health care professionals. These terms have been used interchangeably and often appear to embody the same meaning.

The link between perceptions and expectations in health care research appears complex. In relation to their standard dictionary definitions, it seems that the former is a process of developing meaning, whereas the latter is an anticipation or probability of an occurrence in a future tense. The Macquarie Dictionary (1998) definitions of expectation and perception are closely linked, with perception defined as the process of *'gaining knowledge through the senses'* and the specific psychological definition as *'a single unified meaning obtained from sensory processes'*. Expectation is defined as the prospect of a *'future good or profit'*; or more simply, the 'probability of the occurrence of something' whereas the concept of 'expectancy' is defined as *'anticipatory belief or desire'*(Delbridge & Bernard, 1998). However, the definitions are problematic as the concepts of expectation and perception are used seemingly interchangeably in existing research.

Figure 1 (on the following page) attempts to clarify the complex relationship between these various definitions used. In this thesis, the term 'perception' is used to describe views that patients have of their PHC professionals in the present context. These perceptions are influenced by the preferences for, expectations of, and satisfaction with, PHC professionals and the care they provide. In turn, factors such as age, gender, disease status, exposure to models of care and experience may also determine the preferences, expectations and satisfaction that patients form. Thus, perceptions are invariably dynamic and change as patients' preferences, expectations and satisfaction change.

There is little current work which defines the relationship of perceptions and expectations specifically in relation to health service models. An editorial in the Journal of Health Expectations raises the issue of the definition of health expectations by questioning the relationship between expectations and preferences and, if there are indeed changes in patient expectations of services or care provision, what these are and why they might occur (Coulter, 2006).

Figure 1: Patient perceptions - Definitional associations



The majority of current research into patient expectations is conducted with reference to the biomedical framework, for example defining the expectations of patients with diabetes, those diagnosed with and receiving care for Alzheimer's disease or receiving post-operative heart surgery care (Janzen et al., 2006). The concept of 'expectation' is a means of identifying and understanding individual patient values with respect to health care. Some studies focus on identifying patient expectations of the individual roles of specific providers rather than the overall models of health service delivery. Implicit in this is the idea of patient satisfaction with their health care professionals. Indeed, this area has been well researched and how and why patients make satisfaction judgments are well documented. Researchers argue that there is little need to continue with research into satisfaction of patients with health care professionals; including satisfaction with 'newer' professions such as nurse practitioners and physician assistants (Baldwin et al., 1998; Cipher, Hooker, & Sekscenski, 2006; Farmer, Hinds, Richards, & Godden, 2004). Current evidence suggests that acceptance of, and satisfaction with, these professionals is high. Researchers now argue that, without understanding expectations and perceptions, patient satisfaction research may be misused in some instances, as low levels of expectation may be more easily satisfied (Janzen et al., 2006).

One study which addressed the process patients go through when developing health care expectations differentiated between 'expectancy' and 'expectations'. 'Expectancy' was defined as the general concept and 'expectation' was used to identify specific examples of expectancy in the 'real world'. The authors argued that expectancy might be acquired in three key ways, namely through: (i) individual personal experience (which can be related to the idea of perception and acquiring of experience); (ii) the suggestion of others; and/or (iii) the observation of others. The process of expectation formulation is cyclical and longitudinal with a series of complex interactions taking place which result in an expectation of an outcome. Here, the authors model outcome as a behaviour, attitude or motivation and argue that any or all

of these may be influenced by expectations. Finally the authors conclude that societal expectations of health care professionals appear to be increasing with time (Janzen et al., 2006). This definition is very close, if not identical to, the concept of perception which is said to be the result of both direct and indirect personal experiences. However, a key difference can be made in relation to the sense of outcome, where an expectation necessarily informs an anticipated outcome and a perception merely embodies a unified meaning or understanding.

International research has studied the expectations that patients have of their care professionals in specific health care settings. For example, a Finnish study described expectations held by patients of their nurses and also those of the nurses in relation to patients in primary care settings. The study also sought to explore what nurses themselves expected of the nursing role and how these expectations were met. Notably, the findings in relation to patient expectations of nurses related predominantly to personal attributes such as honesty, being genuine, having a sense of humour and displaying attentiveness and kindness. The authors described some of these as *'individualised nursing care factors'* and patients saw them as the *'duty of the nurse'* (Haggman-Laitila & Astedt-Kurki, 1994 p.256). Professional factors included an expectation that the nurse would provide information on patient care, recognise patient individuality and offer patients alternatives with regard to treatment (Haggman-Laitila & Astedt-Kurki, 1994).

Studies into patient or community 'perceptions' are broader and include a range of issues such as patients' perceptions of quality of care (Haddad, Fournier, & Yatara, 1998; Lee & Young-Hee, 2007; Wensing & Grol, 1998), of health care priorities and of clinical service provision (Bowie, Richardson, & Sykes, 1995; Haggman-Laitila & Astedt-Kurki, 1994; Hundley & Ryan, 2004; Infante et al., 2004). A Nigerian study identified patient perceptions of nurses in expanded roles, with the participants classified as users (patients) and non-users of the expanded nursing services. The role of the nurses included the management of common health problems as well as the performance of some

minor surgery such as suturing lacerations, incision and drainage of abcesses (Olade, 1989). Nurses often performed these tasks even when the GP was present. The study sought to determine the overall acceptance of this role by patients. Not surprisingly, patients were more accepting of the role than non-users (Olade, 1989), again demonstrating the close link between patient experience and their acceptance of professional roles.

By comparison, a study conducted in Korea explored the perceptions and expectations of patients in relation to nursing care services. The study identified a list of what were described as nursing attributes, including everything from the physical work area of the nursing station, to personal attributes such as empathy and assurance. A significant expectation of patients was the provision of a precise and skilful nursing service (Lee & Young-Hee, 2007); yet there is little evidence about how such a concept is defined by patients, and what specific criteria they use to determine it. In addition the study highlighted inconsistencies between the expectation of the role of the nurse held by patients, versus those of the nurses themselves (Lee & Young-Hee, 2007).

An Australian study explored the perceptions held by patients with chronic conditions of the nature and quality of their general practice care. This study identified patient priorities in health care, including the quality of the GPs. It encapsulated diverse quality issues such as interpersonal skills, technical competence and time spent with the patient. A second priority was the role of patients in consumer organisations encapsulating factors such as recognition of GP knowledge of the patients' condition and self-management, and GPs development of links with consumer organisations (Infante et al., 2004). Although there are marked differences in the purposes and populations used in these studies, there are some striking parallels between this and the Finnish study; with patient 'expectations' of nursing echoing patient 'perceptions' of general practice care specifically in relation to interpersonal skills.

2.5.1 Patient preferences and the perceptions of role identity

Linked to the concept of patient perceptions is that of patient preferences. In previous research many of the concepts of expectation, perception and preference have been grouped together and may also include elements of community or patient satisfaction. However, Cheraghi-Sohi et al (2006) differentiate preferences from satisfaction by defining preferences and expectations as those elements which are desired, or which should happen (in a future tense); while satisfaction is an assessment of care that has already been experienced.

A study conducted in rural New South Wales sought to evaluate whether consumer preferences for health services had changed over time or varied across communities with different models of health service delivery. The design ranked seven different health care service options including a general practice, pharmacy, hospital and ambulance services. The main outcome was the development of a rank order of patient preferences for these different health care services. It also included intervals to demonstrate the relative 'distance' between preferences. The authors concluded that the *'doctor was regarded as the most valued health service in rural communities, followed by the hospital'* (Smith et al., 2004 p.94). The authors maintained these preferences persisted over time regardless of participant age, gender, or place of residence and were similar for residents of towns with different models of health service provision.

However, one community with a multipurpose health care service (MPHS) placed significantly less emphasis on the importance of a GP and hospital. While the authors concluded that this might indicate a subtle change in attitude, they maintained their overall focus on the importance of, and rural community preferences for, a GP-based model of care (Smith et al., 2004). It should be noted that this study was sponsored by the Rural Doctors Association of Australia whose mission is to increase support for rural medical practitioners.

The comparison of services such as general practice, hospital and pharmacy are difficult to make. Indeed the participants in the study appear to have ranked

models on the basis of their perceptions of the providers, based perhaps on personal experience (Smith et al., 2004). Historically, the promotion and provision of health care in Australia has been medico-centric, so the overwhelming majority of Australians have no concept or experience of other service types. This includes services such as ambulance paramedics, hospital services, pharmacy, or true primary health care services such as Aboriginal Medical Services and those in which health professionals of all kinds are partners in the health management of community members (Smith, 2004; Fitzgerald, Pearson, et al, 2001). Thus participants in the above study would likely rate as a preference that with which they were most familiar (given that 85% of people see a GP at least once a year and very rarely see any of the other 'alternatives' - a fact the authors acknowledge). Therefore, the validity of using community preferences, measured in this way, is questionable if patients always prefer what they know. Indeed it could be argued that the above study may well be little more than a patient satisfaction survey by another name.

It may be that the broader community has preconceived notions of their local health care professionals based predominantly on experience. These notions are influenced by factors such as the physical location of the services and the way health care practitioners work together. Studies which look at the role and acceptance of NPs in rural communities in the US demonstrate slowly evolving but non-significant trends of greater acceptance among patients who had also dealt with practice nurses (Baldwin et al., 1998; Batchelor, Spitzer, Comely, & Anderson, 1975; Larson, Palazzo, Berkowitz, Pirani, & Hart, 2001; Way, Jones, Baskerville, & Busing, 2001). For example, general practice (or family medical centre) users depended more on nurses to provide information and thus were more accepting of nurses in this role when compared with similar people living in the same community who did not use the service (Batchelor et al., 1975). Where communities have a significant lack of experience of a new or closely corresponding role, practical systems factors have been identified which increase the likelihood of acceptance of a new role in the community. These include the type of service into which the role is to be introduced and the integration of the role with the existing health care system (Baldwin et al.,

1998). There is, however, little research evidence which specifically relates to community perceptions about health care professionals, how these are formed and how they might, in fact, inform health service development.

A number of studies conducted in Australia and overseas have explored patient perceptions and expectations of the roles of PNs, nurses with expanded clinical roles, PAs and NPs. Patterson et al (2005) identified the traditional role of the PN as it is viewed by the nursing profession itself. The study focussed on exploring three key roles of the nurse, namely: clinical; educational; and supportive (Patterson, Price, & Hegney, 2005). By comparison Hegney et al introduce three additional dimensions, namely: clinical organisation; practice administration; and care integration. Hegney et al (2004) examined the perceptions and preferences of patients in relation to the introduction of 'new' or 'expanded' nursing roles in rural general practice care, where a PN and GP worked together to provide care, or where a nurse may in fact substitute for a GP. The authors raised concerns that rural and remote communities would *'accept no further erosion of already limited service'* (Hegney et al., 2004 p.848). The majority of patients felt that the role of the PN was in enhancing general practice, rather than providing it. Once again the authors acknowledged the fact that patients appeared to have a very traditional view of PNs based predominantly on their experience of nurses in hospital settings (Hegney et al., 2004).

In Patterson's study, individuals were asked to reflect on the role of PNs through data gathered in a series of focus and discussion groups. While the profession itself has a strong if varied idea of its role and function, patient interviews demonstrated that there is a significant grey area in relation to their understanding of the PN role. The authors concluded that most patients had limited understanding of nursing in general practice. The majority of patients, once again, responded within their framework of knowledge of general practice as being the service that provided health care in times of illness, rather than as a service for preventive care. Given that the role of PNs in rural areas is broad (from health promotion to procedural work), the need to identify the ways in

which consumers perceive models of primary health care and the criteria they use to understand these services would seem important (Patterson et al., 2005).

Consumer studies conducted in Australia suggest that acceptance of the PN as a substitute for the GP would be limited (Cheek et al., 2002; Hegney et al., 2004). Overall, there appears to be persistent confusion among patients and debate between the professions about what the role of PNs should be, particularly in rural and remote areas. Evaluations of nurse-delivered PHC services in the UK suggest that appropriately trained nurses can undertake functions previously undertaken by GPs. Lauder et al (in Hegney et al 2004) suggest that PNs and GPs in rural areas should be interchangeable and the focus should be on the competency of the person delivering the care (and the adequacy of the service provided) rather than the right of one discipline (medicine) to perform a particular role. By contrast Campbell, (also in Hegney et al) believes public understanding and thus acceptance of nurses as GP substitutes would be poor, with a better role for nurses in primary health care stated as providing health education and illness prevention (Hegney et al., 2004). It is possible that there is greater community acceptance of PNs in the UK because of the long tradition of community based nurses, particularly in rural areas (Jenkins-Clarke & Car-Hill, 2001).

Cheek et al (2002) describe ‘grey areas’, specifically in relation to the ways in which community and patients identify their local nursing staff and AHPs (Cheek et al., 2002). As described earlier, a study of AHPs in rural and remote Australia raised the issue of their own identity and the means by which they are identified by their patients as a key problem (Hornsby & Fitzgerald, 2000 p.2).

Fitzgerald et al (2001) sought to capture a sense of rural peoples' experience of chronic illness and specifically, their perceptions of 'finding the right doctor'. The authors argued that rural patients have a 'traditional' view of GPs and primary health care models. Rural patients saw their general practice services as 'curative' in nature and patients defined a strict hierarchy of care where the GP was seen as the primary professional, followed by the specialist for more

complex conditions. There is also evidence that patients perceived the overall role of the PN as subordinate to that of the GP (Fitzgerald et al., 2001; Tolhurst et al., 2004).

2.6 Conclusion

While the difference in approaches to rural and remote versus regional and metropolitan primary health care service delivery has been well documented (Australian Institute of Health and Welfare, 2008a, 2008b; Australian Productivity Commission, 2005; Hays et al., 1997; Health Workforce Queensland, 2006; Hegney et al., 2002; Veitch, 2005), there is limited literature which explores patients' perceptions of PHC professionals working in specific rural primary health care settings. Previous work on patient perceptions of PHC professionals has also tended to focus on exploring the perceptions of 'consumers' as a broad group, rather than patients of a discrete community setting. In addition, there has also been a focus on patient satisfaction with, and preferences for, health care delivery and health care professionals. An understanding of patient preferences is important however these are often used to maintain a more conventional general practice approach to primary health care delivery. Due to evidence that patients prefer those services and health care professionals with whom they are most familiar, the utility of including patient preferences in the planning and design of health services is questionable (Hundley & Ryan, 2004). The following chapter outlines the present context of rural and remote health service in international and national settings and explores the key enablers and barriers to innovation in rural primary health care service delivery.

Chapter 3
Innovative approaches to rural primary health care delivery

3.1 Introduction

Internationally, innovative primary health care models have been proposed as a means of addressing a range of issues common to rural primary health care. This is not new and in developing regions such as rural Africa, expanded clinical roles for nurses and other community health staff have been used since the early 1970s (Olade, 1989). In the United States of America (US) and the United Kingdom (UK) the development of 'new' health care roles, the expansion of existing health care professionals and innovative combinations of new and conventional styles of service delivery are either in existence or being explored. In Australia, there is also growing concern about predicted primary health care workforce shortages and ageing populations in rural areas. More recently these approaches have been variously proposed as means of ensuring sustainable rural primary health care delivery.

Research into more sustainable models of rural care began in Australia as early as 1998 (Togno et al., 1998). Reports on sustainable rural health delivery are still emerging (Wakerman et al., 2006). These works have demonstrated that the more geographically remote and dispersed the population, the more innovative approaches to primary health care delivery need to be. Innovative approaches are described as those demonstrating greater visiting or outreach service provision; integrated service delivery often with a generic, multi-skilled workforce and the use of information technology. Additional issues such as the importance of team-work, expanded roles for health care professionals, and flexibility to allow greatest use of the existing workforce have also been identified as part of sustainable rural primary health care delivery (Togno et al., 1998). However, despite a move towards 'hybrid' models of rural health care, the majority of discussion remains focused on strategies to maintain the viability of general practice-based models.

Much of the existing evidence which explores new approaches to primary health care delivery comes from the international context. Most notably, the US and UK literature explores innovative approaches to primary health care delivery and in doing so has attempted to incorporate aspects of community perceptions and expectations. This has been particularly so in parts of rural Scotland. This chapter describes the current context of international rural primary health care. It then presents the reasons why innovative models of primary health care are needed. Based on the experiences of the US, Scotland and Australia, the barriers to, and enablers of innovative approaches are then identified and discussed. This includes the role of community perceptions in the development of innovative and sustainable models of Australian rural primary health care delivery.

3.2 Overview: The rural primary health care context

There is a lack of internationally standardised measures of rurality. This is partly due to the variability of health systems across international settings. Despite this, existing evidence suggests that rural and urban primary health care share themes and issues that are common across international boundaries. These themes relate to rural and urban residents and rural and urban health care professionals and can be broadly grouped under four categories. In relation to rural versus urban residents, these are the overall differences in (i) health status and in (ii) health seeking behaviour underpinned by attitudes to health and well-being (Howat, Veitch, & Cairns, 2006; Veitch, 1995, 1995 2005). In terms of rural versus urban PHC professionals, these are characterised by (iii) the differences in service delivery models and (iv) the differences in professional attitudes and expectations of rural practice. This latter difference suggests that a distinct professional personality type exists in rural PHC professionals (Hays et al., 1997; Strasser et al., 2001; Taylor et al., 2006). In order to place these experiences in context, the following section presents an overview of rural primary health care delivery in Queensland, Australia, and compares this with findings from both Scotland and the US.

3.2.1 Queensland, Australia

In Australia, the Federal and State governments take responsibility for national and state-wide health care delivery respectively, with a separation of roles and responsibilities between the Federal and State health departments. Historically, rural primary health care delivery has comprised a mixture of services and organisations including rural hospitals, community clinics, fly-in and fly-out or visiting services (for example RFDS and visiting allied health services). In rural Queensland, local GPs may fulfil the role of both local GPs in private practice and as Medical Superintendents of public hospitals. Additionally, in contrast to their urban counterparts, many rural practitioners continue to work in solo practice (Health Workforce Queensland, 2008). Many rural GPs also continue to be responsible for all day and after hours on-call work (Britt et al., 2001). Nationally, evidence suggests that rural practices are increasingly dependent on overseas-trained medical practitioners, essentially bonded to work in rural areas for defined periods of time (Health Workforce Queensland, 2006; Wells, 2005).

Two National Rural General Practice Studies (NRGPS) undertaken in early 1990 and again in 1996-7 covered professional, personal and social issues, personal background, patient issues, recruitment and retention programs, and questions relating to changing health services. The 1990 survey results demonstrated that rural GPs worked longer than their urban counterparts; required a broader range of (clinical) skills; worked in different socio-economic contexts; had greater difficulty accessing professional development and also had greater difficulty accessing locum support (Strasser et al., 2001). By the mid-1990s, several programs were in place aimed at providing rural GPs with greater autonomy and increased support at local and regional levels. These initiatives included the introduction of Federal and State government programs such as the Divisions of General Practice (established 1993), the General Practice Rural Incentives Program (established in 1994) and state-funded Rural Health Units to coordinate improved support, education and training specific to rural GPs. However, despite the positive achievements, the

second NRGPS found that the rural medical workforce was ageing, retiring and being replaced by an increasingly part-time workforce (Strasser et al., 2001).

Recent discussion papers from government, academic and practitioner perspectives have sought to highlight the range of issues and considerations related to the design and delivery of a range of new models of primary health care service (Duckett, 2005; O'Connor, 2005; Wells, 2005). Additionally, proposals to adapt the community-based therapy assistant (CBTA) model for allied health care delivery; to trial health professionals with extended clinical roles; and to develop training curricula for extending the role of rural paramedics to include primary health care delivery are presently under discussion (De La Rue, 2009; Raven, Tippett, Ferguson, & Smith, 2006). In Australia, strong professional and organisational networks provide opportunities for advocacy and lobbying in relation to proposed changes to rural service delivery. Additionally, up-to-date statistics provide information on changing rural workforce trends; most particularly changing demographic profiles, trends in recruitment and retention, location and the practice profiles of rural GPs. These state-based and national professional networks such as the Rural Doctors Association of Queensland (RDAQ), the Rural Doctors Association of Australia (RDAA), the Council for Remote Area Nurses of Australia (CRANA) and state-based rural workforce agencies deliver education, training and support to rural medical professionals. The success of such networks in lobbying for or against workforce and service delivery change and changes to education and training has been acknowledged by overseas health care professionals and, most recently, featured in discussions at the World Organisation of National Colleges, Academies and Academic Associations of General Practitioners / Family Physicians (WONCA) in 2009.

3.2.2 The United Kingdom: England and Scotland

There has been a move toward radical health system reform in the UK, with a refocus on models of service delivery rather than the specific issues of health care practitioners. The role of the English National Health Service (NHS) Modernisation Agency (2001) is essentially that of refocusing the health

system, with three of the agency's five themes being (i) the investigation of current primary care delivery, (ii) the potential for new models, and (iii) the development of a health workforce designed to meet actual needs of the health system and priority health needs of the community. The redesign of health professional roles is a crucial element of this change and involves the development of amended roles, the creation of new roles and the expansion of existing roles (O'Connor, 2005).

Likewise, in Scotland the emphasis is on the sustainable delivery of health care (The Scottish Executive, 2005; Woods, 2001). The geographic area of rural Scotland comprises 98% of the Scottish land area, with a population of approximately one million people (Godden & Richards, 2003). The area has similar issues relating to the recruitment and retention of rural primary care workforce as experienced in Australia (Richards, Farmer, & S, 2005). As in rural and remote Australia, the area is characterised by sparse populations of small communities serviced predominantly by traditional general practice. District nurses and allied health services (including dental services) may be either local or visiting. However, in contrast to Australia, Scotland has fewer visiting services and very limited aero-medical retrieval services. In 2003 and 2004 The National Health Service (UK) employed American trained physician assistants (PAs) to function in both primary and secondary care settings on a trial basis. These roles perform delegated tasks rather than substituting for other health care professionals and evidence suggests that they have had a positive impact on supporting the UK health care workforce in both England and Scotland (Jolly, 2008).

3.2.3 The United States

As in the UK and Australia, the US also struggles to provide rural health care services (Doeksen & Schott, 2003). The US health care system has seen complex reform and revision since the introduction of Medicare and Medicaid in 1965, with successive governments seeking to contain health care costs that rose under these programs (Feldstein, 1999). The impact on rural health services was noted from the mid-1980s, with many of the cost-containment

strategies affecting health service access, particularly in poorer areas (Straub & Walzer, 1992).

Rural health care delivery is based primarily on conventional general practice and community health service models with some aerial emergency services, similar to the Australian context. However, models such as PAs and NPs are also used in most states. Unlike PAs, NPs perform a task substitution role. Evidence demonstrates that in some states, both of these models of care now contribute a significant proportion (up to 50%) of total rural health care delivery (Larson et al., 2001). Issues of health care delivery are particularly prominent in rural and remote settings such as rural New Mexico, where traditional models of primary health care delivery have dominated in the past and the common problems of recruitment and retention persist (Treeson, 2003). The growth of PAs in this area has been effective in addressing some workforce issues (Katalanos, 2006).

As with Australia and the UK, participation by the community in health care design and delivery is also a growing consideration in ensuring sustainable primary health care services. It forms a fundamental part of some of the existing rural primary health care education programs including the Washington, Wyoming, Alaska, Montana and Idaho (WWAMI) Program. WWAMI has completed extensive work on the role of mid-level health professionals such as NPs and PAs in under-serviced areas (Larson et al., 2001). However, many communities in areas such as rural New Mexico continue to seek primary health care physicians as their preferred model of care (Treeson, 2003).

3.3 Why new models of primary health care are needed

Across Australia, the UK and the US there is a common range of issues leading to the development of new models of primary health care service delivery. Three are considered in this section: workforce, community participation and community perceptions and expectations.

3.3.1 Workforce: Recruitment and retention

The historic issues of recruitment and retention of PHC professionals in rural areas are well documented in Australia (Hays et al., 1997; Health Workforce Queensland, 2006; Veitch, 2005) and continue to be of concern in the rural US and in the UK (Richards et al., 2005). Internationally, workforce concerns about GPs and PNs have been widely discussed. These include predictions of future workforce shortages and changes in service delivery due to changing workforce demographics (Schofield & Beard, 2005). Key issues common across Australia, the UK and the US include: falling numbers of GPs and corresponding GP shortages; rising numbers of part-time GPs; reductions in rural training posts; and debate about the role of PNs in primary health care (Farmer et al., 2003; Health Workforce Queensland, 2006; Mass, 1999; Richards, Carley, Jenkins-Clarke, & Richards, 2000); reliance on, and competition for International Medical Graduates; and retirement of GPs and nursing staff (Wells, 2005). Overall, there are shorter retention periods for GPs and nursing staff than in the past due to changes in policy and increasing pressure on rural and remote GPs. This is particularly so for Australia and the UK (Richards et al., 2005; Strasser et al., 2001).

The 2006 Australian health workforce report entitled ‘Sinking Deeper Into the Abyss’ highlights the continuing trends in workforce shortage nationally (due to ageing workforce and changes in workforce practices, such as shorter working hours) and parallels this with evidence of increasing demand for primary health care services (Health Workforce Queensland, 2006). Data from Australian Rural Workforce Agencies suggest that over the next five to ten years the same can be expected for rural and remote Australia. In addition to the ageing workforce, it is also estimated that up to 25% of the current rural general practice workforce is made up of practitioners compelled to work in rural and remote locations due to provider number legislation requirements (Health Workforce Queensland, 2006). These practitioners are likely to move to urban areas once their rural requirements are met.

As a result of this, the pressures of both clinical and administrative workload are raised. Pressures on rural and remote GPs come from previous changes in policy, as in Australia (Strasser et al., 2001), and the increase in the need for complex care, as identified in Australia and the UK (Richards et al., 2000). This issue continues to negatively influence the retention of rural GPs. The emergence of 'enhanced roles' such as NPs and PAs, intended to relieve the pressure on rural GPs, has also led to concerns about the potential blurring of traditional boundaries and uncertainty amongst both health care practitioners and the community at large (Richards et al., 2000).

There has also been increased policy focus on non-acute aspects of primary health care including health promotion, disease prevention and the management of chronic disease (Bailey, Jones, & Way, 2006; Duckett, 2005; Richards et al., 2000). Following this, there has also been movement towards better coordinated and integrated care in both the UK and Australia (Health Workforce Queensland, 2006; The Scottish Executive, 2005), adding to the workload of already burdened rural practitioners.

3.3.2 Community participation in health care planning and service design

The notion of community participation is not new and has been seen as a central component of health planning and service delivery by the World Health Organisation since the early 1950s. Work published early this decade explores the history and processes of community participation in policy development and choices in both national and international contexts (Adams & Hess, 2001; Bishop & Davis, 2002; Edwards, 2005). This work paradoxically highlights the lack of clarity of the concept and meaning of community participation and the tokenism associated with past practice on the one hand, and its extreme attractiveness to government as a political strategy on the other. Community participation, albeit poorly executed, is thus seen as a fundamentally useful political tool which allows a refocus on positive government-community relations. In relation to rural and remote Australia this centres on enabling communities to be less disenfranchised from government decision-making (Redell 2002; Bishop and Davis 2002).

Internationally, community participation has been used at a variety of levels including: health care planning and priority setting (Bowie et al., 1995; Bowling, Jacobson, & Southgate, 1993; Wiseman, Mooney, G, & Tang, 2003); local and regional health program planning (Bowie et al., 1995; Litva et al., 2002; Smith & Bryant, 1988); and local level primary health care decision-making (The Scottish Executive, 2005). Nationally, the approach has been used to inform local health care resource allocation; the organisation of health care; recruitment and retention of health care professionals; and business model development (Taylor et al., 2006; Veitch & Grant, 2004). However, active community participation in the development or design of health services is uncommon, particularly in Australia (Taylor et al 2006) and the impact of community participation in relation to health outcomes is currently unclear (Preston, Waugh, Larkins, & Taylor, 2010).

The Scottish government is attempting to capture the needs of the broader community in relation to care provision (The Scottish Executive, 2005). The NHS Modernisation Agency and the Scottish parliament have recognised the need for system reviews to support this move (National Health Service, 2005; The Scottish Executive, 2005). Understanding community perceptions of their current service providers may assist in understanding better ways of engaging communities in the development of appropriate, acceptable and innovative service models.

3.3.3 Patient perceptions: Evidence from the literature

There is increasing debate globally about primary health care service delivery, specifically in relation to models of care that meet complex care needs (Duckett, 2005; Health Workforce Queensland, 2006; Mass, 1999; Mobley, Root, Anselin, Lozano-Gracia, & Koschinsky, 2006; Tovey, 2000). There is some evidence that suggests current rural health service characteristics do not match community expectations (Veitch, 2005). Community expectations relate primarily to the need for locally responsive primary health care services that take into account local context and meet local needs (Veitch, 2005).

As outlined in Chapter 2, there use of the terms ‘expectation’, ‘preference’, ‘satisfaction’ and ‘perception’ have been problematic. Previous studies have examined patient perceptions of health care professional roles largely through exploration of patient expectations. That is, expectations of how the health professional should function and interact in the clinical environment. There is a dearth of literature on patient perceptions. In addition, the terms ‘roles’, ‘skills’ and ‘tasks’ may have distinct meanings as they are applied to patient perceptions.

Much of the evidence on patient perceptions presented in the literature is implicit rather than explicitly described. In addition, it is apparent that patient perceptions of health professionals’ roles have been explored more commonly in nursing than in general practice, allied health or pre-hospital care settings. In some studies the focus related to patient expectations and, in one instance, preferences of roles rather than perceptions. Despite these difficulties, it is possible to gain an understanding of broad patient perceptions of health care professionals’ roles and use this as the basis for further investigating those perceptions in specific contextual settings.

Multiple complex factors appear to impact on the roles of health care professionals and how the roles are perceived by patients and the broader community. These factors include the model of care and the exposure the community has to different types of service models. Elements relating to the former include the management structures of the service and its location (remote, rural or metropolitan). Elements relating to the latter factor include age, gender, chronic disease status of individual patients, and their experiences as a parent or a carer (Infante et al., 2004). In addition, the ways in which health professionals are employed or employ staff also impacts on patient perceptions of their role. Some evidence suggests that rural communities see health professionals, especially nurses and GPs, as delivering care within a cost hierarchy. That is, that the PN has a different role to the GP and is thus paid accordingly (Cheek et al., 2002).

Patient (often termed as ‘consumer’) perceptions of the functional roles of PHC professionals have been linked most commonly with investigations into perceptions of quality of care. It has been demonstrated that patients often equate quality of care with continuity of care and most specifically having the same health care professional (such as a GP or PN) responsible for delivering the same type of clinical care (Christakis, Wright, Zimmerman, Bassett, & Connell, 2002). While previous research demonstrates that quality care has been associated with continuity in relation to patients’ ability to see the same person at each visit (Alazri, Heywood, Neal, & Leese, 2007; Christakis et al., 2002; Guthrie, Saultz, Freeman, & Haggerty, 2008), later studies suggest that patients also make a judgement about the type of clinical care that they perceive should be delivered by each primary health care discipline (Cheek et al., 2002).

Perhaps not surprisingly, there is emerging evidence that patient preferences and expectations change markedly with exposure to different types of service delivery models and the roles of the health professionals within these services (Hundley & Ryan, 2004). Most notably, there is some evidence that patients who attend multipurpose services perceive the GP as being of less importance as a principal care-giver than by patients who attend more conventional general practice services. One of the reasons for this is thought to be patients’ exposure to a wide range of health professionals within the MPHS model (Infante et al., 2004).

There is also some evidence in the literature of a mismatch between the perceptions that patients hold of health professional roles and those held by the health professionals themselves. This may be largely because patients do not appear to easily differentiate the skills and roles of professionals based in hospitals versus those in primary health care settings. This is particularly so for nursing roles. When patients were asked about their perceptions of PNs, they frequently appeared to describe the role of a nurse who cared for them in hospital (Cheek et al., 2002; Haggman-Laitila & Astedt-Kurki, 1994; Lee & Young-Hee, 2007). Thus, it is unclear to what extent patient perceptions of PN

roles are based on their experiences in primary health care services, or have been formed in tertiary care settings. PHC professionals also demonstrate misconceptions and misunderstandings of each others' roles and functions. This, in turn, has been shown to lead to the under-utilisation of health professionals working in team-based environments (Tolhurst et al., 2004).

Finally, there is a dearth of information outlining rural community perceptions of AHPs and ambulance paramedics. The majority of literature on rural AHPs focuses on the issues of recruitment and retention and their professional and personal experiences of rural and remote life and practice (Keane et al., 2008). Some studies suggest that the high turnover of AHP staff in rural and remote locations and the way in which AHPs are integrated (or not) into local primary health care practices may have a significant influence on patient perceptions of their role and function (Battye & McTaggert, 2003).

Available evidence suggested that patients were consistent in relation to their perceptions of the role of the GP. The conventional idea of the GP as the professional who diagnoses and cures illness was the most commonly held view. There was some divergence in relation to perceptions of the clinical functions of PNs. In addition there were also indications of the perceived medical hierarchy in relation to PNs and GPs; with GPs both fulfilling the role of the primary care deliverer and displaying the attributes of leadership. However, patient perceptions appeared to be strongly influenced by exposure to different service types.

The majority of available evidence also suggested that patients were confused about nursing roles; particularly PN roles and skills. It appeared that patients tended to formulate their ideas based on their knowledge of, or experience in, tertiary care settings. Overall, there is limited evidence about how different primary health models may impact on patient perceptions of the roles of PHC professionals.

While there is some information relating to patient perceptions of the skills and roles of GPs and nurses, there is limited information about perceptions of the roles of AHP and ambulance paramedics. In the available evidence, AHPs appear to be perceived as:

1. integrated with other local health care professionals; and
2. team focused.

One paper focused strongly on identifying patient preferences for AHP roles. This study found that patients preferred the professional roles of AHPs to be integrated with other local health care professionals and provide team-based care. A prerequisite of this role was being a 'good communicator'; an attribute commonly associated with both PNs and GPs (Hornsby & Fitzgerald, 2000).

There is also little literature specifically exploring patient perceptions of the role of ambulance paramedics. A 2005 study investigated patients' perceptions of the role of ambulance paramedics providing pre-hospital emergency care for acute asthma (Morgans, 2005). One of the barriers identified during patient focus groups is that of a misunderstanding of the role of paramedics by the patients. However, there is little further exploration and clarification of this issue. With the introduction of expanded primary health care paramedic training, there is a need to develop a more detailed understanding of how patients presently perceive this role and how proposed extensions to the current role may best be introduced to both communities and local PHC professionals.

A collection of international studies outlined below demonstrated that patients have a range of perceptions and expectations in relation to the professional role and tasks of GPs and PNs. In addition patients associated specific personal attributes with these roles (such as being trusting or caring). Factors which appeared to influence the development of these perceptions are identified and appear to correspond with those of a recent Australian study (Cheek et al., 2002). However, there is little information about the attributes associated with these roles and how these attributes correspond to perceptions of the roles and tasks of health professionals.

Even so, based on the available information patient perceptions of GP and PN roles and tasks can be grouped under five broad headings. Each of these is described below.

(i) Clinical care delivery including referral to other providers

Patient perceptions of the clinical role of PNs reported in the literature are broad and varied. While patients expect that PNs provide a skilful nursing service (Lee & Young-Hee, 2007), there is limited information about what tasks and criteria are associated with this. Overall, PNs are seen as providing specific clinical and follow-up care with a diverse range of tasks associated with this role. Tasks included taking blood, wound care such as dressings, the provision of first aid, patient triage, provision of minor surgery and referrals to other health care professionals or community services (Cheek et al., 2002; Lee & Young-Hee, 2007; Olade, 1989). Additional tasks such as the communication of test results and provision of detailed explanations about diagnoses and treatment were also associated with the role of PNs (Cheek et al., 2002). Some inconsistencies in patient perceptions were also reported. For example, two studies noted that patients specifically did not want PNs to be solely responsible for diagnosing illness (Cheek et al., 2002; Hegney et al., 2004), although paradoxically, PNs were also seen as having a role providing patients with a second opinion (Cheek et al., 2002).

Likewise, a wide range of patient perceptions of the roles and tasks of GPs have been reported. Discussion of GP roles covered a broader range of tasks whereas perceptions of the roles of PNs centred on specific clinical functions. There was a strong thread in the literature of perceived medical hierarchy, particularly in relation to the overall role of the GP. The GP was described as the ‘main health care professional’ and the role seen as a ‘care co-ordinator’ (Haddad et al., 1998; Infante et al., 2004). Clinical tasks associated with this role were ‘treating’, ‘curing’, a ‘solver of health problems’; a ‘diagnoser’ and ‘drug dispenser’ (Haddad et al., 1998; Infante et al., 2004). This was in contrast to the perceived role of the PN as both the provider of supportive and follow-

up care and being able to provide patients with a second opinion to the GP. GPs were seen as providing guidance in relation to the stages of a chronic condition as well as knowing the clinical cause of disease (Infante et al., 2004). The GP was also seen as a health monitor and a referrer to other health care specialists rather than community-based services (Haddad et al., 1998; Infante et al., 2004).

(ii) Health promotion and education, holistic care

A key perception of the PN role was provision of holistic care (Hegney et al., 2004). In particular this was described in relation to providing health education in areas such as heart health and nutrition (Cheek et al., 2002) and overall maintenance of patient well-being (Haggman-Laitila & Astedt-Kurki, 1994). Patients also perceived the role of the PN as providing 'family oriented care' (Cheek et al., 2002; Haggman-Laitila & Astedt-Kurki, 1994; Hegney et al., 2004).

Perceptions of the GP role also included providing guidance on lifestyle changes and on the stages of chronic illness development (Infante et al., 2004). GPs were seen as a general source of health information and also described as 'advisors' (Atkinson, Schattner, & Margolis, 2003; Infante et al., 2004).

(iii) Support and patient advocacy

The study by Cheek et al showed PNs were perceived as having a strong role in patient advocacy. This was described as provision of 'caring' and 'support' (as opposed to clinical care). It manifested itself in areas such as interpretation of test results (Cheek et al., 2002).

By comparison, there were no studies in which patients perceived the role of the GP specifically in relation to patient advocacy. In a study of rural secondary school students, GPs were perceived as offering advice and support across a range of areas and contexts, such as pregnancy, mental health, contraception, sexual abuse, diet and drugs although their role as an advocate for teenagers was not specifically noted (Atkinson et al., 2003).

(iv) Ethical roles

PNs were perceived has having a strong role in maintaining patient confidentiality and protecting 'patient intimacy' (Cheek et al., 2002; Haggman-Laitila & Astedt-Kurki, 1994). However Cheek's study noted that patients were often concerned about PNs maintaining confidentiality (Cheek et al 2002).

GPs were also perceived as having a strong role in maintaining patient confidentiality and privacy. However, this appeared to be noted mostly by young adults (aged 20-24 years) and was not specifically noted in any of the other studies (Atkinson et al., 2003).

(v) Personal attributes specific to the discipline

A range of attributes were identified, specific to the disciplines of nursing and general practice. These were often interwoven with perceptions of skills and tasks.

Attributes associated with the role of practice nursing included 'being a good listener' and having the ability to empathise with individual patients (Atkinson et al., 2003). Other attributes such as being supportive, gentle and genuine were also associated with nursing (Haggman-Laitila & Astedt-Kurki, 1994) as well as the characteristics of being careful, conscientious and protective of aspects such as patient intimacy and confidentiality (Haggman-Laitila & Astedt-Kurki, 1994). The personal attributes that patients appeared to associate with nursing roles included being caring, kind and sensitive with a desire and ability to care for the needs of the patient as an individual.

There is little information available about the attributes that patients associate with GPs. Characteristics such as having the ability to instil hope, courage and comfort to a patient were reported (Haddad et al., 1998) as well as those of trust and empathy. Trust and empathy were often described in the context of patient expectations and perceptions of quality of care (Atkinson et al., 2003;

Infante et al., 2004). These attributes were ‘desired’ in a GP, rather than associated with the role *per se*.

Finally, there were several perceptions which were specific to each health care professional. For example, nurses were perceived as being able to be ‘accurate’ in relation to clinical decision-making and ‘sensitive’ to patient needs (Haggman-Laitila & Astedt-Kurki, 1994). They were often described in terms of their ability to sympathise and maintain an overall role of patient support. By comparison, GPs were perceived as providing the core of a ‘trusting relationship’ between patient and professional. Most importantly, GPs were perceived as ‘leaders’ in relation to health care delivery (Infante et al., 2004). A detailed summary, including the literature search protocol is provided in Appendix A.

3.3.4 Health status and health seeking behaviour: Rural versus urban residents

In Australia, the Bettering Evaluation and Health Care (BEACH) Report ‘It’s different in the Bush’ notes general differences between rural and urban illness and injury rates. Increasing rurality has been associated with declining health status including higher rates of obesity and injury (Britt et al., 2001). Evidence of increased rates of cancers between those living in regional areas, when compared with residents of major urban or remote settings has also been demonstrated. Rates of self-reported chronic diseases such as cerebrovascular and coronary heart disease, depression and anxiety appear to be similar across major urban, regional, rural and remote settings. However, rural and remote people were more likely report higher rates of risky behaviours, particularly in relation to increased alcohol and tobacco consumption (Australian Institute of Health and Welfare, 2008a).

Nationally and internationally, rural and remote residents have also been shown to have different health seeking behaviours compared with their urban counterparts. Issues such as access to health services and attitudes to health and well-being contribute to patients presenting later with illnesses (particularly cancers, asthma and other chronic diseases) and injuries. Stoicism, fatalism, self-care and use of social networks and a functional rather than cosmetic view of health characterise rural residents (Elliot-Schmidt & Strong, 1997). In addition, Veitch describes the trust that rural residents have of 'old timers' versus and 'new comers' and the specific role of rural women in health care decision-making and as the first port of call (Veitch, 2005). Additional factors such as long travelling distances to local primary health care services; pressures of work and weather influence how and when rural residents seek care (Veitch, 1995, 1995).

3.4 'Enablers' of new primary health care roles and delivery: International evidence

There are a range of factors common to the US, UK and Australia that may enable the development and implementation of new primary health care roles and approaches to health care delivery in rural areas. These 'enabling' factors can be grouped into the following categories: (i) system change (including the need to evaluate the impact of past and present policies and strategies); (ii) identification of new skills-sets and hence 'new' primary health care practitioner roles; (iii) a growing governmental and professional focus on supporting integrated and coordinated care; and (iv) the role of the broader community in the design and development of innovative services.

This final factor is the area where the most significant gaps in knowledge exist. Fundamental to this is a lack of information about rural community perceptions and expectations of existing models of care, how these may affect the introduction of new models and thus, service sustainability. In addition, such knowledge may inform the development and implementation of strategies to enable community-relevant and responsive models of primary health care. This

section describes the factors that enable the development of innovative rural primary health care services.

3.4.1 Health system change

Health system change is perhaps the most fundamental characteristic enabling the development of new services. Structural review and change supported by relevant policy is a common feature enabling the development of new primary health care services. In some instances, system change or review has come about through recognition of an impending crisis in health care delivery (US) or acknowledgement of the failure of a 'one size fits all' strategy in rural health care provision (Australian Productivity Commission, 2005; Duckett, 2004, 2005; Feldstein, 1999). The US, the UK and Australia are at different stages in relation to system change (Australian Productivity Commission, 2005; Feldstein, 1999; The Scottish Executive, 2005; Wells, 2005). As described previously, the US history of system change and funding models has resulted in the development of strategies such as institutions specifically responsible for rural health care delivery (as in Australia). It has also resulted in the development of 'new' models of care, most specifically NPs and PAs (Straub & Walzer, 1992). The UK, as a whole, is undergoing significant system reform manifested by the establishment of the National Health Service Modernisation Agency and devolution of funding to the Scottish parliament resulting in changes in health care funding and purchasing at local levels (The Scottish Executive, 2005). Following this, the National Framework for Service Change (Scotland) and workforce planning strategies were designed to support the identification and development of new approaches to service delivery (Health Committee of the Scottish Parliament, 2005; The Scottish Executive, 2005).

In Australia, discussions have centred on the fundamental shortfalls of the health care system (Duckett, 2005; Wells, 2005). A key focus has been the need to enhance policy relevance through the evaluation of past policies, the need to identify community and health care professional expectations and the identification of workforce development options (Wells, 2005). The increased centralisation of policy development is such that Federal and State

governments have been expanding the roles of the central agencies. It is argued that these agencies, now dealing with policies across the breadth of government administration, do not have the capacity for detailed understanding of the complexity of rural health issues from professional, organisational and community perspectives (Duckett, 2005; Wells, 2005). Further to this, Douglas et al (2009) identified a series of key recommendations for an 'adequate, sustainable and effective primary health care workforce' (p. 81). However, in making recommendations specific to workforce training and supply, the authors note that such recommendations cannot be met without broad systematic change that addresses issues such as funding, financial organisation, service organisation, role delineation, career pathways and the paradigms of education and training (Douglas et al., 2009).

3.4.2 Skill-sets for primary health care

The need to identify new skills-sets for rural primary health care practitioners has recently been given greater weight as a response to chronic workforce shortages, and the growing focus on prevention and chronic disease care. Sibbald et al (2004) note that 'skill-mix' as a term, is used to refer variously to: a mix of multidisciplinary groups involved in delivery of a service; a mix of skills within a given disciplinary group; or a mix of skills possessed by an individual. In addition 'skill-mix' can also refer to role demarcation between different categories of existing staff (Sibbald, Shen, & McBride, 2004). This raises issues in relation to precise meanings of task delegation and substitution. Sibbald looks at these two concepts in terms of the task and the responsibility for the task and whether responsibility is passed over. Thus, 'delegation' is described as being the occurrence of a health care professional delegating a task to another person while retaining the overall clinical responsibility for that task; and 'substitution' as the transferral of both the task itself and clinical responsibility to another professional (O'Connor, 2005; Sibbald et al., 2004).

In the UK, the NHS Modernisation Agency (2001) and the Scottish NHS have mandated the redesign of health professional roles, in line with new models of service delivery (Health Committee of the Scottish Parliament, 2005; The Scottish Executive, 2005). National reforms in the UK have identified issues relating to four different types of change that can occur in role redesign, and are echoed in discussion papers written in the Australian context. These include moving work tasks up or down the 'ladder' of professionals; expanding the breadth of roles; increasing the depth of roles; and creating new roles by combining tasks in completely different ways (O'Connor, 2005; Sibbald et al., 2004). Indeed, Duckett argues that in some instances in Australia substitution may already be occurring. In other instances substitution requires the identification and clarification of the precise range of tasks to be substituted; protocols to identify types of patients (conditions) for whom substitute professionals are relevant; clarification of the nature of supervision, reporting and regulatory arrangements; and salary/payment arrangements (Duckett, 2005). There is little evidence in Australia to currently inform the development of substitute health professionals, or the inclusion of concepts of community expectation in role design.

A key criticism of work conducted in this area to date is that the majority of studies focus on skills-sets in tertiary rather than primary care. However, the concept of shifting work within primary health care teams is complex. Skill-sets reviews have been criticised as failing to address patient needs and patient outcomes (Richards et al., 2000). These criticisms relate to just how to define new skills-sets across the silos of existing primary health care professions, specifically inter-professional role function and finally, community understanding of new roles and models.

3.4.3 Primary health care 'team-work'

There has been a recent focus on improving health through coordinated and integrated health care delivery. At a policy level this is represented by an emphasis on the need for coordinated planning across government, training institutions and the broader health care policy community, particularly in

relation to defining workforce needs and priorities (Duckett, 2005; Humphreys et al., 2006; Wells, 2005; Woods, 2001). At the community level, it is represented by debates and trials to achieve better coordinated and integrated primary care delivery (Taylor et al., 2001; Woods, 2001). This focus on integrated, coordinated service models has also led to refocus and debate on inter-professional team-based approaches to care delivery.

The concept of team-work is not new in relation to primary health care delivery and has been promoted as 'best practice' (Ovretveit, 1993). Outlined in Richards and Carley et al (2000), the World Health Organisation defined effective primary health care team-working in 1984 as: *'a group of people working at, or from a primary care practice within common goals and objectives relating to patient care…'* (Richards et al., 2000 p.324). Inter-professional PHC teams have been defined as models of health care delivery where teams of traditional professionals including GPs, nursing, and AHPs work together to provide a range of services taking into consideration the expertise and equal functioning of each team member with the result of better integrated primary care delivery (Opie, 1997; Ovretveit, 1993; Taylor et al., 2001; Woods, 2001).

Most recently, the concept of team-work has re-emerged as a way of providing effective, economic and integrated care provision in rural settings where existing services are limited. The 2006 Report 'Team-work in Healthcare' synthesises current Canadian policy and makes recommendations about the importance of team-work in health care. In this report the authors highlight that:

> *'recent reports on health human resources have suggested that team-work might be an effective way of improving quality of care and patient safety as well as reducing staff shortages and stress and burn out among health care professionals'* (Canadian Health Services Research Foundation, 2006 p.1).

Internationally, new models of care attempt to incorporate and reflect the concept of team-work (Brooks & Ellis, 2006). In Australia, a project initiated by Queensland Health, the Models of Chronic Disease initiative, targeted rural and remote communities. The project's aim was to identify, implement and evaluate effective and innovative means of AHPs involvement in the provision of chronic disease health care (Wagner, 2009). Brooks and Ellis state that new models of care should reflect the importance of team-work and real role change alongside improvements in productivity (Brooks & Ellis, 2006). Overall, these recent reports indicate a subtle shift in rural primary health care over the past 10 years towards more integrated models of care, based on multidisciplinary team-work.

3.4.4 Understanding the role of community perceptions

One of the key gaps in the literature in relation to each 'enabler' of innovative service development is an understanding of the perceptions the community has of health care services and the roles of health care professionals. The idea of encompassing community needs (as defined by patient characteristics) is now a key element of primary health care service provision. The underpinning theory is that services become more viable and sustainable if patient and broader community characteristics are taken into consideration (Humphreys et al., 2006; Veitch & Grant, 2004).

However, there is limited understanding of how this applies to the design, implementation and function of new models of primary health care. In addition, the focus in the past has been on patient characteristics and perceptions informing specific clinical service delivery (Wensing & Grol, 1998) rather than the broad perceptions that communities have of existing services. Veitch discusses the impact of rurality on primary health care and care seeking behaviour in rural areas (Veitch, 1995) however, there is little other information on broad community perceptions and expectations and specifically how these may impact on new models of rural primary health care.

In Australia, there is evidence that community context and involvement in service design and delivery is important and that community expectations of their health care services are indeed realistic rather than 'wish lists' (Veitch, 1995, 2005; Veitch & Grant, 2004). Key elements of community expectation include: equity of supply and access; service responsiveness to local needs, ideally with local input and some local autonomy; provision of the basics (birthing, emergency, dental, pharmacy and allied health); and continuity of care (implying lower staff turnover). These expectations are echoed in summary results from regional community meetings conducted recently in Scotland (The Scottish Executive, 2005). However, by comparison, current rural services in Australia are characterised by limited facilities and resources; public and private mix; high staff workloads resulting in high staff turnover; and often designed as 'mini-metropolitan models' (Veitch, 2005). There is presently little, if any, recognition of specific needs of rural populations and the capacity of services to meet these needs (Strasser et al., 2001; Taylor et al., 2001). Indeed, recent focus continues to be on defining 'realistic care provision' within 'financial and workforce restraints' (Humphreys et al., 2006). This view, while encompassing community needs to some degree, still advocates a 'top down' perspective in relation to primary health care delivery.

In Scotland, the government has sought to include community perceptions and expectations in the development of new models. However this has been done primarily in a series of general meetings held in the main metropolitan centres. It is difficult to tell how relevant this consultation is to the Scottish rural population. Investigating organisational issues in primary health care that influence community involvement, Brown concludes that community involvement is not something that can be simply 'added in' but needs to be best conceptualised in terms of social capital (Brown, 2001), something not included in the context of the broad Scottish community consultation process. In the UK, there is a call for a better understanding of how communities understand current models of care, their perceptions and expectations of current health care professionals and how this may influence the implementation of new models of care (Black et al., 2004).

In the US, ongoing issues of recruitment and retention appear to be largely addressed through the training and provision of PAs or NPs (Treeson, 2003). There is a paucity of literature which examines the role of community expectations and perceptions of both conventional and 'non-traditional' health care professionals. However, evidence suggests that community involvement in recruitment and retention of health care professionals remains important, particularly in isolated rural areas such as New Mexico (Treeson, 2003). In the Australian context, 'new' approaches to health care delivery have been proposed as the means to address not one, but a variety of issues influencing the future delivery of primary health care services; particularly in rural and remote areas (Jolly, 2008).

3.5 Barriers to new rural primary health care models

There are a range of barriers to the development and implementation of innovative models of rural primary health care common across both national and international settings. These are discussed below, in relation to the Australian rural primary health care context.

3.5.1 Professional bodies' acceptance of innovative services

Health professional organisations and colleges demonstrate historical opposition to the development of 'new' professional positions. This is borne out further by the concepts of professional guilds as maintaining silos of care (Wells, 2005). In addition, the development of new models, and specifically new primary health care roles, has given rise to a range of concerns about the call for increased inter-professional 'team-work'. At present, it is almost impossible to achieve the concept of 'primary health care teams' due the strong hierarchical traditions of existing professions, little history of multi-professional 'team-work' and a lack of a uniting context (Jenkins-Clarke & Car-Hill, 2001; Opie, 1997). Most recently Van Der Weyden's editorial in the Medical Journal of Australia stated that the government's aim was *'to dismantle and eviscerate the ranks of its medical practitioners'* by *'proposing health care be delivered by new players in ubiquitous teams'* (Van Der

Weyden, 2009 p.193). By contrast, Kidd states that, in order for workforce reform to be effective and sustainable, governments must actively engage the entire primary care workforce in the planning and debate (Kidd, 2009).

There is a historic reluctance on the part of many solo GPs (particularly in rural Australia) to share practice, in spite of evidence that it is not possible to sustain rural general practice services in communities with populations less than 1,000 (Australian College of Rural and Remote Health, 2005). Factors such as the difficulty of recruiting and retaining colleagues and the desire of many rural GPs for independent practice contribute to this (Hays et al., 1997).

3.5.2 Focus on integrated care: Macro to micro levels

A multitude of issues relating to the concept of primary health care teams and their function have been identified across the international literature. These include functional differences between groups and teams in primary health care delivery and the need for clear specification of contexts relevant to either group or team approaches, such as whether teams relate to patient populations (such as aged care teams); disease types (such as diabetes teams); or the care delivery setting (such as primary health care service) (Canadian Health Services Research Foundation, 2006). In addition, health care professionals may oscillate between working as a team or a group, depending on the changing nature of their work and the impact of the availability of other services in the local areas (Opie, 1997; Saltman et al., 2007).

The push towards primary health care team-work in Australia raises issues for the effective development of new models of primary health care and specifically the development of new categories of PHC professional. Duckett (2005) suggests that the more prevalent role substitution becomes, the more there will be challenges to the contemporary concepts and place of a ‘nurse’ or ‘physiotherapist’ in a health care system and potential undermining of effective and efficient team function (Duckett, 2005).

Difficulty in researching and evaluating team-based care is compounded by factors such as the range of definitions of what constitutes full-time equivalent GPs, limitations associated with the current ways of counting GPs, and the problems of measuring what care is currently being provided, how, and to whom it is provided. At the most basic level, evidence of improved integrated care is demonstrated by numbers of shared patients and cross-referrals (Taylor et al., 2001). In addition, planning models of team-based care often fails to incorporate the needs and expectations of the community and the capacity of team-based practises to meet these needs (Strasser et al., 2001; Taylor et al., 2001).

There is a paucity of Australian evidence on the actual impact of primary health care teams on patient care outcomes. Limited evidence from the US suggests that primary health care teams improve primary health care practice and physicians and non-physician professionals working together can also demonstrate improved patient outcomes (Grumbach & Bodenheimer, 2004).

There is also a lack of empirical evidence relating to the function of health professionals in teams or groups, the contexts within which teams and groups are formed and evidence relating to directional referrals, duplication of services, understanding of roles by the communities they serve, a lack of understanding of professional roles between health care professionals and the effect of traditional professional hierarchies on team-based approaches (Farmer et al., 2003; Farmer, West, Whyte, & MacLean, 2005; Saltman et al., 2007).

Evidence suggests that professional hierarchies can impact on effective role coordination resulting in service duplication, dissatisfaction amongst patients who remain essentially unclear about the roles of their health care professionals, and increased costs of care (Cooper & Stoflet, 2004; Grumbach & Bodenheimer, 2004). Presentations from an international workforce conference with representation from a range of health care professionals in ‘new categories’, including NPs and PAs suggest that this continues to be an

issue in areas where these new health care roles are introduced (Brooks & Ellis, 2006).

3.5.3 Training and development

In Australia, a key barrier to the development of new models of service is the identification of skills-sets needed for primary health care. This issue persists because there is no agreed method for identifying or accessing the core generic skills specific to rural practice (Saltman, 2005). Indeed, Duckett proposes the need to determine the range of skills required, rather than continuing to focus on the range of professionals required (Duckett, 2005). Policy attention in Australia and the UK is moving towards strategies for workforce delegation. This is being done through such means as the proposed development of 'skills escalators', by which existing health professionals acquire skills that enable them to take on additional tasks (Sibbald et al., 2004). However, as discussed previously, a standardised and precise meaning of the concept of skills-sets is needed in order to facilitate broader discussion on the issue.

3.5.4 Stakeholder links and health systems

Poor links between existing stakeholders in primary health care delivery (namely government, training institutions, professional colleges and organizations, service providers and communities) are also key barriers to developing innovative services. Barriers include a lack of shared priorities in relation to addressing workforce shortages and historical evidence suggesting that, even given potential opportunities for linkages, there may be a fundamental lack of willingness to collaborate (Douglas et al., 2009; Duckett, 2005; Wells, 2005).

A significant barrier is that of funding within the health system. Medicare is criticised as being demand-driven rather than strategic and is thus a barrier to the introduction of innovative workforce models (Duckett, 2005; Wells, 2005). These debates have been echoed by Douglas et al (2009) where the authors link the need for defined skills-sets for rural primary health care practice with the need for a fundamental change in the education and training of health care

professionals by academic institutions. In turn, the authors claim that these programs and the institutions which run them should be underpinned by a health system that acknowledges highly innovative health care practices (Douglas et al., 2009).

3.6 What is needed?

There are two considerations in relation to the promotion of sustainable rural and remote primary health care models which arise from the literature. These are (i) the support and strengthening of existing health care services and (ii) the redesign of existing services and the development of new primary health care delivery models. In this section, these two options are discussed in relation to the Australian rural primary health care context.

3.6.1 Strengthening of current PHC models

Wells (2005) advocated revisiting and evaluating the strategies currently used to address workforce shortages (Wells, 2005). Attempts to increase workforce recruitment and retention in rural Australia have been underway for over ten years. However, in this period only small increases in workforce numbers have been achieved. These increases are currently just keeping pace with the ageing and retiring primary care workforce although the gap between new graduates entering and those retiring from the rural workforce is set to increase (Health Workforce Queensland, 2006). Specific concerns about the decline in rural generalists have also been noted (Pashen & Crossland, 2006). This has resulted in the implementation of a program of procedural training for rural general practice by the Australian College of Rural and Remote Medicine (ACRRM) in an attempt to maintain some procedural practice in rural communities, and more recently the Rural Generalists Training Program (collaboration between Queensland Health, RACGP and ACRRM). If forecast changes such as the ageing rural population and the continued shortages of rural primary care providers occur, there will be an increasing reliance on overseas trained medical graduates. Additionally, this will occur in an international market where Australia will be in competition with the UK, US, Canada and South Africa for these graduates, and there is increasing concern about the morality

and ethics of participating in (and encouraging) this brain drain from developing countries.

3.6.2 Redesign of existing models and development of new models

Investigation is underway into the expansion of the role of Queensland rural paramedics to deliver primary health care (Raven et al., 2006). This expanded role sees paramedics working in conjunction with GP and nursing support to provide primary health care services specifically the monitoring of chronic diseases. In addition, a curriculum has been developed for CBTAs to support follow-up care for allied health patients in rural areas (De La Rue, 2009). In rural areas, local community members may be trained as therapist assistants, to support the delivery of allied health services, under the direction of visiting AHPs.

Farmer et al (2003) argue that such changes reflect an attempt to increase or preserve elements of rural 'social capital' through the retention of existing health professionals by role expansion or community participation in care delivery (Farmer et al., 2003). These models also reflect a broad move toward coordinated care provision with some elements of team-work between health care professionals. Thus, there is need for a sharp shift in community residents' perceptions and understanding of service delivery.

The introduction of new models of care is also proposed as an answer to current concerns in rural primary health care delivery. Indeed, an exploration of the role of health professionals with extended clinical roles is underway in Australia. In Queensland, expanded care paramedic training commenced in 2007 and the first cohort of PAs commenced training in 2009 (Pashen, 2006). These positions are delegated rather than substituted roles. Similarly, tentative discussions of issues such as task transfer and task substitution are most notably underway in a recent edition of the Medical Journal of Australia, but these are largely based within the framework of preserving the dominance of the GP-patient model of care. Even so, there is acknowledgement of the role of

changing community expectations in forcing the exploration of new models (Kidd et al., 2006; Van der Weyden, 2006; Yong, 2006).

Humphris, quoted by Brooks and Ellis (2006), has argued that international models of care increasingly reflect the importance of team-work, collaboration and real role change. However, this can only be achieved effectively through close relationships between academic institutions, local policymakers, service deliverers and patients. In addition, Humphris reflects that we have not effectively asked communities what they want from a health service. She argues that these wants may be far simpler than planners aim to provide (Brooks & Ellis, 2006).

Community perceptions and expectations inform, to some degree, each of the service enablers described previously. However, there are significant gaps in understanding the potential precursors to community perceptions. One of the key gaps in relation to model development is an understanding of community perceptions of existing models and how these perceptions might influence community understanding and use of new models of care.

3.7 Conclusion

A better understanding of patient perceptions of existing roles and how these are used would enable more effective public education and service promotion strategies. This would also allow better use of resources presently available and a more effective identification of gaps and shortfalls in service delivery. Misperceptions about the current roles and capabilities of health professionals may actually lead to communities not using, under-using, or inappropriately using particular health service professionals. Misperceptions about the capabilities of local health care professionals may also lead to rural people making expensive and fruitless trips to more distant services.

Understanding community perceptions of existing health services and specifically patient perceptions of the roles of specific PHC professionals may assist in the development and effective implementation of new primary health

care services. The following chapter outlines the theoretical and methodological approach for exploring patient perceptions of their PHC professionals within the context of rural and remote settings.

Chapter 4

Research aims, design and methodology

4.1 Introduction

Previous research has focused on identifying factors that influence patient expectations of PHC professionals. These include: individual exposure to the service; and the age, gender and disease status of the community member. In addition, there is limited evidence that suggests the service type (such as a conventional general practice as opposed to MPHS) may also affect patient expectations of PHC professionals. It is, however, not known how, or if, these factors contribute to patient perceptions of the roles and functions of PHC professionals.

The key aim of this study is to explore individual patient perceptions of existing health care professionals (GPs, PNs, AHPs and ambulance paramedics) in rural and remote communities. Investigations focus on the perceptions of roles and skills as held by both patients and principle PHC professionals at each service. These perceptions were then placed within the detailed context of each health service model. The objectives were to identify and investigate:

(i) individual patient perceptions of existing health care professionals; and the perceptions of the PHC professionals themselves, in four rural communities;

(ii) broad differences and similarities between rural patients' perceptions of PHC professionals and the key factors that contribute to these differences (with particular focus on the role of patient experience and the context of service delivery);

(iii) patient perceptions of the broad archetypal views of the health care professions; and

(iv) how these perceptions may impact on the development and introduction of innovative approaches to primary health care delivery.

The study takes a qualitative approach using a collective case study methodology (Huberman & Miles, 2002; Silverman, 2005) and narrative approaches to identify the perceptions that individual patients have of their local health care professionals. Following this, key elements of Organisational Change Theory (OCT) (Greenwood & Hinings, 1993; Phillips, Hall, & al, 2007) have been adapted in order to explore broad archetypes (in the form of iconic representations or stereotypes) of the health care professions of general practice, nursing, physiotherapists, occupational therapists, speech therapists and ambulance paramedics. These two approaches allow patient perceptions (which result from lived experiences) to be differentiated from, and compared with, pre-existing archetypal views. Finally, these perceptions are explored in relation to their impact of sustainable and innovative approaches to rural health care delivery. The following section defines the theoretical framework and methodological approaches taken in this study.

4.2 Theoretical and methodological frameworks

Silverman 2005 outlines a hierarchical approach to understanding qualitative research, where the chosen broad model provides the overarching *'framework for viewing reality'* (Silverman, 2005 p.98). Following this, Silverman goes on to define concepts as the *'clearly specified ideas deriving from a particular model'*. In this hierarchy, theory is described as *'a set of concepts used to define or explain some phenomena'* (Silverman, 2005 p.98). In relation to a broad model, Silverman defines *'interactionism'*, as that which *'focuses on how* [individuals] *attach symbolic meaning to interpersonal relationships'* (Silverman, 2005 p.98).

Interactionism assumes that *'behaviour and perceptions derive from processes of interaction with other people'* (Silverman, 2005 p.378). The interactionism model has been used in the fields of consumer research, discourse analysis and

sociology. In relation to 'consumer' interactions, the interactionism model provides a framework to view consumerism in a wide variety of settings, including in relation to the purchase, use and meaning of products in the market place, and impact on social roles (Solomon, 1983). It has also been used as the framework to explore theoretical concepts related to patient delay in seeking care, specifically for heart attack (Dracup et al., 2003) and models for the evaluation of informatics applications (Kaplan, 2001). The current study uses interactionism as the framework within which relationships between key concepts are explored. These theoretical concepts relate primarily to the impacts of context, namely rurality and the structure of service delivery, on the perceptions patients have of the roles of their local health care professionals.

4.2.1 Theories of social organisation and organisational change

OCT has been used to examine organisational readiness for change in relation to innovations in primary health care; specifically disease prevention and health promotion activities and innovation in workforce design and development (Greenwood & Hinings, 1993; Sibthorpe et al., 2005). In addition, it has been used as a means of identifying and defining the factors that sustain such innovation (Greenhalgh et al., 2004; Sibthorpe et al., 2005). However, defining social organisation is difficult in that social systems are defined by human interactions rather than by actual physical structures. Three forces shape this variability of human interactions into patterns required for social organisation and functioning, namely: (i) environmental pressures (generated by direct requirements of given situations); (ii) shared values; and (iii) expectations and rule enforcement. These three elements form the basis from which the design for this study was conceived. That is, the environment (namely each health service model), along with its history and recent events, provides the context for exploring the unique values and perceptions of patients and PHC professionals of these services.

In OCT, formal patterns of behaviour that are achieved through rule enforcement are thus role behaviours, sanctioned by norms, justified, in turn, by specific values. Interrelated elements of roles, norms and values form the

basis for organisational integration. Following this are the dynamic and changing organisation subsystems; these include maintenance subsystems which work to attract and hold people in their functional roles; adaptive subsystems related to organisational change and managerial subsystems which direct and adjudicate.

In traditional OCT, two levels of analysis are identified; firstly, at the broad institutional level, where the aim is to discover the forms of the organisation that are broadly legitimised in the wider world (through social, government, policy, and dominant groups). The second is that of individual organisations where the aim is to examine the extent to which individual organisations embody their particular sector's archetype (Greenwood & Hinings, 1993). 'Archetype' is here defined through the dictionary definition as being '*the typical example or an original model; the prototype against which others are based'* (Soanes & Stevenson, 2009).

The latter part of OCT has been adapted recently in primary health care as a means of identifying and exploring social constructs of the roles of PHC professionals (namely GPs and PNs) and practice managers in general practice settings. Thus, there appears to be an emerging recognition of OCT as a means of informing change in relation to primary health care workforce structures. However, this is a new application of the theory in this area. In this application of OCT, the exploration of 'archetypes' is concerned with identifying the original model or ideal of the PHC profession roles. These roles are defined as *'constructs of shared meaning that demonstrate understanding about "the way things are" for a social group'* (Phillips et al., 2007 p.144). It has also been used as a framework for exploring the readiness for change of primary health care as a social system, with particular focus on the impact of social relationships on sustainable innovations in primary health care delivery (Sibthorpe et al., 2005).

This study follows OCT methodology to explore patient perceptions of their health care professionals and identify health professional archetypes (the 'ideal

examples') that may be shared by rural and remote patients. Both contemporary and historical information is used to support the emergence of each archetype. This includes investigating the impact that patients' perceptions of their health care professionals by exploring their lived experiences (contemporary). It is followed by discussions of the role and skills that patients associate with the PHC professions in general (contemporary and historical). These views are placed within a defined geographic, community and service profile context.

4.2.2 Case studies

Eisenhardt, in Huberman and Miles (2002) sees the case study approach as a research method focussing on understanding dynamics present within a defined, single setting (Huberman & Miles, 2002). First described as a detailed method by Yin in 1984, case studies have become a widely accepted part of qualitative research methodology. As a methodological approach, Hawtin et al (1998) further define case studies as *'an in-depth examination of one example or instance of a wider phenomenon'* (Hawtin, Hughes, & Percy-Smith, 1994 p.81). Silverman (after Stake 2000) goes on to further define this approach as encompassing three types of method; namely the intrinsic, instrumental and collective case-study. The intrinsic case study is defined as the *'case of interest… in all its peculiarity and ordinariness'*. The instrumental case study is that *'which is examined in order to provide insight into an issue or revise a generalisation'* and the collective case study approach *'examines a number of cases to investigate a general phenomenon'* (Silverman, 2005 p.127).

This latter method is used in the current study to look at both differences and commonalities in patient perceptions of their health care professionals. The aim is to distil common perceptions which may differentiate health care professionals in the eyes of the patients, and investigate those perceptions within the context of the service delivery model.

4.2.3 Rural and remote classification indexes

Classification indexes have been developed in order to define and delineate specific geographic areas. Since the mid-1990s, such classifications have enabled research into factors impacting on the health and welfare of Australians living in specific areas. In addition, they have assisted government departments in policy, planning and funding allocation. This section presents a brief overview of three major Australian geographic classification indexes, namely ARIA (Accessibility and Remoteness Index of Australia); ASGC-RA (Australian Standard Geographical Classifications – Remoteness Areas); and RRMA (Rural, Remote and Metropolitan Area).

The ARIA classification was developed in 1998. In this classification the different ARIA categories are based on index scores allocated on road distance from the closest service centres in four classes. These classes are defined by using the Australian Bureau of Statistics (ABS) census data. The ARIA categories are 'highly accessible', 'accessible', moderately accessible', 'remote' and 'very remote'. The ARIA approach thus means that allocated indexes can be updated as populations change.

The AGSC-RA was released in 2001 and is used by the ABS. It combines ARIA classification indexes and more refined measures of remoteness. The AGSC Remoteness has only five categories; namely 'major cities', 'inner regional', 'outer regional', 'remote' and 'very remote'. Recent policy changes mean that this classification will be used for funding rural retention and incentive payments as part of new government strategies from July, 2010.

The RRMA is a geographic classification used in Australia to group areas with similar characteristics. RRMA is the oldest classification, developed in 1994 by Department of Primary Industries, and then adopted by the Department of Human Services and Health based on data from the 1991 population census and taking into account the 1991 Statistical Local Area (SLA) boundaries (Department of Human Services and Health, 1994). The classification consists

of three zones; namely metropolitan, rural and remote comprising of seven classes, as detailed in Table 1.

Table 1: RRMA classification

Zone	Class	Abbreviation
Metropolitan	Capital cities	RRMA 1
	Other metropolitan cities	RRMA 2
Rural	Large rural centres	RRMA 3
	Small rural centres	RRMA 4
	Other rural areas	RRMA 5
Remote	Remote centres	RRMA 6
	Other remote areas	RRMA 7

The RRMA index of remoteness is based on distance to service centres as well as distance from other people. Previous reviews of the use of the RRMA index (and other classifications) have stated that the validity of the classifications in a given application is greatest when the issue(s) of interest are affected mainly (or solely) by remoteness. It combines a geographic and population density measures to define remoteness.

Use of RRMA Classification for this study

In this study community remoteness was determined using the RRMA classification and this informed the selection of models for inclusion in this study. In this way it provides a standardised descriptive guide to each community area and is thus the classification used in this research.

4.3 Study Design

As described previously, the interactionism model provides the framework for this study design. There are two phases to the project and these are described in detail below. Ethics approval is provided by James Cook University Human Research Ethics Committee (H2716) and the Queensland Health District Ethics Committee (519) (Appendix B). Funding for this study is provided through a James Cook University Primary Health Care Research and Development (PHCRED) program PhD project award. This is a federally funded program which supports primary health care research capacity building.

4.3.1 Phase1: Case studies of four service types

Four rural communities were selected in rural and remote northern Queensland on the basis of:

1. rurality, using Rural and Remote Metropolitan (RRMA) scoring and geographic profile;
2. local service professionals (primary health care services, including a range of models such as traditional general practice, multipurpose centre, advanced nursing post; hospital with MSRPP);
3. community size (including outlying areas); and
4. population and socio-economic profile.

A key feature of the community selection is the primary health care model in each location. The four selected communities were chosen to encompass the main variations of rural and remote primary health care services in north Queensland. They also cover the broad geographical variations of remote inland and rural coastal sites. The service models targeted were two traditional GP models (solo practice and MSRPP practice with resident nurse), a primary health care service (MPHS, with primary health care services contained on one site) and a solo advanced remote area nurse site, with no emergency workers or on site general practitioner. All sites have Queensland Ambulance Service (QAS) representation, although in two different forms; namely a separate ambulance station with full-time resident paramedics and a QAS supplied

ambulance staffed by the local PHC professional with support from the community.

Case studies are then developed for each of the service models. Each involves the following: a review of the primary health care service documentation (including history and evolution of the model; policies and practices); a review of the health care services provided (including primary, secondary and tertiary services; visiting and outreach services and changes to these over time); the interrelationships of the health care professionals associated with each service model; and where possible, the patterns of service use. In addition, population profile information and other specific quantitative data (sourced from Australian Bureau of Statistics (ABS), Queensland Health, local governments and the Australian Institute of Health and Welfare (AIHW) are used to develop population and health profiles of each community. This information includes socio-economic status of the community (based on information from the ABS); patterns of disease (ABS, AIHW data) and the range of existing health services.

Observational techniques are also used to further document the relationships and interactions between the PHC staff within each model. Information is collected using a written diary which the interviewer completes every day at each practice site. Information collected during observation includes the layout and operation of the practice; details of the practice organisation; the range of roles of administrative and other support staff; interactions between health care professionals, support staff and other visiting services; interactions between health professionals and patients (including the way the health professionals introduce themselves and other visiting service staff). Observation is not a core component of the data collection but is conducted casually as a means of assisting the interviewer to gain a clearer and more detailed understanding of the organisation, roles and responsibilities undertaken by the health care professionals in day-to-day practice. It also provides a secondary source of information to assist the in-depth interviews. Case study information provides

the contextual setting for the perceptions of skills and roles as described by patient and health care professionals during the in-depth interviews.

4.3.2 Phase 2: Interviews with primary health care professionals and patients

In-depth semi-structured interviews are conducted with the principle PHC professionals and attending patients, in each of the four services. Introductory letters, and consent forms are provided at the first meeting, explaining the study and recruitment method. Written consent at time of interview is gained from all face-to-face interviewees. PHC professional interviews are conducted on site during practice hours, at a time and place nominated by the interviewee.

With consent from practice staff, patient interviewees are purposefully recruited via the practices at each site. Recruitment continues from clinic during opening hours over 1-2 week period. The interviewer is present at the clinic every day during this time and approaches patients to invite participation while they are in the waiting room or attending to collect medications. Where possible, both male and female attendees are recruited. In addition, representation of a broad range of demographic types is sought; including a range of employment types (young families; local community, agricultural or mine workers; unemployed and retirees) and age groups (18-25; 36-45; 46-65; 66+ years). Confidentiality is assured and, where possible, interviews conducted face-to-face in a private room at the clinic. Alternatively, the patient nominates a time and date to be contacted by telephone. Written consent is also gained from those interviewees recruited through the practices but who wished to have a telephone interview at a later date. In these situations, verbal consent (recorded) is obtained again at the time of interview. Patients are recruited until data saturation occurs.

<u>Interviews: Primary health care professionals</u>

In-depth semi-structured interviews are held with principle PHC professionals and staff members at each site; namely GPs, nurses and, where possible, AHPs. Participants were asked to comment in detail on: their perceptions of staffing

and staff roles; existing links with other local, regional and state health care providers; and the history of the service, including changes to staffing levels and service function and community expectations over time. In addition, they are also asked to describe in detail, their perceptions about the ways in which health care is organised and delivered; and any barriers or enablers to health care delivery (Appendix C).

Interviews: Patients

Fifteen to 20 interviews with patients aged 18 years of age or above are held at each site. These in-depth, semi-structured interviews further explore patient perceptions of their local health care professionals. The semi-structured interview proforma is divided into three broad sections: (i) demographic information; (ii) perceptions of the role and skills of patients' local health care professionals; and (iii) patients' broad archetypal views of the health care professions (Appendix D).

In the first part of the interview demographic information is collected. This includes age, gender, marital status, years living in the rural community and information about any diagnosed chronic illnesses. In addition, it explores patient perceptions of the types of illness or injury that would prompt them to attend the service and beliefs and understanding about existing health care services (including perceived differences between locally available primary and tertiary services).

The second part of the interview aims to explore detailed patient perceptions of the role, skills and functions of their health care professionals in the context of the local health service. Using the adapted OCT approach, the third part of the interview explores patients' perceptions about the characteristics and attributes they associate with the health care professions in general. This includes exploring the representative or iconic ways patients' describe their health care professionals' roles and functions and patients' perceptions of the clinical hierarchy. The final part of the interview explores patients' perceptions of the role of community in defining and supporting their local health care

professionals and in maintaining, improving or changing the local primary health care service type.

Observational field notes are made to document the interaction between patient and health care professional. This allows the identification and exploration of any inconsistencies between the perceptions of the patients and PHC professionals in relation to the observed activities. Additional information collected during observation includes reason for presentation and diagnosis (where available); discussions relating to referrals or other support for clinical treatments. All interviews (patients and PHC professionals) are digitally recorded and transcribed.

4.4 Data Analysis

After transcription, an inductive data analysis supported by the QSR NVivo 7 software package is completed to develop case study profiles for each service type and identify recurrent themes and issues in the narratives (QSR Pty International Ltd, 2006). The comparative, inductive analysis of transcribed interviews identifies key themes in relation to patient perceptions of local health care professionals. Patient and PHC professional perceptions are explored within the detailed context of each of the service models and community profiles. This enables aspects of rurality (such as local environment; socioeconomic profiles and models of health care delivery) to form the framework for the identification of patient perceptions and the emergence of PHC professional archetypes. Figure 2 provides a diagrammatic explanation of the overall analysis, including the three distinct stages, outlined below.

Stage 1: This stage incorporates two approaches to data analysis. The first approach is the generation of detailed case studies of each service type. These case studies are based on documents reviewed and materials collected at each site as well as the community profiles. These case studies provide the context for the second approach to data analysis; namely an initial analysis of patient perceptions of the roles and skills of their local health care professionals. The

initial analysis is undertaken to identify specific commonalities and differences in patient perceptions. Comparisons of emergent themes are then made between the health services in order to identify skills and roles of health care professionals. Themes identified in this first stage provide the basis for a second stage comparative analysis.

Stage 2: In this stage an internal comparative analysis is performed to compare patient perceptions of the skills and roles of their principle PHC professionals with those described by the PHC professionals themselves. This allows the identification of consistent and divergent views of roles and skills expressed by patients and their PHC professionals. More specifically, it allows for the identification of areas where the roles and skills of PHC professionals may not match with the perceptions held by patients.

Stage 3: The third stage of analysis uses the adapted OCT approach to identify and explore patients' perceptions of the characteristics of health care professions. During this stage of analysis the broad attributes and perceptions of clinical hierarchy are explored across all models, despite patients' exposure (or lack of exposure) to these health care professionals within the context of their local primary health service. The results are then compared with the skills, roles and broad characteristics identified in the background literature. They are also compared between the case studies in order to explore any differences in the broad perceptions of the roles and skills of PHC professionals.

Figure 2: Data analysis

The results of the analysis are presented with respect to each of the following three themes: (i) PHC professionals' perceptions of their own skills and roles in each service model and the relationships between each health care professional; (ii) patient perceptions of PHC professional skills and roles (commonalities and differences); and (iii) broad archetypal roles of PHC professions as expressed by patients.

4.4.1 Rigour in qualitative research

There is continuing debate about the application of concepts such as reliability, validity and generalisability, most commonly used in relation to quantitative methods, to qualitative research. This, in turn, has led to debates about the rigour and broader application of research results stemming from qualitative inquiry. These terms have been redefined and clarified in relation to qualitative

inquiry. This section discusses the terms and definitions of these concepts as applied in this study. The strategies used to enhance the rigor of data collection and their application in this study, are outlined in the study design.

Reliability, validity, trustworthiness and rigour

The concepts of reliability and validity are more usually associated with quantitative research. Kirk and Miller in Golafshani (2003) note that, in quantitative paradigms, 'reliability' is associated with the degree to which a measurement repeated, remains the same, the stability of the measurement over time and the similarity of measurements within a given time period (Golafshani, 2003). 'Validity' in the quantitative paradigm is defined as to what extent the research instrument actually measures that which it was purported to measure (Wainer & Braun, 1998). In relation to qualitative paradigms, however, 'new' definitions of reliability and validity have emerged. Golafshani stated that:

> *'when quantitative researchers speak of research reliability and validity they are usually referring to a research that is credible while the credibility of qualitative research depends on the ability and effort of the researcher. Although reliability and validity are treated separately in quantitative studies, these terms are not viewed separately in qualitative research. Instead terminology that encompasses both, such as credibility, transferability and trustworthiness is used'* (Golafshani, 2003 p.600).

In this thesis the concepts of reliability and validity are encapsulated in the concept of rigour and trustworthiness. These terms encompass the detail of the methods employed to enhance both the credibility of the findings in relation to each health service and also the application (transfer) of these findings to other similar service settings.

Generalisability and transferability

From the mid-1980s to present day, qualitative researchers have continued to redefine what is meant by 'generalisability' in the qualitative paradigm (Falk &

Guenther, 2006; Lincoln & Guba, 1985; Patton, 2002). Although the debate centred on whether or not the concept of generalisability should be used with respect to qualitative research, it has been reconceptualised and accepted as 'transferability'. Perhaps the most long standing definition of transferability is: *'a direct function of the similarity between the two contexts….. defined as the degree of congruence between sending and receiving context'* (Lincoln and Guba in Falk & Guenther, 2006).

Following this definition, the authors argue that transferability is determined by the *'researcher 'who knows (with some confidence) about both the sending (where the research took place) and receiving contexts (where the results are to be applied'* (Falk & Guenther, 2006 p.3). This definition of transferability is used in the context of the application of the findings of this study (patient perceptions of their PHC professionals and the implications of these) to other rural primary health care settings.

4.4.2 Trustworthiness, rigour and transferability

Well documented strategies to enhance trustworthiness and rigour are incorporated in the study design, including elements of Patton's reference to case selection, (Golafshani, 2003; Patton, 2002). These are described below.

Firstly, the study design incorporates four unique service models. The case studies are developed from data-rich descriptions. They thus allow for the exploration of potential commonalities and differences in patient perceptions of their PHC professionals from within detailed contextual environments.

Data are gathered from a variety of sources which include interviews with both patients and PHC professionals (perceptions of skills and roles; perceptions of patterns of service use; perceptions of health care organisation and delivery), background materials which detail the history and operation of each of the health services and detailed observational field notes from the researcher. This allows the triangulation of sources and the review and confirmation of findings. In addition, patient perceptions of roles and skills are confirmed by information

gathered during observation of interactions between them and their health care professionals at the clinic.

Following the interviews, all participants are provided with the opportunity to review their interview transcripts (ten patients and two PHC professionals chose to do so). On completion of four to six interviews, a basic preliminary analysis is undertaken at each service site and broad emergent themes are noted. Those participants interviewed in the latter part of the data collection period and those who revisit the service during the data collection period, are then provided with the opportunity to comment on the emergent themes in relation to their own health service case study. Two emerging negative cases are followed up by the researcher again in order to investigate specific contextual information, experiences and beliefs in greater detail in relation to their perceptions of health care professionals.

Two approaches to data analysis are employed. The first approach is the generation of discrete case study analyses, using the case study function available in QSR NVivo 7 (QSR Pty International Ltd, 2006). In this approach, the researcher reviews interview findings within the context of each case study service and community profile. This includes the comparison of PHC professional and patient interviews. The second approach is the review of emergent themes across all the interview transcripts, regardless of the case study service models. A critical review is undertaken of the findings in relation to each case study. This includes reviewing such aspects as the history and current organisation of health care delivery, as well as the presence or absence of other health care services (primary and tertiary). Once again, specific analysis is performed on divergent cases, in order to explore the unique aspects of their perceptions of their health care professionals.

Transferability of research findings is addressed in three key ways. Firstly, the findings from this study are discussed and applied in relation to the Queensland context of health care delivery, with reference to the specific innovations in workforce design proposed for rural and regional north Queensland. However,

two service models included in this study (MPHS and solo GP without a hospital) are also service models relevant to the national context of rural and remote health care delivery. These services contain features that are common across national rural settings, including aspects of the staffing profile, as well as the organisation and delivery of care. Finally, the researcher has twelve years experience of working within rural and remote north Queensland, with knowledge of the service delivery and health care policy context in which this takes place. The following chapter provides detailed contextual information for each of the case study service models. It thus describes unique scene within which interviews about perceived roles and skills with PHC professionals and patients were conducted. In addition, it provides an overview of the specific issues and events occurring in the health care and community settings during the study periods.

Reflexivity

The researcher has twelve years experience working in rural and remote Queensland and resides in both coastal regional and remote rural settings during data collection and analysis phases of the study. In addition the researcher has been involved in extensive studies relating to rural and remote service delivery and is familiar with the models of care in rural Queensland settings.

Chapter 5
Case study descriptions

5.1 Introduction

This chapter outlines the case study descriptions for each service type. Each case study details the community population, local industry, the history of the health service, current staffing and facilities and visiting services. Finally, each case study highlights emergent health service issues, including the local impact of changes to state or regional health management structures, funding or proposed changes to roles and functions of service support staff and finally local service delivery issues. It should be noted that changes to local services, such as a sudden loss of a health care professional or changes in visiting or outreach service provision, may occur very quickly, particularly in remote northwest Queensland. The information presented here was correct at the time of data gathering (March 2007 - September 2008).

5.1.2 North Queensland: The study area

Northern Queensland forms the broad study area within which each of the following case study services was located. North Queensland covers approximately 40% of the state of Queensland and the area is divided into state government areas of north; far north, north west and central west Queensland. The major population centres are the coastal sites of Townsville-Thuringowa with a population of approximately 170,000; Cairns with a population of 160,000; Mackay with 73,000 and the inland remotely located mining city of Mount Isa with approximately 20,000 (Australian Bureau of Statistics, 2006a).

The north Queensland region is experiencing considerable population growth, with cities such as Townsville-Thuringowa growing at approximately 4.2% per year (Australian Bureau of Statistics, 2006a). Inland sites such as Mount Isa have maintained a stable population for the past twelve years, however some anecdotal evidence suggests that predicted growth in the local mining industry

may result in a rapid population growth in the city between 2010 and 2012. The four models selected for this study comprise two Queensland Health services and two private practices. As described previously, the communities fall within Rural Remote and Metropolitan Area (RRMA) classifications 5 (rural) to 7 (remote). Qualitative and quantitative data are reported.

5.1.3 Data sources

In order to provide a contextual overview quantitative and qualitative data relating to population profile and other community features have been collected. Quantitative data are sourced from the Australian Bureau of Statistics (ABS) community profile series website. Additional quantitative data are drawn from Shire Council websites and meeting minutes (where publically available). Qualitative data are sourced from service records such as documents outlining organisational history and changes to health care delivery over time; meeting minutes and researcher observation. In two instances data from informal interviews with long-term administrative and management staff are included. These interviews provide further insight into historical changes in the service models, namely the solo GP without a hospital model and the solo GP with a hospital model. Informal discussions with health professionals are included where relevant, particularly to provide information on organisational aspects of the service and the role and function of the staff. The following section outlines each of the case study services used in this study.

5.2 Case study 1: The 'No Different to a GP' service Rural Isolated Practice Endorsed Registered Nurse (RIPERN)

This inland shire covers approximately 62,000 square kilometres, bordering a desert region. The township (RRMA 7) has a local population of approximately 200 people (resident in the community itself) comprising both retirees and younger families (Australian Bureau of Statistics, 2006b). The town also supports a surrounding population of large cattle and sheep stations, many of which continue to be severely affected by drought. The community has a

strong seasonal tourism focus with a number of local events and local tourist activities which can significantly increase the local town population during the dry season.

5.2.1 Health service history

The original community health service was established in the early 1900s as a small hospital, staffed by a local GP. A maternity ward was added in 1920 with most obstetrics performed locally. The RFDS made its first visit to the community in 1927 as part of ongoing health support. Due to a combination of both policy decisions and difficulty in recruiting a full-time GP, the original hospital was replaced with a community primary health care clinic in the 1970s. Under this model, services are delivered primarily by a RIPERN.

5.2.2 Local staffing

The RIPERN (known locally as a ‘bush nurse’) provides both emergency and primary health care services, with support from visiting health care professionals including the RFDS. The RIPERN is the sole health care professional in the community; responsible for running the primary health care clinic and all emergency and after hours calls. The service position is currently shared by two experienced RIPERNs; one as permanent staff and the other as an occasional reliever. This has ensured continuity of health care professionals over the past 15 years and also close coordination between RIPERN professionals.

The RIPERN is supported by one administrative officer (part-time) and an Operational Services Officer (OSO) position (full-time). The official role of the OSO is in the maintenance and cleaning of the facility with flexibility to provide further support to the RIPERN position. In the case of the incumbent OSO, it includes driving the ambulance during emergencies and providing security for the RIPERN during after hours calls.

5.2.3 Local services and facilities

The clinic facility has a small waiting room, large treatment room with a trauma area, small pharmacy, separate X-ray and rooms for allied health service delivery. There are no inpatient facilities at the clinic. In addition there are offices for administration and also a staff room. Accommodation, available for visiting services, is located adjacent to the clinic. There are no other local health facilities in the community.

The clinic has a fully equipped Queensland Ambulance Service (QAS) emergency response vehicle, staffed by the RIPERN and assisted by the OSO as driver during emergency calls. Additional nursing and paramedic staff are stationed in the community during major community events.

5.2.4 Other supporting health services

There are a number of visiting services co-located at the clinic, most notably RFDS coordinated services such as a weekly RFDS clinic, with occasional paediatric clinics and a child health nurse. Additional annual services included a visiting optometrist and ophthalmologist (operating independently). An independent organisation provides outreach allied health services, these include visiting physiotherapy and occupational therapy (fortnightly), psychology, speech pathology and a nutritionist. All patient appointments and follow-up are handled directly through this organisation and while the AHPs used the clinic facilities to treat patients, they appear to work independently from the RIPERN with little interaction between local and visiting health professionals. Additional visiting services include a cardiologist delivering clinical care to the local Indigenous community.

5.2.5 Issues

There were a number of issues raised by the RIPERN and other staff during the data gathering period. Firstly, changes to OSO positions have been discussed by state health. These changes included making OSO positions full-time cleaning and maintenance roles, rather than allowing the current flexibility of providing on-call security and support. At the time this raised many stressful

scenarios for the RIPERN who felt her ability to provide effective on-call work may be compromised by a lack of security support. However, at the conclusion of the data gathering period, Queensland Health had acknowledged the need to support the RIPERN roles, particularly in relation to security for after hours calls. It was thought that this decision may have been partly influenced by an incident in the Torres Strait where a solo nurse without security support was assaulted. OSO positions are presently able to claim up to ten days consecutive on-call work making them available to support the RIPERN positions after hours.

In addition to the role of the OSO as security support, state health also raised concerns about the fact that the QAS receive funding to train local community volunteers as ambulance drivers and that this should not be part of the OSO role. Informal discussions with staff and other community members indicated that there were difficulties in finding enough community members available in town to share on-call responsibilities. In relation to emergencies, the community are required to call triple zero (taken by communications in a major metropolitan centre) who then contact the RIPERN with details. The RIPERN (with OSO as driver) then deal with the situation. The RFDS provided evacuation support if necessary. All fatalities are transported back to the clinic and stored for retrieval by the RFDS.

Due to the fact that the RIPERN must cover all on-call and emergencies, she maintains a strong stance on what will and will not be seen at the clinic after hours. Over time, she has sought to ‘educate’ the community about what is an appropriate after hours call out. Observation and informal discussions with community members suggest that they continue to be mindful of using the service after hours. During data collection the RIPERN spoke about her perceptions of her workload, particularly in relation to her day-to-day responsibilities and need for time out. Following this, she spoke about the difficulties associated with continually having to find her own locum relief.

At the time of data collection, a number of palliative care patients also required clinical support in the community. Staff felt that this was an unusually large number for a community of this size and these patients were difficult to manage locally; both in relation to their clinical needs and also in terms of the emotional stress placed on the health care professionals involved in their care. While a palliative care team from the nearest major centre had offered to provide one additional palliative care nurse, finding accommodation for them in the community was an issue and also raised concerns about the ongoing support a single nurse would require.

Anecdotal evidence suggests that in comparison to other non-GP service models, many patients do *not* reminisce about having a GP in the area; as far back as the vast majority can remember, a RIPERN professional has looked after the health of the community. However, shortly after the completion of data collection, local staffing changed completely with the resident RIPERN having to withdraw due to personal reasons. For several weeks the community was supported by the fly-in fly-out RFDS which provided primary health care clinics once per week on site and emergency evacuation when required.

5.3 Case study 2: 'The Hospital Doctor' service

Solo Medical Superintendent with Right of Private Practice with local hospital

This model serves an inland shire of approximately 55,000 square kilometres and a population of 1,600 people, with nearly 1000 residents in the shire town (Australian Bureau of Statistics, 2006b). It is classified as RRMA 6. The community itself was established in the mid-1800s as a major centre to support pastoral holdings. The main industries revolve around sheep and cattle farming with a growing transient (fly-in, fly-out) mining population. As with other communities in this region, the town has a strong tourist focus, particularly during the dry season.

5.3.1 Health service history

Historical information from the clinic suggests that there has been a resident GP working in a conventional general practice service in this community almost continuously, since the early 1970s. However, clinic documents indicate that GPs have been resident in the community since the late 1800s, with very few gaps. Each practitioner has remained in the community for an average of six years, providing continuity for the local residents. Anecdotal evidence suggests that, as with the RIPERN service, the majority of elderly community residents do not recall a time without a local GP delivering health care. In addition to the general practice, a federally funded local MPHS was established in 2003. The MPHS is now situated on the site of the old hospital clinic and is separate to the general practice clinic. The focus of this case study is the general practice clinic.

5.3.2 Local staffing

The resident GP was responsible for both the clinic and the MPHS and was the sole medical practitioner. As a Medical Superintendent with Right of Private Practice (MSRPP) the GP held clinical responsibilities across both the general practice and the MPHS. The general practice clinic was staffed by one enrolled PN and two casual receptionist staff. The PN also provided support to the MPHS while one of the reception staff was a volunteer ambulance driver when necessary.

5.3.3 Local Services and facilities

The general practice clinic has consultation and treatment rooms, enabling minor procedural work to be done in the general practice (such as excisions and minor suturing). The MPHS is staffed by six nurses including a local Director of Nursing (DON) who is well known in the area. The majority of the other nursing staff are agency nurses resulting in a high turnover of nursing staff at the MPHS. The MPHS contains facilities for emergency and trauma care, plastering and X-rays. In addition, there is the provision for in-patients. The MPHS also hosts locally based AHPs, including dietician and a podiatrist. A dentist has also become recently available in the MPHS. A separate QAS

station in town is staffed by two ambulance paramedics and provides emergency services in the township and surrounding area. There is a community pharmacy service located in the main street of the town.

5.3.4 Other health support services

There are a number of other local community-based health services located separately from both the general practice and MPHS. These services include community health (with home and community services, mental health and youth health) and a small aged care facility supported by aged care services. Home and Community Care (HACC), home nursing, aged care activity groups and Meals on Wheels also have a local role in supporting the township. Additional services based in the township and providing outreach care to the surrounding area include the Rural Family Support program and the Rural Youth Workers program. There are some visiting AHPs including a speech therapist. Recently a visiting physiotherapist service ended and, at the time of writing, both physiotherapist and occupational therapists are only available in a neighbouring town, approximately 160km away.

The community itself has a number of key groups which actively participate in the local health services and health related activities. A Community Health Action Team meets regularly and provides local input into the MPHS. This community team is a requirement for the function of all MPH services. The team has broad representation from local health professionals as well as members from the wider community, drawn particularly from other active community interest groups such as the aged care group. The local aged care group is also active in both health service delivery and aged care support for the local community. Additional groups include child welfare and mental health support groups.

5.3.5 Issues

There are a number of difficult issues and recent events impacting on health services and local health professionals at the time of data collection. Most notably these relate to the demands on the local health care practitioner,

perceived relationships and responsibilities between the local health care professionals and a recent adverse event in the community. In addition, anecdotal evidence suggests that previous agency nurses at the local hospital placed extra on-call pressure on the practitioner due to inexperience. It later emerged that there had been a death at the hospital which had also impacted on the community and the local health care professionals.

The MSRPP was away at the time of data collection and did not return. During this time, a series of locums covered the general practice clinic. Informal discussions with reception staff as well as observation during general practice opening hours and information about patient attendances suggest that patients were reluctant to attend the clinic whilst the resident GP was away. In particular, patients felt that because the locum was not as familiar with their clinical history or their everyday lives, that consultations with the locums were not as effective. Both PNs and the reception staff suggested that the practice had been quieter than usual due to the presence of the locum.

5.4 Case study 3: The 'He's It' service

Solo general practitioner without a local hospital

This coastal community (RRMA 5) was established by European settlers in the mid 1860s. The shire covers a coastal and inland area of approximately 2,900 square kilometres. The area is dependent on agriculture, particularly cane and banana farming. In addition it has a strong tourism profile. Other local industries include aquaculture, beef farming, timber and some fruit and vegetable crops.

Approximately 11,000 people live in the shire; over 1,000 of whom reside in the local town (Australian Bureau of Statistics, 2006b), although the local community population has fallen since the last census. The shire itself had a considerably different age profile to other regional coastal areas, with almost half the current community population aged 55 years and over and significantly

lower numbers in the 15-45 year age groups in comparison to state averages (Australian Bureau of Statistics, 2006b).

5.4.1 Health service history

This community has supported a resident long term GP for many years, with a practitioner setting up the first private practice in the early 1970s. He was followed by another GP who lived and worked within the community for five years and then a female GP (resident for three years). After this, the community was without any resident health services for approximately five years. The area was classified through the then Queensland Rural Medical Support Agency as an area of need. An international medical graduate moved into the area and took up practice in 1998. The GP remains there to the present day. This model is a solo general practice without the support of a local hospital, the nearest being approximately 60km away.

5.4.2 Local staff

The general practice is staffed by two registered nurses and an Indigenous Health Worker[2]. Administrative staff include a full-time practice manager and receptionist. The GP operates as a private practitioner based in a rented Queensland Health owned facility.

A highly experienced PN works closely with the GP to support all elements of this practice (including some minor procedural work and assistance with on call). All patients see the PN before the GP. The PN performs all observations and takes detailed patient histories. In addition the PN takes a role in the development of patient management plans, under the direction of the GP. The PN also works closely with the practice manager to coordinate the chronic care management and coordination of visiting services.

5.4.3 Local services and facilities

The practice is situated in a recently built Queensland Health building with several treatment rooms, a conference room and a staff room. Treatment rooms

[2] The term 'Indigenous' is used here to represent Aboriginal and Torres Strait Islander peoples.

are set up for basic consultations, the care of emergency and trauma patients and also minor procedures (including excisions and basic suturing). In addition, one treatment room is set up to provide dental services should these become available. At the time of data collection, there is no X-ray facility within the clinic and patients requiring imaging are referred to a local hospital approximately 60kms away.

5.4.4 Other supporting health services

The practice coordinates a broad range of visiting services including a diabetes educator, podiatrist, visiting psychologist and optometrist. Physiotherapists, occupational therapists and a dentist are available in the neighbouring town. A monthly chronic disease review day is coordinated by, and conducted in, the clinic. This is an entire day devoted to review and team management of patients with chronic disease. Services include a visiting dietician, podiatrist and diabetes educator. Patients rotate through each health care professional and a final review is then conducted by the GP. Additional services include a biannual visiting breast screen service.

There is a separate QAS station adjacent to the practice, with one resident paramedic. Emergencies and those patients requiring minor surgery are usually referred to the nearest community hospital. There is also a local high dependency residential aged care home staffed by enrolled and registered nurses and also an adjacent independent living facility for elderly community members. These centres are overseen by the local GP who provides weekly clinics for the residents on site.

5.4.5 Issues

Issues raised by the GP and staff include the continuing demands (particularly on call) of this solo general practice and the lack of support available for the resident health care practitioner. As with the RIPERN service, the PHC professionals carry a high workload, providing acute, emergency and primary health care maintenance services in one central location.

5.5 Case study 4: The 'Does Everything' model Multipurpose Health Service

This historic community (RRMA 5), approximately 15kms from the coast, is located in large shire encompassing approximately 115,000 square kilometres and approximately 80km from a major metropolitan centre. There are approximately 4,600 people resident in the area, with over 1,700 in the local township (Australian Bureau of Statistics, 2006b). As with the inland centres, the surrounding area is made up predominantly of large pastoral holdings, significant tourist industry in the township and also local mining, fishing and horticulture, particularly cane farming.

The community itself appears to be growing fast due to the cheaper land and housing in comparison to other local coastal sites. Many former cane farms have been sold and converted to subdivisions to support this growing population which includes both young families (supported by farming, local development projects and the hospitality industry) and also retirees, taking advantage of cheaper land and housing, proximity to a major centre and access to local primary and secondary health services. The area is also attractive to tourists, with large numbers using camping grounds located in the township, particularly during the dry season.

5.5.1 Health service history

Historical evidence suggests that there has been a health service in this community since the early days of the settlement with access to local GPs, either in the community itself, or 20kms to the south in another community centre. Previously, local general practices were supported by a small rural hospital, providing some emergency and inpatient care. This service was originally overseen by a long-standing rural GP who provided health care services both in a general practice setting and also within the small community hospital. The MPHS was developed as part of Federal government initiative which began in 1993. At this time 11 MPHS's were established as trial models in selected sites. Following this, the initiative was rolled out nationally,

resulting in the establishment of a further 117 MPHS's in subsequent years (Department of Health and Ageing, 2009). The development of the MPHS (and subject of this case study) placed the focus back on local general practices to provide day-to-day patient care.

The range of available services coordinated by the MPHS continues to expand to meet the demands of the growing community and tourist population. Indeed the MPHS co-ordinates everything from emergency and trauma care to community health, rehabilitation and home-based care. While there are several solo and group general practice services in the community, this study focuses on the MPHS model as a service providing both acute care and primary health care based services.

5.5.2 Local staff

The MPHS is overseen by a full-time DON and medical care is provided by two Medical Officers (MOs) who are experienced rural generalists. MPHS staff include registered nurses, enrolled nurses and a part-time physiotherapist. In addition Indigenous Health Workers support home assessments and the Alcohol, Tobacco and Other Drugs (ATODs) unit. There is some administrative and reception support. A key aspect of the MPHS management structure is the Community Advisory Network (CAN). As with other MPHS models, this network is made up of local residents who provide advice to the management committee on local hospital services and health care delivery.

5.5.3 Local services and facilities

The MPHS is a 16 bed acute care facility which includes an accident and emergency department, an eight bed aged care facility and a community health centre. The services delivered through this model are based on an integrated health care framework, with nursing, allied health, community health and medical services housed within the same centre. The centre supports a broad range of allied health and community services. Both child and youth based services are coordinated through the MPHS, namely: antenatal clinic; positive parenting program; school screening and school-based health nurse. Clinics

relating to chronic disease management and support include the chronic disease program support group, diabetes education and a high risk foot clinic and the provision of diabetes supplies. Finally, the service has a role in coordinating community based health promotion and education.

The community is supported by thirteen GPs (working both full and part-time) in the immediate area. These services comprised both private and bulk-billing clinics within a range of 20kms of the township. There is also a QAS station with five locally based emergency paramedics.

5.5.4 Other supporting health services

A comprehensive range of services are coordinated through the MPHS. Visiting specialist services include a paediatrician, gynaecologist, general physician and psychology services; including clinics for child and adolescent mental health. There is also a visiting dentist provided through community health. Neither obstetrics nor surgery is now provided through the MPHS. Due to staff changes, a lack of facilities and proximity to a major metropolitan centre, these services were withdrawn in 2005. However, some obstetric support is required, particularly during the wet season when there may be difficulties transporting cases outside of the community either by road or air.

The staff noted drawbacks in relation to the MPHS layout, both in the age of the building and small offices spread throughout the building. They also felt their ‘team mates’ were spread through the building and felt this sometimes impacted on the functionality of each unit. Paradoxically, this was also seen as positive, allowing for staff from different areas (such as community and ward nurses) to interact about patient care, attend ward handovers and clinical meetings.

5.5.5 Issues

Observational evidence suggests that staff in the MPHS have flexible roles within the service, as well as fulfilling a variety of additional roles within the community. Many of the community health based nursing staff have extensive clinical skills; these include midwifery, palliative and aged care support. As such, community nurses are often available to assist in emergency and medical areas as required, or on the ward where necessary.

The MPHS building itself also encourages close team-work between different acute and non-acute care providers. The large main reception and triage area is adjacent to both the emergency department and community health, with treatment rooms (such as medical and physiotherapy) in this immediate vicinity. The public waiting area is for all patient clinics except those seeing community health professionals or the visiting dentist. This shared space provides greater opportunity for interaction and mutual professional support.

Currently the various medical, community health and Home and Community Care (HACC) services report through the MPHS service, with the management committee and DON being fully informed about all activities and issues. However, regional changes have resulted in the community health section now reporting to a centralised office in the nearby metropolitan centre without being required to report through the existing MPHS management structure. Concerns have been voiced at recent staff meetings in relation to the impact such changes might impose on existing informal team-work practices. These included the division of current integrated team-based approaches to health care and perceived potential divisions in coordinated care. Recent management committee meetings have aimed to identify potential strategies to maintain a localised reporting and team-based focus. It is hoped that the main outcome will be that staff from each area in the MPHS feel they are still part of a central integrated organisation rather than seeing themselves as separate entities.

5.6 Conclusion

These services reflect the range and complexity of primary health care delivery in rural and remote Queensland. Table 2 (below) provides a summary of key characteristics that define each case study service model described in detail above. Most solo PHC professionals, specifically the RIPERN and the 'solo GP without a local hospital, have ongoing issues with what they feel are difficulties in gaining timely support, particularly in relation to the high workload they carry. In these models the PHC professionals, with limited support, are responsible for all day-to-day health maintenance, emergencies and after hours care, under one roof. By comparison, the rural GP with a local hospital divided general practice cases and hospital-based cases between the GP clinic and local MPHS. This medical practitioner provided all GP and hospital-based services across two separate sites (general practice and MPHS) with registered nurse, PN and QAS support.

The 'Does Everything' (MPHS case study) coordinates a range of primary health and acute care services. The suggested close association it has with local GP services was designed, in part, to restrict its role as a provider of primary health maintenance care; the medical practitioners delivered only MPHS based services. The MPHS houses a range of acute, emergency and community based primary health care services, including allied health services, under its roof.

These case studies provide descriptions of the community and service delivery models in each site. In addition they outline the broad characteristics of health care delivery. This information provides the context in which the patient and PHC professional interviews are conducted. The following chapter outlines the perceptions that medical and nursing staff have of their key skills and roles (and their perceptions of the skills and roles of their local colleagues) within the context of their community settings and the health services described here.

Table 2: Summary profiles of the case study health services

Case study 1 ***'No different to a GP'***	**Case study 2** ***'The Hospital Doctor'***
RRMA 7 **Solo Nurse (RIPERN)** No local paramedic Visiting allied health RFDS support	**RRMA 6** **Solo GP (MSRPP)** Practice Nurse Local paramedics Local allied health Local Hospital
Case study 3 ***'He's It'***	**Case Study 4** ***'Does everything'***
RRMA 5 **Solo GP** Practice Nurse Local paramedics Visiting allied health **No** local hospital (nearest 60km)	**RRMA 5** **MO** Multipurpose Health Service Highly flexible staff delivering range of services Local GP practices in town

Chapter 6

PHC professionals' perceptions of their roles and skills

6.1 Introduction

This chapter outlines the results of the in-depth semi-structured interviews held with GPs and nurses in each of the service types. Interviews with these health care professionals were conducted on site at each service model. This allowed the interviewer to observe the day-to-day interactions and professional role of each of the participants, thereby enabling validation of the perceptions that GPs and nurses had of their own roles. It also provided the interviewer the opportunity to explore inconsistencies between PHC professionals' perceptions and observed activities.

In the following section, unless specified by professional role, the term GP denotes the solo GP, MSRPP and MO professionals. Following this, the term 'nurse' denotes PN, community nurse and RIPERN professionals.

6.2 Demographics

A summary of interviewee demographics can be found in Table 3 on the following page.

Detailed discussions were also undertaken with two administrators. One of these was the manager of a solo general practice in the community with a supporting hospital, and who had no formal clinical training. The second interviewee was the DON of the MPHS. This nurse was interviewed both in her capacity as DON and in her role as a clinical care provider.

Two GPs had entered Australia as international medical graduates but had been in Australia for more than five years. Both these GPs had extensive rural experience in their country of origin as well as in Australia.

Table 3: PHC professional participants and other on-site staff

Service	Interviewed	Years rural	Other on-site staff*
RIPERN	1 RIPERN	24	NIL
	1 Operational Services Officer	11	
	1 Administrative Assistant	5	
Solo GP without a hospital	1 GP	12	1 Registered Nurse
	1 Registered Nurse	11	2 Reception staff
	1 Indigenous Health Worker	~	(part-time)
	1 Practice Manager	38	
Solo GP with a hospital	1 GP (MSRPP)	12	NIL
	1 PN (Enrolled nurse)	26	
	1 Administrative Assistant	45	
MPHS	1 GP (MO)	12	1 GP (MO)
	1 DoN	10	Registered Nurses (ward and community-based health care Indigenous community health staff
	1 Registered Nurse	12	
	1 Registered Nurse	12	
	1 Community-based health nurse	48	
	1 Community based health nurse	15	
Total	**16**		

*NB: 'Other staff' are those working in the case-study service only. It does not include staff in other locally-based health care services.

~ Missing data

All interviewees had extensive health care experience in rural and remote areas, with all being resident for eight years or more in their current community. Indeed the RIPERN professional, a practice manager, a PN and both community health nurses began their rural practice in, or close to, their present areas of practice. Most had moved away to pursue training and careers in other areas and then returned to their 'home' communities. These PHC professionals also had, on average, more than 15 years experience nursing in the community and within the local health service. This enabled many of these interviewees to provide insights into the changes to the health services and the local community health profiles over time.

6.3 Results

This section describes findings from an analysis of the interview transcripts from each service type. Data from clinical and non-clinical administrative staff (such as practice managers) are included in order to provide further perspectives on the roles and functions of health care professionals within the context of service types and day-to-day work. The non-clinical staff were also able, in most instances, to confirm the work patterns described by the health care professionals themselves. In addition, casual observations recorded by the interviewer in field diaries were also included in the analysis. Information included the interactions between PHC professionals and non-clinic staff and the broader roles and functions of each staff members compared with their perceived 'official' roles. This enabled a detailed exploration of the organisational constructs of each service model. Broad topics relating to GP, PN and community nurse perceptions of their own and their colleagues' roles were discussed.

The interview sought to identify and explore interviewees' perceptions of:

1. the service in which they worked;
2. the most common conditions treated within the service;
3. their own skills in the service;

4. their perceptions of their own roles and their perceptions of the roles and functional relationships with other PHC professionals; and
5. changes to these roles and skills over time.

The final part of the interview focussed on key factors that the participants saw influencing their roles, as well as their own and their patients understanding of these roles. Three common themes were identified, namely: continuing centralisation of services and decision-making; professional team-work; and changes in community expectations.

6.3.1 Perceptions of the service models

All PHC professionals described their own roles and skills almost exclusively in terms of their clinical skills. GPs, nurses and administrators had very clear perceptions of their service types and there were two contrasting service perceptions. One was that of a team-based and flexible approach to health care delivery service (MPHS) and the other was notion of the single, essential health care professional as the leader (GP with a hospital and RIPERN services). Interestingly, the solo GP without a hospital service embodied elements of both of these views, that is, a perception of staff with specifically defined roles who are coordinated as a team by the GP.

> *It's a true multipurpose service - we have the togetherness and the diversity… communication-wise the model brings us all together. We're sort of amalgamated… community health gets referrals straight from the ward… (Nurse Manager, MPHS)*

> *It's a multipurpose health service – it's flexibility, everyone just mucks in and it's a team effort… very close knit. (Medical Officer, MPHS)*

> *Definitely a multipurpose health service, everyone is close and we meet informally in the corridors, you can be involved in other aspects of the service, you can talk about referrals from the ward to HACC, but we all get on and do everything. (Community health nurse, MPHS)*

The solo GP model with hospital, and RIPERN services were described as being essentially about leadership of the senior health care professional on site. The RIPERN professional described her model as 'nurse-led' and one that required her to be her own 'team'. The team-work aspect came mostly from being able to rely on the helping hands of non-clinical staff. These support staff were described as 'helpers' and supporters of the RIPERN role.

> *... Yeah, this service - you don't get here* [to the clinic] *and say 'here's my patient, bye', you say 'hang on a minute this patient is mine again'… I will do things here because I can do them, it's not hard for me to do them, because [the RFDS] empower me to do them. We have the tailored training here, in this environment with C-* [administration support] *and R-* [non-clinical operation support officer] *as my helpers and it's great because this is the way it really is… (RIPERN, RIPERN model)*

The solo GP with hospital was described as solely and wholly GP-led. By comparison, the solo GP without a hospital, while describing his service as holistic and team-based, saw the GP as the 'director' of the model.

> *This service, well it's essentially a GP-led model, that's it. It's his job to fix the patients…* [he's] *the leader… and the advisor…(Practice Nurse, solo GP with a local hospital)*

> *It's a GP model, and it's holistic care… it's about the GP as the director of a whole team of carers. (GP, solo GP without hospital)*

The solo GP model without a hospital service was also perceived in similar ways. The PHC professionals and the non-clinical practice manager described their model as one of holistic care and team-work.

I don't think it's traditional GP or nurse led… really it's holistic, it's about team-work and coordination (Practice Nurse, solo GP without hospital)

Yes, yes, well ummm [pause] *I always strive to make sure that the patient gets the best care, from that reception desk right through until they walk back out that door, just support everything. We [pause] we run now 6 diabetes clinics and I mean going that way has been a one stop shop for the patients now… you know that one stop shop is marvellous and you know the traditional thing of just your GP in your practice, I mean I think we expand on that and we bring in the allied health and it works as a team and I think it's a better way to go. (Practice Manager, solo GP without hospital)*

6.3.2 Perceptions of the most common conditions treated within the service

All PHC professionals listed a broad range of conditions; with perhaps the most commonly mentioned being complications arising from chronic diseases such as diabetes and asthma. In addition, all listed the frequency and importance of geriatric care, while falls and factures (in both the young and elderly) were also commonly mentioned. This, in part, reflects the well known diversity of rural and remote practice, however it is also indicative of the ageing population and an increasing focus on elements of chronic disease prevention treatment and management. This theme is closely linked with the perceptions the PHC professionals have of their skills and role, with many seeing prevention and health care promotion or maintenance as key aspects of their role. However, the GP at the MPHS service felt the majority of chronic disease was dealt with effectively by the local private general practices, although nurses felt that some complications from chronic disease still made it to the MPHS.

We see a lot of acute – emergency and surgical, broken bones, factures and that's children right up to the young men – with them it's mostly alcohol. Also chronic renal impairment, some diabetes, cardiac arrests

and chest pain. We have a lot of respiratory – COPD. … and then the tropical diseases. We don't get a lot of chronic disease-related issues here - that seems to be handled well by the GPs in town. (Medical Officer, MPHS)

Oh a lot of chronic disease comes in – diabetes and asthma, a lot of the issues are to do with non-compliance. We also have a lot of heart attacks, falls and fractures. (Nurse Manager, MPHS)

We see a lot of blood pressure; hypertension… chronic disease… ummmm, quite a bit of wound dressings; maybe we have more tropical ulcers here than you do in the city. we do quite a bit of excisions because GP can do those and also because we're so far north, you know, the amount of skin cancers that we cut out is pretty high. We have quite a few elderly here so chronic disease – heart problems or lung problems. Actually we do have a few people with cancer as well. (Practice Nurse, solo GP without hospital)

We get a lot of mental health mostly, geriatrics and some trauma – factures and work injuries… there's also a lot of chronic disease, diabetes – diseases associated with ageing, COPD and then things like weight – obesity. (GP, solo GP without hospital)

Yes, we've had a lot of aged care, we've had diabetes and we've run one cardiovascular clinic .... We have a lot of patients who are still living in their own homes who need a hell of a lot of support… that's aged care. (Practice Manager, solo GP without hospital)

It's mostly general geriatric care, chronic disease is a big one… skin cancers and cancers in general, we do a lot of skin cancer excisions. Then the usual, coughs and colds and some, but not much, antenatal… (Practice Nurse, solo GP with hospital)

Lots of chronic disease, mostly in the acute phase though... health maintenance type things and the usual coughs, colds and sore throats. Then we get injuries – broken bones, fractures – alcohol related mostly, I get broken legs and things, probably a few every 12 months… (RIPERN, RIPERN model)

Results suggested that PHC professionals treated a common range of illnesses and injury across all health service types; with the major differences being perceptions that chronic disease and 'standard' coughs and colds presentations were less common at the MPHS when compared with other service types.

6.3.3 PHC professionals' perceptions of their own skills and roles

When each PHC professional was asked their perception of their own skills and roles, they first listed their extensive range of clinical skills, rather than discussing their organisational roles such as management or care coordination. Nursing staff listed a broad range of skills and roles, no matter what type of service model they worked in, frequently describing themselves as 'generalists'. These skills and roles included everything from suturing, plastering and procedural work, to patient assessment, coordinated care and the provision of health promotion and even administration and reception work.

I'm a generalist, I do everything really – I'm trained in midwifery. (Nurse Manager, MPHS)

Yes, an RN. I did a degree course in nursing and midwifery after that and my degree course was over 4 and half years and it was integrated with psychiatry. But that's not recognised here, my psychiatry and midwifery is.... Normally when there is someone new coming in I normally go in and see the patient before the GP comes over and then it's a bit of a social history about parents, if they had anything like diabetes, cardiovascular disease ... In relation to health promotion, so for instance it gets to something about smoking and we'll talk about smoking; either GP or me. (Practice Nurse, solo GP without hospital)

I have training in midwifery, geriatrics, community and palliative care… I'm really a generalist but I work mostly in home health assessments now. (Community health nurse, MPHS)

I'm a general nurse with advanced practice – I do X-ray and plastering, suture removals… at the clinic I assist with excisions, but I also do supplies – [ensure] *the cold chain and reception. (Practice Nurse, solo GP with local hospital)*

As an advanced nurse, the RIPERN described extensive clinical skills which included everything from pre-hospital trauma and life support, pharmacy management to administration.

I prescribe – using the guidelines and management protocols, manage the pharmacy, X-ray, plastering, cannulation, suturing, pre-hospital trauma and life support… as well as that I do patient assessments, health promotion - that's a big thing, empowering the patients to look after themselves before it impacts on me here… organisation, referrals, patient travel documents and I used to do all administration but I have some part-time admin help now. (RIPERN, RIPERN model)

GPs (solo GP with and without a hospital and the MPHS) all described extensive emergency skills for rural practice. They placed their focus on describing skills similar to those listed by the RIPERN.

I'm a rural generalist... particularly have procedural skills, general medicine, trauma and emergency. (Medical Officer, MPHS)

I have mental health, paediatrics and geriatrics...have surgical, anaesthesia and O&G training but that's not recognised here in Australia… I still do a bit of A&E stuff - we don't have an A&E here so it's basic patient stabilisation. (GP, solo GP without hospital)

The administrators (solo GP without a hospital and the MPHS) described their roles in terms of coordination and 'overseeing'. However, the nurse manager working in the MPHS described what she perceived as the diversity of her role in management and administration whilst also being able to participate in the provision of clinical care as needed.

> *Well, my general role is to oversee the running of the practice, sort of overall. Then, the daily running of the practice is the management side of things and to keep that running …making sure we have staff, the paperwork that needs to be done, all your Medicare stuff, everything like that. I'm lucky here because C- is my accounts manager and she takes care of that… C- and I take turns at doing the late shift because usually they're here until seven, half past seven at night. One of us goes at half past four one day and the other stays back… and so, that makes it a little bit easier. (Practice Manager, solo GP without a hospital)*

> *Well, it's reporting business cases and overall management – that's a lot of what I do… but it's also the diversity, I still get to join in with the clinical, if I'm needed. (Nurse Manager, MPHS)*

6.3.4 Perceptions of the roles and functions of colleagues

All participants were asked their perceptions of the skills and roles of other PHC professionals; namely GPs, nurses, AHPs and paramedics. While nurses in the MPHS and RIPERN models tended to describe their role as much more autonomous, the PNs working in solo GP services saw their primary role as 'assisting' and 'supporting' the GP as 'leader' or 'principal care giver'. In addition, whereas GPs in the solo GP services described the overall role of GPs as being that of leadership and direction, particularly in relation to a team of health care professionals, those in the MPHS service tended to describe themselves more as part of the team, with specific clinical skills that were part of overall health care delivery. In general, the health professionals in the

MPHS appeared less likely to perceive their disciplines in terms of a medical hierarchy.

Nurse perceptions of GP and nursing roles

The PNs in these services perceived more of a hierarchical structure of operation, with organisational and clinical leadership, and responsibility lying with the GP. They described the nurses' role as that of 'support' and 'assistance' to the GP and it was their perceived ability to handle a diversity of clinical work that was part of the successful execution of this nursing role.

> *I see the GP as the principal care giver, the nurse is really the supporter to the GP. We do have more autonomy now, it's good… it means the nurses are able to take on a range of things and have that diversity. I think the key thing is you have to work as a team. (Practice Nurse, solo GP without a hospital)*

> *The GP – his skill and role is to fix the patient – he's a leader, an advisor. The nurse's job is to assist him and be a general all rounder. (Practice Nurse, solo GP with a hospital)*

> *Well the nurses do lots of things - they're flexible… the doctors, well they're about acute care really, rather than anything else. (Nurse, MPHS)*

One nurse working in the MPHS stated that it was potentially the sense of knowing exactly what your specific function was that facilitated true and effective multidisciplinary work.

> *It's team-based, we are each here with a very specific job but it's a team structure so we can work in a multidisciplinary way because we know our jobs. (Nurse, MPHS)*

The practice manager (solo GP without a hospital) felt that the GP's role was in handling any clinical issue, while the PN provided the support and back-up.

> *The GP's role is being able to handle anything. The practice nurse backs him up, can be opportunistic and get things done – really there to support the GP (Practice Manager, solo GP without a hospital)*

The perceived flexibility and diversity of all nursing roles emerged as a key theme, particularly in relation to the MPHS.

> *Nurses, well they have the diversity of roles… it's been an eye-opener here, everyone mucks in and the service and the roles are more fluid. (Community Health Nurse, MPHS)*

The RIPERN spoke about her perceptions of GP roles in relation to her experiences and close ties with the local RFDS. Her perception of their role was that of providing specific support and assistance to her own position.

> *I will do things because they know I will and can do it, because it's not hard for me to do it and because* [RFDS] *doctors empower me to do it, they encourage me and up-skill me, they say there might be a better way to do that … it's brilliant, just brilliant. (RIPERN, RIPERN service)*

<u>GP perceptions of GP and nursing roles</u>

Once again, all the GPs described their perceptions of the role of both GP colleagues and nurses in relation to good team-work. However, while the nurses might see their role as more autonomous in the MPHS and RIPERN service, the GPs generally described the idea of the role of the GP as 'director' of the team.

> *It's a privilege, as a doctor, to be allowed into a patient's life… so I think my profession needs to be more humble – it's also about the sense of*

teamwork. The GP is and should be the director of a team of health carers. (GP, solo GP without a local hospital)

Doctors roles - just to get on and do the clinical work. I'm a mother duck really though, I go around and see how everyone's going… it can be about managing the personalities as much as anything… it is about maintaining that sense of team-work. (Medical Officer, MPHS)

Perceptions of the role of AHPs, including emergency paramedics

All interviewees, apart from the RIPERN, described the role of AHPs, particularly physiotherapy and podiatry as being important and essential to ongoing or coordinated care in the service.

Allied health – they have essential roles, we need more physios, they are able to see all the patients from the acute, those on the ward and in the community. (Medical Officer, MPHS)

However, in the RIPERN service, there appeared little linkage between the RIPERN and the visiting AHPs in terms of either patient referrals or treatment, despite the fact that they shared clinic space. All interviewees described emergency paramedics' primary skills and role in pre-hospital care. Many also described the close professional relationships with their local paramedics. However, the solo GP without a hospital also described the role of a paramedic as being 'part of the health care team' and an 'extra pair of hands', in a multipurpose general practice setting. The RIPERN herself fulfilled the role of paramedic for her community and surrounding area.

We have a close and good relationship – good links with the paramedics, they have those key skills of stabilising the patients and bringing them in, then they'll often stay and be a spare pair of hands in the surgery there (Medical Officer, MPHS)

The paramedics are vital - it's a very important role. When they hand over a patient to you, at that time they are the ones that know that patient best… their role can be actually more than you would usually see… I had a paramedic and he was keen, he wanted to learn to suture, so I taught him… he could help out... some of them do and some of them don't. (GP, solo GP without a hospital)

6.3.5 Changes to these roles and skills over time and contributing factors

The nurses had a wide range of views about changes to the nursing role. While some described themselves as becoming more involved with patients and having greater autonomy, others felt they were losing skills and that patients would no longer truly understand what the role of the nurse was.

Nurses

Well, it's changed over time since I started. I think I have more involvement with patients now, clinically and personally than I ever did – it's very fulfilling. (Practice Nurse, solo GP without a hospital)

I think the practice nurse role has increased for 100 years, well the first 20 years and now it's decreasing…patients don't know the full extent of the nurse role anymore… they think you do something but they don't know anymore… you're dealings with them aren't as long, because they're just in and out and they don't see you in that role. (Practice Nurse, solo a GP with hospital)

In addition, one nurse described how more roles and tasks were being handed to nurses at the expense of nurses focusing on the traditional and holistic patient caring role.

I see lots of things becoming part of the nursing role that maybe weren't there before – clinical things like cannulation, the use of care plans… Nurses are the ones who always had the unique and intimate relationship

with the patient… we established the relationship with the patient because the doctor didn't have time. It's not necessarily good that we're not doing so much of the traditional care anymore – we're actually just becoming clinicians. (Community Health Nurse, MPHS)

The RIPERN felt that there were now more expectations of her role than ever before, particularly from the RFDS. She saw this in relation to her role as the sole health care professional in the community, her knowledge of the patients and thus her ability to provide continuity of care.

Ummm, it has changed over time I think… the expectations of the RFDS have changed and rightly so, it's that they will have more highly skilled nurses in these roles than they had in the past… the expectation is far greater now than it was, especially with things like follow-up… I suppose they know I know the patients, they see me as being the continuity and they know that I will follow through with that patient… (RIPERN, RIPERN service)

GPs

This view was echoed by the solo GP without a hospital, who described Australia as on the verge of further developing the nursing role, but who felt clarification of this role was vital to its growth in supporting GP-led, team-based primary health care.

I think there are 2 stages in Australia… I think the whole Division network[3] *that has developed… emphasised the position of the GP as the family physician and the director of a whole team of carers… the practice nurse role has only been discovered in the past 2 years… I just*

[3] Divisions of General Practice: an initiative of the Federal Department of Health and Aging which began in 1992. Divisions are professionally-led, regionally based and largely government funded voluntary associations of general practitioners that seek to coordinate local primary care services, and improve the quality of care and health outcomes for local communities (Sibthorpe, Glasgow et al 2005).

think we need to make more use of them. The practice nurse, it's important we make clear her function… (GP, solo GP without a hospital)

The general practitioners felt that their own role had changed over time, most specifically towards a sense of team-based management.

Yes, our role has changed and I think it's got a lot to do with politics. I think this model [MPHS] *encourages flexibility… but it is the personalities that matter… you have to want to be part of a team effort… this is more so, I think, for the more rural regional centres, not so much in the cities. (Medical Officer, MPHS)*

We are the directors of a team… it's an opportunity to serve... I think what's needed in our profession is a little more humbleness and a little bit more appreciation and understanding of the huge role played by other people. (GP, solo GP without a hospital)

Finally the PN (solo GP with a hospital) also felt that the role of the GP had changed over time, more so due to the changes in information technology allowing networking between health care professionals.

I think GPs take a much more holistic view now and they've been able to work with a lot more services like mental health. I mean now that they can liaise with technology the way it is, patient's health can be fixed a lot quicker. (Practice Nurse, solo GP with a hospital)

6.3.6 Additional themes

Three common themes could be identified which interviewees saw as contributing to their own perception and that of their patients of their current roles and skills; (i) centralisation of services, (ii) team-work and (iii) community expectations. The themes of the centralisation of services and team-work were linked in the interviews. PHC professionals in the MPHS and the solo GP with a hospital described issues relating to the centralisation of

services and its impact on both their own roles and the perceptions of their roles by their patients. Several interviewees felt that loss of services locally (particularly procedural and midwifery) and an inability to perform many former tasks relating to these roles meant that patients no longer had the opportunity to gain a clear understanding of the full extent of a nursing role.

> *I think the community see our role as not as holistc anymore, there's not many of them here who have seen me in all my roles… they perceive your dealings with them aren't as long, and they just don't see you as much being a nurse (Practice Nurse, solo GP with a hospital)*

In addition, nurses and nurse managers working in the MPHS felt that proposed changes to the state health organisation could also threaten current team-work.

> *The centralisation, and the changes in organisation at a state-level, the way it's all run… if we* [community health] *had to move out of here, it would be terrible, we'd be out working separately. (Community Health Nurse, MPHS)*

> *Centralisation of these services has and will have a big impact on our roles and how we work…it's about keeping the team together and keeping everyone feeling like they're still a part of a 'whole'. (Nurse Manager, MPHS)*

The RIPERN did not mention issues around team-work or centralisation. This probably reflected her self-reliance and role as the sole health care professional for her community.

Finally, community expectations were noted as influencing the roles of PHC professionals in all services. In relation to the solo GP services, community expectation provided reasons not to take on specific roles on two counts: (i)

litigation and (ii) obtaining clinical training in order to deliver better care to a patient in a team-based environment.

> *I am doing a venepuncture and cannula course in January as suggested by the doctor*
> *[Interviewer] *Will you do anything further, along those lines?*
> *No! It'll only be so I can give him a hand when* [patients] *come in for blood tests and things like that… there's just too much politics happening - the medical liability now, if something goes wrong you're in it. It's just too hard, you know, the RN cops it first and then the EN follows… the communities – they want a second opinion now, you see you can always misdiagnose and then you're in the sh**. (Practice Nurse, solo GP with a local hospital)*

> *Well I'm definitely more involved with the patients now, so I've been and done the three day course down in Brisbane to do Pap smears. It's good because when they come in I fill in, on the computer, all this new stuff about when they had their last Pap smear and then being able to say to them too, I can do Pap smears here so if you feel awkward about the male doctor, I can do it also. (Practice Nurse, solo GP a without hospital)*

For the RIPERN, her perception of the community expectation was that she was able to do, and would continue to do, everything. This placed increased pressure on the RIPERN herself:

> *Yes, well community expectation of you – there's this woman in the community who is quite… proactive in terms of health and she was asked by allied health did we need counselling services here and she said no, we don't need counselling services, we've got* [the RIPERN] *she does all that… so sometimes I can say, I do provide a valuable service to the community. (RIPERN, RIPERN service)*

6.4 Discussion and conclusion

This section reflects on both the organisational contexts as described in the previous chapter, and also the skills and roles as described by PHC professionals. PHC professionals in the MPHS and solo GP without a hospital described their service models in terms of team-work. GPs in these models perceived their roles in terms of leadership (i.e. the GP as team leader) and management (i.e. the GP as manager of individual personalities and promoter of the team-based environment). The nursing staff in these models appeared to have similar views of their models as exemplifying team-based health care delivery. Nursing staff in the MPHS saw their clinical roles as relatively clearly defined. Indeed, one nurse felt it was precisely the clear definition of these nursing roles that allowed the nurses to work flexibly across a number of areas.

MPHS nurses and GPs acknowledged the individual importance of each other's skills in what they perceived as a flexible team-based environment. However, the solo GP with the hospital and the RIPERN were perceived, both by themselves and other staff, as the leaders or the 'one stop shop' of the health care service. In relation to the RIPERN, this was despite the complex array of visiting health care professionals. For the GP with the hospital, this was despite the range of additional nursing staff supporting the general practice clinic and the local MPHS.

Interviewees described the roles of AHPs as essential to comprehensive health care delivery. However, as evidenced in the case study descriptions and the following patient interviews, this did not necessarily translate into close or effective working relationships. For example, although the RIPERN perceived that AHPs have key skills in relation to patient care, observational case study and interview evidence indicated the RIPERN did not have a close working relationship with visiting AHPs. It is unclear why this should be so. However, it is possible to speculate that, in the same way long-term and trusting relationships are important between rural residents and their health care professionals, they are also important between PHC professionals themselves. AHP services in the RIPERN community are characterised by regular visits,

but with a potential lack of continuity of visiting individual AHPs. Coupled with high workloads, there is a fundamental lack of opportunity to form close or supportive working relationships in an environment where the RIPERN is ultimately responsible, either directly or indirectly, for so many levels of health care.

Role descriptions such as 'leader', 'director', 'supporter' and 'assistant' pointed to a perceived level of organisational hierarchy between health professionals. This was particularly evident in interviews with nursing staff working in the solo GP models. These nurses described their roles as 'assistants' to the GPs who were seen as 'leaders'. Conversely, the RIPERN who was largely self-reliant, described the RFDS GPs as fulfilling the role of assisters and supporters to her advanced clinical work. The idea of the medical hierarchy with GP as the 'leader' was also less commonly mentioned in the MPHS.

Finally, GPs and nurses in all services were aware of the changing nature of their roles over time. GPs perceived a move towards increased management roles and those requiring the coordination of team-based care for GPs in general. By comparison, nurses in the two solo GP services described nursing as having increased responsibility and greater patient interaction and diversity (solo GP without hospital) and, conversely, less interaction with patients and the perception that the nursing role was less clear (solo GP with hospital). Nurses in the MPHS felt that their role had increased in clinical diversity and responsibility over time, but that this move has detracted from the traditional patient nursing roles. The RIPERN felt that GPs (in the form of the RFDS) and community members now had a greater expectation of her role. In wishing to meet these expectations, it was evident that the RIPERN increased her already demanding workload and challenged her range of skills. However, it was also the RIPERN's way of determining her own professional value and usefulness both to the community and the wider clinical network. Health professionals' perceptions of their own, and often others,' roles are important in service delivery. Mutual respect both builds and sustains team-based approaches.

However, as noted by some interviewees, the way health professionals' practise can also be influenced by patients' perceptions and expectations.

The following chapter details patient perceptions of the skills and roles of their primary health care professionals. The focus is placed on perceptions unique to health care professionals from different service types, common perceptions of health professionals regardless of their service types and finally, the broad attributes of PHC professions.

Chapter 7
Patient characteristics and patient perceptions unique to service types

7.1 Introduction

The following two chapters present the results of in-depth semi-structured interviews held with consenting patients attending the four services. This chapter presents a profile of patients and then outlines their perceptions of PHC professionals unique to each service type. Chapter 8 then describes the roles and skills common to all PHC professionals regardless of service model and, also presents the attributes associated with the primary health care disciplines.

The following section outlines basic demographic information and patients' self-reported reasons for attending the service. This information provides a context within which patients' overall perceptions of their local health services can be explored. Since patients had limited knowledge of the role and skills of AHPs and ambulance paramedics, these results are presented first. Discussion then turns to patients' perceptions of GPs, RIPERN and PNs. Finally the discussion highlights the implications of the results presented here and places them in context to the common themes which are discussed in Chapter 8.

7.2 Patient demographics

A total of 47 patients were invited to participate and of these a total of 43 in-depth interviews were conducted across the four sites. Of the original invitees, four (three males and one female) did not consent to an interview. The reason for non-participation in the study was generally given as the patient feeling too unwell. However, one patient stated that she felt she was unable to contribute to the study. Those who declined did not differ in age from the interviewees and all had lived in their local areas for at least 12 years.

Patients ranged in age from 29 years to 80 years, however the majority of patients were aged 50 years or more and were retired or working part-time. This reflects the overall population of rural and remote towns. The median age of the study participants was also older than that of the general community. This is likely to reflect the general over representation of older residents in the townships and also that these groups are more likely to attend to be attending the clinic. In addition, a largely proportion of males were also interviewed when attending the clinics. Table 4 summarises the patient demographics and those of the broader communities based on information gathered for each service location (Australian Bureau of Statistics, 2006b)[4].

[4] Community names have been removed from the ABS (2006) references to maintain the confidentiality of each service setting.

Table 4: Summary of patient demographics

	Case study				Patients interviewed[‡]
Characteristics	**1**	**2**	**3**	**4**	**n (%)**
Males (n %)	100 (50)	500 (53)	650 (52)	900 (51)	29 (67)
Females (n %)	100 (50)	450 (47)	600 (48)	850 (49)	14 (33)
Median Age	35	40	45	40	55
Married/ Widow (n %)	70 (35)	400 (42)	600 (48)	700 (40)	40 (93)
Same address or SLA as 5 years ago (n %)	100 (50)	630 (66)	650 (52)	1100 (63)	40 (95)
[†]**Total**	**200**	**950**	**1250**	**1750**	**n = 43**

(ABS, 2006)

[†]Total population of township areas (rounded); n = total number of study patients (excludes 4 refusals)

[‡]Eleven (11) patients reported a chronic illness as a combination of one or more of the following: heart disease; hypertension; asthma and diabetes. Thirty-two (32) patients reported no chronic conditions.

7.3 Perceptions of the health services

In contrast to the PHC professionals, patients did not discuss their local services as overall models of care but rather tended to describe them in terms of their personal relationships and experiences with the individual PHC professionals. The exception to this was the MPHS, which patients still

described as the ‘hospital’. Patients in two of the four case studies identified what they termed a local ‘hospital’ which was in fact a MPHS. One MPHS was the subject of a case study and the other was overseen by a MSRPP whose private practice was the subject of this research. In the former case study, patients clearly delineated what they saw as the local ‘hospital’ versus local general practices. Their decisions about attending it were made with this in mind.

> *Generally I’d see a GP for things like* [child injuries] *but if it’s after hours you don’t have a choice, you’ve got to go up to the hospital. There was a case when my son got a big splinter in his foot one day… I couldn’t work it out and my friend couldn’t work it out - who was there as well – which way this huge thing had gone in. It was like off an old coppers log and she said I reckon we’ll have to just go up to the hospital, she still calls it that too…. so we took him up there and the doctor was looking at it and they couldn’t work out which way it had gone in either because it had gone in and then sort of pulled back and gone really deep… (F, MPHS)*

Overall, the majority of patients with access to a MPHS were more likely to say they attended their general practitioner as the first port of call. Reasons that prompted them to use the MPHS related to an expectation of needing a procedural intervention and ‘specialist’ care.

> *Well, I’ve always been in the habit of going to a private doctor. When our kids were young we ended up in emergency a couple of times with things kids do, but not frequently … It was easy, we had a very good relationship with all the doctors… (F, MPHS)*

> *Well the last time I went to the hospital* [MPHS]*... that was snake bite, that was in May or June… it was my husband, he got transferred by ambulance to ----- because there are those protocols there in place… if you get a snake bite you need to be assessed and you go straight to* ------

because they have more facilities there and if things do get serious you're into intensive care and whatnot. (F, MPHS)

There was still some confusion about how the hospitals had changed into MPHS services, and what this meant in terms of access. This issue was raised particularly by the older patients (over 60 years of age), who also tended to be long-term residents of the area and who had seen the changes that had taken place in their local health services over time.

I guess years ago you went to whichever doctor you preferred. If you … liked the doctor in the hospital, then you went to him, it wasn't money - it was a preference thing. Now, from what I gather, you just don't go to the hospital at 11 o'clock in the morning for a fluey cold or something because the doctor isn't available. It's changed so much here that people just go to their GP now… they don't go to the hospital unless they get sent there… (F, MPHS)

I was amazed the ambulance man, the night he took this splinter out, he said you should ring the hospital and it was coming up a weekend… so I ***did*** *ring and the nurse didn't want me either… I said to my husband I think there's still something in there. He started pushing it and he was saying its coming, its coming – it was like something out of the movies – there's more, there's more and it came out, it was a piece like that* [approximately 3 cm long]*…. It was just rotten wood … but I was upset when I called the hospital, the attitude of the nurse… they weren't happy with me. (F, Solo GP with a hospital)*

By contrast, there was less confusion about use of the RIPERN service which had once been a hospital. As this was more than 80 years previously, there were few people in the local town who remembered it as such. Most patients simply referred to it by the first name of the RIPERN who worked there.

Yeah, I came up to see ----- about depression. I hadn't been able to sleep so I wanted to talk to ----- and she said about giving me some tablets… (M, RIPERN service)

I'll come up here to -----, she'll sort me out. (M, RIPERN service)

I get all my medication and everything here. ----- looks after it all. (F, RIPERN service)

Most patients from the solo GP without a local hospital (the nearest hospital being more than 50km away) saw their local primary health care clinic and its staff as being able to do everything that the regional hospitals could do:

[The service] *does everything, I mean they have all the same skills as those people at the hospitals. (M, Solo GP without a hospital)*

It's really only the specialists that we need to go to hospitals for, I mean they do everything here. (F, Solo GP without a hospital)

Overall, patients appeared to have greater understanding of the function of the health care professionals in these services (namely the RIPERN and GP without a local hospital). This was possibly due to patients' intimate knowledge of the service arising from the lack of other local alternatives and their long-term familiarity with this type of health service delivery. The relative experiences of patients in each service suggested there was little or nothing that might be done by a hospital that could not be done by their own health care professionals. These broad perceptions of the service types were also closely related to patients' individual perceptions of the skills and roles of their health care professionals, and patients described them largely in terms of personal relationships. However, patients appeared to have a generally limited understanding of the role and skills of individual AHPs. The factors which may contribute to this, including the role of personal relationships, are discussed further in the following section.

7.3.1 Self-reported reasons for attending

In addition to discussing perceptions of their health services, patients were also asked to describe the most recent time they had attended the clinic. Later in the interview they were also asked what kinds of things, in general, prompted them to attend their local service. Patients were inconsistent in their responses to these two sets of questions. The majority described their most recent visit as involving check-ups, health monitoring and medications. This was particularly so in relation to patients attending the RIPERN and solo GP without a hospital service.

> *I come up here for my health check-ups and things (M, RIPERN service)*

> *I come for me heart condition and medications and everything. She checks me over, you know? (M, RIPERN service)*

> *I go for check-ups… check-ups really and maybe flu needles (M, Solo GP without a hospital)*

> *It's monitoring really… monitoring (F, Solo GP without a hospital)*

MPHS patients' accessed a range of community health services. These included physiotherapy and chronic disease clinics. One patient also discussed recently attending for prenatal checks due to the loss of her first child. Another patient described attending only to visit relatives in the elderly respite section.

> *I went* [to the MPHS] … *because I lost my first baby when I was about 36 weeks pregnant and I'm well known at ---- hospital because of that. I ended up going to ---- a lot, but the hospital stayed involved and my GP was involved and all of my blood tests and everything, I have them done at the ---- hospital. (F, MPHS)*

I come up here for the physio… just have to access it through the hospital. (M, MPHS)

Well, we went up really for nothing more than to the old peoples section – we were grateful for that because my husband could go up there nearly every night to see [his parents] *and they ended up with severe dementia and so if he got there and they were off in another world, or asleep, well he knew all the other people there too, so he could visit them and the same would happen with the other people who knew our family. (F, MPHS)*

When patients were asked what would prompt them to attend their health care services in general, they stated that it has to be something they considered serious (life threatening or disabling). The MPHS was described generally as 'the hospital' and patients indicated they were unwilling to access it for anything other than perceived emergency situations (something perceived as 'serious') or for procedural interventions.

I've got to be really sick, I stay away otherwise! (F, RIPERN service)

Oh, only if it's something drastic you know… you know I won't waste their time, especially if it's something you can just fix at home. (M, Solo GP without a hospital)

No, [I don't go] … *well there's been doctors here that I've never hardly met. (F, Solo GP with hospital)*

It's for people with asthma or heart problems, people who need emergency care… whereas people like me, I think it would be wrong to clutter up the system. I leave it to people with emergency problems. (F, MPHS)

No, no. I don't go up for much… I had my babies in Brisbane. (F, MPHS)

The RIPERN and general practice without a hospital services had both introduced monitoring and prevention activities into the clinic. For the RIPERN, this was often done when patients dropped into the clinic for other reasons. In the case of the GP without a hospital, patients had appointments to attend a combined chronic disease assessment day at the clinic which were made on their behalf. So, while patients stated that they would come for check-ups and for health maintenance, they appeared to rarely attend for this reason of their own volition.

7.4 Perceptions of health care professionals: An overview

The analysis of all patient interviews identified perceptions of skills and roles both unique to and common across the different service types. These perceptions related to skills and roles as well as broad attributes associated with each health care professional.

Table 5 summarises the key perceptions which are dealt with in the remainder of this chapter and also Chapter 8. The rows contain the common key perceptions of the role, skills and attributes (grouped by themes) of each health care professional (namely GP, nurses, AHPs and ambulance paramedics). The columns contain the case study services. The table demonstrates the skills, roles or attributes that patients associated with each health care professional by service-type attended. For example, patients who attended the solo GP with hospital (case study 3) perceived their GP's skills and roles as being those of 'essential', 'runs things', 'confident' (theme 1) and having skills in 'diagnoses', 'procedural work' and 'referring' (theme 3). However these patients were unsure how to describe the skills and roles of nurses, AHPs or ambulance paramedics in their community or, did not see them as part of the medical team (theme 4).

Table 5: Patient perceptions of PHC professionals across all service types

Theme Grouping	Skills, roles, attributes	Case study			
		1 RIPERN	**2 Solo GP without hospital**	**3 Solo GP with hospital**	**4 MPHS**
1.	*Knows us*	RIPERN	GP, Nurse		Nurse
2.	*Essential, Runs things, Confident*	RIPERN	GP	GP	Nurse
3.	*Caring, Assisting, Supportive*	GP	Nurse		Nurse
4.	*Diagnoses, Procedural, Refers*	RIPERN, GP	GP	GP	GP
5.	*Not part of the medical team*	Phys*	Phys, Occ, Diet*	Nurse, Phys, Occ*	Phys, Occ*
	Don't know	Paramedic	Paramedic	Paramedic	Paramedic

*Physiotherapists, Occupational therapists, Dietitians

7.5 Perceptions of Allied Health Professionals and Paramedics

As demonstrated in Table 5, patients had almost no understanding of the roles and skills of ambulance paramedics and AHPs. This was the same across all health care service types and appeared to be common to the majority of patients, despite their exposure to care provided by these groups.

7.5.1 Allied Health Professionals

The majority of AHP services available in each centre were provided by outreach programs. The exceptions to this were the MPHS service which had a part-time local physiotherapist and the GP with a local hospital, where a local AHP had been formerly based at a local clinic. However, this service had recently been relocated to a site 180km distant and visiting services were yet to commence.

Those patients who saw AHPs as part of their chronic disease clinics exhibited perhaps the best understanding of specific AHPs (namely diabetes educators, dieticians and podiatrists). Of all the patients, seven had direct experience of physiotherapists; either being treated at their local clinic by visiting services, or having been referred out to other locations.

> *Oh, a physio you mean – she has treated my shoulder, she's very good … I think she gives you the exercises and things. (M, Solo GP with a hospital)*

> *Well, she's very experienced and she's very good. I think she's overworked and underpaid. She seems to do an awful lot – more than what she's supposed to. There's a waiting list, you know I got in there this time last year and I was going to the physio and going through my exercises but mostly with her it was having a fortnightly or weekly check-up that my exercises I was doing at home were helping and that I was doing the right thing and not overdoing it and all the rest of it. But yes, they're very important. (F, MPHS)*

It was common for patients, even those who had experience of AHPs, to be unsure of their role and function. Indeed when asked to describe their overall perceptions of AHPs patients often said that they did not know what they did or how to describe their skills or roles.

> *I don't go to them and you don't see many of them around here really… I don't know what they do. I don't think they do anything for me. (M, RIPERN service)*

> *Oh, I don't know what they do, I couldn't really comment… I wouldn't begin to even guess. (F, RIPERN service)*

> *Ummmm, no, no… I wouldn't be sure what they do… no, we don't' really know about them. (M, Solo GP without a hospital)*

> *Oh hang on, hang on, I've seen someone who comes here about my sugar, my diabetes, talks about your diet… she comes and sees me about my food and she comes down and talks about that and my weight.*
> [*Interviewer: Ok, anything else?]
> *Oh and how I'm coping with everything. She'll be coming down next month and she either rings me or she rings these folks* [the practice staff] *up and they let me know. I don't really know what she's called, what her job… but she comes and sees me about all of that.… (M, Solo GP without a hospital)*

As described previously, there is little literature about patient perceptions of the role and associated attributes of AHPs. One paper focused strongly on identifying patient preferences for AHP roles and identified that patients preferred the professional roles of AHPs to be integrated with other local health care professionals and be 'team focused'. A prerequisite of this role was being a 'good communicator'; an attribute commonly associated with both PNs and GPs (Hornsby & Fitzgerald, 2000).

However, one patient concluded that AHPs were actually not part of the medical team:

> *Ummmmm, usually they'd have different uniforms for starters, so appearance… and they're just not in the same location usually they're detached from the actual clinic… it's like they have their own space… they're not part of the medical team. (M, RIPERN service)*

> *They basically operated completely separately from the hospital and it's hard to describe their role… (F, Solo GP with a hospital)*

This lack of understanding may have been partly due to patients' limited exposure to AHPs' and the transiency of these health care professionals in the community.

7.5.2 Ambulance Paramedics

When asked to describe their perceptions of the roles and skills of local ambulance paramedics, the majority of patients were uncertain and often expressed a complete lack of knowledge of these roles. When prompted further, patients frequently began by discussing their perceptions of the transportation role of paramedics, and their impressions of the changing nature of the profession.

Three key themes were identified; namely ambulance paramedics:

1. as 'bearers';
2. in the 'past'; and
3. 'clinical skills'.

<u>'Bearers'</u>

In most cases, patients described the paramedic's role as transportation, or in having specific driving abilities.

[It's] *driving… really… they have to be on time… if people take a fit or have an accident, do something, they have to get there to help them out, to take them back to the clinic here so they can be treated… (F,RIPERN service)*

I suppose really when I think of what they do, I think of them picking people up really – that's their primary job. (F, Solo GP with a hospital)

Yes, I think [transportation] is what I'd associate most with ambulance… not really clinical skills. (F, Solo GP without a hospital)

Two patients specifically noted that a key skill of a paramedic was having the knowledge (as well as the equipment) to be able to navigate their way around country roads.

Well, it's really getting fast to an accident and getting the patient back fast… they have to know the roads and everything out here. They have to be able to get out to the remote places you know the stations and other spots that the RFDS can't get to… (F, RIPERN service)

[The ambulance paramedics] *have to know the rural numbering – it's very important. Its' the familiarity… you know we had an ambulance officer from C---- that got lost… and that was in the paper – it made the paper! If there's an accident out on a rural property, on a powerline – like there has been, you need a four wheel drive ambulance and be able to drive a four wheel drive, especially around here because there are lots of four wheel drive tracks, following the powerlines and whatnot. (F, MPHS)*

<u>In the 'past'</u>

Many patients spoke about their lack of knowledge of the role in terms of its changes over time. However, the idea persisted among the older patients that paramedics were once available to deal with minor wounds and illnesses, but

that this was no longer the case. In addition there appeared to be limited understanding of the primary role of ambulance paramedics in providing expert pre-hospital care.

> *It has* [changed], *once upon a time if you had something in your eye or something like that you'd go knock on the door and the ambulance would fix it up for you, but you just can't do that anymore but it's the policy that they can't do that anymore, it's not their fault…but other than that, we haven't had much to do with them so it's really hard to know what they sort of do. (F, Solo GP without a hospital)*

> *I'm so behind the times… you know one year I got a splinter in my leg, not long before* [husband] *died. Anyway he said I can't get it out, there was a lot of blood and it was quite big, like from one of those old chairs - when the wood's sort of rotted and I thought I'll come up to the ambulance and they were having a meeting… But then I found out you don't go to the ambulance for that sort of thing anymore. You know as kids, if you had sore eyes you'd call in for things like that and get your drops there, get your splinters out… I don't know what the ambulance does. (F, Solo GP with a hospital)*

One patient also recalled the historic relationship between the local ambulance and those in the community who were employed in a local industry. In this arrangement a small portion of employee wages went as a supplement to the local ambulance station.

> *The ambulance certainly has changed a lot, I mean … when I first came here as a teacher, if the kids had a boil or something, they'd go to the ambulance and get it sorted and get a bandage… I was astounded… but I think it was if you worked* [in the local industry] *and they employed a significant number of the population maybe the equivalent of $1 or $2 a week automatically went out of your pay to the ambulance every week and so they just regarded it as their property. The ambulance officers*

used to buy the stuff you put on boils from our local shop by the kilo… there would have been a lot of non-emergency work… (F, MPHS)

Finally, several patients described their lack of knowledge of the paramedic's role in relation to a lack of a personal relationship. Older patients, in particular, held firm views about what paramedics do based on a recollection of closer links between the community and the local paramedic.

It was really good when [previous local paramedic] *was here, but since he's been gone, you know, you just don't know what they really do… and you just don't know much about it. (M, Solo GP without a hospital)*

I mean now, I don't know, I just don't know [the local paramedic] *very well at all. (F, Solo GP with a hospital)*

One patient noted that a paramedic, enrolled in the extended paramedic course, had been spending time (as part of course work) at the local practice but did not feel he had the skills in primary health care.

[The local paramedic] *was doing … days up there* [at the clinic], *doing things and I was given the option* [to see the paramedic] *and I said DEFINITELY not because, I… I just see that's not their role… he's ambulance man, he doesn't have those skills… he drives the ambulance and I guess he gets you out of trouble if you cut your finger … something like that. (F, Solo GP with a hospital)*

<u>Clinical</u>

There were broad and varied views of the clinical skills of a paramedic. These ranged from the view that paramedics had no, or limited clinical skills to paramedics having skills similar to nurses and GPs. Older patients generally described paramedics as having standard first aid and/or CPR skills.

In terms of the skills, I think it's like first aid, but they do CPR… really most people in town have done that… they have to be able to do things like stop the flow of blood but then get the person to hospital fast. (F, Solo GP with a hospital)

…It's basic first aid really and then they can do the CPR too. They have good communication skills… Yeah…their job is really first aid. (M, RIPERN service)

… I think they have training to almost a nurse standard…Ummm, I think they have training to save lives, you know? They know what to do… clinically, like stabilising a patient. I think really ambulance people that come out here need to spend most of their time getting to know the area. (F, RIPERN service)

Basically, it's first of all to be able to assess the patient, to stabilise the patient and then get them to medical help as soon as possible. Yes, basic clinical and then transport to further care. (M, Solo GP without a hospital)

One older (aged over 60 years) patient noted that they felt there had been a significant advance in the skills of paramedics when compared with ambulance officers from the past while another simply described them as 'experts'.

I think it's an upgrade now from just the first aid that the ambulance officers that I knew, you know? The old fellows used to go round and put a bandage on you and these other fellows now… they're more skilled… they're almost doctors some of them, I think, what I've seen of them. They're really efficient. (M, Solo GP without a hospital)

Well, I don't know… they're just the expert people really. (M, Solo GP without a hospital)

While patients had a limited understanding of the role and skills of AHPs and ambulance paramedics, they could readily discuss their perceptions of the role and skills of their principal health care providers. The following section describes patients' perceptions of the skills and roles of GPs and nurses.

7.6 Perceptions of PHC professionals by service type

This section explores patients' perceptions of the skills and roles of GPs and nurses (PNs and RIPERN) which were unique to each service type. Up to three themes, specific to the PHC professionals working within the context of each service model were identified. These themes were closely linked to each other and demonstrated patients' focus on the more human experience of health care, rather than the processes of receiving care. It became clear that patients' perceptions of their PHC professionals were also shaped by a complex interaction of factors such as length of exposure they had to their particular service type and the PHC professional and their actual experiences of health care and the way in which care was organised and delivered in each service setting.

7.6.1 Case study 1: The 'No Different to a GP' service

Rural Isolated Practice Endorsed Registered Nurse

In this model the RIPERN works in isolation with support from a visiting GP service. As discussed in the case study outline, the RIPERN service had operated in this community for at least 80years, with patients having little experience of any other service arrangements. Three themes emerged when exploring patient perceptions of the RIPERN's role and skills. These are that the RIPERN:

1. 'does everything a GP can do';
2. has broad clinical skills 'like a nurse or a doctor'; and
3. 'checks me out' (most specifically in relation to health monitoring and maintenance).

Although patients commonly described the RIPERN as a 'nurse' or, in one instance a 'DON' (Director of Nursing), they often described their perceptions of the skills and role of the RIPERN by contrasting it to their perceptions of the skills of visiting GPs. Patients saw the RIPERN and GP skills as very similar and, in many instances, almost interchangeable. Indeed, overall they saw the RIPERN *'do all the things a doctor does'* and many of patients would attend the RIPERN rather than the visiting GP.

> [RIPERN] *can do all the things a doctor does. She knows more than the younger doctors… the training doctors… (F, RIPERN service)*

> *Ahhhh, well basically* [RIPERN] *isn't that much different to a GP… it's probably the analytical side of things, the analysis and everything else of medical conditions – I think maybe doctors have more training in that – but she's quite capable of diagnosis, as far as I'm concerned, for certain conditions… (M, RIPERN service)*

> *Ummmm, well the* [RIPERN] *does anything a doctor would do really…. Well, they ARE the doctor, they write prescriptions… (F, RIPERN service)*

Decisions to see the RIPERN rather than the GP appeared to be almost wholly in relation to perceptions about the RIPERN's knowledge of the local community and the individuals therein. These perceptions were mentioned by all patients regardless of their age. Several patients felt it was better to see the RIPERN rather than a visiting GP with whom they had no familiarity. However, this did not translate into patients feeling that they had received a lower standard of care.

> *Oh, the GPs – they're not so good, many don't speak English, you don't get to see the same one twice and they just don't know what you really need. (M, RIPERN service)*

> *I came up here and* [the RIPERN] *did the X-ray and everything and then when she looked at it she said my arm wasn't right and so she put on plaster to hold it and when the RFDS – they were going to do the next plaster.* [The RIPERN] *said, it's not set right - it needs to be reset but they just ignored her… they did the plaster and this is how* [my arm] *turned out… it's now set like this because they didn't do it properly and now I can't use it very well. (F, RIPERN service)*

There were, however, two notable exceptions to these views. Two patients who had recently moved to the community from coastal regional towns (RRMA 5) still saw the GP as the key health care professional. They perceived that the RIPERN did not have the same clinical skills and abilities as a GP, particularly in relation to prescribing.

> *I come up here to the clinic but it's usually to see the GP, the GP is the one who will help with my problems, he's the one who can write the scripts… (F, MPHS)*

Both of these patients perceived the GP as the leader of the service and the only health care professional capable of assisting them. Their perceptions were more in line with those characteristics associated with GPs in previous studies; namely those of 'leadership' and 'direction' (Haddad et al., 1998; Infante et al., 2004). For these patients, the perceptions of the specific skills and roles of GPs persisted despite their physical change of location and 18 months exposure to a different service type. The perception of the GP being the only health care professional with the skills to assist them was also echoed by patients in the GP with a local hospital service.

Patients also often used the phrase *'checks you out'* to describe the role of the RIPERN. This was in contrast to the previous reasons ('has to be serious') that patients gave for attending the service. These perceptions of the monitoring and maintenance role reflect the high number of individuals who reported a diagnosed chronic condition. However, several patients gave this

response despite the fact that they were actually attending the clinic for other reasons.

> *She checks me out, you know? (M, broken arm, RIPERN service)*

> *She does the dressings for my legs and she checks me up* [treatment and dressing for infected wound due to removal of a skin cancer] *(M, RIPERN service)*

> *I'll come up here and she'll sort it* [the RIPERN] – *she'll have a look and sort it all out. (M, chronic heart disease and diabetes, RIPERN service)*

For one patient, this was not a skill associated with the visiting GPs.

> *Oh,* [the RIPERN] *does everything… well, they are different skills to a GP…* [the RIPERN] *checks you over more, you know? (M, RIPERN service)*

Patients were also aware of the heavy workload carried by the RIPERN. They perceived the key role of the GP as that of providing back-up to support the RIPERN's clinical decision-making. If the RIPERN required relief, it was the GP who would provide this. This in part reflected the experiences that patients had with locum nursing services, even those that were RIPERN endorsed. However, it again demonstrated the close association that patients perceived between the clinical skills and roles of the RIPERN and those of a GP.

> *I think* [the RIPERN] *needs support, someone like a doctor to relieve her sometimes. She's on-call 24 hours a day. (F. RIPERN service)*

> *The GPs are there to back her up really… when she needs relief. (M, RIPERN service)*

This perception contrasted completely with that identified in previous studies, where the themes of support and back-up were most commonly associated with a nurse working to support a GP in a general practice setting (Cheek et al., 2002; Hegney et al., 2002; Patterson et al., 2005). It demonstrates the unique nature of patients' perceptions of the RIPERN role in health care delivery.

7.6.2 Case study 2: 'The Hospital Doctor' service
Solo Medical Superintendent with Right of Private Practice with local hospital

Overall, patients in the two GP-based case studies appeared to be most alike in their perceptions of the role and skills of GPs. These were also generally in line with the role and skills described in previous studies. However, there were some subtle differences in the ways in which patients described the skills and roles of the GPs which appear to be unique to each service type. Case study two patients perceived their GP as the *'only and essential care giver'*, in comparison to case study three where patients perceived their GP as *'the leader'* who held key *'knowledge'*. Patients in both these case studies held widely diverging views of the role and skills of the PNs. In the case study discussed here, the GP delivered all primary health and hospital-based health care, with some limited support from a PN during primary health care clinics.

<u>General Practitioner</u>

In case study two, the most commonly occurring themes were that of the GP as:

1. the care giver who is essential; and
2. advocate and facilitator.

Patients placed great emphasis on the importance of the GP as being essentially the only professional capable of delivering health care; a role that no other professional could fulfil. When asked to describe their perceptions of the key roles and skills of the GP in the GP-based service with the local

hospital, patients described the personal characteristics associated with the position and, when prompted further, their perceptions of the clinical skills.

> *Well, I mean my blood pressure is up at the moment and I have to go back in a week and I don't know how we'd manage if we had anyone else here… anything half baked, you know? There are a lot of people in town that have to have constant attention – that's work for a GP really. (F, Solo GP with a hospital)*

> *Oh, people just want to see the GP – it's the skills they need and if they're here to give blood or for blood tests with the nurse they'll always say I need to see the GP… they'll always want to see him… I mean the GP is the one that does all the coughs and colds and all the stuff like the skin cancers and all then all the emergency things too… (F, Solo GP with a hospital)*

These perceptions were expressed almost entirely by the older patients (aged 60 years or over) and this group made up a significant part of the primary health care population attending the clinic. As with the RIPERN service, this solo GP model had functioned in a similar way for many years.

Patients in this service also described the GP's role as one of advocacy and facilitation. This theme was closely linked with the theme of referral. However, the idea of a GP's skill being to support patients and facilitate access to care outside the community was a perception specific to this remote inland service setting. It was not mentioned by patients in relation to the RIPERN service, despite its similar remote inland setting. Most particularly, these comments related to the GP being responsive to and supportive of patients' circumstances and wishes, rather than the idea that referring was a clinical necessity.

Oh, well… the doctor is great, he found another [specialist] *in R---, they usually go to T---- and he couldn't have been more supportive. He got the appointment for me the last day of the conference so I could go there and go to the conference and then go to the doctor and have the colonoscopy done… that was in May last year. (F, Solo GP with a hospital)*

He dealt with my knee operation … well, I tried to go to T--- but I couldn't get there for 3 months so I made my own arrangements and then I went to the GP and said, hey I've got an appointment with doctor what's his name in T---- and he said oh yes, I know him, I know him - other people have been to him and I said are you happy to give me a referral there instead and he said yes, that's fine. (F, Solo GP with a hospital)

This is in line with findings from other studies, which also identify the role of the GP in supporting patients to access specialist care, usually outside their local setting (Haddad et al., 1998; Infante et al., 2004). The perception of the GP as the 'essential care giver' echoed those of the patients in the other GP-led service who described the GP role as one of 'leadership'.

Practice Nurse

In contrast to this, patients had little or no understanding of the skills or role of the PN in this service, despite her extensive skills and training. Their perceptions of the skills were often described in terms of her role in office work or administration or in relation to supporting the GP during any procedural work.

I think the practice nurse may do some office work… I don't know… maybe she does some interviewing people for … ummmm [the local GP] *I think has a list of people who have got things that he wants to see… I*

think she does that… but I don't know… and I don't think I'd want her to do anything else. (F, Solo GP with a hospital)

Well, I don't ever really see the nurse… I did go up to see the GP with this thing on my back and nurse was there when he took it off and that nurse does do that – she's been here for yonks… Ahhhhh, I think she can take X-rays as well. I had two X-rays and she did those… (F, Solo GP with a hospital)

7.6.3 Case study 3: The 'He's It' service
Solo general practitioner without a local hospital

As with the previous case study, patients in this service perceived their local GP as being the principal or most important local health care practitioner and that the GP was aided and supported by the PN. However, patients had a much greater understanding of the skills and role of the PN.

<u>General practitioner</u>

The most common themes related to perceptions of a GP's skills:

1. being the 'leader' and 'knowledgeable'; and
2. 'listening' and 'recording'.

Patients described the role and skills of the GP in this model as being *'the one'* and *'the leader'*, particularly in relation to having the *'knowledge'*, or skills to deal with specific issues and health problems. These descriptions related to patients' perceptions of the expert training and experience that GPs had.

He's the man – he's the one – the leader…outside they're really just office staff and the others – they're the subordinates. (F, Solo GP without a hospital)

I thought, I'll come in and see [the GP]… he looks after me, and has the knowledge to deal with me and my problems. (M, Solo GP without a hospital)

He's a very knowledgeable man… I think he's an intelligent bloke, he's experienced and he comes from a background where he's had to have a variety of skills. (M, Solo GP without a hospital)

Patients also spoke about the GP's skills as an attentive listener. This perception included the feeling of being able to tell the GP about specific problems and of having that discussion acknowledged. This active listening skill was raised by several of the patients.

The doctor – he listens to you, listens to your problems and he checks you over. (M, Solo GP without a hospital)

He does listen, he listens to your complaints… well that's his job, but he records everything you tell him so next time you come he says well how's your leg, you know? (M, Solo GP without a hospital)

It is closely related to the perception of a GP displaying empathy for his or her patients as described in previous studies (Atkinson et al., 2003; Haddad et al., 1998; Infante et al., 2004).

<u>Practice nurse</u>

Patients had a much clearer perception of the role of the PN, when compared with perceptions held by patients in the previous case study. Two common themes were identified which were specific to patient perceptions of the PN role in this service; namely:

1. supportive (to GP and patient);
2. gentle, caring, friendly

These themes perhaps reflected the personal relationship of the GP and PN (who were married) and the development of the close team-work aspect of the practice. In addition, factors such as high workload, lack of local hospital facilities and thus greater exposure by patients to the PN role overall may also contribute to these perceptions.

> *Well, I think the nurse has a supportive role to* [the GP]. *(M, Solo GP without a hospital)*

> *Umm, they're good – she takes me in and has a chat with me … they have everything spread out when the doctor comes in and he just looks and writes his prescription and I pick it up on my way out, it's really good. (M, Solo GP without a hospital)*

> *Their skills…ummm, it's their attitude… the way they do things, you're always spoken to, acknowledged when you walk in, spoken to as if you're a person, you know? She's gentle at doing the dressings. (M, Solo GP without a hospital)*

Patients from this case study discussed their perceptions of the role of the nurse much more in relation to the kind of personal characteristics they associated with the role. These characteristics were also closer to those identified by patients in previous studies; namely the nurse being gentle, kind, caring, sensitive and empathetic with patients (Cheek et al., 2002; Lee & Young-Hee, 2007; Olade, 1989). However, unlike findings in previous research, patients did not mention the role of PNs in relation to either diagnosing illness, or of being able to provide a second opinion to that of the GP. Indeed, all patients clearly delineated the roles of the PNs supporting the GP as the 'leader' in health care delivery with the GP being responsible of 'treating' and 'diagnosing'.

7.6.4 Case study 4: The 'Does Everything' model

Multipurpose Health Service (MPHS)

As described previously, the perception of the MPHS as the local 'hospital' in the area persisted with patients, regardless of their age. This was perhaps in order to differentiate it from their local GPs in the area. Patients perceived that the MPHS GPs:

1. 'have to do a bit of everything'; and
2. that they deal with emergencies.

Following this, patients indicated that MPHS GPs had a wide range of skills due to the fact they might have to deal with so many different issues.

> *I know you basically have to be a genius at the ------ hospital because they deal with so many different scenario; they do a bit of everything. If you're a doctor up there it's like, oh my god what's going on – you know? (F, MPHS)*

> *They really have to be on the ball … they're always doing extra study it can be a matter of life and death… (F, MPHS)*

Patients also described how they saw the skills and role of the MPHS GPs, most commonly by differentiating them from the local private GPs.

> *I think it's changed so much that people just go to their GPs… they don't go to the doctor at the hospital unless they get sent there or it's an emergency… that's the impression I get, but it has changed. (F, MPHS)*

> *You know, people use their GP for all chronic things – for everything really and you only go to the hospital if it's an emergency. (F, MPHS)*

> *No, well I've always been in the habit of going to a private doctor. When our kids were younger we ended up seeing* [the GP] *in emergency*

a couple of times with the things kids do, but not frequently. We had the pharmacy and the doctors' rooms then were in the next shop. It was very easy. We had a very good relationship with all the doctors. (F, MPHS)

Nurses

Perceived flexibility and diversity of nursing roles emerged as the two key themes in relation to the MPHS.

I think the nursing staff as well… they're got to be able to do this and that and everything from what I can see. They may have to be on duty on the ward, or doing aged care things, or in the emergency room bit... I've seen different nurses doing all sorts of things. (F, MPHS)

We do have nurses who do all sorts of things and that's the crux of the whole situation here. It's the nursing staff in these places - they've got to be superwoman or superman. (F, MPHS)

These days [nurses] *they have to be so practical and they also have the basic caring and people skills as well… it's sort of like they have common sense and lots of skills that aren't academic skills. (F, MPHS)*

I guess they're very good, I do hear that the university girls might not be quite as trained in the basics but I don't think that applies so much here… they have to be clever and practical enough – with all the machines these days. (F, MPHS)

These perceptions echoed the perceptions of flexibility and team-work identified in interviews with the MPHS GP. However, these characteristics were not associated with either nurses or GPs in previous studies. As with the RIPERN, this may be due, in part, to the uniqueness of this health service type and the PHC roles operating within it. In contrast to this, patients also perceived that an additional role of the MPHS nurses was that of supporting

the MPHS GPs, particularly in relation to after hours care. This was a characteristic clearly associated with nurses in previous studies (Cheek et al., 2002; Patterson et al., 2005).

> *Well it's the nurses that assess you first and they'll call the doctor and sometimes they just give the information over the phone and sometimes they come down – it just depends on how serious you are… the nurses are the frontline. (F, MPHS)*

7.7 Discussion

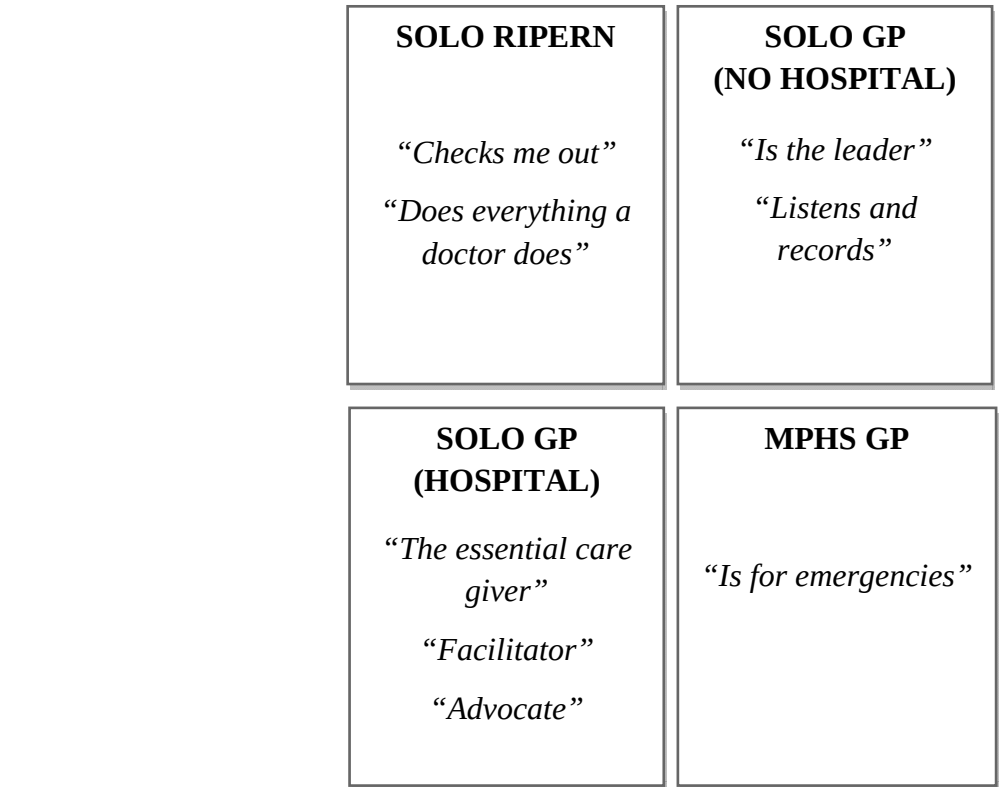
The general inconsistency between many patients reasons for attending the clinic at the time of interview ('would dressings' and 'medications') and their general thoughts about what would prompt them to see health care ('something serious') is in line with factors that influence rural patients' health care decisions described by Veitch (1995; 2005). It suggests that a complex array of issues impact on rural and remote residents' health care behaviour. Most particularly, that people are generally prompted to seek care when their condition is seen as 'serious'; that is when there is an interruption to their normal routines. This further supports the view that rural and remote residents continue to have a functional rather than cosmetic view of their health (Elliot-Schmidt & Strong, 1997). Additional factors such as patients' conditions and familiarity with available services also influenced patients overall perceptions of their local services (Veitch, 2005). These are highlighted in the following sections.

Rural and remote residents and those identifying as 'rural' have been shown to have different health-seeking behaviours compared with their urban counterparts (Veitch, 1995). Issues such as access to health services and attitudes to health and well-being contribute to rural residents presenting later for illnesses (particularly cancers, asthma and other chronic diseases) and injuries. Stoicism, self-care practices and a functional rather than cosmetic view of health characterise their health care behaviours (Elliot-Schmidt &

Strong, 1997; Howat et al., 2006). Patient reports from this study are in line with that view, with the preventive and health maintenance activities provided largely through opportunistic and planned, pro-active clinics, rather than patients attending of their own volition.

Patient participants described perceptions of the roles and skills that were unique to each PHC professional, within the context of each service type. These subtle differences relate both to broad perceptions of the role the PHC professional fulfils ('leader'; 'facilitator') and also subtle differences in clinical roles ('checks you out'; 'is for emergencies'). However, patients only discussed their perceptions of clinical roles when prompted by the interviewer. It was this prompting that yielded some of the subtle differences described in this section. Figure 3 provides a summary of these perceptions.

Figure 3: Patients' perceptions unique to service type



Previous research identified the factors of age, gender, disease status and role either as a carer or as a patient (Cheek et al., 2002; Infante et al., 2004). However, the findings from these case studies suggest that the long-term exposure of participants to different service types also appeared to have a strong influence on participants' perceptions of the roles and skills of their PHC professionals. This long-term exposure is characterised in two ways, namely the: (i) way in which that specific health care professional organised and delivered care in their community, and (ii) the longevity of the PHC professional in the community.

The ways in which each PHC professional organised and delivered care had a direct impact on both participants' exposure to the range of other PHC professionals and their subsequent perceptions of the roles and skills of these health care professionals. The longevity of the PHC professional in the community had a direct impact on the development of participants' personal relationships with that professional and their overall familiarity with the individual health care professionals. The roles and skills which participants associate with their PHC professionals appear to be most closely associated with their personal experiences of care. The remainder of this chapter focuses on the organisation of care within each case study service. These most closely associated with longevity and patients' personal relationships with their health care professional will be discussed further in Chapter 8.

The RIPERN was called a 'nurse' by the majority of patients in case study one. Her role and skills were associated with those of a GP ('does everything a doctor does'). In addition, they perceived that workload relief was more appropriately required by a GP. The RIPERN actively organised care in such a way that she maintained full responsibility for the majority of health care (preventive, acute and emergency). Patients, thus, actively sought her services, rather than those of the visiting RFDS practitioners. Findings in the RIPERN case study particularly suggest that where a community has become used to a specific type of health care professional, they will actively choose to use that service even when given the choice of attending a visiting GP. That is,

familiarity was a more important factor to patients than type of health professional. The participant perceptions indicate that non-GP led models (such as the RIPERN service) may indeed be entirely acceptable and appropriate services to the rural communities within which they operate. Following this, long-term residency and exposure to the RIPERN model appeared to be an important factor in the development of these perceptions. Those patients with less than two years residency in the community perceived the skills and roles as being better able to meet their health care needs. Interestingly, these patients had previous long-term exposure to more conventional, GP-led service models and transplanted their beliefs with them into their new community.

There were subtle differences in the ways patients from the GP-led case studies perceived the role and skills of their GPs. While the GP with a local hospital was described as ‘essential’, the GP without a local hospital was described as ‘knowledgeable’ and a ‘leader’. As with the RIPERN service, the solo GP with a local hospital provided the vast majority of care to the community, through private practice as well as the local hospital. The manner in which health care was organised by this GP very much reflected that of the RIPERN, that is, that the GP took responsibility for the majority of all primary health and acute care and after hours emergencies, working between the local hospital and private practice. The GP had long-term residency in the community. This community also had a history of general practice services, extending back for more than 40 years.

The perception of the ‘essential’ role of this PHC professional reflected both the longevity of a GP-led model in the community, as well as the community’s exposure to the GP as an individual who they had come to know and who provided all facets of care. By comparison, in the case study of the solo GP without a hospital, participants’ perception of the GP as ‘leader’ reflected the GP’s role as the coordinator of care. Indeed, this also reflected the GPs own view of his role in ensuring team-based health care as a

mechanism for optimising the use of visiting allied health services and local PNs.

This approach was more aligned with that of the MPHS where health care delivery was also organised as a team-based approach and across a spectrum ranging from emergency care to health promotion. Indeed, MPHS staff themselves described the means by which health care was delivered and organised in their community setting as being one of flexible team-based approaches to care. The result was that health care professionals often worked outside their normal scope of practice. However, the MPHS had always been regarded as a 'hospital' by local patients and they appeared to have more difficulty in identifying the skills and roles of GPs or nurses than those participants of the solo GP without a local hospital. GPs in the MPHS case study were perceived as having a wider range of skills; of being able to 'do a bit of everything' including deal with emergencies. In this service the focus was on acute and emergency care delivery, while local GPs were encouraged to handle other issues in their practices. Indeed, despite community health and allied health services based within the MPHS, the perception of the MPHS as being 'for emergencies only' persisted.

Both these case studies demonstrated the development of team-based approaches as a means of addressing limited availability of local services and/or high workload demands. However, neither the case studies of the RIPERN nor solo GP with a local hospital described team-based approaches to health care delivery. These case studies also represented the extremes of available local services, with the RIPERN being the sole health care professional in her community versus the GP-led service with a local hospital, hospital nursing staff, resident social services and a PN. This may also reflect the individual philosophies and expectations of the health care professionals themselves. During the interviews with PHC professionals, the solo GP without a hospital expressed a strong commitment to providing leadership and direction in team-based health care delivery, while the RIPERN appeared to

be strongly influenced by the perceptions of the community that her role would and could provide all aspects of health care.

These fundamentally different approaches to care delivery also influenced patients' exposure to nursing skills and roles. In the solo GP-led service without a local hospital, the close team-work between the GP and nursing staff appeared to result in a clearer understanding of both clinical and organisational roles of PNs. In the solo GP with a local hospital, where team-based care was less a feature of the private practice, patients had a limited view of the skills and role of the PN. Despite team-based approaches to care delivery at the MPHS, patients also appeared to have a limited understanding the skills of the nurses. This may be due to the range of community and hospital based nurses operating in the MPHS, and patients' inability to differentiate between these different roles. It may also reflect the 'dilution' of the identities and roles of nurses, within a team-based, multidisciplinary framework that makes identifying specific roles and functions difficult for patients. Although patients were unable to describe specific nursing skills, they did perceive the diverse nature of the PN role in the context of the MPHS setting. Once again, this perception indicated that patients had experienced a possibly wide range of care from nursing staff across different settings in the MPHS.

Case study findings suggest that there are currently limited service models in which PNs could be used to their full potential and these are restricted by current funding, organisational support structures and policies. For example, PNs were essential to the solo GP without a hospital, however in this case study, state health policies restricted the role that the PN could have in the treatment and management of patients. These restrictions, in turn, impacted on the role of the solo GP, who was essentially responsible for the delivery of all clinical care, both in and after hours. The opportunity for appropriately trained PNs to undertake delegated tasks in clinical practice, with the support of resident GPs may contribute to the sustainability of these solo models; particularly where there are no other health services in the local area.

Similar issues were also raised for the nursing staff at the MPHS. The interchangeability and flexibility of the roles of community health nurses and MPHS-based nurses are part of the success of the MPHS itself. However, the Medical Officers and Nurse Manager noted that this flexibility was outside the policies and funding models of the broader state health system. Paradoxically, the organisational and scope of practice restrictions appeared to be a catalyst for the MPHS to adopt more innovative strategies to health care delivery.

Many patients had little understanding of the roles and skills of AHPs despite having received health care. This may be a result of limited exposure to these services and the lack of ability to form personal relationships with the professionals themselves. Participants with direct experience of the roles were often able to describe what type of care an AHP (particularly a physiotherapist) had provided during the course of a consultation. However, overall, participants did not see AHPs as part of the 'medical team'.

Historically, there have been considerable changes to the role of paramedics in Australia over the last four decades. Advances in clinical skills training have been paralleled by changes in policy and practice. Most particularly, paramedics have a greater advanced emergency response focus. Anecdotal evidence suggests that these changes, introduced in the early 1970s, are still not fully understood by rural residents in Queensland (Gaskin, 2007). Indeed, results from this research suggest that perceptions of paramedics having a limited clinical role and basic first aid skills may persist in rural and remote communities. Patients often described paramedics as being primarily responsible for transporting patients to definitive care. The perceptions of patients aged over 60 years were particularly influenced by their recollection or experience of the historic ambulance officer roles. Many patients appeared unaware of the increased clinical skills of paramedics or, if they suspected that the role had changed, were unsure in what ways the role had changed.

Notably, there appeared to be no difference in the perceptions of paramedic skills between those patients living in a community with a resident paramedic and those without. There also appeared to be no difference in perceptions between those patients who had any type of previous experience with paramedic services and those who had none. This reflects the fact that few respondents had had recent contact with paramedics. Their perceptions, therefore, were likely based on the most visible elements of QAS officers – transport and trauma stabilisation.

7.8 Conclusion

Patients made subtle but discernible differences in their descriptions of the role and skills of PHC professionals which appear to be influenced by a complex interaction of factors. While these factors include patients' age and disease status described in previous research, findings from these case studies suggest they also include participants' exposure to different types of PHC professionals (GP and non-GPs); defined by the ways in which PHC professionals organise and deliver health care and the longevity of the PHC professional in the community.

Indeed, an overall lack of exposure to both paramedics and AHPs appeared to have led to the common view that such professions lay outside the existing 'medical teams' and were somehow seen as a largely undefinable 'other'. This is perhaps a continuation of the historical view of AHPs, who until recently were able to work only in hospital-based and not private practice settings. In relation to this study, these perceptions may change in those sites where AHPs have the opportunity and incentive to establish private practices. The historical view of the paramedic as the 'bearer' also persisted and carried through into contemporary views of ambulance paramedics, despite considerable advances these roles.

The next chapter considers perceptions common to PHC professionals, regardless of service type and discusses the impact of factors such as of health care organisation and the longevity of the PHC professional and their

contribution to patient perceptions of PHC professionals. It also describes the broad stereotypical characteristics which participants associated with the primary health care disciplines and the impact of these on innovative service delivery in rural and remote settings.

Chapter 8

Patient perceptions: Common themes and attributes

8.1 Introduction

This chapter presents patient perceptions of skills and roles common to PHC professionals, regardless of the service model. These perceptions are compared with those identified from previous studies. Following this, it explores the existence and persistence of the stereotypes which patients associated with the general health care professions (namely GP, nursing, allied health and paramedic). Finally, the discussion draws together findings from both Chapter 7 and those presented here. It identifies and discusses the key factors which may impact on patients' perceptions of the roles and skills of their health care professionals.

8.2 Common perceptions regardless of service type

When asked to describe the roles and skills of their local PHC professionals, all patients spoke first and foremost of their personal relationships with the individual practitioner rather than their perceptions of clinical skills *per se*. Indeed, patients only outlined their perceptions of clinical skills when prompted to specifically describe the clinical work they associated with particular health care professionals. All patients discussed the skills of their health care professional firstly in terms of procedures, secondly in relation to diagnosing illness and injury and finally in relation to prescribing medications.

Given this, perceptions of 'roles' and 'skills' were grouped into three common themes:

1. 'knows me';
2. 'has confidence' (giving confidence to patients and displaying confidence); and
3. 'refers' (to GPs or specialists).

In all but the MPHS, the key health care professionals (RIPERN and solo GPs with or without local hospitals) were described by patients in terms of their 'key' status in delivering health care in the community; that is that are they were perceived as the only health care provider in the community despite the presence of other clinical staff or visiting health care professionals. Thus, the following theme was also included:

4. 'The number one'.

These themes were reflective of patients' focus on the human or personal experiences of health care. The one exception to this was the sense that a practitioner's knowledge of when to 'refer' was seen as a key skill. However, this theme was closely linked to that of 'knows me' and the in-depth knowledge that each health care professional had of the lives and needs of their individual patients. All these terms were used by patients in relation to GP, Senior Medical Officer and RIPERN roles; they were common to these health care professionals regardless of the type of service the interviewee attended.

8.2.1 'Knows me'

The most commonly mentioned 'skill' identified by patients was that their health care professional knew the local people, the local area, and applied this knowledge in the way they provided health care to the community as a whole. This perceived skill was listed by all patients in relation to their local PHC professional regardless of the service type, but was most commonly noted by those patients reflecting on the skills of the RIPERN.

> *Other nurses, they don't know, you know? They try and run things a bit like a Brisbane hospital - they don't have the same skills as* [the RIPERN]. *(F, RIPERN service)*

Her biggest skill is that she knows us all - she knows our conditions, what's wrong with us…. It's because she knows the town, she applies that… she knows us and will ask about things. (F, RIPERN service)

I guess it's that [the RIPERN] *knows everyone here, she knows all the personalities… and she has a good personality, she lives here and she fits in here. (M, RIPERN service)*

He looks after me and he has the knowledge … you know because they know me here, and they know my history. (M, Solo GP without a hospital)

You see we had a locum… but I just didn't feel comfortable because he wasn't my GP reviewing my case. (F, Solo GP with a hospital)

Perceptions of 'expert knowledge' were closely linked to the sense that the individuals in each community had health care needs, ways of coping and histories that were clearly understood and this knowledge was applied in the way they were treated. The idea that the PHC professional 'fitted in', lived and worked in that community along with their patients was an important part of this perceived 'skill'.

Links between the knowledge of the community context and the health care professional as 'part of' the community echoes the findings of earlier studies (Kilpatrick, Cheers, Gilles, & Taylor, 2008; Veitch & Crossland, 2002). In these studies, a GP's integration into local community life was seen as a significant indicator of their long-term retention in that community (defined as five years or greater). However, in the case of the current study, patients perceived the long-term integration or 'belonging' of a health care professional (both RIPERN and also GP) as an indicator of their skill in developing expert knowledge of the lives and health care requirements of the individuals in the local context.

8.2.2 'Confidence' and 'gives confidence'

Patients' sense of confidence in their local PHC professional, as well as the confidence instilled in them by their PHC professional, were linked to their perception of the role of that individual practitioner. This was based on two perceptions. Firstly, the actions undertaken by the PHC professional in treating them and secondly the demonstrated willingness of the PHC professional in referring them on to a relevant 'expert authority', if and when needed.

> *The GP looks after me … and if he can't he sends me to the hospital so that's how I feel like he knows what he's doing. (M, Solo GP without a hospital)*

> … *if* [the RIPERN] *thought it was serious enough, that she needed to contact the RFDS, she would… that makes me confident. (F, RIPERN service)*

> *When I first went to him, I just went and he looked at my records and he said look you haven't got much here – would you mind if I did a few blood tests and that, just to get a clearer picture and I thought that was a good start. That gave me confidence that he wanted to do the best he could for my health. (F, Solo GP with a hospital)*

These perceptions of both instilling and displaying confidence were also identified in previous studies. However, they were most commonly associated with GPs alone, along with other characteristics such as instilling hope, courage and providing comfort (Haddad et al., 1998; Infante et al., 2004).

The characteristics of gentleness and caring were most strongly associated with PNs. In the current study, the confidence displayed by the PNs in the GP service without a local hospital was specifically mentioned in relation to their gentle attitude.

The practice nurse – she's just gentle as gentle… it's just those kinds of things, they're confident and friendly. (M, Solo GP without a hospital)

8.2.3 'Refers'

In previous studies, the role of 'referring' was most commonly associated by patients with the GP role as referral agent to specialist services (Infante et al., 2004). However, it was mentioned by patients of the current study in relation to both GPs and RIPERN. This perception of being referred to another health care 'expert' was also linked to the idea that patients' PHC professional could inspire confidence in them, as well as appear confident to them, by referring.

I mean we come here and then we get referred straight away if necessary… (F, Solo GP without a hospital)

It's the fact that he has a big range of experience, that he knows your history but that he will also pass you on to a relevant specialist. (M, Solo GP without a hospital)

I got the referral to the bone density… I mean, there's something wrong with my back, but then [local GP] *gave me a referral to see him because she knows, so the* [local GP] *said go to him, and he was very good. (F, Solo GP with a hospital)*

[The RIPERN] is very efficient, nothing is left to chance… she rang the specialist about my oxygen levels, she just doesn't do things off her own bat. (F, RIPERN service)

I feel quite comfortable about coming up and seeing the [RIPERN] *if there is a bigger problem, that they will contact the RFDS and talk to them… (F, RIPERN service)*

These results are also consistent with those characteristics identified in previous studies where the roles and skills of 'leadership' and 'referring' were

both clearly associated with GPs. However, patients of the RIPERN service also associated these roles and skills with their RIPERN health professional. This is perhaps not surprising given the context of the service and responsibilities carried by the RIPERN. However, as outlined in Chapter 7, it continues to indicate the importance of the service model in shaping the perceptions of patients.

8.2.4 'The number one'

Finally, when asked to comment on the role of the PHC professionals, patients spoke about roles in terms of being the 'number one' PHC professional. This was particularly noted by patients of the RIPERN and GP-led services.

> *Yeah, well* [the RIPERN] *she's the key one, she's the head of it all. (M, RIPERN service)*

> *… Absolutely… he's the number one player. (M, Solo GP without a hospital)*

> *I'm under no illusion; the GP is my number one… (F, Solo GP with a hospital)*

Once again, in previous studies this characteristic was associated with GPs. The association of these characteristics with the RIPERN may, in part, be due to the uniqueness and complexity of this health care role and long standing presence in this community. These were also features of the two GP-led services. The absence of the MPHS in relation to this theme may be indicative of the availability of GPs in the community and the fact that patients favoured them as first port of call, thus placing less emphasis on the MPHS practitioners.

Overall, in all case sites, patients appeared to focus most particularly on their perceptions of the human experience of health care, rather than their perceptions of key clinical skills. This is best demonstrated by the theme

'knows me' and the idea of health care professionals who were seen as 'belonging to', and 'being a part of', the community. When specifically prompted, patients did discuss their perceptions of the clinical skills associated with their health care professionals however these differed in relation to each service type.

8.3 Clinical skills

When prompted during interviews, patients drew on specific personal experiences to illustrate their perceptions of the clinical skills of their PHC professionals. In this section, perceptions of clinical skills are grouped by health profession; namely RIPERN, solo GPs, MPHS GPs and nurses.

8.3.1 RIPERN

Many patients described receiving specific procedural care such as having limbs plastered, wounds sutured, X-rays taken, and dressings changed. They also described the emergency work done by the RIPERN.

> *Oh, well ... My grandson had come off his motorbike and he wasn't in a good condition… so they [RIPERN and emergency vehicle driver] went out and picked him up… I mean they have to be skilled for all sorts of things, falls off bikes and trampolines…* [the RIPERN] *can deal with all of that… (F, RIPERN service)*

> [The RIPERN] *does everything, hey? I need pills… tablets because I really needed sleep and I talked to the* [the RIPERN] *about it all. (M, RIPERN service)*

> *Well* [the RIPERN] *does anything… I've been on the ECG machine and I have seasonal asthma… I haven't had to be on the nebuliser or whatever you call it, but if I had that problem I'd come up here and have it sorted… (F, RIPERN service)*

[The RIPERN] *is pretty damn good… I haven't asked her to do too much, but I know she does needles and stitching… she has all the skills a normal nurse has and she can do x-rays and broken bones, she can sort that out – all of those things. (F, RIPERN service)*

She knows about this [heart condition] and skin cancers and things like that, she does the dressings and everything – it's really good so it's better to see her. (M, RIPERN service)

These perceptions of clinical skills were similar to those associated with nurses identified in previous studies such as taking blood, wound care, minor surgery and patient triage (Cheek et al., 2002; Haggman-Laitila & Astedt-Kurki, 1994). However, although previous studies have identified the characteristics of 'curing', 'treating' and 'dispensing' almost exclusively with GPs (Haddad et al., 1998; Patterson et al., 2005), these skills were perceived as an integral characteristic of the RIPERN professional.

8.3.2 Solo GPs

The idea of the GP being able to diagnose, perform procedural tasks and 'cure' was raised by several patients. As mentioned briefly above, these perceptions, particularly those of 'curing' and 'diagnosing', were also commonly associated with GPs in previous studies (Atkinson et al., 2003; Haddad et al., 1998; Infante et al., 2004).

Patients were asked to discuss the skills and role of the solo GP with a hospital in the context of the PHC clinic only. However, almost all described the GP's clinical role as a combination of both primary health care service and hospital. Patients did not appear to readily or easily differentiate between these skills and roles. However, one participant described the role in terms of 'general GP-ing' in contrast to other roles required of the GP in the community.

Ummm, he's the diagnostician really… (F, Solo GP with a hospital)

Well, I think it's outpatients and his own surgery – he likes to go to his own surgery. He has a lot of skills… he does skin cancers and all things like that … not that I've had those but you hear about all the things people have had done. (F, Solo GP with a hospital)

I bring the family to the practice…. He is a really good doctor, he gets things done….In terms of the GP – he does everything, colds and flu, all the general stuff… and also the emergencies. He does things like skin cancers and what I'd call general GP-ing. It's like earaches, cold and fevers. I think he does do some mental health stuff… I think maybe one of his key roles here is providing mental health support – like counselling and drugs and scripts, that sort of thing… (F, Solo GP with a hospital)

Well, you see the GP seems to be the only one who is able to put a needle or a shunt or something in… it's only the odd occasion when the nurses seem to crack it, then someone told me that why he's so good at that is because he worked in an oncology ward… I mean, he has to keep his hand in… (F, Solo GP with a hospital)

Well it was [local GP] *who was correcting my husband's diagnosis… (F, Solo GP without a hospital)*

He has a few skills right across the board… like we just had a skin graft done over there... where my husband had a cancer cut out. (F, Solo GP without a hospital)

I was throwing the cast-net and there were stingers in there… in the water and I came in and he cured that, there was no problem at all. (M, Solo GP without a hospital)

Once again, these results mirrored those in previous studies where GPs were perceived as the only health care professionals to have roles such as 'treating' and 'curing' and who were seen fundamentally as the 'solver of health problems' (Haddad et al., 1998; Infante et al., 2004). These perceptions of GP skills and roles appeared to be more common in traditional general practice-based settings, when compared with the more unique RIPERN and MPH services.

8.3.3 Practice Nurses

Perceptions of the clinical skills of PNs differed between the two solo GP models. Patients from the solo GP without a local hospital service had a clear idea of the clinical skills of the practice nurse, and listed them as dressings, taking blood and blood pressures.

> *She does all the dressings I think and everything like that. (M, Solo GP without a hospital)*

> *Oh, I think she is on the frontline, she sees everyone as the practice nurse…actually we haven't seen her in a lot of areas but we've seen her in relation to wound dressings and taking bloods and things – I know she does all of that … (F, Solo GP without a hospital)*

In contrast to this, patients from the solo GP with a local hospital service were unsure about the clinical skills of the practice nurse and tended to describe the clinical role of the nurses in the hospital. Once again it appeared that experience, particularly in relation to transitory agency nurses, impacted on patients' views of the role and skills of all nurses. Yet, despite the fact that the local practice nurse was a long-standing resident of the community and worked in both hospital and private practice settings, her position was still not well understood.

> *Well, I never really see the nurse… I've never had anything done by the nurse in the doctor's surgery … (F, Solo GP with a hospital)*

Oh, I don't know [what she does] *but I'd be horrified to hang my hat on the practice nurse… I mean she's a nice person… but well, they just can't handle it really. (F, Solo GP with a hospital)*

I don't know… I mean when I was in the Mater Hospital in R----, you know there's no doubt they have the most tremendous skills… the nurses, they radiate confidence. It far outweighs anything here. If you experience that, then your eyes are opened [to what nurses do]. *(F, Solo GP with a hospital)*

This view follows those identified in a previous study, where patients' confusion about the role and skills of PNs were also noted (Cheek et al., 2002). The tendency for patients to describe the role of the hospital-based nurse rather than that of the practice nurse perhaps reflects the most common experience of the nursing role. It may also reflect the way in which the resident GP perceives and utilises the role of the practice nurse.

8.3.4 MPHS GP

Patients of the MPHS had limited perceptions about the actual skills they associated with the role of GPs. The most common perceptions of the skills mentioned were in association with emergency care. This was also in line with the reasons patients gave for attending the service. In addition, patients, unable to describe their perceptions of the skills of the medical practitioners, often reverted to describing their perceptions of the service itself, rather than the individual practitioners.

… Accidents and things, I mean … dressings and things like that. (F, MPHS)

I know my GPs – they're always reading things and doing extra study because of where we are... it can be a matter of life and death. It's an

hour – a very uncomfortable hour in ambulance down the highway to C----. (F, MPHS)

It's a suitable place for people with asthma or heart problems, people who might need emergency care at odd times, that they should be quite welcome as outpatients for everything, because they're the ones who are going to need it at 3 o'clock in the morning and going to need all the particulars, whereas people like me, I think it would be very wrong to clutter up the system. I should leave it to the people who are likely to have emergency problems. (F, MPHS)

Obstetrics is the perfect example. They all don't have experience in obstetrics and it's very hard to get someone. (F, MPHS)

8.3.5 MPHS Nurses

Once again, patients could not clearly define the clinical skills of the MPHS nurses and tended to describe them in terms of practicality, people skills and diversity. When prompted about clinical skills, one patient reiterated the importance of the 'local knowledge' of the nurses.

There's midwives doing aged care, there's midwives on the ward, there's a midwife down in ED, for example. You know they're midwives but they're doing everything else, and they're drawing blood. The nursing staff at the M---- Hospital are incredible and the fact that they're probably there permanently. (F, MPHS)

It being practical and having common sense and a lot of skills needed other than academic. (F, MPHS)

It's because they're locals and they've been in the area a long time and they, nine times out of ten know someone who is coming in the hospital if you're a local. (F, MPHS)

8.4 Attributes and stereotypes of the health care professions

This section examines patients' perceptions of the attributes they associated with the roles of nurses, GPs and AHPs as general disciplines. The aim was to identify and explore the ways in which patients' described representations of the PHC professions. These views were explored by asking patients firstly to describe the means by which they identified each health care profession; interview prompts included factors such as dress and appearance; interaction and communication; location in a clinic or community setting; attitude and demeanour. Secondly, patients were asked to discuss the types of characteristics (personal or skills related) that they associated with the general professions of GP, nurse, AHPs and ambulance paramedics.

Anecdotal evidence suggests that traditional or stereotypical views (the GP as leader and clinical head, the nurse as the carer and assistant) may have arisen from the historic military context of health care provision and perceptions of the medical training hierarchy (GPs expected to have greater knowledge because of longer training and education when compared with nurses). However, it is unclear if stereotypical views of health care professions persist in rural and remote communities and how they might impact upon patients' perceptions of the skills and roles of their resident PHC professionals.

8.4.1 Key characteristics

In the RIPERN-led service, these conventional views were largely reversed. In this case study patients' perceptions of the general discipline of nursing were of authority, of being in charge; of displaying attributes that included confidence and control. In comparison to this, GPs were perceived as the supporters and back-up for nurses. In this case, the GP profession was associated with more extensive training and the ability to 'treat' but with limited knowledge of the local community. This reflects the visiting nature of the GP services versus the permanence of the RIPERN.

> *… Nurses are the head of the clinic… They're the ones that act in charge - you know? They are the head of it all…. GPs are the ones that*

just back [nurses] *up really – they're the ones that might treat people. (M, RIPERN service)*

A nurse will have the authority; will be in charge of the patients and everything. A nurse is the confident one, comes across as confident and is very sure of everything. She is the one with all the knowledge of the people and you don't get that so much from a doctor, they're just not as sure – they might do some of the treatment stuff, but they're not as sure… (M, RIPERN service)

… Really the nurse is someone in charge… [A nurse] *has authority… (F, RIPERN service)*

The exceptions to this general view were the two patients who had spent 18 months or less in this remote community. Both patients had previously lived in regional coastal towns where they routinely made use of GPs and local hospital-based services. They associated more conventional characteristics with GPs and nurses; that is, where the GP was the one in charge and nurses would take direction.

The GP would be the one with the stethoscope… and when you're in a clinical situation, it's the GP who is the one attending the patient. The nurse is the one assisting. Any direction would come from the doctor and be given to the nurse.
(M, RIPERN service)

In direct contrast to the RIPERN service, patients in the two GP-led case studies had a more traditional view of the characteristics associated with GPs and nurses. Perceptions of the GPs having 'authority' and a superior level of clinical training while nurses fulfilled a 'kind, caring and supportive' role, featured most commonly in patients' descriptions. These views were also more in line with those identified in previous research. The traditional

appearance (nurses wearing starched white uniforms and GPs wearing white coats) were most commonly noted by older patients (aged over 60 years).

> *I think that once the nurses all wore uniforms and that's how you'd know who was who, I see a GP as the leader… If he's not happy with his staff he's the one who hires and fires. (F, Solo GP with a hospital)*

> *I would say that it's the doctor that gives you confidence, but a nurse doesn't always. It's* [a GP's] *degree, his training and… yes, communication. (F, Solo GP with a hospital)*

As with case study two (solo GP with a local hospital), patients in case study three (solo GP without a local hospital) also associated conventional characteristics with GP and nursing professions. Patients described the GP profession as embodying the characteristics of authority, leadership and knowledge in comparison to the kindly, caring and supportive nursing profession.

> *The nurses… show efficiency, they're the bustling and busy people. Nurses are kind, they're the ones that treat you kindly and respectfully … they always look professional, they are neatly dressed. Doctors, once upon a time they had uniforms – the white coat…It's usually their appearance… and their… demeanour. I think it's the way they conduct themselves, they give you the impression they know what they're talking about - they have authority. (M, Solo GP without a hospital)*

For one participant, the symbolic appearance and the traditional role of a nurse were united in the iconic 'Florence Nightingale' figure of history:

> *I think, the nurses, you know, they're like Florence Nightingale. They have the caps and the starched uniforms and all of that, they care about you… (M, Solo GP without a hospital)*

By contrast, patients from the MPHS were unsure about how to describe the attributes of the health care disciplines. Once again, patients began by discussing the appearance as a way of representing the different professions. As with patients from the GP-led services, MPHS patients felt that appearance had once been the key means of differentiating GPs and nurses but that this was no longer so.

> *Well the nurses, I think all the nurses usually have uniforms - they're in their uniform. Doctors, well … they don't wear uniforms, they don't have the white coat now, unless maybe they're in scrubs or something, but, hang-on… nurses wear that too… they all do everything. (F, MPHS)*

Patients of the MPHS also associated the more common attributes of being caring with the nursing profession. However they also felt that the professions did not exclusively embody specific characteristics but rather 'did a bit of everything'. Overall, patients from this case study found it difficult to define specific attributes (traditional or otherwise) associated with the professions.

> *I think the nurses and doctors there do a bit of everything… it's hard to tell… Nurses are caring. The doctors do emergencies, but they all do a bit of everything…They both have to communicate with each other and each know their work. (F, MPHS)*

> *A doctor might have a stethoscope behind his neck, but nurses do that too… They all do everything. (F, MPHS)*

Of the seven patients who had some direct experience with AHPs (that is, receiving care for a specific injury or condition) most described the actual interactions they had with the AHP (physiotherapist or dietician) and perceptions of tasks, rather than attributes associated with the profession. Interestingly some patients associated high workloads with AHPs, particularly with physiotherapists.

Psychologists, podiatrists, and, umm… the child health nurse and women's health also … but they don't come from allied health, they come from, um, different … (F, RIPERN service)

She comes here about my sugar. Talks about food and talks about weight. (M, Solo GP without a hospital)

Gives exercises - shoulder manipulation and asks about pain. (F, Solo GP with a hospital)

Treats arms and gives exercises. (F, RIPERN service)

They're overworked and underpaid. They do more than what they are supposed to…hardworking – but there's always a waiting list. Gives exercises. (F, MPHS)

Finally, patients' perceptions were often couched in terms of the appearance of AHPs, rather than of their role as a deliverer of health care. Most significant perhaps were those characteristics which patients omitted from their discussions about the allied health professions. In general they made no mention of training (such as specific clinical skills) or more personal characteristics (such as being kind and caring), nor did they mention AHPs as having a role in support of, or assistance to, a GP.

Different uniforms - that would be it… (F, Solo GP with a hospital)

Have the different uniform. They're not in the same location… usually they're detached from the actual clinic. Not part of the medical team. (F, RIPERN service)

They're always at hospital – it's hard to define role. (F, Solo GP with a hospital)

Wouldn't be sure… don't know about them. (M, Solo GP without a hospital)

These findings follow on from the participant perceptions of individual AHPs described in Chapter 7. Patients' knowledge of AHPs was so limited that they could neither describe the roles of specific individuals (Chapter 7), nor more generally (here). Conceptually, this should be the case, as most patients appear to have developed their knowledge through experience. In the majority of the case studies AHPs were not permanently located in the community and were perceived as visiting. Ambulance paramedics were similarly regarded. Patients were unable to describe the overall attributes they associated with the role in general, but reverted to perceptions of 'drivers', 'bearers' and the skills needed to fulfil those duties.

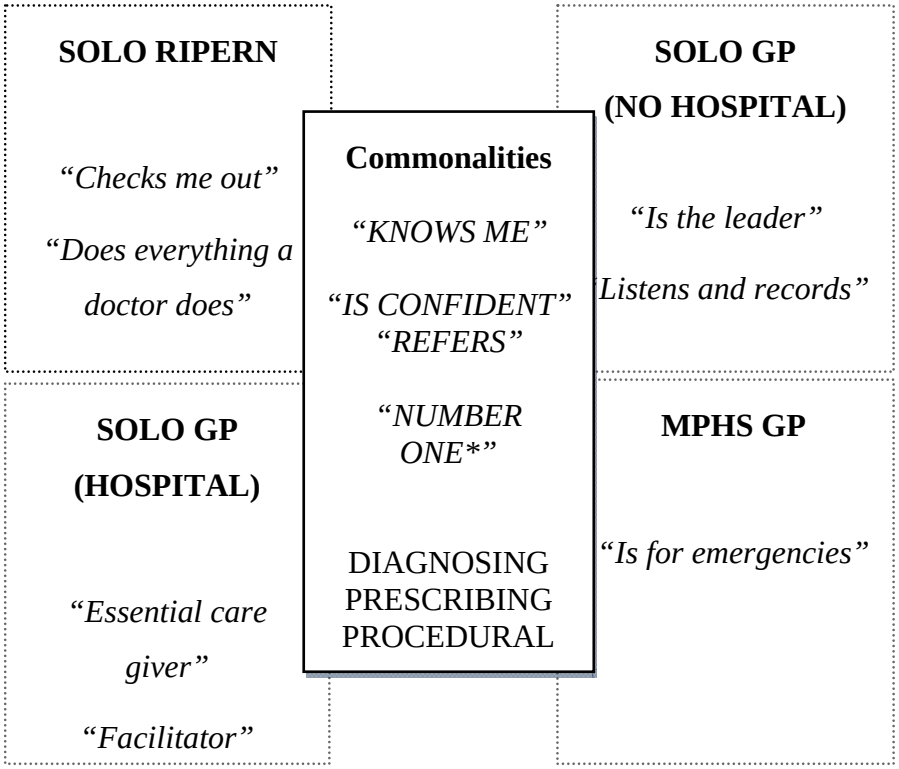
8.5 Discussion

Subtle differences in patient perceptions of roles and skills differentiated PHC professionals in the context of their service model, as identified in Chapter 7. While the clinical skills are common between the RIPERN and GPs (namely diagnosing, prescribing, procedural), these perceptions are secondary to patients' perceptions of the RIPERN and GPs skills of 'knows me', 'is confident and gives confidence' and 'refers'. These perceptions demonstrate the complex interaction of both participants' personal relationship with their PHC professionals and also the organisation and delivery of health care in each service setting. They also reflect the value patients placed on the predominantly personal experiences of care. Figure 4 provides a summary of both those perceptions which are specific to each PHC professional (presented in Chapter 7) and those perceptions common across all service types (discussed here).

Patients universally perceived the skills of their principal PHC professionals in relation to their personal experiences of care. These themes do not fit the conventional definitions of 'skills', 'roles' and 'tasks' used in this study,

rather they present a potential insight into the non-clinical aspects of care valued highly by patients, regardless of the service model or the PHC profession and the importance of the personal relationships built up between participants and their PHC professionals over time. Each theme is discussed separately below.

Figure 4: Patients' perceptions – The commonalities and differences



*This theme was common to GPs in all services except the MPHS.

'Knows me'

Participants perceived the theme 'knows me' as a skill of their PHC professional. It was largely associated with the longevity of the PHC

professional in the community and their integration into day-to-day community life. All PHC professionals had been resident in their communities for more than five years. In the RIPERN and both GP-led services, the PHC professionals had been the sole health care professional resident in their community for extended periods. This longevity allowed participants to build familiarity with their PHC professionals and this was reflected in the personal relationships which participants' built with their individual professional over time. In addition, the skill of 'knowing me' was a perception of the PHC professionals' ability to develop an understanding of the community and the health needs of the individuals and apply that knowledge in the delivery of health care. This theme has been identified often in background literature. Veitch lists 'familiarity' as a specific 'provider factor' (Veitch, 2005). However, it does not appear to have been identified in literature focusing specifically on perceived skills and roles. This may in part be due to the dearth of literature which focuses on exploring rural and remote patients' perceptions of their PHC professionals. It may also be due to the uniqueness of the service types studied here or, perhaps, is a characteristic unique to rural areas.

'Having and imparting confidence'

This dual theme was seen as a common skill across all PHC professionals in each of the services and was closely linked with the following theme of 'refers'. The skill of 'having and imparting confidence' is in line with the definition of broad attributes used in this thesis. It reflected both personal characteristics of the PHC professional as a skill in its own right but was also linked to a demonstrated ability and willingness to link with other health care professionals if required.

'Refers'

Once again, patients felt that a key skill of the PHC professional was in recognising when they needed to seek assistance of help from other health professionals. This related to both GP and RIPERN nurses, although for the RIPERN it generally was perceived as referring to a GP, whereas for the GPs in all services, it was perceived as seeking specialist help.

Finally, the perception of the RIPERN and GPs (with and without hospitals) as being 'number one' also reflected the attribute of leadership. This was both in relation to being the leader of health care delivery as well as displaying leadership in care organisation. This perception perhaps reflected patients' lack of access to other local health care services. That the MPHS GPs, with other local general practices and other health care services, were not perceived in the same light suggests that this may be a contributing factor. In addition, it also suggested that the means by which health care is delivered in the service (GP or RIPERN 'in charge') also contributes to the perception of the PHC professional as 'number one'. The following section discusses those attributes patients' associated with the health care disciplines in general.

8.5.1 Attributes and stereotypes

Perceptions of a professional hierarchy appeared to persist in patients' descriptions of the attributes of the health care professions, however, these perceptions varied between service models. Most notably, patients of the RIPERN service described stereotypical characteristics of nurses generally associated with GPs and vice versa.

Patients of the RIPERN service legitimised her role as the leader of health care due to her continued presence in the community and her knowledge of the health needs of residents. It was through this knowledge that the RIPERN's leadership and authority was conferred; something the visiting GP service could not hope to gain. Similarly, when describing MPHS professionals, patients' indicated confusion about who was a nurse and who was a GP. Patients' views that all staff did 'everything' and looked the same meant that perceptions of a conventional medical hierarchy seemed to no longer apply to this service. This is also reflected by patients' views of the flexibility and diversity of nursing and GP roles as described in Chapter 7. This alternative view of the professions may be due to the less visible role of the GP in the RIPERN and MPHS services.

The conventional views of the GP profession as leaders of health care assisted and supported by the less clinically knowledgeable nursing profession were described most commonly by patients of the GP-led services. These perceptions were influenced by patients' experiences of the care provided by their own health care professionals. In the RIPERN service, GPs were almost universally perceived as having expert clinical training or the ability to 'treat' (as described by the RIPERN service patients); despite this extra clinical ability, the GP profession was not automatically seen as the leader in the service. Conventional visual identities of GPs and nurses (GP as wearing a white coat; nurse in a cape and uniform) also appeared. These were most commonly expressed by patients of the GP-led services and MPHS. However, patients acknowledged that historical views of the 'white coat' of the GP profession and 'starched uniform' of nurses no longer held true in the present day.

The persistence of stereotypical views has been discussed most particularly in the UK literature. Discussion has focused on describing the ways organisations have led to the stereotyping of clinical roles which have *'evolved over time, have been consolidated by professional association and confirmed by legislation'* (Kernick, 1999 p.648). Additional research also suggests that *'nurses may do what doctors do, usually to the greater satisfaction of patients'* (Salvage & Smith, 2000 p.1019). The debate has continued in relation to the restriction on the evolution of roles of both nurses and GPs due to stereotypes based on historical precedent and conflicts of professional power. In addition, arguments about patient preferences have been used as a means of maintaining GP autonomy. Traditional health care systems may perpetuate stereotypical views of health care professionals through their organisational structures and policy that are not supported universally by patients. These case study findings suggest that perceptions of GP and nursing roles may be impacted more by both the 'norms' of health care organisation and delivery the personal relationships of patients and PHC professionals at local levels. These findings have implications for the expansion of nursing roles and issues of clinical governance in rural and

remote settings and also the successful introduction of team-based approaches to health care. These are discussed in the following Chapter.

8.5.2 Factors impacting on common and unique perceptions

Despite the fact that patients in this study retained a largely homogenous view of health, displaying health-seeking behaviours similar to those reported in other rural health studies, they held complex perceptions of the skills and roles of their local health care professionals. Overall, perceptions of the importance of the PHC professional skill-base appeared not to be based on a judgement that clinical work is essentially the domain of the GP. Rather, the importance of health care professionals appeared to be a function of the participants' exposure to the PHC professionals. This is determined by both the longevity of PHC professional (particularly participants' personal relationship and familiarity with the PHC professional) and also participants' exposure to different service types (that is, the organisation of health care delivery).

It appeared that the longer patients had lived in the community together with their local health care professional, the more accustomed they were to the roles each fulfilled. That is, patients associated what they perceived as 'proper' or 'customary functions' with their own health care professionals, thus legitimising the role. However, in some instances the motivation for this varies. For example, patients' perceptions of both RIPERN and GP as the essential or key health care professional were based on different factors, namely; local contextual knowledge and 'belonging' to the community (as in the RIPERN service) versus those of perceived 'expert' knowledge (the solo GPs with and without a local hospital services).

<u>Knowledge of the community</u>

This factor encompasses two distinct aspects; firstly, knowledge of the community and secondly, knowledge of health care services. In relation to the first aspect, long-term residency is associated with PHC professional knowledge of the town and the people. This includes PHC professionals understanding the needs and expectations of the residents such as how and

why they may seek care; who may require specific medications. It is also the knowledge a PHC professional displays about the local environmental impacts such as weather. The second aspect relates to PHC professionals' knowledge of other supporting services available for referral (for example a practice nurse to a GP, a GP to a specialist, a RIPERN to supporting services).

Personal attributes of both displaying confidence and imparting confidence as part of the interaction with the patient

Confidence is a personal attribute which PHC professionals demonstrate in their overall demeanour. Additionally, those PHC professionals who demonstrate sound knowledge of their community (by applying this knowledge to the way in which they deliver health care), impart confidence to their patients.

Willingness to refer on to other health care professionals

In relation to perceptions of clinical care delivery, referral is valued highly by rural and remote residents. That is, the demonstrated willingness of a PHC professional to seek outside assistance or collaboration in diagnosing and treating; rather than referring a patient in a simple hierarchical sense. An example of this is participants' perceptions that their PHC professionals' demonstrated knowledge about and use of, other health care professionals (such as nurses; GPs or physiotherapists).

These values are not associated with any one health care discipline, *per se*. Such values are recognised and valued in GP-led services and in non-GP led services (such as the RIPERN). It appears in the communities studied here that general practice, as a discipline, is not perceived to be the sole cornerstone of rural health care. However, patient perceptions appear to be strongly influenced by exposure to different service types as illustrated in each case study. Recent studies have focused on GPs as the preferred and perceived 'gold standard' PHC professional across rural and remote communities. This previous research concluded that the GP remained the most valued health care professional in rural communities and that such preferences persisted over

time regardless of participant age, gender, or place of residence and model of service provision (Smith et al., 2004). The authors then argued that:

> *'since GPs remain the preferred cornerstone of care for rural consumers, solving the current rural medical workforce shortage and implementing measures to ensure that rural Australians can obtain effective primary health care at the local level MUST remain a national priority for government, particularly for small rural communities where sustaining a resident practitioner is more problematic'* (Smith et al., 2004 p.94-95).

The case studies presented in this thesis suggest the 'value' which rural and remote patients place on their health care professionals is a function of what they consider the service delivery 'norm'. That is, both the usual way in which care is delivered (the health care professional) and the manner in which care is provided (the way in which care is organised). Although perceptions of clinical expertise were important to participants, perceptions of a health care professional's long-term residency in the community appeared to outweigh that importance; regardless of the type of PHC professional. Patients appeared to equate long-term residency with PHC professionals' detailed knowledge of the community and its residents and their ability to tailor the health care they provided to take into account community context. Where communities have had continued, permanent GPs (rather than simply access to a locum), there are also perceptions of the importance of that practitioner as a leader and 'essential care giver' (Infante et al., 2004; Smith et al., 2004). This may perpetuate the position of general practice at the top of the health care hierarchy in these areas.

The MPHS, with its greater role-flexibility and team-work, particularly between nursing staff and GPs was in direct contrast to the solo GP-based and RIPERN services. However, between the two GP-led services, the GP without a local hospital had a greater team-based approach to health care delivery than that of the GP who was also responsible for the local hospital. In this service the GP fulfilled the clinical role, and the role of leader and coordinator of a

range of visiting services. These roles were contained within one clinic site in contrast to the GP with a local hospital who was required to keep separate his private practice and hospital responsibilities. This partly reflects the impact of the broad health care system on the organisation of health care and role delineation. Most particularly it demonstrates that private GPs may have the latitude to organise their service and staff roles in ways which a practitioner working as part of the state-based health system has not the outward freedom to do.

While patients of the MPHS had overall less understanding of the individual skills and roles of their health care professionals, they placed greater emphasis on their descriptions of team-based care, and health care professionals 'being able to do a bit of everything'. There was little evidence of team-working in the RIPERN service; other than between the RIPERN and the RFDS GPs. However, this was largely hidden from the patients. In fact, the RIPERN was indeed 'doing everything'. In the case of the patients of the RIPERN service, this was particularly evident in their choice of the RIPERN herself over visiting GPs. While patients from the RIPERN and solo GP with a local hospital services did not perceive team-working as a skill of their health care professional, they did discuss the flexibility of the individual roles; that is the RIPERN with a vast array of skills able to deal with all eventualities and the solo GP with a local hospital who performed both 'GP', procedural and 'emergency' related care.

The solo RIPERN, with no other local health care professionals to support her, fulfilled both a role of 'doing everything a doctor does', while also performing ongoing health maintenance (namely check-ups and monitoring of chronic conditions); a role commonly associated with a practice nurse in other studies. The RIPERN herself noted the necessity of completing health maintenance 'check ups' ensuring fewer acute episodes and thus effectively managing her own ongoing workload.

As described by the RIPERN during her interview, patients did not see the need for additional services due to the fact that she could and would fulfil all health care roles. It is unclear to what extent this may have contributed to the decision of the RIPERN to leave the community permanently (as described in Chapter 7). While the demands placed on her by the patients were high, she herself had to maintain her control over a range of health care activities with the view that this would help maintain control of her workload. A further issue was the RIPERN's perceived lack of organisational support and recognition of her role and workload. These issues are discussed further in Chapter 9.

Finally, the age of patients seemed to have some impact on how they perceived the role of their health care professionals. More traditional views of GPs, nurses and ambulance paramedics and their respective roles were most commonly mentioned by patients aged 60 years or greater, and more likely to be patients of the GP-led services.

Overall, patients' acceptance of what they saw as the usual roles and skills of their health care professionals appear to have developed over long-term exposure to service types, the perceived differences between local and visiting health care professionals and the history of health care delivery styles in the area. Long-term exposure to GP-led services (as in case study of the solo GP with a local hospital) also contributed to the perception that the GP was the only and essential care giver. As illustrated in the case study description (Chapter 6), historical records from this community indicated that, apart from short breaks, it had almost continuously had a GP resident in the town. Additionally, GPs tended to integrate into the community and remain there for upwards of four years. In contrast to this, long-term exposure to specific service types, such as the RIPERN, seemed to reverse many of the more traditional views patients held of the roles and skills of GPs and nurses. In this community, which had not had a resident GP for over 80 years, many patients could not recall a time when the RIPERN was not the sole health care

professional. The RIPERN was also a long-term resident of the community with expert knowledge of the community.

Perceptions and an overall understanding of practice nursing roles were greater in those models where there were no local alternative services, and where nursing staff had clearly delineated roles (most specifically the solo GP without a hospital service). Perhaps this was a function of the necessity of utilising nursing staff across a range of specific areas thereby increasing patients' exposure to the nursing role. The idea of expanding the role of PNs has been discussed in previous research (Tolhurst et al., 2004) and indeed more collaborative and flexible models of practice were evidenced in case studies presented here; most particularly the GP without a local hospital and the MPHS services. Flexibility of roles in these services addressed high workload issues (MPHS and GP without a hospital), and contributed to health prevention and promotion activities (GP without a local hospital).

8.6 Conclusion

Even though views of medical hierarchies of GP and nursing professions persist, these appear to be influenced by the long-term exposure that patients have to their own particular services. The term 'role' here is defined as the 'proper or customary function' of an individual (Delbridge & Bernard, 1998). For the patients in these case study services, their experiences of proper and customary function of their health care professionals differ greatly; particularly in relation to GP versus non-GP-led services. The characteristics of clinical expertise and specifically the role of the GP profession in diagnosing and treating do not automatically confer leadership and authority in a service setting. As highlighted in Chapter 3 and evidenced in these results, it follows that these rural and remote communities have already experienced models of primary health care delivery that differ from more conventional rural primary health care services. Indeed, patients have developed perceptions of both the role and skills of the PHC professionals not previously reported. Rural and remote residents aged over 60 years continue to hold traditional beliefs about the roles of some health care professionals

(particularly ambulance paramedics and GPs). Evidence from this study suggests that where these traditional views persist, older rural residents may be less accepting of the new workforce roles.

These issues have implications for the development and implementation of innovative approaches to primary health care delivery. This is particularly so with respect to the successful embedding of innovative approaches into existing local service structures, and the introduction and success of team-based approaches to primary health care delivery in rural and remote Australia. The next chapter discusses the implications of these findings in relation to existing health care services, the introduction of new health care professions and services and team-based approaches to health care delivery in rural and remote communities.

Chapter 9

Implications for sustainable primary health care innovation

9.1 Introduction

Existing policies suggest that health systems have a tendency to treat rural communities as homogenous entities; all behaving the same way and with similar perceptions due to similar beliefs and experiences. However, case study evidence suggests that while health beliefs and health-seeking behaviours may be largely the same across rural and remote communities, the experiences and perceptions that rural and remote residents have of the skills of their health care professionals are unique to the context of the health service itself.

A 2005 report by the Australian Health Workforce Productivity Commission noted that rural communities are diverse and that any changes to health workforce planning and programs of care delivery must be tailored to meet the particular needs of each site (Australian Productivity Commission, 2005). The NHHRC Report (2009) makes recommendations which attempt to acknowledge the diversity in rural and remote communities. These recommendations relate to the five building blocks of a reformed health care system; namely regional management; infrastructure (including new works and modifications to existing structures); information technology; workforce (education and training, use and distribution) and quality and safety. The NHHRC Report proposes new approaches based on population health principles which can be defined as preventing illness and injury, and protecting and promoting good health and well-being. These new models of health care are based more on tasks (disease prevention, chronic disease management) and organisational factors such as team-based approaches, than on traditional medical disciplines or specialties. The findings from the current study provide insight into the potential impact of patient perceptions on policy and practice; particularly in relation to the domains of health care workforce, quality and safety, and infrastructure in the context of current and proposed innovative approaches to rural and remote primary health care delivery. This chapter

discusses the implications of the study findings on each of these areas within the context of the NHHRC Report. Finally, it discusses findings in relation to the development of sustainable primary health care services for rural and remote communities. First, however, this chapter discusses the strengths and limitations of the study and the transferability of findings to the national health care context.

9.1.2 Strengths and limitations of the study

Qualitative methods are commonly used in investigating new fields of research enquiry, or in areas where little evidence exists. These research fields often preclude the use of quantitative approaches. Qualitative research has significant strengths in allowing the exploration of issues in great depth and detail. However, a key consideration of qualitative research studies is ensuring the reliability and validity of data and the findings. Unlike quantitative designs that can employ well proven methods such as appropriate sample numbers; randomisation and statistical tests, qualitative research relies on the combined application of rigorous data collection and analysis techniques to ensure trustworthiness and rigour (Golafshani, 2003). In this study the following techniques were employed.

Trustworthiness and rigour

The literature provided a guide for the questions used for patient interviews. In the early stages of the interview phase of this study, proforma questions were reviewed to ensure that participant responses were congruent with the questions. This was done in order to increase the reliability of responses against each question. Data (interview and observation) were collected solely by the researcher. This ensured consistency in the conduct and focus of both patient and PHC professional interviews. In addition, it ensured consistency in the depth and detail of observational information collected in each service model.

Data were gathered from a variety of sources, using a variety of methods. Observational data were cross-referenced with patient interview information,

particularly with respect to patients' reasons for attending the service and their discussions about their interactions with health care professionals. Service documents (including information relating to the organisation of health care and interaction with visiting services) were cross-referenced with sections of the PHC professional interviews relating to perceptions of the roles of their colleagues. This enabled the confirmation of any identified links between PHC professionals (both visiting and local) in each case study model and the exposure that patients may have had to visiting services. Emergent themes were then explored further during patient interviews. Finally, the researcher was immersed in each case study service from ten days to two weeks during data collection. This involved spending full days observing interactions between resident and visiting staff and also between staff and patients; being present during consultations (with the consent of patients); interviewing staff and patients and searching relevant clinic background documents. All emergent issues resulting from data collection were able to be explored during the same time period with both PHC professionals and patients alike.

In relation to patient interviews, data were explored and analysed in two ways: as single interviews; and within discrete case studies. PHC professionals' interviews were analysed together, as well as within their discipline groups and within each case study. This was done to enhance the validity of findings by exploring the alternative explanations of data findings. Following this, exploration of the negative cases in each case study was undertaken in order to investigate findings that appeared contrary to emergent common themes.

Transferability

As outlined in Chapter 4, qualitative methods aim for the transferability rather than generalisability of findings. Transferability is defined as the means by which qualitative research findings from one setting can be applied (transferred) to other settings and is a direct function of the congruence between these settings (Falk & Guenther, 2006; Patton, 2002). Two strategies were used to enhance the transferability of the findings: firstly, the choice of primary health services and communities, and secondly the use of detailed

data-rich case studies. The choice of a case study methodology and purposive sampling of cases ensured that broad geographic rural contexts of the study area (inland remote and coastal) and most common variants of primary health care service models were included. This enhances the transferability of the study findings across a greater number of similar service models and communities in Queensland. In addition, the data-rich case studies provide a means by which services can be matched according to their rurality, community profiles, PHC profession, and service model to allow for the transferability of findings unique to each service type, despite the dynamic nature of the data.

Transferability is also determined by the *'researcher 'who knows (with some confidence) about both the sending (where the research took place) and receiving contexts (where the results are to be applied)''* (Kempel et al in Falk & Guenther, 2006 p.3). The researcher has considerable knowledge of the north Queensland study area having lived and worked there for over twelve years. Thus, the researcher had a detailed understanding of both the 'sending' and 'receiving' contexts.

Limitations of the study

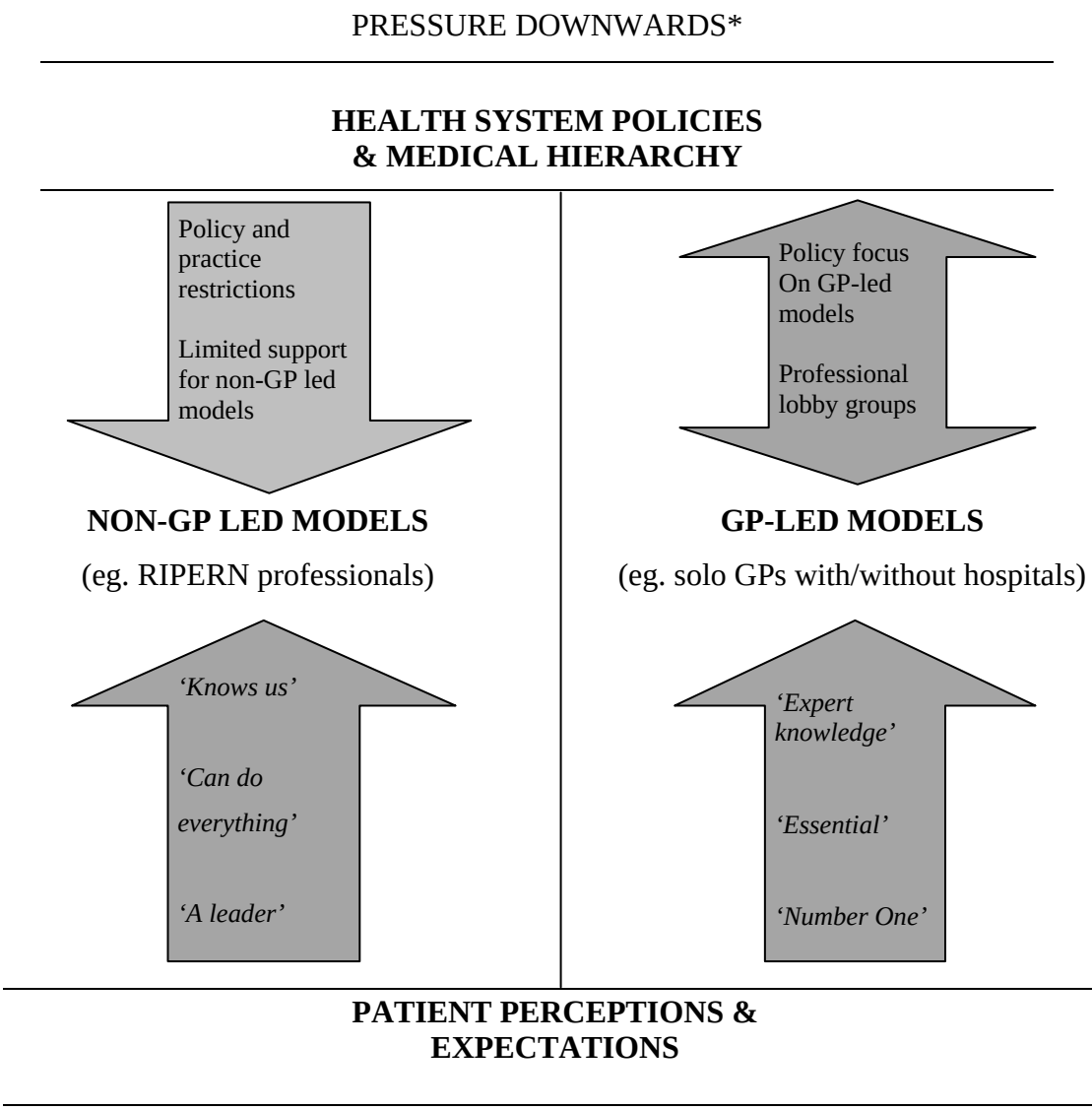
There are two limitations to this study, namely: (i) policies and workforce characteristics that are unique to the Queensland primary health care context; (ii) the small numbers of patients interviewed in some service settings (primarily due to the small community populations and/or timing of data collection).The context of the Australian health system has led to the development of workforce initiatives which are unique to the contexts of each state. RIPERN and MSRPP roles, discussed in this study, are specific to the Queensland health care context. Following this, the findings from these case studies may not be directly transferable across other Australian states, where other health care professional workforce approaches may have evolved in the context of different state policies and practices.

Overall, small numbers of participants were available for interview. In addition to this, there were small numbers of attendees from properties outside the townships, although some patients had recently moved into the communities from properties. This limits the range of patients' 'lived experience' explored in this study, with the majority of patients interviewed living in or closely adjacent to, the rural townships. Rural residents living on isolated properties, well outside township boundaries may have different views of their health care professionals' roles and skills. These factors may reflect the combined impact of attitudes (stoicism and self reliance) and distance in relation to health-seeking behaviour (Elliot-Schmidt & Strong, 1997; Veitch, 1995).

9.2 Implications for existing and innovative models

When patient perceptions and expectations are placed alongside policy and funding foci on supporting GP-led services, an array of pressures are identified which impact on both GP and non-GP led models of care. The following conceptual diagram (Figure 5) demonstrates the interplay between community pressures (perceptions) and pressures applied by health systems (policies and funding mechanisms) which are perpetuated by medical hierarchies. These pressures do not bear equally on GP and non-GP led models. GP-led models have somewhat greater ability to engage with health systems in relation to how they organise care. They generally have greater access to funding relief and support. By comparison, non-GP led models have less ability to engage with organisations in ways that support the provision of primary health care. In other words, they have overall poorer access to available funding, additional support (such as locum relief), and also have greater role restrictions, while they fulfil the perceptions that the community holds of their role. Whether they are able to engage effectively with the broader health system or not, both GP and non-GP led models of care are influenced by pressures of community perception described in this study. Such pressures may have significant effects on the long-term sustainability of these rural and remote services.

Figure 5: Pressures on GP and non-GP led models of care



*Pressure downward exerted by restrictions of health system, funding arrangement and inherent medical hierarchies which impact on the clinical and non-clinical roles of PHC professionals

#Pressure upwards exerted by patient perceptions of the roles of the PHC professionals, regardless of health care discipline

Additionally, it appears that medical hierarchies are reinforced by current policies and funding arrangements at health system levels, rather than being perpetuated by patients and communities. However, there is a question about whether solo health care models of primary health care should continue as a means of delivering primary health care in rural and remote areas. It is undoubtedly impractical to keep care based around a sole resident practitioner as there are continuing issues of viability and sustainability, regardless of whether they are GP or nurse-led practices. In addition, it might be argued that findings from this study demonstrate that, where solo practitioners have had a long history, they are perceived by patients as embodying the skills and roles of a range of health care professionals thus negating the need for other team-based approaches to health care. Duckett (2007) notes the potential impacts of ignoring such workforce imbalances as resulting in poor access, unmet need and potential poorer outcomes, an overworked and stressed workforce and the increased costs relating alternative service provision to address the shortfalls (Duckett, 2007).

Federal and State-based support policies and strategies are focused on GP rather than non-GP led models of care, particularly in relation to solo and small group practitioner models. In addition, while there may be incentives offered through private organisations, other health disciplines such as nurses and AHPs continue to have limited access to formal incentives provided through State and Federal policies. Likewise, incentives for paramedics to remain in rural areas are limited to rent relief or the payment of stamp duty for those individuals who buy property. There is, however, an extensive history of Federal and State policies and strategies aimed specifically at recruiting and supporting GPs. These include recruitment incentives such as scholarships and financial bonuses such as early payment of university debts incurred during undergraduate training and retention strategies such as the provision of housing, ongoing increasing financial incentives for time spent in rural and remote areas and programs for regular locum relief and family support.

These policies do not work to support non-medical health professionals in locations that cannot support a resident medical practitioner. Although non-GP services may access some locum relief programs, evidence in the case studies suggested that existing rules and regulations, when applied diligently by state organisations, meant that these services did not effectively qualify for assistance in identifying locum relief. In these instances, non-GP led models were responsible for identifying and securing their own locum relief (to cover recreational leave as well as workshops for professional development). These stratified discipline-based support strategies delivered at organisational level may perpetuate medical hierarchies that patients do not perceive.

There have been limited attempts at implementing integrated approaches to recruitment and retention strategies across the range of PHC professionals. An outcome of the 2009 National Rural Health Conference was a combined media release by medical and allied health students. In their statement, students called for equitable incentives to encourage and support rural education placements across all disciplines. In addition they called for equal access to financial support for those who elect to undertake rural practice during their period of study and also increased rural training opportunities for recent graduates. This was seen as a means of encouraging equality between rurally trained health care professionals and their urban counterparts. The students linked the concept of equal incentive and support to the concepts of team-based care in rural and remote areas and went on to state:

> *In recent years there has been a big emphasis on addressing medical workforce shortages… they have doubled the intake of medical students, established rural clinical schools and introduced scholarships for rural placements and HECs reimbursements for those who go rural. Yet chronic workforce shortages do not apply to medical students alone. Young doctors don't want to consider working in rural and remote communities unless they have the support of strong primary health care teams and visiting specialists. The students are calling for all health care disciplines to be given similar incentives so rural and remote*

> *workforce shortages can be addressed in a more holistic manner* (National Rural Health Students Network, 2009)

Following this, The NHHRC Report makes a series of recommendations which include the need for an:

> … *integrated package of strategies to improve the distribution of the health workforce. This package could include strategies such as providing university fee relief, periodic study leave, locum support, expansion of medical bonded scholarships and extension of the model to all health professions…* (National Health and Hospitals Reform Commission, 2009 p.25)

It is worth noting here that the provision of more equitable support for PHC professionals across all service delivery models may bring health systems in line with the perceptions of rural and remote communities. This is particularly so in relation to the importance that communities place on their individual PHC professional, regardless of the discipline of that individual.

As well as demonstrating the tensions on existing health service models, Figure 5 also highlights the array of tensions which impact on the introduction of innovative primary health care approaches. These innovative approaches encompass both the introduction of new workforce roles (such as PAs, expanded paramedic roles or community-based therapists) as well as the development of innovative team-based approaches to care (that is team-based approaches which may involve PHC professionals working outside their present scope of practice in order to share workload).

Chapter 3 considered key enablers of, and barriers to the introduction of innovative rural primary health care models. Enabling factors were: (i) health system change; (ii) skills-sets; (iii) team-work in primary health care; and (iv) understanding the role of patient perceptions. These enabling factors had associated barriers; namely (i) current health system policies and stakeholder

links (ii) the identification of appropriate skills-sets; (iii) a current dearth of evidence on what constitutes primary health care team-work, its relation to rural and remote service settings. The fourth barrier was a lack of understanding of patient perceptions of their PHC professionals as considered in this thesis. The case study findings raise a number of key implications in relation to these barriers and enablers. Indeed, community perceptions provide an insight into each of these barriers.

If community perceptions of PHC professionals are to be incorporated into health care planning and delivery, several issues should be considered at the broad health system level. These changes relate to the present restrictions placed on roles (and scope of practice) as well as restrictions imposed by current funding arrangements.

The importance of a health care professional's long-term residence in the community should be taken into account. Changes to health system policy and funding arrangements might be considered in order to support both non-GP led and GP-led models equally. This applies particularly to the local support that professionals are entitled to. Also important is the type of additional professional support they develop at the local level, or require as an outreach service. As there is a need to address policies and funding to support the role of the RIPERN and practice nurses, there is also the need to address the equity of funding and support for AHPs. Arguments have been made in relation to both benefits and drawbacks of targeted funding. Some see targeted funding as a means of focusing finance and reducing service duplication while others see it as restricting networks and constraining potential collaboration across health disciplines and broader health-related agencies (Duckett, 2004; Wells, 2005).

Most particularly, debate continues to focus on the drawbacks of fee-for-service and the restrictions of the Medical Benefits Schedule. Medicare is criticised as being demand-driven rather than strategic and is thus a barrier to the introduction of innovative workforce models (Duckett, 2004, 2007; Wells,

2005). In addressing these restrictions the NHHRC Report recommends that:

> *Medicare rebates should apply to relevant diagnostic services and specialist medical services ordered or referred by nurse practitioners and other health professionals having regard to defined scopes of practice determined by recognised health professional certification bodies* (National Health and Hospitals Reform Commission, 2009 p.31).

However, changes to Medicare rebates, while recognising and legitimising the roles of a broader range of health care professionals (such as NPs), may not alone be sufficient to ensure the appropriate and optimal use of these professionals in communities. This applies at both the level of existing PHC professionals and the community as a whole. Issues such as community understanding and acceptance of new health professionals and the means by which new roles are matched to existing service delivery at a local level are also fundamental considerations.

If we are to explore new workforce roles, then a standardised meaning is needed for the term 'skills-sets' in order to facilitate more meaningful discussion and, thus how skills-sets may be defined for various PHC professionals. Current definitions and discussions of 'skills-sets' most commonly focus on the clinical skills required (including diagnosing and procedural skills) (Opie, 1997; Saltman et al., 2007). However, the case studies indicated that rural and remote communities may see skills in a different light. While clinical skills were important, case study participants focused on additional skills and characteristics described in Chapters 7 and 8. These included the familiarity of the PHC professional with the community, the readiness of the health professional to collaborate and/or refer a patient if needed and their ability to act with confidence and also impart confidence to the patient.

The case studies suggested that the skills developed by PHC professionals were influenced by three competing pressures: (i) needs and expectations of

the community in which the health care professionals live and work; (ii) the availability and accessibility of health care professionals; and (iii) the organisational policies and procedures within which they are required to deliver care. A clearer understanding of 'skills-sets' might be developed by focusing on clinical skills needed by PHC professionals in particular clinical settings, and also on non-clinical elements valued by rural remote communities. In order to achieve this, it may also be necessary to look across a range of rural and remote health professionals in the context of care (that is the service itself) as well as the local community context within which they deliver this care.

The case study findings also have implications for the development of new health care professions. A recent example of this is the first intake of physician assistant students at the University of Queensland. This cohort is expected to commence placement and training in 2010 and graduate in 2012. Students are drawn largely from the ranks of nurses and ambulance paramedics. It is anticipated that these health professionals will ultimately fulfil the roles of general practice and hospital-based clinical assistants in rural and remote Queensland. The overall aim is that they may ultimately practise in areas where there are no GPs, or, alternatively, support current solo or small group rural practices as delegated practitioners, assisting GPs with procedural work as well as in monitoring and maintenance of patients with chronic disease and with on call emergency care.

Where it is planned for PAs to provide rural and remote primary health care support, it will be important to take into account the perceptions and expectations held by community members of their existing PHC professionals. Strategies to introduce roles such as PAs should include community consultation and education. Without the inclusion of communities in this process it is likely that these roles will not be fully accepted and thus not fully utilised in some communities. As discussed previously, suggestions of under-utilisation of AHPs by other PHC professionals may also be translated to new workforce roles such as PAs. Any introduction of new

workforce approaches should take into account both the history of primary health care delivery and the current organisation of care to ensure incumbent PHC professionals and community residents have an understanding and acceptance of the new health care professional.

9.2.1 Implications for AHP and expanded Paramedic roles

The case study results have implications for existing AHP roles and also the development and introduction of new roles, such as expanded care paramedics and the development of team-based approaches to care which use existing AHPs as well as new roles. Two issues were identified in the case studies which influenced AHPs' potential to become effective members of multidisciplinary care teams. These were community perceptions that their local health care professional provided all necessary care, without the need for other services and the understanding, and appropriate use of, AHPs by other PHC professionals as part of health care delivery. The overall lack of a clear understanding of current AHP roles and skills further hampers the introduction of allied health support roles such as community-based therapists. The most clinically and socially effective role these support services may have in rural and remote areas is not currently well understood.

The role of paramedics is already being informally extended to include more preventive health care and some expanded skills (Raven et al., 2006). An extensive literature review performed by the QAS concluded that paramedics' roles could be formally expanded to assist other health professionals in rural and remote areas (Murdoch, Gaskin, & Tippett, 2006). The report resulted in the development of a Graduate Certificate in Rural and Remote Paramedic Practice. The Graduate Certificate is a one year program. The first six months are based on the RIPERN course and taught through the Workforce Directorate in Cairns, Queensland. This component focuses on managing acute disease presentation and is based on the Primary Clinical Care Manual developed by the RFDS and endorsed by Queensland Health.

The second component of the course is a population health component offered online. It focuses on health promotion and chronic disease management. The underlying basis of the course is for paramedics to get to know their communities and be part of the ongoing strategy for post-hospital care by assisting local multidisciplinary health care teams with ongoing chronic disease management. The successful implementation of the extended paramedic role depends on a variety of factors including an understanding and acceptance of the role by residents of rural and remote communities.

However, the successful implementation of the extended paramedic role depends largely on an understanding and acceptance of the role by residents of rural and remote communities. Ambulance officers are an under-utilised resource in some rural and remote areas with active service time only partially filling the day (Raven et al., 2006). This means that they are potentially a valuable additional resource precisely in the communities with highest need and could become part of multidisciplinary health teams in areas of workforce shortage.

Results from previous research into the rural paramedic expanded scope of practice positions suggest that the expanded scope of practice role increased interactions between ambulance services and communities with a subsequent and overall benefit to health and understanding of ambulance paramedic roles in these communities. The study, conducted in Victoria, Tasmania and New South Wales, concluded that this was largely due to closer relationships forged between ambulance paramedics and communities (Stirling, O'Meara, Pedler, Tourle, & Walker, 2007). Indeed, in the current study several participants sought to explain their lack of knowledge of ambulance paramedic roles by saying they did not know their local paramedic personally, or that they had built a relationship with a local paramedic who had since left the town. These results indicate ignorance and/or confusion about current ambulance paramedic roles in some rural and remote communities. It is likely, therefore, that community perceptions might be amenable to change, but only

through public promotion of paramedics' extended roles and through direct contact with paramedics and their extended skills.

There is a need to increase community knowledge and understanding of both the current and new paramedic roles and also the roles of AHPs in primary health care delivery. It may assist in the acceptance of paramedics and AHPs as part of multidisciplinary teams by rural and remote residents. This may be achieved by closer relationships developed between paramedics, AHPs and their local rural communities. For paramedics in new extended roles, this may be done as part of their training where there are opportunities to inform rural residents of their skills pre and post-hospital care. For AHPs, this may be achieved by closer, integrated team approaches, facilitated by existing PHC professionals. In addition, there is also scope to investigate and profile existing PHC professional and AHP approaches to care such as those demonstrated in the case study of the solo GP without a local hospital.

The desire of many solo rural GPs to maintain autonomy has been used, along with evidence of community preference, to maintain overall GP autonomy. However, this is largely based on patients' exposure to and experience of the model of health care, rather than a universally held perception of health care professions. It also suggests that the successful introduction to innovative workforce approaches may be best tailored to a range of existing models, where they may be more acceptable to patients and PHC professionals alike. The acceptance and appropriate use of innovative workforce roles may be less likely in those communities with previous long-term exposure to GP-led models of care. In these settings, the organisation of health care may perpetuate and reinforce patient perceptions of health care professional stereotypes.

The case studies also suggest that there is a range of innovative approaches and experiences of health care delivery in rural and remote practice not wholly endorsed by present professional bodies. Perhaps this is because such

approaches and experiences are poorly documented and thus remain largely unknown.

9.3 PHC team-work

There is increasing evidence that a health care system modeled on chronic care interdisciplinary teams benefits patients with chronic illness (Canadian Health Services Research Foundation, 2006). In addition, multidisciplinary teams are more likely to be effective and provide solutions to rural and remote health workforce shortages (Australian Productivity Commission, 2005; Canadian Health Services Research Foundation, 2006). As outlined previously, the concept of team-work in relation to primary health care delivery is not new in Australia. Team-based care has recently re-emerged as a way of providing effective and economic care in rural and remote settings where existing providers are limited and increasing community access to a broader range of skills-sets over those provided by a single practitioner.

The NHHRC Report focuses on the role of team-based and integrated care. The NHHRC recommendations are aimed at both enhancing the care for patients with chronic and complex conditions, through the development of communication strategies and partnerships between PHC professionals. The NHHRC Report also sees this as a means of developing and maintaining a sustainable health workforce for the future by investing in leadership skills in multidisciplinary care delivery.

> *… a new education framework for the education and training of health professionals: moving towards a flexible, multi-disciplinary approach to the education and training of all health professionals…*
>
> *promoting a culture of mutual respect and patient focus of all health professions through shared values, management structures, compensation arrangements, shared educational experiences, and clinical governance processes that support team approaches to care;*

> *supporting effective communication across all parts of the health system;*
>
> *investing in management and leadership skills development and maintenance for managers and clinicians at all levels of the system* (National Health and Hospitals Reform Commission, 2009 p.30-31)

Recent debate has focused on the need for leadership training in order to provide effective multidisciplinary care provision. Presently, these debates do not clearly differentiate leadership roles which relate to clinical care delivery from roles in the coordination of care and the range of health care professionals involved in the team-based chronic care delivery. It is perhaps timely to define more specifically what the role of a leader of a multidisciplinary health care team entails and who is best placed to undertake such a role.

A critical issue in workforce development and planning relates to a clear understanding of the future role and place of the medical profession. This relates to both new workforce roles and team-based approaches to care (Duckett, 2007). Case study evidence suggests that some GPs may already fulfil team coordinator roles, taking initiative in the coordination of a range of visiting and local services in order to address the complex care needs of their patients. If team-based care is the future primary health care practice, is this, indeed, the best role for clinically experienced rural and remote GPs? If so, what type of education, training and onsite support will be needed to fulfil such a role and what impacts might this role have on their current clinical workloads (Sturmberg, O'Halloran, Jackson, Mitchell, & Martin, 2009)?

An absence of team-based approaches undoubtedly threatens the viability of solo models of practice, as evidence by the RIPERN, who created an expectation in the community that she could and would provide all necessary health care. Such behaviours, designed primarily to assist in the management of the clinical workload appeared to hinder close collaboration with visiting

services, other than the RFDS. In addition, the RIPERN was further disadvantaged by the lack of other non-clinical support, particularly locum relief to allow for recreational and training leave. These pressures ultimately proved unmanageable.

Preliminary work in relation to innovation in health care emerging from Canada concludes that power-issues perpetuated by stereotyped hierarchies may impact on the formation and function of effective team-based care. This may be most particularly evident in relationships between GPs and nurses which may profoundly affect the inclusion of other innovative workforce roles such as NPs. In turn, the perpetuation of such hierarchies has been shown to impact on the professional growth of individual health care professionals and also on the development of effective team-based approaches to care (Rodriguez & Pozzebon, 2010).

The traditional inter-professional model of health care delivery, consisting of teams of health professionals including GPs, nursing, and AHPs working together to provide a range of services (Opie, 1997; Ovretveit, 1993; Taylor et al., 2001; Woods, 2001) is evident in some rural and remote settings. In these case studies there is also a match between patient perceptions of the coordination or flexible role of their PHC professionals and the team-based approaches described by the PHC professionals themselves. However, there is general reluctance on behalf of the PHC professionals to discuss these approaches in detail due to describing roles and processes outside scope of practice and organisation policy.

A variety of visiting services does not necessarily translate into team-based approaches to care. Team-based approaches to care delivery in existing services may be influenced by necessity (such as a desire to reduce workload pressures) as well as the personal philosophies of the resident practitioner and the perceptions of their patients. More tangible barriers may also exist in relation to the development of shared care approaches and team-based care in rural and remote settings. The lack of infrastructure in remote settings, such as

small clinics with limited space and resources already result in the restriction of team-based approaches to care. In addition, long travelling distances restrict the time visiting services spend on site, particularly allied health professionals. Environmental factors such as weather and geography also mean that more isolated communities may spend extended periods of time without visiting allied health services.

Finally, clinical governance issues and patient confidentiality form a barrier to developing shared record keeping. Indeed, it is only by the good will of some allied health services in the north-west region, that clinical information is recorded across several clinical records and thus accessible to a number of different clinical providers. This enables PHC professionals, regardless of their organisational affiliation, to access patient information and use it for ongoing health care management.

In relation to the PHC professionals themselves, issues such as a lack of understanding of professional roles between health care professionals and inherent hierarchies between professions have been seen to impact on effective role coordination. The result is dissatisfaction amongst patients who remain essentially unclear about the roles of their health care professionals (Cooper and Stoflet 2004; Grumbach and Bodenheimer 2004). Where approaches to team-based care were described in these case studies, there was little evidence of a lack of understanding of roles by PHC professionals or dissatisfaction from participants. Perceptions of medical hierarchies, perpetuated at the broader organisational level, may have a greater negative impact on the development of team-based care, although this is not clear from these case study findings. Much could be learned from an investigation into how rural and remote primary health care services have evolved team-based approaches, despite broader organisational policy restrictions.

The movement towards primary health care team-work raises issues for the effective development of new models of primary health care and specifically the development of new categories of PHC professional. Duckett (2005)

argues that the more prevalent role substitution becomes, the more there will be challenges to the contemporary concepts and place of a 'nurse' or 'physiotherapist' in a health care system. This, in turn, raises the potential for effective and efficient team function to be undermined (Duckett, 2005). However, this view does not seem to be wholly supported by participant views of health care professionals in these case studies. In the RIPERN and MPHS models, contemporary notions of the role of the 'nurse' may have already been changed and reframed by rural residents. If contemporary notions generally include those characteristics patients most usually associated with a health care professional, then many of these archetypal views appear to persist (the nurse as 'Florence Nightingale'; the GP as 'the leader'). However, in practice these contrasts are not the sole means by which rural and remote residents determine the skills and roles of their health care profession, nor locate them on the traditional 'medical hierarchy'.

There are a number of characteristics which might enhance the trial and uptake of redesigned and new approaches to primary health care delivery. Services where patients are potentially already exposed to flexible, team-based care may be ideal sites for the trial of new workforce approaches. New types of health care professionals may be more readily accepted and thus used more effectively by patients who are used to this mode of health care delivery. Patients also appear to gain a clearer understanding of skills and functions of PHC professionals through exposure to team-based health care.

Universal acceptance of the importance of the resident health care professional, whether this is a GP or non-GP led service, was a common characteristic across the services studied. A list of key community and service characteristics can be identified (Table 6). The presence of any one or more of these characteristics might enhance the uptake of redesigned or new models of primary health care.

In identifying the services where new primary health care roles, such as PAs and expanded role ambulance paramedics, may be best trialled it may be

useful to take into account existing health care professionals, service organisation and the potential impact of patient perceptions by asking:

(i) Who?

Identify what primary health care profession(s) the community has had exposure to and who communities perceive as their principal PHC professional.

(ii) When?

When did this PHC professional arrive in the community and how long have they resided there; and finally,

(ii) What?

This question should determine what care is delivered and how that health care is organised in the service setting; including such aspects as links between local and visiting services. These questions may be asked both in terms of the history of PHC service delivery, and the types of PHC professionals communities have had in the past as well as the present service model. Using this approach it is possible to identify what types of new workforce role or innovative service approach may then be best trailed according to the characteristics present at each site (see Table 6).

If innovative and sustainable approaches to rural and remote primary health care workforce are to be developed and trialled effectively, including communities is a necessary part of both planning as well as implementation. Indeed, some communities may be more appropriate trial sites for new approaches (such as the expanded care paramedics) and non-GP led models of primary health care. Taking into account the existing health service, the longevity of the health professional, and value placed by rural residents with respect to skills and roles of the PHC professionals of that community, will ensure effective innovative service development and implementation in the long-term.

Table 6: Characteristics of sites to facilitate trial of innovative approaches

Community characteristics	**Service characteristics (Who, What and When?)**	**Trial of innovative approaches ... eg.**
Small size population	Single long-standing primary health care service; unable to support other PHC professionals	NIL
Demonstrated desire to secure a resident primary health care service	Long standing vacancy: No present primary health care service or history of high PHC professional turnover	PAs
Community experience of flexible or diverse PHC professional roles	Use of team-based approaches to care by resident PHC professionals within an existing primary health care service eg. MPHS models	Team-based approaches PHC paramedics
Community experience of coordinated care within single primary health care clinic setting	Use of team-based approaches to care delivery with visiting health care professionals	PAs PHC paramedics
Long-term experience of non-GP led models of care	Historic provision of primary health care by non-GP led models such as RIPERN service	PAs

9.4 Patient perceptions: Impact on quality and safety of care

Theoretical concepts relating to the theory of quality of care are well defined and discussed in previous literature. Overall, discussions about quality of care have centred on two key areas, namely (i) delivery of care to the individual patient, including a focus on health outcomes and (ii) the organisation or broad structure of health care (Brown, 2007; Burley & Greene, 2007; Coulter & Elwyn, 2002). Brown (2007) identifies issues relating by whom and how and quality care is currently defined, stating that the most common definitions of quality care relate primarily to patient health outcomes with limited acknowledgment of the importance of patient-based perceptions of quality of care.

As outlined in Chapter 2, the use of patient expectation of, and satisfaction with, health care have been challenged as an effective means of measuring quality of care, as satisfaction may be more easily achieved where expectation is low (Janzen et al., 2006). The findings from these case studies suggest that patients may assess the roles and skills of their health care professionals, and thus frame their perceptions of health care, using a far broader range of criteria than previously believed. Patients in this study placed great emphasis on non-conventional definitions of ‘skills’, most particularly the relationships and the role of familiarity in health care delivery.

Although including domains such as ‘familiarity’ may be difficult in relation to defining a measure of quality, specific outcomes such as the longevity of the health care professional in the community may stand as appropriate proxy measures. Additional domains such as referrals and evidence of a coordination role may also be effective ways of including patient-based criteria of quality. Once again, it should be noted that these criteria are not discipline specific, rather they are important to the resident, principal care professional in each setting.

9.5 Patient perceptions and sustainable health services

The issues of quality and safety in health care and the strategies for educating and training both existing and new medical workforce raise the question of the role of the community; specifically how and when to include community (patients) in education and training and the role of patient perceptions in determining appropriate quality and safety measures.

However, integral to the issue of community participation in innovative health care planning and workforce development is that of the health beliefs and health-seeking behaviour of rural and remote residents (Veitch, 2005). As described in Chapter 8, rural and remote residents and those identifying as 'rural' have been shown to have different health-seeking behaviours compared with their urban counterparts (Veitch, 1995). The key factors which Veitch identifies in his ABC (Access, Behaviour, Context) framework influence rural residents' decisions to seek care; most notably service type, condition and patient factors. Rural and remote residents may have subtly differing attitudes and behaviours based on their exposure to different types of health services (Veitch, 2005).

Two further comments can be made in relation to this. Firstly, factors such as exposure to service types combined with the personal relationships built up with local PHC professionals appear to have a significant impact on rural and remote residents' choice of service. Secondly, early perceptions of health care professionals' roles and skills, formed by long-term exposure to particular service types, appeared to influence participants' perceptions of health care professions overall. This is significant where rural residents move between communities; with the possibility that their perceptions and thus expectations of health care professionals are transported with them, into new community and health care service environments. While rural and remote residents may be a largely homogenous group in relation to their health beliefs and health-seeking behaviours, they are not homogenous in terms of their perception of the role and skills of PHC professional or indeed, what health care

professional they deem as ‘essential’ to the community (Veitch, 2005; Veitch & Grant, 2004).

The current study uses a definition of sustainability as the interaction of political systems (at State and Federal level); service organisation (including aspects such as team-based care); workforce (including the PHC professionals and support structures); and patient perceptions and expectations in the context of community profiles. The case studies all exhibited some element of sustainability, most usually demonstrated by health care professionals’ attempts to organise both their patients (as evidenced in the RIPERN service) and their health care staff (as evidenced in the solo GP without a hospital service and the MPHS) to make their workload more manageable and/or their care more effective. However, undermining these local attempts at sustainable service delivery were the desires of the PHC professionals to meet the needs of their communities and the lack of organisational support provided by state health systems.

There were also implications for the solo GP-led services. While they had access to support such as locum-relief, they were also attempting to fulfil community perceptions of their roles. For example, the solo GP with local hospital who worked across both private practice and MPHS was seen as the only person capable of delivering care to the community. Overall, participants in this service did not believe there were any other PHC professionals who could fulfil this role. Issues such as burn out have been well documented in models such as these, often as a result of demanding on call sessions and pressure from sole responsibility for the community. The solo GP without a local hospital appeared to adopt a ‘care coordinator’ role in order to fulfil the perceptions of the role held by the community. In addition, this PHC professional made use of the skills of the nurses in patient management while expanding the skills of the local paramedics in order to get assistance during emergency situations.

Existing health policies at State and Federal levels may restrict the possibility of solo GPs to develop team-based approaches to health care delivery. In addition, existing policies are also barriers to PHC professionals making use of the skills of experienced staff resident in the communities. A lack of team-based care approaches may impact on the long-term sustainability of rural primary health care services. This may be particularly so in small rural communities which are unlikely to support two GPs. New health care professions such as NPs and PAs are potentially ideally suited to provide supporting clinical roles in these services.

The issue of community inclusion and sustainability rests with reconciling community participation in health planning with case study evidence that participants tend to be most accepting of what they know (that is, the service delivery 'norm'). Participant perceptions of health care professionals in the long-term GP-led case studies indicated that GPs were seen as the essential care deliverer. This view can be contrasted with that of the RIPERN and MPHS models, where participants, whilst acknowledging the clinical importance of GP back-up did not tend to regard the GP as the essential care deliverer. The introduction of health care professionals such as PAs in rural and remote Queensland, should take such views into account. It is perhaps timely to move away from a continued focus on maintaining viability of GP-led models alone, to include the broader scope of non-GP led models of primary health care. Given that previous research has clearly documented the importance of team-work, expanded roles for health care professionals, and flexibility to allow greatest use of the existing workforce, policies and systems which actively impede such practices should be reviewed. (Togno et al., 1998).

9.6 Conclusion

Douglas et al (2009) in outlining their recommendations specific to primary health care workforce, conclude that, without attention to the greater context, specific workforce reform alone *'may flounder and not achieve intended goals'* (Douglas et al., 2009 p.5). The findings of this study support that view.

They suggest that the role and inclusion of community perceptions of existing health care professionals is an integral part of this broader context of workforce reform. The findings of these case studies provide an insight into considerations, specifically in relation to the introduction of innovative approaches to rural and remote health care and considerations for the implementation of team-based approaches to health care.

Despite the contextually specific findings of these case studies, it is possible to identify strategies which address the broader issues identified and discussed here. The ultimate challenge lies in the effective incorporation of such strategies into workforce planning, development and delivery. The final chapter thus outlines strategies to address the issues identified here and draws final conclusions in relation to workforce innovation with respect to this wider context of care.

Chapter 10
Conclusions and recommendations

10.1 Introduction

The findings and recommendations from this study demonstrate the importance of the principles espoused in the NHHRC Report. However, history suggests that many policies have failed or had a reduced impact due to poor implementation strategies. This chapter outlines some broad strategies at Federal, State and local levels to assist the achievement of sustainable primary health care services and address the recommendations made by the NHHRC. Firstly, the findings from this study demonstrate the importance of incorporating community views to ensure a responsive and sustainable health system and health reform. This is particularly so in relation to the redesign of existing health services and the potential introduction of new workforce models. Secondly, effective team-based approaches to health care delivery may only be adequately achieved where community perceptions of existing PHC professional roles and service models are taken into account. Finally, future research directions are identified and discussed.

Before discussing the relevance of the findings and broad recommendations, the following section provides a brief overview of the key aims, objectives and results of this study.

10.2 Summary of results: Aims and objectives

The key aim of this study was to explore individual patient perceptions of existing PHC professionals in four rural and remote communities. This included the investigation of individual patient perceptions of existing health care professionals; the perceptions of the PHC professionals themselves; differences and similarities between rural patients' perceptions of PHC professionals and the key factors that contribute to these differences; the broad stereotypical views patients hold of the health care professions; and how these

perceptions may impact on innovative approaches to primary health care delivery. The data were analysed within the context of each community and service setting.

Results suggested that, three factors influenced perceptions; namely (i) the age of participants; (older participants appeared to hold more conventional perceptions of their PHC professionals); (ii) their experience of care and long-term exposure to service models and the ways in which health care was organised and delivered (iii) the longevity of PHC professional in community.

When discussing perceptions of their PHC professionals', participants placed greater emphasis on their human experience of care and much less emphasis on perceptions of clinical skills. Participants described their care in terms of their relationship with long standing PHC professionals, and the knowledge PHC professionals had of the community. Long term residency of PHC professional is valued highly by rural patients, regardless of the type of PHC professional. In some instances this results in communities being familiar with, but dependent on, the incumbent practitioner. Perceived dependence on a PHC professional appears most common in communities where there is a history of GP-led models of care. These perceptions may influence patients' acceptance of PHC professionals. Following this, patients may be less accepting of innovative and other non GP-led models of care.

While patients focussed on human aspects of care, PHC professionals gave a description of their clinical skills and/or management roles and their descriptions of common presentations matched with those given by patients. Although most PHC professionals had a clear understanding of the roles and skills of other PHC disciplines, it did not necessarily translate into close clinical working relationships. Such issues should be addressed if shared values and effective team based approaches are to be established in rural and remote services.

There was also a contradiction between PHC professionals and patients in relation to preventive health care delivery. This discrepancy reflected PHC professionals' tendency to provide opportunistic monitoring and maintenance care when patients had presented for other reasons. Given the move toward preventive health care, this finding has implications for the way preventive care may be most effectively provided in rural communities.

The role of PNs, AHPs and ambulance paramedics were not well understood. Patients with regular exposure to these roles were most able to describe them. Community education on the role and function of these PHC professionals is required to ensure their appropriate and optimal use in rural health service settings.

Finally, evidence suggested that patients to do not apply beliefs of a medical hierarchy to their perceptions of the skills and roles of their resident PHC professionals. Health systems and PHC professionals themselves may thus act to maintain medical hierarchies which patients do not perceive. The following section discusses the application of study findings in the broad context of sustainable rural primary health care.

10.3 What is needed: Applying the findings of this study

Chapter 3 identified three potential strategies to facilitate sustainable rural primary health care delivery. These were (i) strengthening current primary health care models; (ii) redesign of existing models and development of new types of Australian rural PHC professionals; and (iii) development of a clearer understanding of community and patient perceptions of existing rural health care professionals. Evidence suggests that an understanding of community perceptions may be fundamental to the successful implementation of the first two strategies.

The following sections present recommendations (in italics) for the application of findings from this study to support the two strategies. These include one or more strategies at local, State or Federal levels. These strategies align with

NHHRC recommendations outlined in the introduction section and demonstrate (i) the importance of including community perceptions in sustainable health care planning and also implementation; (ii) the implications of patient perceptions and health care organisation on team based approaches to care; (ii) and finally the role of education and training in ensuring the development of new, and sustainability of existing models rural primary health care.

10.3.1 Strengthening of current primary health care models

Communities appear to value long term resident PHC professionals; regardless of their health care discipline and service model. This suggests that non-GP led services should be viewed as sustainable service models in their own right, rather than as 'stop gap' models of care. Non-GP led service models appear to be acceptable to the communities within which they operate and should thus be afforded ongoing support to develop and maintain them.

State and Federal health systems should ensure that equal support is provided to both solo GP and solo non GP-led models of rural and remote primary health care. This might include the provision of equal funding such as incentives to remain in rural locations, equal access to timely locum relief and the facilitation of onsite opportunities for clinical training. It should also include recruitment strategies such as equal access to recruitment incentives such as scholarships, financial incentives and placements for both medical and allied health students.

A review of state health policies and procedures to identify and support the current range of health care professional roles should also be undertaken. This is particularly relevant to service models where flexible and interchangeable roles have developed as part of sustainable service delivery. However, in order to do so, there is a growing need for a defined framework of measures of appropriate and effective team-based primary health care. Any framework must take into account both the challenges of primary health care delivery in rural and remote environments and also the means by which context-specific team-

based approaches have already been implemented in many rural and remote areas.

Patient perceptions that incumbent health care professionals will provide all aspects of care suggest that rural residents develop trusting relationships with the familiar long-term PHC professional. Thus, they are less likely to utilise other service providers, particularly if they are visiting. This may also be the case in services where the role of PNs is not well understood. It is important, for the ongoing health of a community, the workload of the existing health care professionals and the effective incorporation of PNs and AHPs, that communities are provided with broad exposure to, and education about, the roles and function of AHPs, in both permanent and visiting service models. In addition, broad changes in funding structures to allow for more effective use of non-GP based services should be investigated to enable more effective service delivery in both GP and non-GP led primary health care services. Douglas et al also argued the importance of this in their recent study (Douglas et al., 2009). The encouragement of shared experiences and understanding of team-based care may provide the means by which GP, RIPERN and AHPs can define more effective team-based working relationships in rural and remote practice. These should be facilitated by partnerships between existing government and non-government funded services which often share service provision in rural and remote centres, particularly in relation to allied health care.

In order for effective team-based approaches to be implemented, a clearer understanding of the concept and practice of team-based primary health care as it relates to rural and remote settings is necessary. Opportunities to foster relationships between existing PHC professionals; particularly between outreach and solo practice models, should be explored. Changes to existing organisation and government based support structures, policies and funding systems should be made if existing and flexible team-based approaches to care are to be maintained and allowed to develop effectively to meet the needs of local communities.

10.3.2 Redesign of existing roles and development of new models of Australian rural PHC professionals

Some services and communities may be more amenable to the introduction of new workforce models than others. Therefore, community perceptions and expectations of existing PHC professionals and the implications of these perceptions on service organisation and delivery should be taken into account when introducing redesigned health care professional roles. In addition, the subtle ways in which care may be organised, regardless of the PHC professional, should not be underestimated if new roles are to be used effectively and remain sustainable, in rural and remote community settings. This aligns with the NHHRC recommendation to develop shared values within patient-focussed framework.

Patients' knowledge and understanding of the roles of PHC professionals appear to be strongly influenced by the establishment of personal relationships. Personal relationships are developed with long-term resident or visiting professionals through clinical interactions and personal encounters in the community. Strategies to increase community awareness may include targeted information sessions in local schools and also at community-wide events. For example, community-wide fund raising events, local rodeos and 'market' days. These approaches may increase acceptance and appropriate use of these services of both existing and new workforce roles.

In order to ensure the sustainability and maximise the effectiveness of the introduction of new workforce approaches, rural communities should be part of a consultation and education process, facilitated by state health or stakeholder organisations. Existing PHC professionals should also be educated about the skills and function of all new proposed roles, if role adaptation is to form an effective part of rural and remote health care delivery. Finally, any education and training strategies must take into account the current organisation of health care at each site to enable new roles to fit most effectively into existing service models.

Community awareness of the roles and skills of ambulance paramedics as pre-hospital clinicians, as well as the new extended primary health care paramedic role should be raised. This may be achieved by providing community education about the extended paramedic role, how this relates to paramedics' traditionally recognised roles in providing both pre and post-hospital care, and the benefits of both roles to rural communities.

Similarly, community awareness should also be raised about the role and skills of AHPs. Strategies should be part of ongoing service delivery; taking into account the possible transiency of some rural populations. However, government and non-government organisations and peak professional bodies might consider providing targeted community education as part of their role. Where AHPs are part of a visiting service, additional and more creative strategies may be needed to achieve this.

Raising community awareness by providing targeted education about AHP and ambulance paramedic roles as well as awareness of extended paramedic roles, should be part of the ongoing rural care delivery undertaken by these health care professionals and supported by their professional organisations.

Existing and effective team-based models might also provide a framework for other similar service settings. However, further research is required to identify and explore existing 'best practice' models of team-based care and how they apply in rural and remote settings. The following section discusses the implications of this for future research.

10.4 Further areas for research

In Australia, the identification and investigation of existing team-based approaches will be fundamental to the development of sustainable rural primary health care services. Investigations under this topic might include: how such models have evolved and adapted, the specific roles and functions of the PHC professionals within each service, and the how these roles are perceived by the community. One of the current ways of measuring team-based care is

through evidence of cross-referrals between PHC professionals in multidisciplinary settings (Taylor et al., 2001). Data from these studies suggest that patients in these rural and remote services see referrals as an important role of their PHC professionals; regardless of discipline.

Further research will also be required to define the flexibility of roles needed to ensure the sustainability of team-based services. This might be achieved by identifying and investigating the present scope of team-based care in rural and remote health service models, particularly in relation to multidisciplinary approaches to health care involving GPs, nurses and AHPs. It is necessary to bear in mind that the reality of existing roles and functions may vary in relation to the official scope of practice. PHC professionals may therefore be reluctant to disclose the full diversity of their roles if they feel they may be legally defined as working outside their defined field of expertise.

Finally, as identified in Chapter 9, the results presented in this thesis provide insight into ways in which patients may also define quality of care. Further research will be needed in order to more clearly identify the ways in which patient perceptions of the roles of their PHC professionals; including factors such as the longevity of the PHC professional in the community and the means by which health care is organised and delivered, may inform the development of more appropriate measures of quality of care.

10.5 Conclusion

Rural and remote primary health care services are context-specific and there should not be a ‘one size fits all approach’ to rural and remote primary health care delivery. Results from the case studies presented in this research demonstrate that patients value the longevity and familiarity of their PHC professionals, regardless of the discipline to which they belong.

If two main factors are taken into account; namely the community perceptions and expectations of existing health care professionals, and the organisation of health care delivery within each rural and remote community, the proposed

strategies may be more appropriate, acceptable and thus effective in the long term. This, in turn, supports the recommendation of the NHHRC, which advocates the importance of listening to the views of all Australians with respect to health system and health reform to ensure the ongoing sustainability and responsiveness of the health system (National Health and Hospitals Reform Commission, 2009).

In listening to the views of rural and remote Australians presented in the case studies, it is perhaps most important to acknowledge that some communities value non-GP based models highly. They do not see their local service as providing less effective care than their GP-led counterparts. This is especially the case when such services are provided by a long-term resident health care professional. In these communities this is the accepted 'norm' of health care delivery. Without it, they would have none. Even though traditional views of the medical hierarchy may persist, in practical terms communities appear not to differentiate between the functional roles of PHC professionals, particularly GPs and RIPERNs. It is thus important to ensure that all models of rural primary health care are equally supported by both Federal government and state-based initiatives if rural and remote practice is to be sustained. In addition, new workforce approaches may be best trialled in specific service models, where community 'norms' of service delivery are taken into account. Finally, rural and remote health care services have a history of being adaptable and responsive in order to meet the demands of rural primary health care delivery. This is particularly evident in the implementation of coordinated, flexible approaches to health care delivery within some health care services. Much can still be learned by investigation into these flexible models of care. This will contribute to the development of evidence-based team approaches to achieve sustainable rural primary health care delivery.

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Appendix A

Literature review methods: Patient perceptions

Introduction

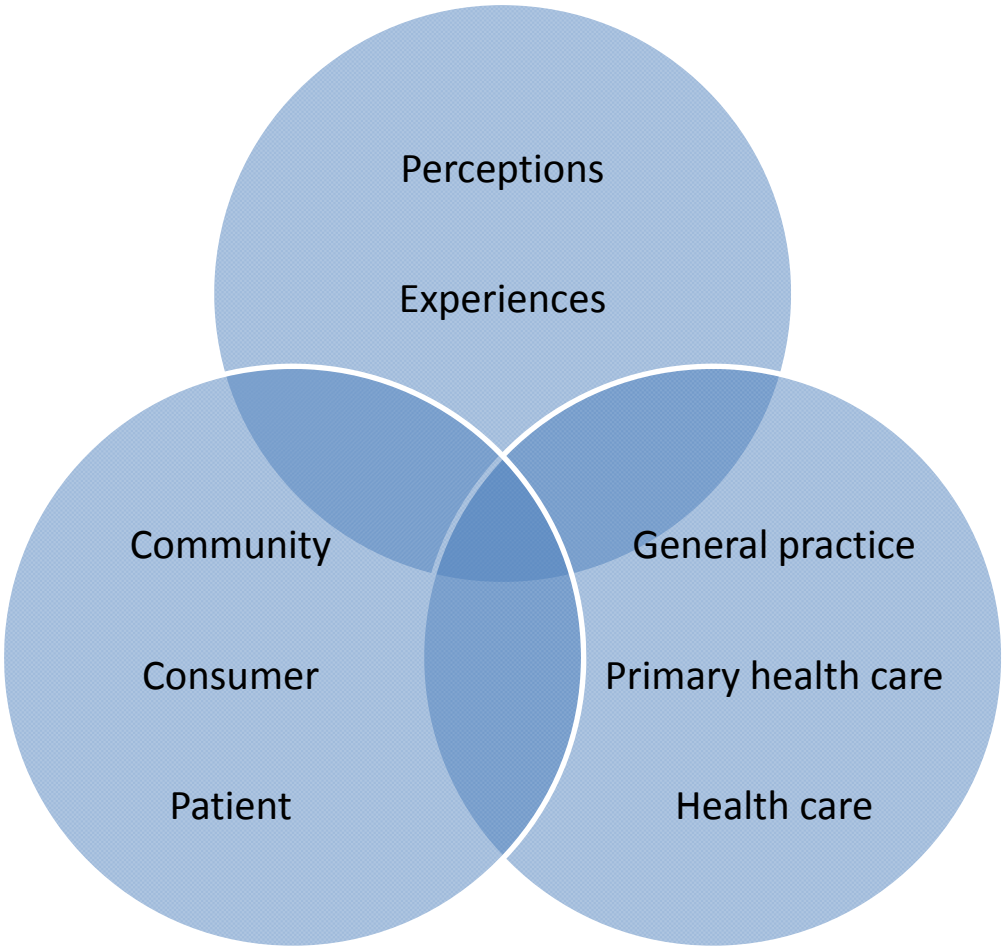
This appendix describes the methods used to identify patient perceptions of the roles and skills of their health care professionals identified from national and international literature (see Chapter 3). Findings from this literature review informed the development of the interview proforma to explore patient perceptions of their local health care professionals.

Literature Review Methods

An initial literature review was undertaken to identify published papers using the search terms ‘community; consumer; patient’ and ‘primary health care; general practice; health care’ and ‘perceptions’. This initial search protocol identified national and international studies which included the word ‘perception’ as part of the keywords or paper title, however few of these focused specifically or exclusively on the idea of community, consumer and patient ‘perceptions’. Indeed many papers that used the term patient ‘perceptions’ appeared to be exploring patient ‘preference’, ‘expectation’ or ‘satisfaction’. The definition of ‘expectations’, ‘preferences’, expectations’, ‘satisfaction’ and ‘perceptions’, as employed in this thesis, are used to assist in differentiating these papers. The notion of ‘patient expectation’ is defined as those elements that patients associated with future care delivery; the concept of ‘preferences’ is defined as what a patient desires (made on past or present experience, or anticipated elements of care, or of a health care professional). The concept of patient ‘satisfaction’ is defined as assessments of patients’ actual health care experiences, in a retrospective review of that care or the health care professional. The notion of patient ‘perceptions’ is associated with a present-tense view of health care.

Given this, the final search term was replaced with the word ‘experience(s)’ in order to initially capture a wide range of literature that may be eligible for inclusion in this review. The figure below provides a diagrammatic representation of this search protocol. Once the search was complete studies which used the term ‘perceptions’ or ‘experiences’ in relation to a solely present tense view of health care or health care professionals were included in the final list of papers. Studies were also included in the final review if the term ‘perception’ was included in the paper, even if used in conjunction with the terms ‘expectation’ and ‘preference’.

Literature Search Protocol



Ten studies (national and international) were identified using these search terms. The studies included views from a range of patients (age and chronic disease status) and a range of settings (rural, remote and urban). In addition, the studies were conducted across a variety of health care models such as MPHS; rural primary health care clinics and solo general practices. The study participants were recruited through national consumer associations, specific chronic disease support groups and different primary health care service models or through sites such as rural secondary schools. This body of evidence, while small, provided an important basis for the development of the patient interviews.

Limitations of the literature review

The available literature was limited and explored notions of patient (often referred to as 'consumer') expectations of, and preferences for, and satisfaction with PHC professionals. However, the terms often appeared to be used interchangeably; with no clear indication of whether the results related to judgements made in a future timeframe (expectations) or past (satisfaction) timeframe. In studies relating to 'preferences' it is also unclear in what timeframe these judgements had been made (past, present or future).

Much of the evidence on patient perceptions presented in the literature is implicit rather than explicitly described. In addition, it is apparent that patient perceptions of health professionals' roles have been explored more commonly in nursing than in general practice, allied health or pre-hospital care settings. In some studies the focus related to patient expectations and, in one instance, preferences of roles rather than perceptions. However, it is possible to gain an understanding of broad patient perceptions of health care professionals' roles and use this as the basis for further investigating those perceptions in specific contextual settings.

Defining roles, skills, tasks and attributes

The Macquarie dictionary (1998) defines a *'role'* as the *'proper or customary functions'* of an individual, whereas *'tasks'* are defined as *'definite work*

assigned or falling to, a person; a duty'. Following this the term *'skill'* is defined as *'expertise'* or *'a particular ability'* and *'attribute'* is defined as: 'to consider as belonging to' or 'a quality, character, characteristic or property'(Delbridge & Bernard, 1998). These definitions are used to assist the delineation patient perceptions from the literature, in particular the differentiation of perceptions relating of customary functions; defined duties (tasks) versus perceptions of expertise or particular abilities (skills); and finally the broader (and in often personal) characteristics or attributes associated with a health care professional or profession. The definitions of these terms are used to guide the review of the identified literature.

The findings of review of perceptions were used to inform the questions used during interviews to explore patient perceptions of roles and skills of their local health care professionals. The findings relating to attributes provided the framework for the second stage of the interview, guiding the questions and prompts used to explore patients' views of professional stereotypes

The table below provides a summary of patient perceptions, the attributes associated with each health professional and the factors known to influence these perceptions as identified in the available literature. In some instances there appear to be close links between what may be seen as a clinical role or a personal characteristic. In these cases, the factors have been placed in the column (either clinical role or personal attribute) relevant to the way in which they were identified in the paper. For example, 'makes time to spend with patient' discussed in the context of the clinical role of a PN was included under perceptions of clinical role rather than as a personal attribute.

Table: Summary of literature review

PRACTICE NURSES			
Clinical role	**Personal attributes**	**Perceptions influenced by**	**Reference**
Giving injections		Personal experience	Cheek, J; Price, K; Dawson, A; Mott, K; Beilby, J; Wilkinson, D. **Consumer Perceptions of Nurses and Nursing in General Practice.** Centre for Research into Nursing and Health Care, University of South Australia, November 29, 2002.
Providing wound care		Exposure (amount and location in either in general practice or hospital settings)	
Dressings		Presence of name badge or identifier	
*Providing care and support but *not* clinical decision-making		Introduction of the nurse to the patient by GP	
Taking measurements		Service provided	
Not prescribing drugs, anaesthesia or making general diagnoses. Nurses may have an opinion but this is discussed with the GP and not with the patient		Seen to be working from area defined as the 'nurses room'	
Providing health promotion and education e.g. heart health		Gender (nurse being female or GP male)	

Clinical role	**Personal attributes**	**Perceptions influenced by**	**Reference**
Taking bloods		In rural areas, general awareness of who employed as a nurse	Cheek, J; Price, K; Dawson, A; Mott, K; Beilby, J; Wilkinson, D. **Consumer Perceptions of Nurses and Nursing in General Practice.** Centre for Research into Nursing and Health Care, University of South Australia, November 29, 2002.
Providing first aid		Understanding of broader meaning of primary health care	
Providing counselling and support		History of nurses role in local community	
**Not* diagnosing life threatening conditions		Terminology ie. 'practice' nurse means a nurse in 'training'	
Writing repeat prescriptions		What patients actually see the nurses doing as opposed to what the nurses do 'behind closed doors'	
Providing follow-up care		Education and training (nursing versus GP); nurses do not have as advanced training as GPs; including the display of qualification certificates. GP has the training and education whereas nurses role or function is determined by 'experience'	
*Providing a second opinion (in relation to diagnosis) to that of the GP		Continuity of service reinforcing roles and functions	

Clinical role	**Personal attributes**	**Perceptions influenced by**	**Reference**
Being a patient advocate		Continuity of care (access to the same GP)	Cheek, J; Price, K; Dawson, A; Mott, K; Beilby, J; Wilkinson, D. **Consumer Perceptions of Nurses and Nursing in General Practice.** Centre for Research into Nursing and Health Care, University of South Australia, November 29, 2002.
Not being a gatekeeper to prevent access to GP		Primary health care clinic versus hospital settings	
Triaging prior to seeing GP		Perceptions of the GP-nurse interaction	
Providing interpretation and communication in relation to test results and diagnoses		Role and context of the individual as a patient; carer; elderly; a person with a young family	
Maintaining patient confidentiality and privacy		Rurality	
Referring to none-professionals or community services		Team-work Service costs; costs of accessing a nurse versus a GP	
Expectation: Providing information on patient care	Expectation: that conduct is appropriate and kind		Haggman-Laitila, M and Astedt-Kurkri, P (1994) **What is expected of the nurse client interaction and how these expectations are realised in Finnish Health Care.** International Journal of Nursing Studies, 31 (3): 253-261.
Expectation: Being sensitive to client needs	Expectation: treat clients equally and justly		
Expectation: Protecting patient intimacy	Expectation: good humoured, careful, gentle		

Clinical role	Personal attributes	Perceptions influenced by	Reference
	Expectation: ask or inquire re. patient		Haggman-Laitila, M and Astedt-Kurkri, P (1994) **What is expected of the nurse client interaction and how these expectations are realised in Finnish Health Care.** International Journal of Nursing Studies, 31 (3): 253-261.
	Respect patient individuality irrespective of importance or need for help		
Being accurate	Introduce self to patient		
	Genuine		
	Honest		
	Body language correspond to verbal communication		
Expectation: Nurses possess 'nursing knowledge'			Lee, M and Young-Hee, L (2006) **Comparative study of patients' and nurses' perceptions of the quality of nursing services, satisfaction and intent to revisit the hospital: A questionnaire survey.** International Journal of Nursing Studies. 44 (4), 545-555**.**

Clinical role	Personal attributes	Perceptions influenced by	Reference
Expectation: Providing a precise and skilful nursing service			Lee, M and Young-Hee, L (2006) **Comparative study of patients' and nurses' perceptions of the quality of nursing services, satisfaction and intent to revisit the hospital: A questionnaire survey.** International Journal of Nursing Studies. 44 (4), 545-555**.**
Expectation: Providing medication and treatment at the correct time			
Low expectation: Providing a comfortable environment			
Having a range of roles including minor surgery		Education level of patients	Olade, R (1989) **Perceptions of nurses in expanded roles.** International Journal of Nursing Studies, 26 (1):15-25.
		Exposure as users or non-users of the nurse in expanded role	
		Age of patient (>50yrs)	
		Services performed ie. nurses commonly managing malaria; gastroenteritis; URTI; measles; sprains and minor accidents; perform minor surgery such as suturing lacerations; incisions; draining abscesses; and plastering	

Clinical role	Personal attributes	Perceptions influenced by	Reference
Not substituting for GPs in diagnosing	Supportive		Patterson, E; Price, K and Hegney, D (2005) **Primary health care and general practice nurses: What is the nexus?** Australian Journal of Primary Health, 11 (1): 47-54.
Not substituting for GPs in prescribing	Caring		
Providing holistic care			
Providing family-oriented care			

GENERAL PRACTITIONERS			
Clinical role	**Personal attributes**	**Perceptions influenced by**	**Reference**
Having 'clinical skills'	Trusting	Patients with chronic conditions	Infante F; Proudfoot J; Powell Davies G; Bubner T; Holton C; Beilby J; Harris M (2004) **How people with chronic illnesses view their care in general practice: A qualitative study**. Medical Journal of Australia, 181 (2): 70-73.
Providing continuity of care	Be a good communicator	Facilities and appearances of a practice do NOT influence patient perceptions of whether a GP is a 'good' GP or not	
Trusting relationship	Being a good listener; understanding; caring; empathy; compassionate; spending time	Perceptions of whether GP is a 'good' or not influenced by displays of: counselling; advising; trusting of the patient; providing education; being up to date with skills; being accessible via telephone; knowledge about the patients' condition; believing patient concerns	

Clinical role	Personal attributes	Perceptions influenced by	Reference
Monitoring and checking of patient progress			Infante F; Proudfoot J; Powell Davies G; Bubner T; Holton C; Beilby J; Harris M (2004) **How people with chronic illnesses view their care in general practice: A qualitative study**. Medical Journal of Australia, 181 (2): 70-73.
Being a care coordinator			
Being the main health care provider whether solo GP or member of the team			
Referring to other health care specialists			
*Providing guidance on lifestyle changes			
Providing guidance on the stages of chronic conditions			
Knowing the clinical cause of disease (not just citing lifestyle issues in relation to onset of chronic illness)			

Clinical role	**Personal attributes**	**Perceptions influenced by**	**Reference**
Being a source of health information	A good listener	Age (adolescent)	Atkinson K; Schattner P; Margolis S (2003) **Rural Secondary School students living in a small community: Their attitudes, beliefs and perceptions towards general practice.** Australian Journal of Rural Health, 11: 73-80.
Offering treatment	Empathetic	Gender	
Offering advice pregnancy; mental health; fevers; sexual abuse; contraception; sore throat; suicidal thoughts; diet; drugs; and stomach/head ache	Have time to spend with patients	Location (ie. small rural community)	
Maintaining confidentiality and privacy			
Being a 'curer', the one who cures	Happy to see patient		Haddad S; Fournier P; Machouf N; Yatara F (1998) **What does quality mean to lay people: Community perceptions of primary health care in Guinea.** *Social Science and Medicine*, *47* (3), 381-394.
Solver of health problems	Interested		
Having clinical resources such as drugs and dressings	Imparts courage to patient		
Dispensing drugs	Imparts hope to patient		
Providing a 'good' diagnosis	Provides patient with comfort		

Clinical role	Personal attributes	Perceptions influenced by	Reference
Deliverer of care which is not conditional on prior payment	Kind		Haddad S; Fournier P; Machouf N; Yatara F (1998) **What does quality mean to lay people: Community perceptions of primary health care in Guinea.** *Social Science and Medicine, 47 (3),* 381-394.
Refers	Polite		
	Respectful		
		Access to care	Cheraghi-Sohi S; Bower P; Mead N; McDonald R, Whalley D; Roland M (2006) **What are the key attributes of primary care for patients? Building a conceptual 'map' of patient preferences.** *Journal of Health Expectations, 9,* 275-284.
		Technical care provided; interpersonal care provided; patient centredness; continuity of care Hotel aspects of care (such as the dress and appearance of the GP)	

ALLIED HEALTH PROFESSIONALS			
Clinical role	**Personal attributes**	**Perceptions influenced by**	**Reference**
Is integrated with other providers	Appropriate communicator	AHP matched to community demographics (present and future)	Battye K and McTaggert (2003) **Development of a model for the sustainable delivery of outreach allied health services to remote north-west Queensland, Australia.** Rural and Remote Health, 3 (Online): 194. Accessed: October 10, 2006.
Is team focussed	Culturally aware	Community input into AHP position description and service model	
Building a trusting – patient relationship		Knowledge that AHP in town so you can attend	
Having time for patients		Poor promotion and notification of AHP in town	
		AHP visit; namely the length of time the AHP spends in community	
		Type of community (Indigenous; non-Indigenous)	
		Previous experiences of allied health service delivery	

* Indicates where patient views diverge between studies

Appendix B

Ethics Approval Forms

Administrative documentation has been removed

Appendix C

Primary health care professional interview proforma

Preamble: Thank you for agreeing to talk with me today. This study aims to identify how patients see the roles and skills of their primary health care professionals and how these might differ from or match the skills and roles that you describe. I would like to talk with you about your professional and personal roles here in this service and in the community. I would like and ask you describe what you see as your key skills. All of the information you provide today will be kept strictly confidential. Before we begin, do you give consent for me to audiotape our discussion? YES / NO. If YES, thank you. I will delete this audio file once I have transcribed our discussion. There will be no information that may identify you written in the transcript). If NO, thank you. I will take manual note only.

Gender (Male/Female)
GP / Nurse

A. Basic demographics
How long have you lived here in ……..

How long have you been rural practice?

Where did you practice prior to this community?

How would you describe your role in this service?
[If MSRPP: can you tell me how your role differs between here and the hospital?]

Professional roles
Can you describe your skills?

- Specific training for rural primary health care

- Specific interests
- Are there any clinical areas/procedural skills that you USED to perform here that you no longer.
  If YES, can you tell me what these are?
  Why did you stop performing these?
  Did you receive any feedback or comments from patients when you stopped performing these? Can you tell me about these?

Are there any NEW skills that you have gained/are gaining here? If so, what are they? Why have you gained these skills? How do you use these skills?

What are the most common conditions that you see in the practice?

Can you tell me what roles you currently perform and the skills you associuate with these roles?
[Clinical and non-clinical]
Prompts:

- Advocacy
- Support
- Health promotion and education
- Diagnosing
- Patient history/triage
- Procedural/assist with procedures
- Emergency
- Health care coordination
- Administration/management

Can you describe for me, how you see the role and skills of the other staff in the practice, both resident and visiting? (GPs, nurses, allied health, managers, paramedics, other)?

Do any of these differ from your original understanding/perceptions of these roles? If YES, in what ways do they differ?

Do you think these roles have changed during the time you have been here?

If YES, in what ways have they changed. If NO, why do you think they have remained the same?

How would you describe this local primary health care service model?

Prompts:

- A conventional general practice (GP-led, PN support, links with additional services) or
- A less conventional model of primary health care delivery. If so, please describe it
- Team-based or
- Solo model of health care delivery
- Other?

Has this health care service changed since you have been here? If YES, in what ways?

What do you think brought about this change?

Has this change impacted on you/the patients? If YES, in what ways. If NO, why do you say that?

How would you perceive your overall role in terms of health care delivery in this community?

Thank you for your participation today. This information will assist me to develop detailed case studies about each of the services and form the background to my exploration of patient perceptions of the roles and skills of their health care professionals

Appendix D

Patient interview proforma

Preamble: Thank you for agreeing to talk with me today. I would like to ask you some questions about your perceptions of the roles and skills of primary health care professionals, such as GPs, practice nurses, allied health professionals and also ambulance paramedics. You don't to have had direct experience with these health care professionals but I will ask you about your last visit to your local health service. Although I will ask you about your own LOCAL service, I am also interested in GENERAL perceptions of what these health care professionals actually do and the role they have in your community.

All of the information you provide today will be kept strictly confidential.
Before we begin, do you give consent for me to audiotape our discussion?
YES / NO. If YES, thank you. I will delete this audio file once I have transcribed our discussion. There will be no information that may identify you written in the transcript). If NO, thank you. I will take manual note only.

Let me start by first asking you some questions about yourself…
Gender (Male/Female)

<u>A. Basic demographics</u>
Age

Marital status

Family (if so, ages of children; elderly parents; other residents in the house)

CURRENT location

Do you live in town or on a property?

If on a property, how far out of town are you?

Are you working, not working or retired?

If working, what is your current occupation?

How long have lived in …… [name of town/shire]

These next questions are about your health

Do you have any chronic conditions, such as diabetes; asthma; high blood pressure; other)?

If so, what are these conditions?

Do you take medication for these?

How do you manage this/these conditions – does it require regular visits to your local primary health care service? If YES, how often do you attend?

Does anyone else in your family have any chronic conditions?

If so who and what are these?

Do they take medication for these?

How do you manage this/these conditions – does it require regular visits to your local primary health care service? If YES, how often do you attend?

Have you been diagnosed recently with any other conditions? If YES can you tell me about that?

<u>B. Use of primary health care services</u>

What kinds of things do YOU go to your local primary health care service for?

When was the last time you attended your primary health care service? What was that for?

Can you tell me why you went there?

What did you think would happen?

Which health care professional did you see that day?

What did you think the health care professional would do?

What DID they do?

Did you see any other health care professionals on that visit? If YES, who?

What did you expect that health care professional would do?

What DID they do?

[If relevant] When was the last time you went to your local hospital? What was that for?

Can you tell me why you chose to go to the hospital?

What did you expect to happen?

Which health care professional did you see that day?

What did you think the health care professional would do?

What DID they do?

Did you see any other health care professionals on that visit? If YES, who?

What did you expect that health care professional would do?

What DID they do?

Have you ever travelled out of town to use a health service?

If YES, can you tell me about that?

Where did you go?

Were you referred? If YES, who referred you and why?

Can you tell me about that visit?

These next questions are about the types of <u>SKILLS</u> you see your local primary health care professional(s) has/have.

What types of SKILLS do you see your local primary health care professionals have?

- Nurse
- GP
- Allied health professional
- Ambulance paramedic

What makes you say this?

[*If not mentioned previously:* What about their clinical skills?]

Can you tell me about the SKILLS you see you see the health care professionals at the local hospital have?

How do you perceive the roles of your primary health care professionals are different from the roles of health care professionals at the local hospital?

What SKILLS do you associate with?

- Nurse
- GP
- Allied health professionals
- Ambulance paramedic

Now I would like to ask you about your GENERAL perceptions of primary health care professions… These questions are about what you think regardless of whether you have ever seen any of these health care professionals or not. Try to answer by saying the first things that come into your head.

C. General perceptions

In general, can you describe for me what you see the key roles and skills of these primary health care professions are:

- nursing
- general practice
- allied health professions, (such as physiotherapy)
- ambulance paramedic

In general, if you were sitting in a waiting-room at a primary health care service similar to your own, without speaking to anyone, what things would help YOU recognise who was a GP, who was a nurse?

- nurse (appearance/role and skills/other)?
- GP (appearance/role and skills/other)?
- allied health professional such as a physiotherapist (appearance/role and skills/other)?
- an ambulance paramedic (appearance/role and skills/other)?

What makes you say that?

These final questions are about how you see the role of your primary health care professionals in your community.

Can you tell me a bit about how you see the role of your primary health care professionals in the community?

- Nurse
- GP
- Allied health (physiotherapist)
- Ambulance paramedic

Do you feel you/your community has as role in maintaining this primary health care service the way it? Why / why not?

Would you like something different, if so what would that be? If not, why not?

Have you ever been involved in community actions to help keep or support your local health care services in the past? If YES, can you tell me about that? If NO, why not?

Is there anything else you would like to add about how you see the roles and skills of your primary health care professionals?

Thank you for your time today.