‘Just a GP’: an exploration of undergraduate medical students’ discourses of General Practice.

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Abstract

General practitioners are at the forefront of the primary health care system. A national healthcare system with primary health care at its core leads to more positive health outcomes and is less expensive than a health system which has a secondary care focus. Maintaining a general practice workforce is thus critical to the health of a nation’s population however, research literature illustrates a decline in the number of medical graduates entering general practice in New Zealand and internationally. In this study I used a qualitative approach that examined medical students’ views about general practice and being a general practitioner. This is in response to the predominantly quantitative perspective that has been used to study the general practice workforce shortage.

I conducted 40 qualitative interviews with medical students upon entry into medical school (second year medical students) and also students in their final year of study (trainee interns or ‘TIs’). Second year medical students were interviewed at the Dunedin School of Medicine, University of Otago in New Zealand. Trainee interns were interviewed at the three clinical schools of medicine belonging to the University of Otago, Dunedin, Christchurch, and Wellington. Trainee interns from The School of Medicine, University of Auckland were also included. Social constructionism, a poststructuralist view of language along with Foucault’s concepts of discourse (including principles of rarefaction), technologies and conditions of power, technologies of self, and power/knowledge formed the theoretical framework for the study.

Four main themes of discourses about general practice were identified. These were the discipline of general practice, being a general practitioner, the value of general practice, and the representation of medicine in television programmes and literature. Furthermore, from the synthesis of the identified themes with the theoretical framework I detail three critical areas which influence the construction of general practice and being a general practitioner. These are the dominance of biomedicine, the mechanisms that exclude general practice from being regarded as a specialty and the mechanisms exercised that are involved in perpetuating general practice as being poorly valued. The thesis concludes by examining the implications of the findings for the medical workforce and for medical education. This includes the institutions of the medical school, teaching hospital and the Royal New Zealand College of General Practitioners; the undergraduate curriculum and individual teachers involved in all aspects of undergraduate medical education.
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Chapter 1 - Introducing the Study

Primary healthcare is at the forefront of a nation’s health care system in many countries around the world including the United Kingdom, Netherlands, Spain, Australia and New Zealand. The Declaration of Alma-Ata in 1978 at the World Health Organization conference (Fendall, 1978) is seen as a critical moment for the approach of primary health care. The declaration outlined a philosophy and policy of the primary healthcare approach in developing and developed countries. This contained specific principles such as governments being responsible for the health of their own people, and that the difference in health status between socioeconomic groups within countries is unacceptable (Fendall, 1978). The conference called for “urgent and effective national and international action to develop and implement primary health care throughout the world and particularly in developing countries” (Fendall, 1978, p.1014). The delegates called for collaboration in order to operationalise primary health care consistent with the feeling and essence of the Declaration.

The advantages of a primary health care system compared to a secondary based healthcare system include fewer low-birthweight infants, lower infant mortality, fewer years of life lost to suicide and a higher life expectancy (Starfield, Shi, & Macinko, 2005; Shi, Macinko, Starfield, Wulu, Regan, & Politzer, 2003; Starfield, 1998; Vogel & Ackermann, 1998). These positive health outcomes are contingent on the number of doctors in primary care. In the United States, Macinko, Starfield, and Shi (2007) illustrated an increase of just three primary care physicians per 10,000 population was associated with an average mortality reduction of 5.3% or 49 per 100,000 population per year. Having a primary care based health system, along with primary care physicians (general practitioners are also known as family physicians) leads to more positive health outcomes. Therefore, maintaining and growing the workforce in primary care is of the utmost importance. In particular, the research by Macinko et al (2007) illustrates the significant impact that only a small number of general practitioners can have on a population.

The report entitled Working Together for Health by the World Health Organisation (WHO) documents the declining international healthcare workforce in the primary heath care sector, such as general practitioners (World Health Organisation, 2006). The number of generalist physicians has been declining in many countries over the last 30 years and in New Zealand it is no different (Smith-Han, Jaye, Fitzgerald, & Stein, 2013b). Investigating this decline is critical if an efficient and effective primary health care system is to be maintained.
The journey to become a doctor begins upon entering medical school. After entry, medical students are trained in the many facets of professional competencies that are important and necessary to be able to practice as a doctor on graduation. In New Zealand, after medical students have graduated (after studying for five-six years depending on entry into medical school) they must complete their first two years of postgraduate training called postgraduate years 1 and 2 (PGY1 and PGY2). The next step is deciding which area of medicine to pursue for vocational training. Between entry into medical school and entering their vocational programme of choice, they spend the majority of their time immersed in their undergraduate medical education. It is this period of time that I was interested in.

The texts *Understanding Medical Education: Evidence, Theory and Practice* (Swanwick, 2014) and *Medical Education for the Future: Identity, Power and Location* (Bleakley, Bligh, & Browne, 2011) illustrate the diversity and complexity that comprises a medical education. My intention was to examine what medical students learned about general practice and being a general practitioner from journeying through, and interacting with, the diversity and complexity of their undergraduate medical education. In medical school, it has been suggested there is little explicit training about the history of general practice and the role of the general practitioner within the health care system as a whole (Wilson & Cunningham, 2013). If this is the case, what messages are students interacting with about general practice and being a general practitioner? This is the key question I investigate in this thesis.

In order to examine this question, I used a qualitative methodology. I chose qualitative interviews due to the complex nature of medical education and training, as it is a well used method in qualitative research and medical education to address complex social issues. This was also chosen in light of the vast amount of quantitative research that has investigated low numbers entering general practice. The quantitative approach is very useful, yet also has limitations when addressing complex issues such as lacking experiential depth. In this study, I interviewed students who had just entered medical school (called second year medical students) as well as final year medical students (called trainee interns). I was interested in their perceptions about general practice and being a general practitioner.

**Structuring the Thesis**

This thesis reflects my journey through a topic that is important to me as a teacher, researcher and patient. I want a plentiful and committed workforce looking after people when they first become unwell, so as not to overburden the expensive secondary health care system.
Maintaining a general practice workforce is of prime significance to help achieve this outcome.

In the following chapter I review the literature focusing on medical student career choice, with a specific focus on general practice (or family medicine). I investigate the various ways this topic has been addressed. This includes identifying particular factors that have been examined along with methodological points of view to illustrate what has shaped researchers’ understanding of low numbers in general practice to date. This thesis uses Foucault’s ideas of discourse, one of which states discourses do not occur in a vacuum, but are constructed in relation to other discourses (see Chapter 4 for more detail). Thus, I also briefly outline the literature on medical student career choice in another specialty - surgery.

In Chapter 3, I outline and discuss the theoretical underpinnings of this thesis including the ontological and epistemological positions. These include social constructionism, a poststructuralist view of language and Foucault’s theories of discourse (including principles of rarefaction), power, power/knowledge, technologies and conditions of power and technologies of self. I also describe how learning in medical school is viewed in the context of this research. I draw upon all of these aspects as a conceptual framework for my thesis.

Chapter 4 focuses on the methodological components along with detailing the methods used. I describe the theory of the method utilised along with the details of the research design. I also specify my methodological practices used for the study including ethical considerations when interviewing along with exercising reflexivity during the research process.

In Chapter 5 I present the first findings of my thesis. Chapter 5 begins by examining the demographics of the cohort interviewed, along with giving an overview of the curriculum that the students engage with. The remainder of Chapter 5 describes the perceptions of the second year medical students about general practice and being a general practitioner. Students expressed views from experiences before entering medical school combined with what they engaged with during the first weeks of entering medical school.

The findings in Chapter 6 focus on the final year students, the trainee interns. This chapter covers the demographics and curriculum overview of the trainee intern cohort interviewed in a similar manner to the second year medical students. The perceptions expressed by trainee interns were from their experience of the entire undergraduate medical degree which includes both hospital and community experiential work placements.
In Chapter 7, I examine these findings in relationship to my theoretical framework described in Chapter 3. During this synthesis I highlight three areas which influence how medical students construct the discipline of general practice and being a general practitioner.

Finally, in Chapter 8, I conclude my thesis by discussing the implications of this research to the medical workforce and particularly, for medical education.
Chapter 2 – Reviewing the Literature

In this chapter I outline the documented research that investigated the general practice workforce shortage. Insight into what research has been considered previously about low numbers entering general practice and how it has been investigated was essential to provide background to the current research presented in this thesis.

It is important to note that terms ‘general practice’, ‘family practice’, ‘family medicine’ and ‘family physician’ are to be interpreted as referring to the same occupations/specialties. In the United States and Canada ‘family practice/medicine/physician’ is most often used, and in Britain/Europe, Australia and New Zealand, the term ‘general practice’ is used.

The literature review consisted of searching particular databases, individual academic journals, professional organisation websites (e.g. the World Health Organisation), generic search engines and grey literature (informally published material).

The following research databases were specifically searched: Web of Science, PubMed, MedLine, ERIC, ProQuest Education Journals, ProQuest Psychology Journals, and PsychINFO. Google Scholar as a generic search approach was also used. The specific search terms included the various terms used for general practice around the world as noted above (e.g. family physician). The following terms were included: medical students; medical graduates; junior doctors; career choice; workforce; recruitment; retention; primary care; medical education; quantitative research; and qualitative research.

As relevant literature was attained and read through, searching through the bibliographies of the literature for additional research was conducted. This was to supplement the database search technique by identifying and uncovering further research that may have been missed from searching the databases.

The Global Health Workforce Shortage

The growing concern of a declining healthcare workforce and the seriousness of these findings have been highlighted by the World Health Organisation (WHO) report entitled Working Together for Health (World Health Organisation, 2006). The report included the WHO regions of Africa, the Eastern Mediterranean, South-East Asia, Western Pacific, Europe and the Americas. For countries with unavailable data on health workers, estimates were
generated on regional averages for countries with complete data. Data were gathered for the latest possible year available. WHO used data collected from the relevant WHO areas and associated countries. The report looked at a wide range of health sector workers. Doctors, nurses and midwives were looked at in one group. The report revealed a global estimate percentage increase was needed of 70% to manage the shortage of doctors, nurses and midwives.

In the United States in 1965 generalists (that includes family medicine, general internal medicine, or general paediatrics) comprised 51% of the total number of physicians. This declined to 35% in 1992 and is attributed to the decline of family physicians that make up the majority of generalists in these figures (Rivo & Kindig, 1996). Interest in family medicine has continued to decline in the United States. Using the Association of American Medical Colleges Graduate Questionnaire (AAMC GQ) data, Newton and Grayson (2003) illustrated this decline in interest from 35.6% in 1999 to 21.5% in 2002. This decline in interest has reflected in the number of graduates entering family medicine. When looking at the percentages of graduates entering family medicine in the USA the numbers have been 15.4% in 1998, 13.4% in 1999, 12.8% in 2000 (Pugno, Schmittling, McPherson, & Kahn, 2001), 10.9% in 2001 (McPherson, Schmittling, Pugno, & Kahn, 2004), 10.3% in 2002 (Pugno, Schmittling, & Kahn, 2005) to 9.3% in 2003 and 9.2 % in 2004, (Pugno, Schmittling, McGaha, & Kahn, 2006), 8.4 % in 2005 and 8.5% in 2006 (McGaha, Schmittling, Biek, & Pugno, 2008), 8.3% in 2007 (McGaha, Schmittling, Biek, Crosley, & Pugno, 2010), 8.2% in 2008 (Biggs, Schmittling, Biek, Crosely, & Pugno, 2011), 7.5% in 2009, 8% in 2010, 8.4% in 2011 (Biggs, Biek, Crosley, & Kozakowski, 2012). With this decline in the United States, International Medical Graduates (IMGs) are being used to fill family medicine residency positions (Koehn, Fryer, Phillips, Miller, & Green, 2002).

In Australia, it is estimated that there is currently a shortfall of general practitioners of between 1200 and 2000 across the nation (Access Economics Pty Ltd, 2002). It appears that medical graduates are choosing other vocational specialties over general practice. Joyce and McNeil (2006) looked at a comparison of four cohorts graduating from Monash University Medical School which showed about 50% of the graduates in the 1980-1985 cohorts were working in general practice compared with 33% of the 1995 cohort. In the Australian Medical Workforce Advisory Committee summary report on the general practice workforce in Australia it was estimated that to reach a supply/demand balance by 2013, starting with a upper limit estimated shortage of 1300 general practitioners, 1200 new doctors entering general practice would be required every year from 2007 (Australian Medical Workforce
Advisory Committee, 2005). Even if the lower estimated figure for the initial shortage of general practitioners was used (800) there would need to be between 700 to 1105 new general practitioners every year from 2007-2013 (Australian Medical Workforce Advisory Committee, 2005).

In the United Kingdom (UK), during the 1990s there was a significant drop in the career choice of general practice (Lambert, Evans, & Goldacre, 2002). In a survey conducted in 1996, only 20% of responders (recently graduated doctors) indicated they wanted a long term career in general practice (Lambert et al., 2002). A pattern of decline had been shown up to this point, with the 1983 and 1993 cohorts showing 45% and 26% interest in general practice respectively (Lambert et al., 2002). These figures, based on career intentions, were mirrored in actual career destinations. When surveying 1993 medical graduates five years after qualification in 1998, 23.8% were in UK general practice compared with 32.8% of graduates from 1983 (Lambert et al., 2002).

However, over the period of 2001 to 2011 the UK experienced an average increase of 2.0% per year of full-time equivalent general practitioners (Health and Social Care Information Centre, 2012). The increase during this period has also produced some further interesting data. For example, the majority of this growth is from an increase of female general practitioners up by 66% (from 2001) compared with an increase of 0.7% for males (Health and Social Care Information Centre, 2012).

Along with this large increase of female general practitioners, is an increase in working part-time, with almost half of female general practitioners working less than full-time (Lambert et al., 2002). This increase in part-time employment has also been noted in males, but is not as high in comparison with females (Lambert et al., 2002). Moreover, since 2001, there has also been a large (893.6%) increase in the number of salaried general practitioners (Health and Social Care Information Centre, 2012). This data has certain implications for the general practice workforce. First, it is important to note that the increase in numbers of part-time recruits will result in a proportionally smaller increase in general practitioner full-time equivalents – as many more part-time general practitioners will be required to work the equivalent of one full-time general practitioner. Second, it also shows the feminisation of the general practice workforce. This may hold further implications, with the literature showing female general practitioners holding longer consultation times than their male counterparts (Britt, Bhasale, Miles, Sayer, & Angelis, 1996). Thus, female general practitioners could possibly end up seeing fewer patients compared with their male colleagues, while working
part-time. Although there has been an average increase of 2.0% per year since 2001, in 2010 there was only a total increase of 0.2% in full-time equivalent general practitioners (Health and Social Care Information Centre, 2012). As the numbers have seemingly flattened, this has raised further issues for the general practice workforce.

There is a growing concern that although there has been an initial increase, this will not meet the demand (Soteriou, 2012). Evidence shows that 22% of general practitioners in the UK are older than 55, with 10% older than 60 and more than 10,000 GPs have expressed an intention to retire in the next 5 years (Deloitte Centre for Health Solutions, 2012). With this possible scenario of a wave of retirements, a continual increase in the number of general practitioners is needed.

Although there has been an average increase of general practitioners of 2.0% every year, the number of planned general practitioner recruitments has not been met. In England, in 2011, it was planned to recruit 3,300 general practice trainees, yet only 2,658 were recruited (Jacques, 2012). Cumulatively, from 2008 to 2011 there were almost 1,000 places short of planned targets for recruitments of doctors moving into general practice (Jacques, 2012). Therefore, training spaces are being made available, yet not enough medical graduates are choosing to enter general practice.

Another compounding factor in the UK is the balance of the medical workforce of general practitioners and hospital doctors/consultants. The number of hospital consultants increased from 4,100 in 2004 to more than 11,000 in 2010; more than double in 6 years (Federation of the Royal Colleges of Physicians of the UK, 2011). This would leave the National Health Service (NHS) with 60% more consultants by 2020 (Torjesen, 2012). This would also mean that there would be more hospital consultants than the present projected demand demonstrates, creating a problem of oversupply (Centre for Workforce Intelligence, 2012). Here, there are concerns that too many hospital specialist places are being provided, leaving a potential oversupply, and yet not enough general practitioners are being produced (Rimmer, 2012).

**General Practice Workforce - New Zealand**

In New Zealand in 1995, the general practice workforce made up 38.6% of the total active medical workforce (New Zealand Medical Association, 2008). Figures from 2012 have general practitioners at 29.9% of the total active medical workforce; a drop of 8.7% (Medical Council of New Zealand, 2012). Although there has been a decrease of general practitioners
in relation to the total active medical workforce, the number of GPs from 2007 to 2012 increased by 12% (Medical Council of New Zealand, 2007; Medical Council of New Zealand, 2012). It is important to note that these data take into account head count only, not full-time equivalent (FTE) data.

Where FTE data is concerned, in 2001 there were 83 FTE general practitioners per 100,000 people, which is equivalent to one general practitioner per 1,204 people. In 2007 this figure dropped to 72 per 100,000 or one general practitioner per 1388 people (New Zealand Medical Association, 2008). This figure has since remained in the low to middle 70s and in 2012 it was 74 per 100,000 people or one general practitioner per 1,351 people (Medical Council of New Zealand, 2012). To achieve the Australian recommended number of 114 per 100,000 or one general practitioner per 877 people, New Zealand would require more than an additional 1,000 general practitioners (New Zealand Medical Association, 2005). Therefore, although the number of general practitioners has increased, as mentioned above, the number of FTE general practitioners per population has dropped, from 83 in 2001 to 72 in 2007. The current data show this figure to be 74 per 100,000 people in 2012 (Medical Council of New Zealand, 2012). In comparison with other countries, in 2008 New Zealand was well below the average of three general practitioners per 1,000 population when compared with other OECD countries, with only five countries out of 30 worse off. The countries worse off included Canada, Japan, Korea, Mexico and Turkey (New Zealand Medical Association, 2008).

As in the UK, the general practice workforce in New Zealand continues to age. In 2002, the average age of general practitioners was 45; in 2012 this had increased to 50 years of age (Medical Council of New Zealand, 2002; Medical Council of New Zealand, 2012). These data show there is an ever growing number of general practitioners nearing retirement age, and this is not matched by increasing numbers of younger doctors entering general practice to counter this (New Zealand Medical Association, 2008).

The general practice workforce in New Zealand, similar to that in the UK, has also experienced an increase of women entering general practice, occurring during the 1990s (New Zealand Medical Association, 2008). Figures show that from 1992 to 1999 the percentage of female general practitioners increased from 27% to 36.2%, nearly 10% in 7 years (New Zealand Medical Association, 2008). In 2012 this increased to 46% (Medical Council of New Zealand, 2012). The increasing trend of more female general practitioners seems to have levelled off since 2005 (New Zealand Medical Association, 2008).
In New Zealand, as in other countries, the medical workforce also includes International Medical Graduates (IMGs). An IMG is a doctor who has obtained their medical qualification in a country other than New Zealand and was previously known as an Overseas Trained Doctor (OTD) (Medical Council of New Zealand, 2008). The percentage of IMGs in the entire New Zealand medical workforce in 2008 was 38.9%, which was up 4.9% compared with 2003. In general practice, 35% of active general practitioners were IMGs in 2000. In 2012, this number had increased to 43.7% (Medical Council of New Zealand, 2012). This means, that of New Zealand’s entire general practice workforce at that time, only 56.3% had been trained in New Zealand. As mentioned by the New Zealand Medical Association (2008), a large number of IMGs has implications for attending to particular Māori and Pacific Island health needs and also may have ramifications resulting from unfamiliarity with New Zealand specific systems such as the Accident Compensation Commission (ACC).

Research into the Decline of Medical Graduates Entering General Practice

There has been a substantial volume of research examining primary care specialty choice, in particular, general practice, over the last 30 years. This body of research focuses on specific areas such as: when medical students make decisions regarding their career path; student characteristics associated with choosing general practice; financial considerations; and factors relating to the medical school environment. The following summarises these areas.

Timing of Interest in Career Choice

Previous research suggests that medical students who become interested in general practice as a vocational choice early in their training are more likely to become general practitioners. For example, Kassebaum, Szenas, and Schuchert (1996) found that students who were interested in a generalist specialty at enrolment were almost five times more likely to choose general practice as a specialty. Colquitt et al (1996) also found a strong association in this area. Students enrolling in medical school with a preference for family practice were seven times more likely than others to plan a career in family practice at the conclusion of medical school. In more recent research, Scott, Gowans, Wright, Brenneis, Banner, and Boone (2011) found that, upon graduation, of the medical students who indicated their ‘top choice’ of career as being family medicine, 52% indicated family medicine as their preferred career choice at enrolment.
Further evidence to show the importance of making early decisions about specialty choice comes from rural medical education research. Stagg, Greenhill, and Worley (2009) examined those factors which influenced the career choices of medical graduates who trained for a full year in rural general practices. This was a retrospective study where respondents were already on a known career path (e.g., a rural medical career path). This study showed a significant relationship between being on a rural career pathway and making this decision, prior to, or during medical school. The relationship between being on a rural care pathway and making a decision prior to or during medical school, was not as strong when career choice was made after graduation.

Based on cohort studies in the UK, Goldacre, Laxton, and Lambert (2010) showed that 80% of medical students who chose general practice in their first year following graduation adhered to this choice and were in fact general practitioners 10 years after graduation (this made up 64% of all GPs in the study). These data also showed that 35% of doctors who intended to enter other specialties ended up in general practice. Additionally, medical students who become interested in general practice as a vocational choice in their postgraduate training are more likely to become general practitioners (Shadbolt & Bunker, 2009).

In New Zealand, Zarkovic, Child, and Naden (2006) investigated career choices of New Zealand junior doctors. One aim of their study was to consider at what stage of career that junior doctors made a choice of specialty. This was a cross sectional survey involving final year medical year students, postgraduate junior doctors (labelled postgraduate year 1 and 2 or PGY1 and PGY2) known as house surgeons, and registrars. Of final year medical students, 70% were undecided in their specialty career choice. This is followed by 52% of PGY1 and 45% of PGY2 doctors being undecided. This drops drastically with only 17% of PGY2+ doctors being undecided and only 12% of registrars being undecided about their definitive vocational choice. The results of this study seem congruent with the Australian research into the timing of career choice (predominantly in the second and third years of postgraduate training) (AMWAC, 2005). What also is important to note here, is that at this stage almost a third of medical students (30%) had decided which specialty they would like to pursue. This increased to 48% after their first year practicing medicine after graduation known as postgraduate year one (PGY1).
Student Characteristics

Age

Student characteristics have also been implicated as being influential in general practice as a career choice. For example, Lieu, Schroeder, and Altman (1989) and Dial and Lindley (1987) showed that the three factors of being older at enrolment, married and having children were positive factors associated with specialty choices in primary care. With regard to students’ plans to pursue particular careers, older or ‘mature’ students were more likely to embark on general practice as a specialty than younger students (Henderson, Berlin, & Fuller, 2002; Vanasse, Orzanco, Courteau, & Scott, 2011), being older was also associated with a higher proportion of students entering general practice (Shelker, Belton, & Glue, 2011). However, Henderson et al (2002) also found no difference between the attitudes of mature students towards general practice compared with the attitudes of entrants straight from school.

Gender

Similar to the findings of Lieu et al (1989) and Dial and Lindley (1987), Cohen, Cantor, Barker, and Hughes (1990) found that females were more likely to choose a generalist specialty than males; a finding that has been replicated in other studies (Kassebaum et al., 1996). This likelihood has also been illustrated through the general practice work force statistics in New Zealand (New Zealand Medical Association, 2008).

It has been argued that women, at least those in their 3rd and 4th year of medical training, are more aware than men about the difficulties of combining work and family (Drinkwater et al., 2008). The reasons supporting this argument include these women thinking early about the optimal time to have a family and the possible consequences this may have on their career. Males however, demonstrated little thought about the tension between their career and being a parent. Women also considered options of sacrificing career ambitions for a family friendly working life rather than pursuing careers involving responsibility and leadership. General practice was viewed as a family friendly specialty with set hours, and no weekend work (Drinkwater et al., 2008).
Personality

Research investigating personality of medical students and its relationship with specialty choice has been conducted since the 1970s (Borges & Osmon, 2001; Borges & Savickas, 2002; Coombs, Fawzy, & Daniels, 1993; DeForge & Sobal, 1991; Friedman & Slatt, 1988; Geller, Faden, & Levine, 1990; Hojat & Zuckerman, 2008; Irey, 1976; Oakland, 2006; Sobal & DeForge, 1992; Stilwell, Wallick, Thal, & Burleson, 2000; Taylor, Clark, & Sinclair, 1990; Vaidya, Sierles, Raida, Fakhoury, Przybeck, & Cloninger, 2004; Zeldow & Daugherty, 1991). A variety of personality scales have been used, including the Myer-Briggs Type Indicator (MBTI), The Sixteen Personality Factor (16-PF), the California Psychological Inventory (CPI) and Budner’s Intolerance of Ambiguity (IOA) scale and the Zuckerman-Kuhlman personality questionnaire (ZKPQ). This variety of scales and measures make a comparison of results across the studies difficult. For example, Oakland (2006) showed surgeons scoring highly on ‘masculine’ and ‘tough mindedness’ and low on ‘empathy’. However, Coombs et al (1993), when assessing surgical and non-surgical residents using a variety of personality measures, found no difference. Sanfey, Saalwachter-Schulman, Nyhof-Young, Eidelson, and Mann (2006) found that when looking at career choice of medical students looking at considering surgery, personality traits were not viewed as a major influence on career aspirations when controlled for gender. However, the authors were not using standardized personality scales in their method.

Zeldow and Daugherty (1991) looked at the specialty choices of medical students upon graduating using a variety of personality tests. Family medicine practitioners demonstrated no distinctive characteristics. In contrast, Vaidya et al (2004) examined fourth-year medical students who selected a specialty from a list of six and also completed the temperament and character inventory (TCI). Results showed that students who chose surgery and emergency medicine scored higher in the novelty-seeking scale than those students who chose family medicine.

When examining these personality measures within family medicine in a meta-analysis, Bland, Meurer, and Maldonado (1995) concluded that although particular distinct personalities exist between specialties, measuring students’ personality type was not useful in predicting the eventual choice of primary care. This, combined with the varying research highlighted above suggests that personality scales and measures do not seem to be a reliable measure for predicting specialty choice.
Social Values

Other factors influencing choice include attitudes and role models encountered prior to medical training. These may have a positive influence on students’ choice of general practice. Martini et al (1994) found that when considering certain characteristics, the top four factors that influenced the decision of physicians already in primary care (including general practitioners) were: personal social values; role models encountered before medical school; internship/residency experiences; and role models encountered during medical school. Kassebaum and Szenas (1994) found that having an interest in helping others and a need to exercise social responsibility were factors that influenced the study participants’ choice of career in generalist specialties more than any other specialty.

Interest in Research

Senf, Campos-Outcalt, and Kutob (2005) examined the relationship between family medicine as a choice of specialty and interest in research. This study drew on a variety of data sources including enrolment and graduation data from the Association of American Medical Colleges (AAMC); the American Academy of Family Physicians (AAFP); and results of surveys of all family medicine department heads, faculty and graduates from all 24 schools included in the research. Using these data, which were predominantly survey-based using Likert scales, the authors reported the following results. First, students interested in family medicine were less likely to have chosen to enter medicine because of research interests. Second, these students were less likely to have been involved in a research project at medical school. Last, they were less likely to plan on a career involving research at graduation. Research careers were also looked into by Colquitt, Zeh, Killian, and Cultice (1996). Their study showed that student graduates planning a research career path were less likely than others to choose family practice.

It is also interesting to note the findings from Grayson, Newton, and Whitley (1996). In their study of first-year medical students’ knowledge of, and attitudes towards, primary care specialties; a statement was included in the questionnaire they administered to participants which read, “Most major medical research advances in recent years have been in primary care”. Participants had to use a 4-point Likert scale to answer, and the responses of ‘agree’ and ‘strongly agree’ were combined. The survey was cross-sectional in design drawing on respondents from two different medical schools - New York Medical College (NYMC) and
East Carolina University School of Medicine (ECU). NYMC is a private medical school chosen as it was ranked in the lower quintile of all United States medical schools in the production of primary care doctors. ECU is a public medical school and was chosen as it is ranked near the top among medical schools in United States in the percentage of graduates entering primary care specialties. The percentage of students who agreed with the statement at NYMC was 15% compared with the 31% at ECU. This difference in results highlights the attitudinal relationship between research and primary care (which includes general practice). The school where a high percentage of graduates enter primary care specialties is also where there is a significant positive relationship between research and primary health care: over twice that of NYMC. These figures were statistically significant.

The research by Block, Clark-Chiarelli, Peters, and Singer (1996) using telephone interviews looked at stratified samples of first and fourth year medical students, residents, clinical teachers, internal medicine and paediatric residency training directors and chairs, and deans. One finding was that the quality of primary care research was viewed as inferior to that in other fields.

**Attitudes**

The attitude of medical students towards general practice and general practitioners was examined by Henderson et al (2002). Questionnaires (Likert scale design) were completed by first and fifth year students from two London medical schools. Of the 44% of students who had a strongly positive attitude towards general practice as a specialty, only 18% had a strongly positive attitude towards general practitioners as doctors when compared with hospital doctors. It is interesting to note that the one factor students believed influenced their attitudes the most was their direct personal experience of general practice which was defined as knowing a good or bad example of a general practitioner, and personal experience as a patient. As visiting a general practitioner occurs more often than seeing a hospital doctor for the majority of a population (Green, Fryer, Yawn, Lanier, & Dovey, 2001), it highlights the important potential of a general practitioner’s influence on potential future general practitioners.

When comparing attitudes of fifth year medical students with those of first year medical students, Henderson et al (2002) found that fifth year students had a more positive attitude towards general practice as a specialty and toward general practitioners themselves than first year students. Fifth year students were also more likely to express an intention to become general practitioners than were first year students. It was interesting to note that significant
gender differences were found regarding attitudes towards general practice (Henderson et al., 2002). General practice and being a general practitioner were seen more positively by female students. Female students also indicated that their attitudes towards general practice were influenced by direct personal experience. The results on gender differences regarding attitudes towards general practice flows onto intention and career choice. Regardless of the year of study in medical school, female students were more likely to express intention to become general practitioners, obstetrics and gynaecology specialists or paediatricians than males who more frequently signalled intention to be surgeons.

Five areas of attitudes of primary care (education and practice) were examined by Block et al (1996). One area was students’ attitudes about the competence of primary care physicians. Using telephone interviews, learners (in this case, fourth year medical students and residents) rated primary care tasks as requiring lower levels of expertise compared with senior faculty and clinical staff. Moreover, Petchey, Williams, and Baker (1997) found in the UK that junior doctors viewed general practice as a ‘negative choice’.

In addition to the quantitative studies about attitudes previously described, the following qualitative research continues to examine attitudes about general practice. Specifically, investigating attitudes relating to the status and respect of general practice, family and public perceptions of general practice.

**Status and Respect**

Low and poor status among the hierarchies of medical specialties was perceived by medical students general practice registrars and general practitioners (Hogg, Spriggs, & Cook, 2008; Thistlewaite et al., 2008; Edgcumbe et al., 2008; Firth & Wass., 2007; Minogue et al., 2005; Petchey et al., 1997). Apart from status, a lack of respect by hospital clinicians towards general practitioners was also noted among medical students (Firth & Wass., 2007; Ng, Kwok-Chi, & Cheong-Lieng, 2005; Tolhurst et al., 2005; Minogue et al., 2005) and general practice registrars (Minogue et al., 2005). Lack of respect was also seen to come through lectures presented to medical students by specialists (Minogue et al., 2005). A perception that general practice was viewed as a ‘fall back’ option was also prevalent among medical students (Thistlewaite et al., 2008; Edgcumbe et al., 2008; Firth & Wass 2007; Minogue et al., 2005; Petchey et al., 1997).
Family and Public Perception

A negative public perception of general practitioners was perceived by medical students was reported in Minogue et al (2005) and Petchey et al (1997) as well as by practicing general practitioners that were participants in the study conducted by Thistlewaite et al (2008). Medical students also commented on their interactions with their family members. Hogg et al (2008) and Tolhurst et al (2005) portrayed that family members showed disappointment or expressed negative comments if the medical student entered general practice rather than specialist medicine. Additionally, family members who were also doctors were described as portraying negative comments about general practice (Hogg et al., 2008).

Working in General Practice

In the following qualitative research, the perceptions of students about general practice included what involved in working in the profession of general practice. Working in general practice was viewed by medical students as being focused on the person as compared with the disease aspects of ill-health (Minogue et al., 2005). Yet, Hogg et al (2008) illustrated that work in general practice was not perceived as ‘real medicine’. Additionally, medical students viewed working in general practice to be quite an isolating profession (Edgcumbe et al., 2008; Tolhurst et al., 2005). Continuity of care and establishing relationships with patients were viewed by students as being favourable parts of the work of a general practitioner (Edgcumbe et al., 2008; Minogue et al., 2005; Mutha et al., 1997).

General practice was perceived to be an attractive lifestyle choice in many of the qualitative studies (Thistlewaite, Kidd, & Leeder, 2008; Edgcumbe, Lillicrap, & Benson 2008; Minogue, Goodyear-Smith, & Fishman, 2005; Tolhurst et al., 2005; Petchey et al., 1997). Lifestyle factors that were considered attractive included flexible work arrangements, the ability to have a family and a vocation choice that can enable travelling overseas.

General practice was frequently viewed by medical students as boring, less interesting and stimulating than other disciplines combined with no excitement (Edgcumbe et al., 2008; Firth & Wass., 2007; Ng et al., 2005; Minogue et al., 2005; Mutha, Takayama, & O’Neil, 1997; Petchey et al., 1997). However, there was a minority of views that considered general practice to be a difficult job (Minogue et al., 2005; Petchey et al., 1997) and Tolhurst et al (2005) reported some responses in which students viewed general practice as varied and interesting. Furthermore, the ‘interesting cases’ were perceived to be the domain of the specialist.
physician along with acute conditions (Edgcumbe et al., 2008) and not the domain of the
general practitioner.

Media

The media was commented on by students and was understood to illustrate general practice as
less glamorous when compared with the work of hospital physicians (Firth & Wass., 2007).
However, it was not just students who held this view. General practitioners also perceived the
media to portray the ‘operating theatre’ to be where the significant work in health care is
accomplished, which does not symbolise general practice (Thistlewaite et al., 2008).

Financial Considerations

Reports on the degree to which remuneration associated with medical career choice influences
vocational decisions offer variable results. Kassebaum and Szenas (1994) looked at a number
of factors that influenced specialty choice, including income. They used a large sample of
over 8,000 medical school graduates who had completed the Medical School Graduation
Questionnaire (GQ) and who had declared their specialty or subspecialty choice. Students
were asked to rate 36 factors influencing their choice of specialty using a 5 point Likert-type
scale where 0 was ‘no influence’ and 4 was ‘major influence’. Students choosing to go into
generalist specialties rated income prospects as among, one of the least, influential factors.

However, following on from the 1994 study above, Kassebaum et al (1996) using national
databases investigated predictive influences of selected variables on specialty choice, with a
focus on generalist choices such as family medicine. The authors used multiple regression
models to look at certain variables and whether they successfully predicated specialty choice
(using student’s actual destination of specialty). When considering income, students were
asked whether the potential to earn a high income was an important factor in their specialty
choice. They found that participants were less likely to choose family medicine for high
income possibilities. Interestingly, Kassebaum et al (1996) found that when looking at level
of debt instead of the possibility of a particular income, the level of student debt was not a
significant predictor of graduate decisions to enter a family practice specialty.

However, Rosenthal, Marquette, and Diamond (1996) showed students with higher levels of
debt, as opposed to income, meant that students were less likely to enter a primary care
discipline. Clasen and Tindall (2004) found that only 8% of its 44 respondents (about 4
people) to a questionnaire stated that choosing a specialty that earns more is a reason for not entering family medicine. Rosenblatt and Andrilla (2005) investigating the level of student debt on their choice of primary career found that the impact of addressing the level of student debt on choosing a primary care career would be small.

More recently, Grayson, Newton, and Thompson (2012) looked at the association between debt and income and career choice. Students just after enrolment and just prior to graduation in year one and four of medical school were asked to report their anticipated loan amount upon graduation, which specialty they intended to pursue and also to anticipate their expected income five years after completion of residency training. Students were also asked to self-rate the value they placed on income using a 4-point Likert scale. When addressing the relationship among debt, income and specialty choice of a PC (Primary Care) versus an HPNPC (higher paying non primary care) career, Grayson et al (2012) found the following. In both years one and four, students intending to choose a HPNPC specialty anticipated significantly greater debt than those choosing a PC specialty. These students placed more weight on income, and anticipated higher income after graduation than those pursuing PC specialties. Lastly, in years one and four, students who highly valued income anticipated higher income after graduation.

The authors also explored whether financial issues were associated with the decision to change from PC into HPNPC specialties during medical school. Of the respondents who indicated an interest in either PC or HPNPC careers at year four, 58% (723 students) had indicated plans to pursue PC at year one, while 42% (513 students) had indicated plans to pursue HPNPC specialties at year one. Yet, of the 723 students intending to pursue PC at year one, 31% (223 students) decided to switch into an HPNPC specialty by year four (referred to as ‘switchers’). Those students who switched anticipated more debt than those who did not (referred to as ‘sustainers’) – which may suggest that debt may be a considerable factor in the decision to not choose a PC specialty. Those who switched were also more likely than those who remained in PC to report that income was an important factor in their choice of specialty. In year one, switchers and sustainers valued income similarly during the period where both groups wanted to do a PC specialty. However, at year four, those who switched away from PC specialties placed a greater emphasis on income than they had in year one. Following on this finding the authors conducted further analysis. They found that switchers developed an interest in income during their degree, whereas those who remained with a PC specialty choice (the ‘sustainers’) did not. Last and most interestingly, the emphasis that ‘sustainers’ placed on income at year four was significantly lower than at year one.
This research has its limitations for the general practice or family medicine/practice context. For instance the specialty of family practice was combined with internal medicine that is, paediatrics, general internal medicine and general paediatrics. Thus, it does not focus solely on family medicine. The study only focused on factors to do with income and debt and did not investigate the additional factors related to career choice that may have been involved.

In any case, this piece of research illustrates that income and debt play some part in medical students decision making. It also shows that some students, in particular the students who choose a PC specialty, adhered to this choice, and even placed a significantly lower value on income than they had done when they started medical school. These results suggest that there were other factors involved with this group of students during their medical education that decreased the importance placed on income.

As illustrated in the aforementioned quantitative research diverse views were also reflected in the qualitative studies when money was examined. For instance, general practitioners were perceived to be not paid enough (Thistlewaite et al., 2008; Tolhurst et al., 2005; Minogue et al., 2005). This was expressed alongside a perception that an increase in pay would help make general practice more attractive as a future career (Thistlewaite et al., 2008). Yet, Edgcumbe et al (2008) reported that general practitioners were seen as being ‘well paid’ by medical students. Moreover, Mutha et al (1997), perceived level of debt or future income was not deemed to be an issue. However, in some of the responses the students were taking into consideration their partner’s or future partner’s income (Mutha et al., 1997). Owning and running one’s own business was viewed negatively among some medical students (Minogue et al., 2005), however Firth and Wass (2007) reported that it was also seen as an attractive side of general practice.

**Medical School Environment**

Factors associated with medical school have also been considered as influencing medical graduates’ career choices. Kassebaum et al (1996) found that medical schools having a department of family medicine was a significant factor influencing graduates’ intentions to pursue generalist careers. Kassebaum et al (1996) also found that students who had taken a family medicine elective were four times more likely to choose a generalist specialty at graduation. Additionally, participating in a rural clerkship was related to students being more likely to choose a generalist specialty on graduation (Kassebaum et al., 1996). Similar results were also found by Maiorova, Stevens, Scherpbieer, and van der Zee (2008), where students
perceived likelihood for choosing a career in general practice increased after participation in a general practice clerkship. Kassebaum and Szenas (1994) showed that those medical schools that achieved high numbers of students interested in pursuing family medicine did so because of high interest beforehand, reinforcement of that high interest and ‘kindling’ students’ interest in family practice during medical school. The study by Martini, Veloski, Barzansky, Xu, and Fields (1994) also supported Kassebaum and Szema’s (1994) findings that a supportive medical school environment is one of the most important factors in producing students wanting to enter general practice.

In the United States, public versus private ownership of the medical school was a significant factor in specialty choice (Colquitt et al., 1996). Attending a public medical school increased the likelihood of graduates choosing family practice as a specialty over non-primary care specialties (Colquitt et al., 1996). As the authors mention, understanding why this occurs is difficult. Public schools in the United States have a controlled student fee structure, thus as the authors suggest, teasing out such factors as income or affordability for students wanting to attend compared with other factors such as the school’s mission or social environment is difficult to ascertain. McPherson, Schmittling, Pugno, and Kahn (2002) looked at all the medical students who graduated between June 2000 and June 2001. Medical school graduates who attended a publicly funded medical school were more likely to be in a family practice residency programme than were graduates from a privately funded school. This research also looked at the last three years’ average percent of graduates who were family practice residents and ranked them accordingly from highest to lowest. It is interesting to note that the bottom ten universities (that had an average of 1.1-3.2% of their graduates in a family practice residency programme) were among the most prestigious universities and medical schools in the United States; all 10 were noted as rated in the top 21 medical schools in the country (U.S. NEWS & World Report, 2013).

In more recent research in the UK, Lambert and Goldacre (2011) looked at future specialty intentions in UK medical graduates. They looked at the career intentions of graduates in the first, third and fifth years after graduation. Respondents were asked to specify their career choice. Respondents could list up to three choices of specialty in order of preference and could indicate choices of equal preference. These specialty intentions were also grouped by medical school attended. Of those who recorded their specialty intentions as general practice one year after graduation as their first choice, the lowest numbers were from the two most prestigious schools in the UK – Oxford and Cambridge (10.9% and 13.0% respectively). The
three highest results were from schools classed as ‘New English schools’ Brighton and Sussex, Hull York and Peninsula (29%, 30.4% and 31.4% respectively).

One possible reason for this could be the organization and structure of their teaching and learning experiences. For example, at Hull York Medical School (HYMS), 50% of the clinical placements for their medical students are in general practice. Additionally, 50% of their curriculum is delivered by general practitioners as compared with other UK medical schools that have less than 20% (Kendrick, 2013).

**Career Choice – Surgery**

As mentioned in the introductory chapter, the literature on medical student career choice in another specialty, surgery is outlined. As surgery is used in this thesis is used as a foil to illustrate the relational nature of discourse, and not the main focus of the study, only a brief review of the literature is given. Attending to a more in-depth review is outside the scope of practice for this thesis.

Jaunoo et al (2014) performed a nation wide on-line survey of final-year medical students at United Kingdom medical schools. A total of 932 students responded (34% of the medical student population surveyed).

The top for reasons for not wishing to pursue a surgical career were: the difficulty of fitting in with family and lifestyle commitments (58%); poor teaching of anatomy at medical school (57%); the discipline of surgery is too competitive (55%); and the surgical culture is too aggressive (48%). Percentages shown are percent of respondents. It is important to note that females were overly represented as a general group for this study with 63% female compared with 37% male. The study did not mention if this was representative for medical schools in the United Kingdom or not. This is important when interpreting the data. For example, the most cited reason for not wishing to pursue a career in surgery was for lifestyle/family commitments. However, 93% of respondents who stated this were female. In comparison the second most cited reason for not wanting to pursue a surgical career was a more evenly split between females (at 52%) and males (at 48%). A similar gender skew is evident regarding the reason of surgical culture being perceived as too aggressive.

A Canadian study looked at factors that influenced medical students’ interest in a surgical career (Scott et al., 2008). A survey was sent to 18 different Canadian medical schools. A total of 2168 of respondents completed the survey. Students who were interested in surgery
were more likely to be younger, single, and influenced by prestige when deciding on choice of career. Students interested in surgery were less influenced by a varied scope of practice and medical lifestyle (i.e. flexibility outside medicine, acceptable hours of practice), less likely to illustrate a ‘social orientation’ (i.e. social commitment, long-term relationship with patients) and were more likely to be ‘hospital orientated’ (i.e. focus on urgent care, prefer medical to social problems).

Corrigan, Shields, and Redmond (2007) also looked at factors that influenced a career choice in surgery. Their on-line survey involved doctors and medical students, however, the majority of respondents (69%) were doctors who were more than 4 years after qualification. Of the total number of respondents, 77% were already in, or about to enter, a surgical discipline. The top two factors influencing the career choice of general surgeons that were also statistically significant (from highest to lowest) were: prestige, followed by a tie with intellectual challenge, lifestyle during training and stress. The top two factors for influencing the career choice of surgeons other than general surgeons that were also statistically significant (from highest to lowest) were: intellectual challenge and prestige. As a comparison, the top two factors influencing the career choice of doctors pursuing nonsurgical careers that were also statistically significant (from highest to lowest) were: work hours and stress.

Perceptions of surgery and a surgical career by medical students were investigated by Hill et al (2014). Using exploratory questionnaires and in-depth interviews, participants perceived surgeons as self-confident and intimidating with surgery being perceived as competitive, masculine, and needed sacrifice. The authors stated that in order to succeed in the discipline of surgery, students felt they must conform to these stereotypes. The perception of surgery being ‘masculine’ is not surprising due to only 6% of surgical consultant positions being held by women (Khan, 2007).

**Summary**

The general practice workforce is struggling to sustain itself on a global scale. The numbers of graduates entering family medicine in the United States have decreased significantly from 15.8% in 1998 to 8.4% in 2011. In Australia, it is estimated there is a shortfall of 1200-2000 general practitioners. In the 1990s, the United Kingdom was experiencing a pattern of decline of graduates entering general practice. However, more recently (2001-2011) the UK has experienced an increase of graduates entering general practice of, on average, 2% per year. Currently, though, the numbers seem to have plateaued and have not met the planned
recruitment numbers. In New Zealand the number of graduates entering general practice (FTE) has dropped from 83 per 100,000 in 2001 to 74 per 100,000 people in 2012 (Medical Council of New Zealand, 2012).

As with other countries, IMGs are meeting the shortfall. In New Zealand in 2012, 43.7% of all general practitioners were trained overseas. This is nearly half of New Zealand’s total general practice workforce (Medical Council of New Zealand, 2012).

Research into the decline in the general practice workforce shortage has been from a predominantly quantitative perspective focusing on particular factors that could be associated with career choice. When considering student characteristics, it seems that being older, female, having personal social values, exercising social responsibility, and an interest in helping others combined with not being interested in research are associated with a greater likelihood of entering general practice.

Research into the attitudes of medical students about general practice and being a general practitioner has produced mixed results, demonstrating both positive and negative attitudes. However, it appears that the majority of research reports a positive attitude among students, with more positive attitudes expressed towards the end of their medical education compared with attitudes at enrolment.

Financial implications have been examined in terms of specialty choices made by medical students and graduates and the research reported has offered variable results. Where financial factors are concerned, level of debt and perceived level of income are the most common factors that have been investigated. With regard to income levels, in one study students were less likely to choose family medicine for high income possibilities, while other studies rated prospective income as a low influential factor. When explaining how income is viewed, the research by Grayson et al (2012) suggested that those pursuing primary care specialties placed less weight on income than those pursuing non-primary care specialties. However, when considering students who initially chose a primary care specialty in year one who then switched away from a primary care specialty in year four placed a greater emphasis on income than they did previously. This suggests that they are learning about certain specialties income as they move through their education and income is a factor that is considered as students progress through their education. There is evidence to suggest that students anticipating a high level of debt are less likely to enter a primary care specialty, while other studies have suggested a minimal impact on specialty choice. Overall, it appears that debt and income are factors that may influence choice of primary care specialty, but due to the
variation in evidence, is a tentative assertion. This is evident by Grayson et al (2012) who showed that students who remained interested in primary care throughout their whole degree had also placed a low emphasis on income throughout their degree.

The medical school environment has been looked at in terms of how it may influence general practice career choice. Having a department dedicated to general practice, participating in a general practice elective, clerkship, and rural clerkship were found to be related to students becoming more likely to choose a career in general practice. Alongside this, working in these clerkships and electives was a reinforcement of prior interest or ‘kindling’ of interest during medical school. However how this was achieved and what was going on to ‘reinforce’ and ‘kindle’ the interest was not described or elaborated on.

When looking at medical schools in the United States, students from publically funded institutions were more likely to be family practitioners than students from privately funded institutions. Additionally, some of the most prestigious medical school and universities in the United States were in the bottom ten insofar as the percentage of graduates entering a family practice residency was concerned. A similar picture is also seen in the UK. The lowest number of students who signalled an interest in general practice were from the two most prestigious universities in the UK, Oxford and Cambridge. Of the highest was the ‘New English schools’, which included Hull and York. A reason for this could be their medical school structure with general practice figuring highly in students’ clinical placements and with general practitioners encompassing over half of the clinical teaching staff.

The predominantly quantitative based research literature suggests that the phenomenon of declining interest in and numbers entering the specialty of general practice is complex and that many different factors are involved. An advantage of the type of research that has been reported is that it has canvassed the breadth of a population well, measuring many participants’ responses to a limited set of questions. However, one of the limitations of this type of research is that it may lack experiential depth. A large volume of this work asks standardised questions that restrict responses to predetermined categories, and therefore is unlikely to reveal unanticipated perspectives. There is also an assumption that these questions are interpreted by everyone in the same way. These limitations were acknowledged by Kassebaum et al (1996) who stated that descriptive studies would help ‘tell the whole story’. An example of these limitations is that while Kassebaum et al (1996) found that a reinforcement of students’ prior interest in family medicine and a kindling of interest was
associated with choosing a general practice specialty, what that specific interest was, how this was achieved and by whom is not known.

The qualitative research that has been reviewed illustrates many factors that medical students associate with general practice and being a general practitioner. From the flexible life style and low status and respect afforded to general practice as well as establishing relationships with patients and viewing the work in general practice as unexciting and tedious. These findings portray possible further areas associated with low numbers entering general practice. However, these studies are descriptive, and a deeper interpretive approach is needed to further investigate medical student perspectives.

The research described regarding surgery and being a surgeon highlights some interesting findings. From the survey research, students interested in surgery and being a surgeon were found to be influenced by prestige, a factor that was also prominent, along with being perceived as intellectually challenging, from doctors who were already in a surgical programme or about to enter a surgical training scheme.

Through in-depth interviews, it was also evident that students were learning further aspects of surgeons (self-confident and intimidating) and surgery (competitive and masculine). In order to make a choice and be a surgeon, conformity to these stereotypes was perceived to be necessary.

This gives some insight into what some students value in their medical career, but also how they surgery and surgeons are perceived – a very prestigious career and discipline that is intellectually demanding. It also illustrates that what could be termed the cultural aspects of a discipline, for example being viewed as masculine, that contributes to the perceptions of a discipline, may influence student choice.

In order to add to the body of knowledge about this phenomenon, a qualitative perspective is therefore utilised in this research within an interpretive framework. As there are many interpretive frameworks offered for qualitative research, there are many varied and interesting ways a researcher can look at the same phenomenon (Denzin & Lincoln, 2008). As mentioned in Chapter 1, this study uses many of Michel Foucault’s theories to further investigate the phenomenon of low numbers entering general practice. Using this Foucaultian lens has not been attempted in the literature on the general practice workforce shortage previously. Using a new way of looking at the phenomenon of low numbers entering general practice may give rise to new understandings that explain the general practice workforce
shortage, along with how it may be addressed. The theoretical framework, along with the epistemological foundations will be described in the next chapter.
Chapter 3 - Theoretical Framework

In this chapter, I outline the theoretical foundations of my thesis. This covers the philosophical underpinnings and assumptions involved in the research process accompanied with the ontological and epistemological basis. The role thought and language play with regard to the epistemological foundations is also described. Particular theories developed by Foucault are detailed. These theories include discourse, power, technologies and conditions of power, technologies of the self and power/knowledge. Additionally, I discuss the relationship between discourse and the self. Finally, I portray how learning is conceptualised in this research.

The Process of Research

The process of research is complex and varied with an array of philosophical assumptions, theories and methodologies to engage with. The purpose of this section is to identify and justify the research process used. As Crotty (1998) states “Theoretical perspective is the philosophical stance informing the methodology and thus providing a context for the process and grounding its logic and criteria” (p.3).

This takes the form of beginning with the philosophical context of where this research is grounded. The following outlines and discusses the ontological, epistemological, theoretical and methodological position of the thesis illustrating how they relate to each other. As there are many discrepancies about the meaning of certain terms, as there may be many competing definitions due to the readers’ theoretical background, it is important to outline what these common terms mean to this research. These definitions of relevant conceptual terms will be outlined in this chapter.

Before outlining the philosophical context for this thesis, it must be noted that these terms outlined take on different forms in different contexts and are written about in slightly different ways throughout the scholarly literature. As Mautner (2005, p. vii) states “The boundaries of philosophy are not sharply defined”. Therefore these philosophical considerations are a construction of my interaction with the social artefacts relating to this philosophical context and understanding.

Defining terms such as ontology and epistemology is difficult in a fundamental sense as they are inherently linked to each other. Some texts will define subjectivism, for example, as an
ontology (Crotty, 1998), others as an epistemology (Runes, 2008) and others both, emphasising context to differentiate the terms (Mautner, 2005).

Below I have discussed ontology and epistemology separately to illustrate that these concepts can be viewed as different and also can be thought of in a hierarchical sense. An example of this is thinking about one’s ontological position first, following into one’s epistemological position leading to a methodological platform similar to Crotty (1998). In the epistemological section, I illustrate that these concepts are also strongly interrelated with each other.

**Ontology**

Ontology is the assumption or claim made about the nature of reality or a theory of being or “is a theory as to what exists” (Urmson & Ree, 1991, p.227). When our assumptions about this nature have been made, we can then discuss how we know what we know about this nature of reality – one’s epistemology. Examples of differing ontological positions are ‘objectivism’ and ‘subjectivism’ (Crotty, 1998). Crotty (1998) also categorises ‘constructionism’ as an ontology, however, as constructionism has both objective and subjective elements associated with it, I will use this term when discussing epistemological positions.

Objectivism, which is embedded with the theory of realism, asserts that there is an external reality existing independently of the person’s, or subject’s, perceptions of it (Mautner, 2005). Thus, the object would exist even if no person, or subject, perceived it. This contrasts with subjectivism, where the existence of reality is solely dependent on a person’s subjective experience of it (Urmson & Ree, 1991). Thus, reality is what is perceived to be real and there is no underlying reality that exists independently of perception (Bunnin & Yu, 2009).

**Epistemology**

Epistemology is the philosophical theory of knowledge. Epistemology is the branch of philosophy that is concerned with how we know what we know, or consider to exist in the world. As with ontology, different people, disciplines, and cultures can hold very different epistemological assumptions (Davidson & Tolich, 2003, p.25).

To use the ontological concepts above, if one had a realist or objectivist view of the world, one may adopt a positivist or post-positivist epistemology (using the scientific experimental method) to elicit knowledge about an object that exists in the world. A different epistemology linking somewhat to subjectivism, is a social constructivist epistemology. In this instance
knowledge is constructed by one’s own mind through social interaction with others, from their experiences. This study is underpinned by a social constructionist epistemology. To illustrate the constructionist position, I will briefly outline a contrasting epistemology, that of positivism and post-positivism.

**Positivism and Post-Positivism**

Positivism has its beginnings during the Enlightenment (Crotty, 1998). The positivist position presumes the social world exists objectively and externally, that knowledge is valid only if it is based on observations of this external reality and that universal laws (or ‘truths’) exist (Blaikie, 1993). This suggests that knowledge is then ‘discovered’ about a particular object. However, in the mid 20th century there was a shift to another position espoused which related to positivism and was named post-positivism (Creswell, 2009, Crotty, 1998). Whilst still having a relationship with objectivism as an ontology (a reality exists independent of our thinking), post-positivism emphasizes probability rather than certainty, views objectivity in non-absolute terms, and where ‘truth’ is approximated rather than to understand something as its totality or essence (Crotty, 1998, p.29).

**Social Constructionism**

There is no one defined perspective of social constructionism (Lock & Strong, 2010), with many cited as contributing to the concepts development over time. Arguably, social constructionism has its roots from the work of Giambattista Vico, born in 1668, who challenged the philosophy of Hobbes who suggested that a universal and unchanging human nature existed. In contrast, Vico opined the perspective that people are “historical beings and that human kind is continually reconstructed into new forms over time” (Lock & Strong, 2010, p.13).

The advent of Berger and Luckmann’s *The Social Construction of Reality* (1967) could be a considered a seminal text that brought the perspective of social constructionism into the forefront of thinking of scholars in many disciplines in Humanities and Social Sciences. Generally speaking, social constructionism is an epistemology that considers reality as constituted by and through human interactions within social and historical context (Lock & Strong, 2010). Social constructionism, therefore, is concerned with meaning and understanding as the central feature of human activities.
From this standpoint, as social constructionism involves relationships with others, the view is also held that how one acquires knowledge is always shared, the process involves a construction of self and others all the time. What is taken to be knowledge of the world “…grows from relationship, and is embedded not within individual minds but within interpretive or communal traditions” (Gergen & Gergen, 2004, p.88). This is one area of distinct difference to another epistemological position named social constructivism which regards the origin of knowledge is located in the individual mind (Guba & Lincoln, 1989). In social constructionism, knowledge is viewed as not one’s own in its entirety, it is always shared or “the terms by which the world is understood are social artifacts, products of historically situated interchanges among people” (Gergen, 1985, p.267).

Thus, social constructionism is embedded within historical and cultural contexts, which change over time and from place to place. As Nightingale and Cromby (1999) propose, “…it isn’t just our ways of talking about the world that vary: the actual, living people that are constituted in and from those ways of speaking will vary, along with the cultures that produce and sustain them” (p. 5). Therefore, the meaning of experiences, and methods of understanding experiences, change through time and across different situations.

This does not imply that social constructionists do not have ‘meaning making for ourselves’. Rather, it conveys that this ‘meaning making’ is not fundamentally or absolutely our own in a purely individual sense but that our ‘own’ is always a shared entity or an inter-subjectively shared social construction of meaning and knowledge (Schwandt, 1994). As opposed to discovering a universal truth as in positivism or post-positivism, the origin of meaning for social constructionists is in relationships (Gergen & Gergen 2004). The ontological relationship here is both objectivist and subjectivist. An external reality is acknowledged, yet what one ‘knows’ about that reality is constructed (or produced) in relationships. This is as opposed to positivism where the essence of reality (or objects) is knowable and able to be discovered.

In summary, the epistemology - the ‘how we know’ of social constructionism is always a shared interaction with and through others – not a purely individual construction. Furthermore, as Nightingale and Cromby (1999) illustrate, it is also situated in an historical and cultural context. Thus, what is known and considered to be knowledge about the world is established in a particular historical context, yet can also change over the course of time. As well as being situated historically, knowledge is also constructed through a cultural lens, that is, knowledge is constructed with the cultural beliefs, values, norms and behaviours of a
particular social group. Thus, where the study reported in this thesis is concerned, when examining medical students’ knowledge, impressions, ideas about general practice and being a general practitioner, the focus was on a particular time in their medical training (either at the beginning or at the end). Investigating students’ conceptions on entry and exit from medical school can portray what may stay the same and/or what may change during this time. The culture of medicine and medical school has been documented for some time (Sinclair, 1997; Fox, 1989; Becker, Geer, Hughes, & Strauss, 1961). One aspect of students moving through medical school is the difficulty in developing their professional identity of becoming a doctor (Wilson & Cunningham, 2013). I suggest this incorporates what being a doctor means in each area of medicine exposed to while at medical school. Students enter medical school with their own cultural perspective and then engage with the culture of the medical world. Utilising an epistemology that acknowledges the cultural context of knowledge is critical to examine what is involved in constructing the conceptions of general practice as a discipline and being a general practitioner.

Outlining the epistemology is important as it influences how language is considered and thought about in qualitative research. In social constructionism, language is viewed as “an expression of relationships among persons” (Gergen & Gergen, 1991, p.78). In other words, the language used is constructed through and within social processes. This is a different consideration to, for example, a social constructivist view which views language as mirroring reality of the person’s own thought processes. Having this epistemological perspective, which leads to a particular view about language, is significant as it places primary importance on the impact and influence relationships and the social world have on subjects. It suggests that our reality is always constantly tied up with whatever we have relationships with - people, bureaucratic organizations, institutions, media and language. Medical students are in constant relationship with other students, patients, clinical teachers, and the medical school and teaching hospital as institutions. Students construct the knowledge about their new world of becoming a doctor with continual interaction within and through these various relationships.

As the approach to this thesis uses a qualitative interview approach, an illustration about how language and thought is viewed in a social constructionist epistemology along with an overview regarding how these views developed over time is pertinent and outlined below.
Language & Thought in Social Constructionism

Traditional thinking about language is viewed and used as trying to describe our internal states such as thoughts and feelings (Gergen & Gergen, 1991). Consequently the make-up of the person and their internal states are real entities, and language is used to find a way of expressing these things to others (Burr, 2003). Therefore, language is utilised to give expression to objects and practices that exist in themselves or in the world and the two (i.e. language and what it is describing – objects or practices) are themselves separate entities (Burr, 2003).

The alternative view, stemming from structuralist and poststructuralist thinking, is that the person “cannot pre-exist language because it is language which brings the person into being in the first place” (Burr, 2003, p.47). Hence, language is used to make sense of ourselves and our experiences in the world and thus our understanding of ourselves and our environment is made possible by language. We are already born into a socialised world (Layton, 1997). Here, language is not seen as a means by which internal states can be made known to others, or that language mirrors reality (Burr, 2003). Rather, how these internal states are given meaning and understanding as constructed through language and social processes. For example, the western distinction between the terms ‘thought’ and ‘emotion’ does not exist in certain societies such as Bali in Indonesia (Wikan, 1990). Thus, “The way language is structured determines the way that experience and consciousness are structured” (Burr, 2003 p. 48).

Burr (2003) notes two implications of this. The first, rejects the idea that what makes up the nature of a person exists regardless of the presence of language or not. Rather, they become available to us, through the use of language - and structure our experience. Second, it means that it could also be possible to construct our world, and therefore ourselves, in a different way. This idea of differing constructions of the world via language, including ourselves, is a critical aspect of social constructionism (Burr, 2003). The following sections are brief descriptions of how this developed, firstly looking at language and structuralism and moving on to poststructuralism.

Language and Structuralism

The term structuralism refers to an intellectual movement beginning in the 1950s and involved a number of scholars such as Althusser and Sassure (Barker, 2008). With regard to
language, the idea that the structure of language determines how we organise our experience is central to the movement of structuralism (Barker, 2008). Ferdinand de Saussure is regarded as a founding figure of structuralism and semiotics, the study of signs, which incorporates language (Layton, 1997).

Here, meanings allocated to the concept of certain ‘things’ do not inhabit the particular concept itself (Barker, 2008). Distinguishing between ‘things’ is through certain rules you use to illustrate what makes them different from each other (Barker, 2008). For example the concept ‘fish’ only forms meaning by referring to other categories or concepts from which it is different (e.g., ‘chips’ or ‘frog’) (Burr, 2003). Meanings of a particular sign (e.g. a word) do not dwell inherently in that sign itself, yet in relationship to another sign or sign(s) (Layton, 1997).

In his work *Course in General Linguistics* Saussure (1960) proposed that language does not reflect a pre-existent reality, but constructs that reality for us through the sign system of language. Saussure also supposed that once a signifier (the form or medium of a sign e.g. word or image) became attached to a signified (concept or meaning) this particular relationship, although arbitrary, was then fixed. Carrying this concept further, once words became attached to particular meanings, they are then fixed in that relationship, with the outcome being that the word in question has the same meaning (Barker, 2008). Although Saussure’s semiotics gave an explanation as to how people speaking a certain language were able to converse with each other, it failed to illustrate the change over time in the meaning of words (e.g. the word ‘gay’); and also how certain words can have more than one meaning (Burr, 2003). The theorists who took Saussure’s work further and focused upon this area are known as poststructuralists.

**Language and Poststructuralism**

The poststructuralist premise that meanings within language are contestable, never fixed, and temporary is a fundamental aspect of poststructuralism (Barker, 2008). This has significant ramifications for conceptions and understanding of what constitutes a person, ideas around subjectivity, and the issues surrounding change from a personal perspective and from a wider social perspective.

Although poststructuralism has this particular fundamental standpoint, both structuralism and poststructuralism share the following assertions. Language is viewed as the major locale of constructing the person (Burr, 2003). The next assertion is that of an anti-humanism stance.
This is based on the rejection of the idea that the person is a totally autonomous rational being, capable of self-determination (Mautner, 2005). Finally, the position also incorporates an anti-essentialist stance in which the view of properties of an individual as inherent within that individual, via aspects such as personality traits, and attitudes is rejected (Lock & Strong, 2010; Mautner, 2005).

Therefore, in explaining the social world around us, as individual emotions or behaviours among groups, our gaze needs to be directed away from investigating the core of the individual, and shifted “out into the linguistic space in which they move with other people” (Burr, 2003 p. 54).

This postmodern way of viewing language is also linked with the way the self is viewed. It follows the anti-humanism stance of rejecting the idea of the person as self governing (Danaher, Schirato, & Webb, 2000). Taking this view of the self as a product of language and social interactions, then the self will be constantly changing depending on the variety of people and circumstances they interact with (Lock & Strong, 2010). This will be examined further towards the end of this chapter.

Following this approach, phrases, words, and texts can change meaning over the course of time, therefore meaning is always contestable. Rather than language being seen from a structuralist point of view - with fixed meanings agreed upon by everyone, it is a site of confusion, variability and disagreement. Thus, the poststructuralist perspective of language is of speech, social interactions, and texts as locations of resistance, disagreement and contestation.

These ideas about language and about the self have been brought about via investigating the relationship between language, discourse, social practices and social structures. For example, ‘micro’ and ‘macro’ views of this relationship have been suggested to illustrate the broad differences in approach to research using a social constructionist perspective (Boje, Oswick, & Ford, 2004). Both of these views use the term ‘discourse’ yet it takes on different meanings within these views. The micro view focuses on the language structures used in the interaction among people. The macro view also concentrates on language, yet it also has a particular focus on the role of social structures in shaping our social and psychological selves (Boje et al., 2004).

In particular, the micro perspective is situated within the discourse of everyday life, the interaction among people. Through these discursive interactions, a number of differing
constructions are possible. Therefore any claims of what is ‘real’ or ‘true’ are irrelevant as “the text of this discourse is the only reality we have access to – we cannot make claims about a real world that exists beyond our descriptions of it” (Burr, 2003 p. 21).

In the macro perspective, the constructive power of language is recognized and is interrelated with particular social relationships, structures and institutionalised practices (Boje et al., 2004). In the micro view texts, either interview or written, are analysed to bring to light how one attains distinct representations of persons or events (Boje et al., 2004).

In contrast, the macro view of discourse, which also uses interview and written texts, accentuates “the way that forms of language available to us strongly channel, not only what we can think and say, but also what we can do or what can be done to us” (Burr, 2003 p. 63). This thesis takes on this ‘macro’ perspective on discourse, in particular using a Foucaultian view on discourse.

Discourse - Foucault

In the previous section regarding language, thought and the poststructuralist perspective, the term ‘discourse’ was introduced, yet not defined or elaborated on. In this section on discourse, I introduce Foucault’s concept of discourse and illustrate particular important aspects in relation to Foucault’s ideas on discourse.

The term ‘discourse’ is often used as a linguistic consideration or concept, meaning passages of connected writing or speech. Foucault however, gave it another meaning, adding to the myriad of definitions and confusion to what is considered to be discourse. As these variances in definition serve “…to show us the fluidity of its meaning” (Mills, 2004, p.5), this also illustrates the previous mentioned notions of words and concepts changing meaning over time.

One must think of Foucault’s discourse as more than just a single definition relating to one thing or event. Foucault’s definition and theory of discourse encompasses many aspects. Hall (2001, p.72) illustrates this by viewing discourse “as a system of representation.” Firstly, Foucault defined discourse as “the group of statements that belong to a single system of formation [of knowledge]”, for example ‘clinical discourse, economic discourse, the discourse of natural history, psychiatric discourse” (Foucault, 1972, p.107-108). Here I will examine what is meant by the term ‘statement’.
The Statement

Statements are considered the “primary building block of a discourse” (Mills, 2004, p.54). Foucault viewed statements as expressions (or utterances) which have an institutional strength and are endorsed or sanctioned by an authority, and thus be viewed as ‘in the true’ (Foucault, 1972). These expressions and utterances which include texts, and not just the spoken word, which make some form of ‘claim to truth’, and are verified as knowledge can be categorised and viewed as statements (Mills, 2004).

Foucault is interested in systems which govern the production of these statements and, the mechanisms whereby other expressions are excluded from being viewed as ‘in the true’ and therefore being categorised as statements (Foucault, 1972). Additionally, as discourse involves looking at a collection of statements, it also involves looking at a collection of single sources or texts, rather than just a single text or single source of texts (Hall, 2001).

Foucault’s notion of discourse was that they are not just clusters of utterances, collected around a particular topic or issue. Furthermore, they are not just a collection of utterances which emerge from a distinct institutional context. Discourses are immensely regulated collections of statements with particular internal structures and rules (Mills, 2004). In addition, discourses should also be viewed to be controlled and governed in relation with other existing discourses (Mills, 2004).

Discursive Practices

Foucault also states discourses are “practices that systematically form the objects of which they speak” (Foucault, 1972, p.49), showing the relationship between discourses and the world we inhabit.

So here, discourse gives meaning to material objects and social practices. That is, discourses are about the production of knowledge (of objects and practices) through language. As Hall (1992, p.291) states, “since all social practices entail meaning, and meanings shape and influence what we do – our conduct – all practices have a discursive aspect”. This is where Foucault’s concept of discourse takes on another element.

Foucault’s discourse unites both language and practice – it is not just a linguistic concept. As Hall (2001, p.72) suggests, “it is an attempt to overcome the traditional distinction between what one says (language) and what one does (practice)”. Therefore, Foucault’s idea of
discourse not only constructs objects of knowledge - it influences how ideas are then put into practice, thus uniting language and practice (Hall, 2001).

As discourse constructs our knowledge of objects and practices, it defines what can be said about a certain topic along with certain ways of conducting oneself. Therefore discourse also limits other ways of talking and conducting oneself in relation to the same topic or object – discourse then is used to regulate the conduct of others (Hall, 2001). These discursive practices work via certain rules which are very specific to a particular time, space, and cultural arena (O’Farrell, 2005; Hall, 2001). Foucault proposed that the same phenomena would not exist in different historical periods or have similar meaning which is universal to all cultures (Hall, 2001). These discursive practices are not a matter of external determinations or rules being imposed on people’s thought, rather it is a matter of rules which allow certain statements to be made (O’Farrell, 2005). An example is when Foucault looked at the discourse surrounding ‘madness’. As Hall (2001, p.74) states “it was only after a certain definition of ‘madness’ was put into practice, that the appropriate subject – ‘the madman’ as current medical and psychiatric knowledge defined ‘him’ – could appear.”

**Discursive Fields and Formations**

The relationships between people and experiences that is, certain discursive practices, comprise various social and cultural fields, including for example, medical education. This field can be considered “a space or area of society which can be used in certain ways” (Danaher, 2000, p.33). These discursive fields construct particular “… rules and procedures, assigns roles and positions, regulate behaviours and what can be said, and produces hierarchies” (Danaher, 2000, p.33). An example of the discursive field in medical education (e.g. the teaching hospital) may look like this. It has certain procedures for running ward rounds or team meetings, assigns roles such as ‘medical student’ and ‘consultant’ and views certain behaviours or forms of language as inappropriate (e.g., talking over a consultant who is addressing a patient, and referring to a doctor by their first name), and additionally creates a hierarchy that means certain positions have greater authority than others (e.g., the final year medical student or ‘trainee intern’ and the ‘consultant’). The discourse making up the discursive field is where the field “speaks of itself to itself” (Danaher, 2000, p.33) and has a significant role in the workings of the field.

A discursive formation can be defined as “a pattern of discursive events that brings into being a common object across a number of sites. They are regulated maps of meaning or ways of
speaking through which objects and practices acquire meaning” (Barker, 2008, pp.90-91). Identifying what a discursive formation may consist of involves outlining the discursive field. This involves investigating where certain occasions of discourse have taken place and to then make connections between them and gather them together to form a certain discursive formation (Danaher et al., 2000). What is constitutive of a discursive formation is seen in the example below.

A discursive formation of general practice may include (adapted from Barker 2008; Hall, 2001): the statements about general practice and being a general practitioner; particular subjects that constitute the discourses of general practice, for example the ‘GP’; the rules that deem what is ‘sayable’ or ‘thinkable’ about general practice, that is certain ways of talking about general practice and being a general practitioner which includes excluding other ways of talking; the practices within institutions that deal with general practice and general practitioners (e.g. teaching general practice, or other specialists who interact with general practitioners in a working environment); and how knowledge about general practice and general practitioners acquires authority, a sense of constructing the ‘truth’ about it.

Following on from what I have already identified in the explanation of discourse, statements, discursive practices, and discursive formations I now move on to describe further elements relating to discourse, in particular the limitations, how particular discourses are kept in existence, and the related idea of dominant discourses.

**Exclusionary Practices - Limitations of What can be Said**

As previously outlined, analysing discourse is not just the analysis of statements. In addition, it concentrates on the rules and structures of discourse. These structures and rules can limit what can be said, by whom, and in what context. This idea of limitation or exclusion as Mills (2004, p.56) states “…is crucial to the understanding of the constitution of discursive structures”.

In *The Order of Discourse* (1981) Foucault discusses how discourse is controlled and governed by institutions to oppose particular dangers through process of exclusion. These processes work to restrict what can be said combined with what is viewed to be knowledge. Foucault states three external areas of exclusion: prohibition or taboo; the rational and irrational; and the perception of knowledge which is considered true and false.
Prohibition or taboo is a discursive and institutional limitation. It makes it difficult to discuss certain topics (e.g., the discussion of sex in certain contexts within western societies) and constricts or limits the way we talk about these subjects (Mills, 2003). This becomes habitual within certain cultures at various times and once a subject is prohibited or tabooed, that tabooed status begins to seem obvious (Mills, 2004). Another example in a medical context is discussing terminal illness. A common occurrence for people who have been diagnosed with a possible terminal illness is for close friends to avoid the affected person. This can be seen in personal stories of ill health (Carter, MacLeod, Brander, & McPherson, 2004).

The next area of exclusion focuses on the rational and irrational, or as Foucault described it, the sane and the insane (Foucault, 1981). The talk of people who are considered to have mental illness (or in Foucault’s term, insane) are largely disregarded, their contribution is seen as ‘irrational’. For example, the language of schizophrenics is not given credibility, if they ask for certain treatments not preferred by those in authority, they are usually disregarded (Mills, 2004). It is assumed that the wishes and views of the sane or ‘rational’ people, such as doctors, have more significance (Mills, 2003).

The last exclusion is knowledge which is perceived as true and that which is considered false (Foucault, 1981). Foucault illustrates this by looking at the sixth century Greek perspective that the subject matter of a statement was no assurance of it being true. What was viewed more importantly was the context under which it was said. Foucault called this shift a development towards a ‘will to truth’ (Danaher et al., 2000), “which imposed on the knowing subject, and in some sense prior to all experience, a certain position, a certain gaze and a certain function (to see rather than to read, to verify rather than to make commentaries on)” (Foucault, 1981, p.55).

This context could be regarded as statements made by those who are not in positions of authority will be considered not to be speaking the truth (Mills, 2004). Foucault (1981) illustrates this ‘will to truth’ is maintained by many institutions: educational institutions; publishing companies; legal institutions and so fourth. These institutions continually work to exclude certain statements viewed as false and continue to circulate statements which they view as true (Mills, 2004). Foucault (1972) argues that only ‘true’ statements will be circulated.

It could be argued that we frequently experience this ‘will to truth’ as “a richness, a fecundity, a gentle and insidiously universal force… we are unaware of the…prodigious machinery
designed to exclude” (Foucault, 1981, p.56). As Mills (2004) suggests, although the process may seem contradictory, exclusion is a significant means of producing discourse.

**Principles of Rarefaction – The Circulation of Discourses**

As well as these limiting measures, Foucault states that what makes up a discourse also has internal and external procedures or mechanisms, keeping particular discourses in continuation. Foucault (1981) entitled these mechanisms ‘principles of rarefaction’ and includes commentary, academic disciplines, and the rarefaction of the subject.

Commentary concerns discourses which are considered to have validity and worth (Mills, 2004). In a sense these commentaries (for example this thesis) continue Foucault’s work to be kept in circulation and existence as legitimate knowledge. Commentary ascribes “richness, density and permanence to the text at the very moment when it is creating those values by the act of commentary” (Mills, 2004, p.61).

The second mechanism is the notion of the academic discipline (Foucault, 1981). This is referring to the limits we place on subject areas which determines what can be said and adjudged as accurate or ‘true’ within a particular field (Foucault, 1981). Therefore, every field of study (psychology, social anthropology etc.) will establish what constructs and forms that discipline (e.g. philosophies, methodologies) will be adjudged to be true. These formations permit new theories and ideas to be fashioned, however only within particular discursive limits. Foucault argues that the formations and organisation of particular fields of study, or disciplines, act to prohibit and reject more ideas than they allow (Foucault, 1981). As Mills (2003) suggests, this exclusion is to the extent that if a particular piece of research appears factually rigorous, if it does not follow the forms and content of a certain discipline it will in all likelihood be ignored, or to be thought of as non-academic. Foucault asserts that disciplines or fields of study permit people to speak ‘in the true’. In other words, within the domain of what is regarded or adjudged true within that field of study. Yet, conversely Foucault also suggests that disciplines also prohibit the examination of alternative knowledge which may have been conceivable.

The last mechanism is called the ‘rarefaction of the speaking subject’. The principle of rarefaction deals with the notion that although at any given time many utterances and statements can be said, only a certain number of utterances or statements are actually stated (McNay, 1994). Thus, some discourses are open to all, yet some have very limited access. What Foucault means by rarefaction is the limitation placed on who can speak.
‘authoritatively’, which encompasses certain cultural practices in various societies where particular discourses “circulate according to specific rules” (Mills, 2003, p.61). For example, only certain people conduct ward rounds in a teaching hospital (the leading consultant). Students generally do not speak on the ward round unless invited. Due to these unwritten rules of ‘ward round conduct’ the student may feel nervous and find speaking very difficult. Foucault (1981) states that “any system of education is a political way of maintaining or modifying the appropriation of discourses, along with the knowledges and powers which they carry” (p.64). Therefore, what is able to be said and what is not able to be said at any particular time cannot be separated from the subject of power. This notion will be examined further under the heading ‘Power/Knowledge’. Focusing on restriction could be viewed as negative, yet this idea of restriction is viewed as being productive along with limiting. It is through this process of restriction and control that knowledge can be produced (Foucault, 1981).

These distinct processes of the limitation and circulation of information create the production of discourse, yet only particular types of discourse (Foucault, 1978). These processes maintain that what can be said and understood to be portrayed as ‘knowledge’ is restrained. Moreover, these mechanisms take place within defined and recognised limitations. This makes certain that the knowledge originating within a certain era has a distinct uniformity. However, this is not to portray that everyone living within a particular period of time concur on a distinct perception of the world, rather, that all of the authorized discourses are produced through analogous discursive restraints (Mills, 2004). This intricate system of numerous restraints and limitations functions internally and externally on the production of discourse and it is these limitations which exercise discourse into actuality (Mills, 2003).

**Dominant Discourses**

Dominant discourses are “discourses which privilege versions of social life that legitimate existing power relations and social structures” (Willig, 2008, p.113). These discourses are so entrenched and embedded in people’s lives that it is very difficult to see how they may be challenged - they have been accepted as ‘common sense’ (Willig, 2008).

These prevailing, privileged or dominant discourses are often tied to social structures and practices which support the status quo and maintain the positions of powerful groups. Consequently, in challenging such discourses and resisting the positions they offer we are also implicitly challenging their associated social practices, structures and power relations. We can
therefore expect to find some degree of resistance to our attempts at change (Burr, 2003). Thus, at the same time it is in the nature of language (as previously explored) that alternative constructions are always possible and therefore counter (competing, or contested) discourses can, and do, emerge (Willig, 2008; Danaher et al., 2000).

**Power**

In later work, Foucault became more interested with how knowledge was put to work through these discursive practices in specific institutional settings to regulate the conduct of others (Hall, 2001). Foucault conceived power as not a “property, but a…strategy” (1975, p.26), where power circulates so people are “always in the position of simultaneously undergoing and exercising this power” (Foucault, 1980, p.98).

Foucault views power as distributed throughout social relations. He rejects the notion of the ‘juridical’ model of power as being the only model (Sawicki, 1991, p.20). The juridical concept of power is the idea of a pure limit set on freedom. This model involves three assumptions: power is possessed (e.g. by people, by a class); power flows from a central source from top to bottom (e.g. law, economy, the state); and power is primarily repressive (a prohibition backed by sanctions) (Sawicki, 1991). Thus, rather than looking at who held power, Foucault focused on how power was exercised, “how things work at the level of on-going subjegation” (Foucault, 1980, p.96).

As mentioned, for Foucault, discourse regulates not only what can be said under determinate social and cultural conditions but also who can speak, when and where. Consequently, much of his work is concerned with the historical investigation of power and the production of subjects through that power (Burr, 2003; Hall, 2001). Foucault does not formulate power as a centralised constraining force; rather, power is dispersed through all levels of a social formation and is productive of social relations and identities (i.e., it is generative) (Barker, 2008). Thinking about power this way – that it is exercised and distributed through all areas of society, it also means that it is a phenomenon that is a continual practice – happening all the time, all at once. Thus, power is viewed as a relational exercise rather then something held by a person or institution. This means, that in this research context, medical students and trainee interns that could be seen as being of ‘low hierarchy’ during their undergraduate education medical education can also participate in exercising power, while at the same time experience power exercised by their superiors, such as clinical teachers.
Further to the relational view of power being exercised rather than possessed, Foucault also viewed power as a productive and generative exercise instead of primarily negative or repressive. With this relational view on power being generative, it therefore brings subjects into being. As Foucault (1975) stated “power produces: it produces reality; it produces domains of objects and rituals of truth” (p.194). As power is being exercised, it produces further objects and discourses. For example, as Hall (2001) illustrates “efforts to control sexuality produce a veritable explosion of discourse – talk about sex, television and radio programmes, sermons and legislation, novels, stories and magazines features, medical and counselling advice, essays and articles, learned theses and research programmes as well as new sexual practices (e.g. ‘safe’ sex)” (p.77). These power relations infuse all levels of social being and therefore are located with in our daily lives (Hall, 2001).

**Power/Knowledge and Regimes of Truth**

Discourse is the production of knowledge through language. These discourses, which form discursive formations and produce practices of knowledge, as noted above, are also rooted with relations of power: “there is no power relation without the correlative constitution of a field of knowledge, nor any knowledge that does not presuppose and constitute at the same time power relations” (Foucault, 1975, p.27).

Therefore, Foucault viewed knowledge as a form of power. Moreover, this power/knowledge for Foucault is also caught-up in the questions of whether and in what circumstances knowledge is to be applied or not (Hall, 2001). This power/knowledge synthesis as Foucault (1975) states “determines the forms and possible domains of knowledge” (p.28). Applying knowledge has real effects, and in that sense at least ‘becomes true’ (Hall, 2001).

This led to Foucault’s concept of Truth. From his concept of power/knowledge, Truth of knowledge was not viewed as something that exists independently or remained constant through history, culture and context. Truth of knowledge was viewed as a discursive formation sustaining a regime of truth (Hall, 2001). Foucault analyses the labour which people perform to exclude certain forms of knowledge from consideration as ‘true’ (Mills, 2004).

Truth isn’t outside power…Truth is a thing of this world; it is produced only by virtue of multiple forms of constraint. And it induces regular effects of power. Each society has its regime of truth, its ‘general politics’ of truth; that is, the types of discourse which it accepts and makes function as true, the mechanisms and instances which enable one to distinguish true and false statements, the means
by which each is sanctioned…the status of those who are charged with saying what counts as true (Foucault, 1980, p.131).

Truth, for Foucault, is constructed and developed by societies, as opposed to something existing independently of societies. Foucault is not concerned with examining which discourse is “a true or accurate representation of the ‘real’” (Mills, 2004, p.17), instead Foucault is interested with the mechanisms through which one becomes formed as the dominant discourse (Mills, 2004).

**Technologies of Power**

Foucault used the examples of school education, the armed forces and also prison to illustrate disciplinary power. Disciplinary power can be seen as mechanisms “which made possible the meticulous operations of the body…and imposed upon them a relation of docility-utility” (Foucault, 1975, p.137). Two of these mechanisms or, technologies of power, are surveillance and normalizing judgment (or normalisation).

Foucault further illustrates technologies of power are that “which determine the conduct of individuals and submit them to certain ends or domination, an objectivising of the subject” (Foucault, 1988, p.18). Objectivisation here is referring to Foucault’s work on how the subject is constituted as an object of knowledge. The practice of surveillance in this study could be illustrated by the doctor keeping any eye on their students, but also, as illustrated above, as power is viewed as circulatory, surveillance could also be seen by students watching doctors, particularly when looking at developing themselves as, and learning how to become professionals.

According to Foucault (1975) normalising judgement (or normalisation), occurs through making comparisons so that they can be referred “to a whole that is once a field of comparison, a space of differentiation and the principle or rule to be followed” (p.182). As Walshaw (2007) illustrates, surveillance and normalisation are bound together. Surveillance influences behaviour and contributes to the choices that individuals make. Thus surveillance “tends to make us make ‘normal’ choices” (Walshaw, 2007, p.130).

**Conditions of Power**

Along with the mechanisms of surveillance and normalisation, in Foucault’s *Discipline and Punish: The Birth of the Prison* (1975), he outlines certain conditions that are needed for
power to be exercised by institutions. These conditions of power include the establishment of space, time and of capacity.

The idea of allocating individuals particular space was used by Foucault (1975) in a prison setting context to illustrate its purpose which was accompanied by surveillance “In the first instance discipline proceeds from the distribution of individuals in space” (p.141). The purpose was to control the distribution of people, where they were allocated, individual disappearances and any threatening gatherings of individuals (Marshall, 1989).

The condition of time is where activities are planned and scheduled to a timetable which establishes “three great methods – establishing rhythms, impose particular occupations, regulate the cycles of repetition – [and] were soon to be found in schools, workshops and hospitals” (Foucault, 1975, p.149). Here, as Marshall (1989) illustrates, this prescribes two principles of initially specifying tasks and events that are considered appropriate to the discipline (which in this research, relate to the profession of being a doctor) and then organising regular rhythms to be put in place for these tasks and events to occur.

Lastly, the condition of capacities (or abilities) what Foucault referred to as “The organization of geneses” (Foucault, 1975, p.156) is where the aforementioned tasks and events are organised and divided into particular stages. These will be defined to be important and relevant for each stage, building on the previous stage. In a higher education context, this idea of Foucault’s resembles the organisation for the idea of alignment, in this case constructive alignment of the curriculum where students can construct new knowledge built on their previous knowledge (Biggs & Tang, 2011). This occurs by dividing learning events and tasks that can build on each other over time, for example, over the five years of a medical degree. Activities that are considered suitable are dependent “upon that discipline’s ‘true discourse’ or the knowledge of people, process and activities which has been established through an exercise of power within that disciplinary block” (Marshall, 1989, p.106).

Conditions of power, although developed from Foucault’s work on the prison system, have been used in research that examined the education system (Gore, 1998; Marshall, 1989; Walshaw, 2007). Conditions of power resonate with medical education. As the undergraduate medical degree comprises of a multitude of areas, deciding on what is ‘appropriate’ and ‘important’ is a difficult task. Therefore, the decisions made about what is going to be taught (allocating space), and when (time) and in what year (capacities) produces certain knowledge; knowledge which is “developed through the exercise of power [which] is used in the exercise of power to produce what Foucault calls ‘normalised’ individuals” (Marshall, 1989, p.106).
Considering the conditions of power is important in the study reported in this thesis, as the discourses of general practice and being a general practitioner that medical students engage with, that is, their knowledge of the discipline and the profession, will be shaped somewhat by them.

**Technologies of Self**

Technologies of the self are mechanisms that

> Permit individuals to effect by their own means or with the help of others a certain number of operations on their own bodies and souls, thoughts, conduct and way of being, so as to transform themselves in order to attain a certain state of happiness, purity, wisdom, perfection, or immortality (Foucault, 1988, p.18).

These are technologies or mechanisms that individuals utilise to transform themselves into subjects (Dreyfus & Rabinow, 1983). In the current study, the process of normalising technologies of self (Foucault, 1990) is particularly relevant. Normalising technologies of self is a process where individuals regulate and discipline themselves with the discourses they interact with in social institutions (Foucault, 1990). This self-regulation and self-disciplining is the process of aligning oneself with what is expected of you, in this study, what would be expected of you as health professional – a doctor.

This aspect of Foucault’s work seemed particularly pertinent to this study. As Jaye, Egan, and Parker (2006) illustrate, medical students are exposed to normalising technologies throughout their medical training. Medical students develop their professional selves during their undergraduate training and immersion in their community placements and the teaching hospital through normalising technologies of the self as they learn to ‘be one of us’ (Jaye, Egan, and Smith-Han, 2010). Thus, this is relevant to my study, as medical students will interact with discourses referring to general practice and general practitioners when working with the process of developing their professional selves during the medical education.

After outlining Foucault’s notions of discourse, power and power/knowledge, technologies of power and technologies of self, a certain question arises. How is the individual or self conceptualised given a social constructionist framework? The following section examines this question.
The self

As mentioned earlier, social constructionism holds particular assumptions. Social constructionism shifts one’s cognitive or psychological being from the mind of the individual to the social and interpersonal domain. It also holds language as the main site of the source of the meaning of the experience. As language is viewed in this light, then the self will be viewed as constantly changing depending on with what and with whom the person interacts to what purposes, in what contexts. Thus it follows the anti-humanism stance of rejecting the idea of the coherent, self governing, and unified self and so leads to consider further important questions regarding the self, also referred to as subjectivity (Danaher et al., 2000), such as, what does it mean to be a person?

A traditional view illustrates we are accustomed to view ourselves as having a particular personality, attitudes, beliefs and make choices originating in our minds (Potter & Wetherell, 1987). However, a social constructionist view would discard these psychological entities and view them as only present in discourse, an effect of language (Lock & Strong, 2010). Although we would experience these entities as having a discernable existence, we would view them as brought into being through language, an example of objects constructed and made via discourses (Potter & Wetherell, 1987). It is important to note here that this would be an extreme form of social constructionism. A form which is more widely held is that that these entities do exist, yet how they come into being for us and have meaning is through discourse (Burr, 2003). This is the form of social constructionism that has informed the study reported in this thesis.

In the social constructionist world for example, instead of the term ‘personality’ being used the term ‘identity’ is more often used, emphasising the embedded social concept and circumventing the essentialist association of ‘personality’ (Elliott, 2008). This view is important as identity is more to do with one’s purposes of identifying rather the than the essences of the object itself. Thus being viewed as sane/insane, may be seen as socially conferred identities as opposed to the nature of the person (Hacking, 1986). Hence what makes someone’s ‘identity’ is constructed from the discourses available and which we draw upon in our communications with other people (Hacking, 1986).

In each of these parts of our identity, there are a restricted number of discourses from which we might construct ourselves (McNay, 1994). However, from these different areas of discourse there are of course alternative discourses giving alternative views of what it means
to be educated, disabled, or for example in this thesis to be a general practitioner. Working with identities supplied by these discourses can be relatively easy, yet at other times this can be very difficult. For example ‘doing’ general practice requires certain tasks which can involve dealing with uncertainty and adopting a non-curative approach, which for this example will be termed ‘caring’ (Wilson & Cunningham, 2013). A student on entering medical school with an early developed identity of a doctor which is fixated on certainty in what they are doing and a curative approach has the potential to create conflict.

Thus, a variety of discourses are continually at work constructing and generating our identity, originating from the social domain as opposed to the inside of the individual (Hacking, 1986). This domain is immersed in language and other signs, yet is so vast and all-encompassing that it is invisible. It is the “very medium of our existence as social beings” (Burr, 2003, p.109).

Discourses and the identities they offer also provide opportunities for resistance. One way to resist the discourse of uncertainty and caring is to draw upon other discourses or construct new ones. Constructing and negotiating identities is a process that can be filled with conflict as we take up or resist the discourses presented to us (Davies & Harré, 1990). For example, a way to resist the discourses in the previous example could be to look for other specialties that do not expose these discourses of uncertainty or a non-curative approach to doctoring.

Subject positioning is a concept which is used by some authors to address the process by which identities are manufactured (Davies & Harré, 1990). As these subject positions cannot be avoided, we are left to either accept or resist them. Accepting or being incapable to oppose a particular subject position leads one to being confined to all aspects associated with that subject position, such as ways of speaking, particular obligations, ways of doing things (Hall, 2001). As Willig (1999) states

> Individuals are constrained by available discourses because discursive positions pre-exist the individual whose sense of “self” (subjectivity) and range of experiences are circumscribed by available discourses (p.111).

The concept of positioning is a way of understanding how people are “subject to discourse and how this subjectivity is negotiated” (Burr, 2003, p.116).

**The Issue of Agency**

If the premise suggested is that people are in fact products of discourse, and what we say has status only as expressions of these discourses, how can we explain the issue of having any
agency? By agency, I mean that people are the authors of their own thoughts and actions. The issue of how human agency might be engaged within a social constructionist framework is problematic.

For Foucault, the subject can be illustrated in the ways in which discourses are exhibited in texts and practices, and the way discourses are lived out through people. This has been described by some as ‘the death of the subject’ and is a criticism of Foucault suggesting that such a conceptualisation makes it unfeasible to acknowledge any concept of human agency (Barker, 2008; Danaher et al, 2000). However, although Foucault abandoned humanism, the idea that we are the sole source and free agents of our actions, the concept of people being entirely constructed of manifestations of discourse may be misinterpreted (Burr, 2003). For example, Sawicki (1991) views Foucault’s concept of the human being as still permitting agency of some degree.

Thus, even though the person is composed by discourse, one is still adept in critical reflection and can implement some choice with regard to the discourses and practices that one aligns oneself with (Burr, 2003). From this perspective

Change is possible because human agents, given the right circumstances, are capable of critically analysing the discourses which frame their lives, and to claim or resist them according to the effects they wish to bring about (Burr, 2003, p.122).

Through releasing certain suppressed and marginalised discourses, Foucault proposed that there is a possibility for change. This makes available to the subject further options of discourse from which different identities can be constructed (Hacking, 1986). This view presents “the person as simultaneously constructed by discourse and using it for their own purposes” (Burr, 2003, p.122).

If we consider the pathway to personal change by using the framework of subject positions outlined earlier, an initial consideration would be to identify the discourses and positions that fashion our subjectivity (Davies & Harré, 1990). An example is below:

Consider a young medical student in training who is stressed that he is not a ‘good doctor’. A mind set of doctors can develop that to be a ‘good doctor’ entails having to know everything necessary about a patient’s ill heath, and have the ability to solve everyone’s problems. This is a dominant ethos medical students begin to learn early in their training (Wilson & Cunningham, 2013). These discourses can lead to adopting a position of perfectibility and is potentially very dangerous to patient safety (Huggard, Stamm & Pearlman, 2013; Wilson &
Cunningham, 2013) due to the doctor living these discourses that contribute to physician stress (Huggard et al., 2013). Such stress can lead to substance abuse, depression and burnout and cause on-going risk to optimal patient outcomes (Hatcher, 2013).

However, different and competing discourses of ‘good doctoring’ exist. A medical student can search for approaches to resist being positioned in potentially harmful discourses of perfectibility in being a ‘good doctor’ along with how to obtain favourable discourse positions. An example of this might be to illustrate to the physician the notion that doctoring involves a limited set of knowledge and skills and you cannot solve everyone’s problems. This notion could be combined with the discourse of practicing professional resilience to cope with physician stress (Wilson & Cunningham, 2013; Shakespeare-Finch, 2013). Whilst not abandoning the notion that ‘good doctoring’ requires a dedication to learning the relevant knowledge and skills and working hard to help your patients, a representation of the recognition of limitations to knowledge and personal fallibility (rather than perfectionism) with the tools of professional resilience allows a medical student to claim the position of a ‘good’ doctor.

In any case, this move to change is not straightforward. To the degree that prevailing or dominant discourses are often attached to social practices which maintain the status quo and sustain the positions of powerful groups, then in challenging such discourses and resisting the positions they present we are, at the same time, implicitly challenging their associated social practices, structures and power relations (Burr, 2003). Therefore it is expected that there will be some amount of resistance to endeavours to change. Thus,

We actively produce and manipulate, and are the products of discourse which allows us the possibility of personal and social change through our capacity to identify, understand and resist the discourses to which we are subject (Burr, 2003, p.124).

Learning

This research involved investigating the discourses held by medical students. The study involved medical students who were just beginning medical school along with medical students in their last few weeks of their undergraduate medical student lives. Investigating how medical students learn discourses of general practice and being a general practitioner before they enter medical school, which it was assumed the second year medical students have to some degree, is beyond the scope of this thesis however, investigating where these discourses are encountered and what they consist of was explored. In any case, once students
have entered the discursive field of the medical school and teaching hospital, looking at how these discourses are learned by our future doctors needs consideration.

Noel Entwistle (2009), explains how psychologists in the 1920s held the idea that certain ‘laws of learning’ could be discovered and be generalized to all teaching and learning circumstances. However, a significant number of theories about learning have been generated from a number of disciplines such as philosophy, psychology and sociology. In the discipline of higher education many theories permeate the landscape of understanding learning. For example in the book by Jarvis, Holford, and Griffin (2003) entitled *The theory and practice of learning*, ten learning theories are discussed. The plentiful array of learning theories may illustrate the complexity surrounding understanding learning which is highly contested in the academic literature. The following quotation by Dahllöf (1991, p.148) reflects this sentiment and offers a way forward.

Too much attention is directed towards finding… ‘the best method’, even though fifty years of educational research has not been able to support such generalisations. Instead, we should ask which method, or which combination of methods – is best for which goals, for which students, and under which conditions.

Bleakley (2006) argues that traditionally, learning theories in medical education have focused on the individual learner. Therefore, what is used to explain learning includes a selection of adult learning theory, experiential and reflective learning (Bleakley, 2006). However, constructivist, radical and social constructivist theories of learning could also be included when looking at the individual learner. Bleakley (2006) argues that this focus on the individual learner as an active agent negates investigating other modes of learning where “the learner is viewed as subject to social and historical discourse, and cognition is described as distributed across people and artefacts making up a community of practice, rather than situated ‘in’ persons” (p.151). Here, Bleakley points towards sociocultural learning theories such as activity theory, and situated learning through an apprenticeship model outlined by Lave and Wenger (1991).

Wilson and Cunningham (2013) suggest that frequently, medical students are not formally taught anything about the role of the general practitioner and the place of the general practitioner within the healthcare system. Therefore, one could propose that what students learn about general practice and being a general practitioner arises during less formal learning in their clinical training years, such as during an attachment to a general practice or through placements in teaching hospitals where patients attend via referrals from their general practitioner.
I suggest that although students are not frequently taught about the role of the general practitioner explicitly, they can still pick up information and subtle messages about the role of the general practitioner and general practice as a discipline through the ‘hidden’ curriculum. Philip Jackson (1968) is seen to be the founder of the concept of the hidden curriculum through his work on public school classrooms. How the hidden curriculum is defined varies across the educational and higher educational literature. It has been defined as comprising “the undeclared non-explicit elements of a teaching and learning programme and its setting which students are exposed to and pick-up” (Smith-Han, 2013a). As Jaye, Egan, and Parker (2005) portray, the hidden curriculum permeates all levels of curricula and includes both positive and negative elements. One aspect of the hidden curriculum that is important to state that Jaye et al (2005) highlight from the work of Gair and Mullins (2001) is that although the term ‘hidden curriculum’ may suggest an intention to deliberately mask, this is not the case. The hidden curriculum works in plain sight and without any conscious effort (Gair & Mullins, 2001). Utilising the concept of the hidden curriculum allows consideration of these aspects of informal learning throughout all parts of the medical students learning, both clinical and non-clinical.

Research using the hidden curriculum as means of investigating the informal learning in higher education has been undertaken in a variety of different areas such as medical education, dentistry, nursing, business education and engineering (Hafferty & Castellani, 2009; Margolis, 2001). In medical education, the hidden curriculum has been used to investigate the professional socialisation of medical students, that is, the learning that takes place to be a doctor. Specifically, Jaye et al (2005) have explored medical educators’ perceptions of the hidden curriculum in order to identify certain mechanisms of the hidden curriculum that students interact with, such as role modelling by staff and professional socialisation. Gaufberg, Batalden, Sands, and Bell (2010) used narrative essays to explore medical students’ experience of the hidden curriculum. The authors identified nine key themes from the medical students written reflections, the last one was named ‘internal transformation’. In this theme student reflections illustrated some resistance to certain values and behaviours, as well as acceptance of the same values.

In this study, along with the hidden curriculum as a framework to examine what is learned, I adopt Foucault’s theoretical concepts of discourse, exclusions practices, power, power/knowledge, technologies and conditions of power and technologies of self as a means to exploring possible explanations about how discourses are learned. This is embedded by a social constructionist epistemology. Foucault’s theories have been used in previous medical
education research by Jaye et al (2006) and Jaye et al (2010) but also in higher education in general (Grant, 1997; Nicholl, 1997). This study, using Foucault’s theories, explores the notions that not only do students learn about the professional persona of becoming a doctor in general, but students can also learn about the specialist areas, in this case general practice, through the hidden curriculum.

Summary

In this chapter I have described the epistemological foundation of social constructionism in which this study resides. From here, I have illustrated how thought and language are considered within the social constructionist and post-structuralist framework. I have explained Foucault’s theoretical underpinnings of discourse, power, power/knowledge, technologies and conditions of power and technologies of self. I have also introduced the concept of the hidden curriculum as a framework for conceptualising learning. I have argued that using the hidden curriculum combined with a social constructionist epistemology and Foucault’s theories of the social world, students learn about the discipline of general practice and being a general practitioner. In the following chapter, I portray how the theoretical perspectives described in this chapter informed the methodology for this study.
Chapter 4 - Methodology

In this chapter I document the methodology and methods used for this study. I differentiate between the two terms methodology and method. Methodology is defined as a theory of how and why things are done. Methodology therefore, is the theoretical foundation that informs the decisions of using a particular method (Willig, 2008; Crotty, 1998). The method or methods are the specific procedures or techniques used to obtain and analyse the data (Crotty, 1998). I describe and outline the specific methodological perspectives that inform this research and from there, describe the methods utilised. I also describe the process of analysis and touch on the nature of reflexivity in this research.

Rationale

The methodology described below is informed by my previous chapter which outlined a postmodern, social constructionist framework using Foucault’s concepts of discourse. I begin by outlining the methods chosen to collect data, participant recruitment procedures and the process of analysis.

My initial question was very broad, as described in the previous chapter. It was to investigate the influence of discourses of general practice within the medical curriculum on undergraduate medical students as evidenced by their opinions on general practice as a medical discipline. Because the goal was to examine personal perspectives, a qualitative approach would be deemed to be the most appropriate means of obtaining data. In order to accomplish this, one-to-one interviews were chosen because interviewing is a technique which elicits an individual’s perception of the topic under question in both a structured and unstructured way (Patton, 2002). Through the use of one-to-one interviews the many different facets that may arise during the interview can be explored further in-depth (Kvale & Brinkmann, 2009).

The one-to-one interview is a method previously used in exploring discourses among medical students (Monrouxe et al., 2011) and is also a frequent means of examining discourse in social constructionist research (Holstein & Gubrium, 2008).

Focus groups were considered as another means of examining the discourses as it has been used in examining discourses in medical education research previously, for example in looking into explicit discourses in professionalism (Rees et al., 2007). However, this was
abandoned for a number of reasons. The practical feasibility of obtaining the number of
trainee interns needed (say between eight to twelve per group) to assemble at the same time
during their last weeks of their education which included assessments carried too much
uncertainty. As the researcher, I was also conscious of removing too many trainee interns
from the hospital wards all at once.

The logistics of conducting focus group interviews over four dispersed geographical areas in
New Zealand towards the end of trainee intern undergraduate training was deemed too
problematic as compared with one-to-one interviews, as timing was of importance as
described further below. One-to-one interviews have more flexibility so arranging a schedule
is more workable along with re-scheduling an interview time if necessary. This is particularly
more likely with trainee interns who may be delayed due to their ward duties.

However, a potential critique of only using one data source in some qualitative research is
how to assess the quality of the qualitative analysis? There is a diverse opinion as to how this
should be addressed in qualitative research. These views vary from undertaking the same
criteria used in quantitative research (such as validity and reliability), using different criteria
than quantitative research, or supporting no general fixed criteria (King & Horrocks, 2010). In
quantitative research, the quality is assessed by illustrating appropriate validity, which is
concerned with seeing whether a particular form of measurement actually measures what it
asserts to measure (Creswell, 2009). Reliability, a prerequisite to validity (as an unreliable
measure cannot be valid), refers to the accuracy of the variable being measured (Creswell,
2009). One example of addressing validity in qualitative research is the use of triangulation.

Triangulation is the use of multiple methods of data collection or sources of data to
investigate the specific phenomenon in question (Mays & Pope, 2000). It is a technique
utilized as a means of validating the research being produced. This concept described in detail
by Denzin (1978), is of four types – data triangulation, methodological triangulation,
investigator triangulation, and theory triangulation. Data triangulation refers to using different
data sources within a single study. Methodological triangulation uses different methods to
address the research question posed. Investigator triangulation compares data sourced by
different researchers. Theory triangulation is using different theories to make sense of a
particular set of data.

Yet, whether or not triangulation improves the validity of qualitative research is of continuing
debate in the literature (Blaikie, 1991; Richardson, 2000; Barbour, 2001). As Blaikie (1991)
illustrates, the concept of triangulation is dependent on the methodologies that are used which
are in turn, as has been stated in Chapter 3, dependent on the epistemological and ontological position of the research and researcher. Triangulation also holds certain assumptions. For example, one assumption is that there is a specific fixed point or object that can in fact be triangulated (Richardson, 2000). Furthermore, a social constructionist view of knowledge; where all knowledge is provisional and contestable and not about discovering an objective fact or making a claim to truth, makes performing triangulation inappropriate. However, I offered participants in the research the chance to read the transcripts as a means to check for accuracy of information.

**Participants**

**The Medical School Student Cohort**

In the following section I outline the different pathways of entry into medical school to describe the medical student cohort at the University of Otago, Dunedin School of Medicine.

Admission into the University of Otago MB ChB degree is accomplished through three main pathways. The first pathway is, through the Otago Health Sciences First Year (HSFY) which is regarded as the first year of the six year MB ChB degree. This course is only available at Otago University and is a prescribed course, to be completed as the first year of study. It is also (usually) restricted to students who have not had any previous university education. The majority of the students who are admitted to the HSFY course have concluded their final year at high school (University of Otago, 2013a).

The second pathway is through graduate entry, also known as ‘competitive graduate entry’. This pathway is for applicants who have graduated with at least a bachelor’s degree from another course. Applicants would have needed to have completed their degree within the minimal time required and also within three years of the date of applying for this category. The degree in this category is to be completed in New Zealand and to a level determined by the Admissions Committee for that year (University of Otago, 2013b). There is no preference given to the type of bachelor’s degree or major studied.

The third pathway is through an alternative category called the ‘other’ category. Applicants who do not fit the criteria in the previous two means of entry (HSFY and graduate entry) can consider this category as another avenue to gain entry into medicine (University of Otago,
The ‘other’ category is open to other graduates, allied health professionals, or mental health professionals (University of Otago, 2013c).

An additional requirement for certain pathways for entry into medicine is to sit the Undergraduate Medicine and Health Sciences Admission Test (UMAT). UMAT is an aptitude test used to assess abilities and attributes acquired through previous experience and learning (Australian Council for Educational Research, 2013). This includes skills in: “clinical thinking and problem solving, understanding people; and abstract non-verbal reasoning” (Australian Council for Educational Research, 2013).

When students have gained admission into the MB ChB degree, the first year of training is regarded as ‘second year medicine’. In 2014, the medical student cohort consists of 266 domestic students and a limited number of international students (University of Otago, 2013b). Of the cohort, approximately 75% have gained entry through the HSFY course, 20% through graduate entry and approximately 5% through the ‘other’ category (Shelker, Herbison, Belton, & Glue, 2013). The three different pathways allow for a diversity of ages (17 years – 30 plus years) and experiences, however, the dominance of the HSFY entry pathway gives a median age of the cohort of 19 years (Perez & Belton, 2013). In 2008 the male to female ratio for the cohort was 46% to 54% respectively, which seems to have remained relatively steady since 2004 (Perez & Belton, 2013).

The medical school at the University of Otago is in three geographically separate locations: Dunedin, Christchurch and Wellington. The Early Learning in Medicine (ELM) component of the course (years 2 & 3) is taught at the Dunedin School of Medicine and the Advanced Learning in Medicine (ALM) component of the course (years 4-6) is delivered at all three schools. The ALM component consists of clinical training in teaching hospitals, community settings and rural attachments at and around these main centres in New Zealand. The ELM cohort is divided into three distinct groups who will complete their training at either the Dunedin, Christchurch or Wellington medical schools. To conduct this research second year medical students and Trainee Interns were recruited from the Dunedin School of Medicine.

Participant Sampling and Recruitment – Second Year Medical Students

A multi-method approach of sampling and recruitment was employed to recruit the second year medical students. First, second year medical students from the medical school cohort were invited to participate in this research via an email distributed to the class through an administrator.
Purposeful sampling was the approach taken because of its potential to identify ‘information rich’ cases. Information rich cases are ones which are of prime significance to the rationale or purpose of the research study (Patton, 2002). Criterion sampling, a component of purposeful sampling, was also utilised (Patton, 2002). Criterion sampling is where the participants meet a predetermined set of criteria appropriate for the purpose of inquiry (Kuzel, 1999; Patton, 2002). The criteria for the present research were threefold. First, participants in this stage of the research had to be in their second year of medicine. Second, they could not have been repeating the year if they had failed second year medicine previously. If this was the case, they were not recruited to take part in the study. Third, the participants had to be available for interview within the first few weeks of starting medical school. This time period was selected as it gave enough time to recruit beginning students but also meant that recruited students had limited exposure to medical school. This was important because I wanted to interview students with a naïve knowledge of medical specialties compared with students who had spent a longer time in medical training.

Once recruitment of participants was initiated and interviews begun, snowball sampling was implemented. After each interview, participants were asked if they knew of anyone else who might have been interested in participating. If so, the participant interviewed was then (1) encouraged to inform these potential participants to get in contact with the researcher and/or (2) asked to obtain a contact email address of a potential participants and contact them directly. Snowball sampling is a very effective means of gathering a number of people quickly, accumulating new information-rich sources of data (Guba & Lincoln, 1985; Patton, 2002). Participants recruited through snowball sampling method had to meet the same criteria stated above.

In addition to the email invitation to the entire cohort, I gave a verbal presentation about the research before the start of a lecture in the first week of the semester. A poster advertising the research was displayed on the second year notice board. This is where important notices are displayed (e.g. class streams, medical student association notices etc.). After this open recruitment technique was delivered, I followed up by verbal presentations in the students’ assigned small tutorial groups. Additionally, through teacher networks, other tutors were asked to outline the research project in their classes.

As a Teaching Fellow employed by the Faculty of Medicine, Dunedin School of Medicine, I also recruited from my own tutorial groups (small groups of ten) which was successful. This type of recruitment may be seen to create informant bias in participants “people’s willingness
to talk to you, and what people say to you, is influenced by who they think you are” (Drever, 1995, p.31). Through teaching in small groups, the teacher-student relationship develops over time as the teacher learns more about their students and they learn more about the teacher. Trust develops between teacher and students and this is an advantage to recruiting, as they can already make judgements about whether or not they can trust the researcher (Guba & Lincoln, 1985). This research topic has a bearing on this assumption. For example, if the research topic involved talking about highly sensitive topics it could be very difficult and distressing potentially if the researcher was also their teacher. As this topic did not involve talking about sensitive or distressing issues, unless the students brought these up themselves, recruiting from one’s own students was seen as an advantage to the research. This type of recruitment is common practice within higher educational research (Mercer, 2007).

Participants were recruited and interviewed in the first six weeks of medical school training – before the students were judged to be too acculturated into their education and training, that is, the curriculum, their teachers and whole educational environment. Utilising these various sampling and recruitment techniques combined with data saturation (i.e., with no new information being revealed), 20 second year students were recruited and interviewed by the researcher.

First year medical students from School of Medicine, University of Auckland were not selected because of logistical issues of interviewing students in the given time period for both medical students in Auckland and Dunedin.

**Participant Sampling and Recruitment – Trainee Intern (Final Year) Medical Students**

Criterion sampling and snowball sampling were also used for the recruitment of final year students or Trainee Interns (TIs). The criteria were that they were in the last few weeks of completing their undergraduate medical degree (MBChB) and had completed a full year of training as a TI. Thus those students who may have been sick or taken significant time off during this final year were not included.

There were a total of 21 TIs who participated in the research, however one interview was discarded due to poor quality in the recording of the interview. This left 20 interviews comprising the dataset. Trainee interns are based in Dunedin, Christchurch and Wellington Schools of Medicine. The School of Medicine, University of Auckland was also used as a possible recruitment site for TIs as they also have a Trainee Intern year. Because TIs are widely dispersed throughout New Zealand, recruitment was done via email, again distributed
by administration staff at each medical school. In addition, teacher research networks were used at the Auckland Medical School to recruit TIs who would also be interested. Recruitment at debrief meetings following attachments (e.g., surgery or general practice attachments) occurred in all schools. This approach yielded participants from the School of Medicine at the University of Auckland and all three Schools of Medicine in Wellington, Christchurch and Dunedin.

The TI interviews were conducted in November, when students were finishing their final attachment and preparing to graduate and move to their prospective postgraduate year (PGY1) or house surgeon positions – thus at the conclusion of their undergraduate medical school training. Conducting the interviews at the conclusion of the trainee interns medical training was to ensure they had been thoroughly exposed to their entire undergraduate medical training and had undergone the process of professional socialisation that is part of the process of medical training.

**Individual Interviews**

One-to-one interviews lasted between 25-60 minutes each. The interviews conducted in Dunedin were conducted in the researcher’s office. Interviews conducted in Christchurch were done in a café, which the hospital and medical school share, in the late afternoon. Although a public space, the interviews were conducted in a secluded area, with no one else around. Interviews conducted in Wellington were conducted at the School of Medicine in vacant tutorial rooms. Interviews conducted in Auckland were completed in a vacant café across the road from Auckland Medical School.

Demographic data were collected using free text responses. Initially these included each participant’s: name; age; gender; ethnicity; country of birth; if they had a previous postgraduate qualification and if so, what; and if they had any relatives who were doctors or other health professionals.

This information was collected for three reasons: to enable comparisons among different groups (e.g., according to gender and age); to check how representative of the medical cohort the interviewee group was; and to determine participants’ familiarity with the primary health care system in New Zealand (international students may not be, as some countries do not have a primary care system). Collecting this information prior to the interview was helpful in establishing rapport with the individual being interviewed. Establishing rapport is important when using interviewing as a method of qualitative research, as it helps to create trust.
between the participant and the researcher (Seidman, 2006). Subsequently, this provides an environment where the participant can comfortably talk about their experiences (Seidman, 2006).

The ‘previous postgraduate qualification’ question served, in combination with age, was to assist in identifying if the participants came into medicine from the first year health sciences course or some other entry. For example, if they were 19 years of age and had completed HSFY, however, if they had completed HSFY but were 28, I would inquire about their previous work experience (which could possibly be in an allied health area) as it might have given me insight into their experiences with other health professionals – including general practitioners or surgeons.

**Interviewing and Questionnaire Development**

A combination of a conversational strategy, also known as unstructured interviewing, and interview guide approach was used to shape all interviews (Patton, 2002). This flexible approach to enables the interviewer to pursue areas of questioning that were not initially thought (the conversational strategy), with a predetermined set of issues or topics that are worked out in advance (the interview guide approach) (Kvale & Brinkmann, 2009; Patton, 2002).

There were several reasons why this approach was used. First, the conversational strategy enables complete “flexibility, spontaneity and responsiveness” (Patton, 2002, p.343) within an interview context. This is helpful when the researcher might be unaware of what could emerge during the interview regarding a particular topic or question (depending upon the type of information being sought). A weakness of this strategy is that it can take up more time than a more structured interviewing technique. It can also generate a large volume of data that needs more time and may be more difficult to analyse (Patton, 2002). Second, the interview guide approach, is used to make certain that particular areas or topics are covered in an interview and these are previously determined. The advantage of this approach is that the interviewer can make sure that certain topics are covered within a specific time-frame. Additionally, it helps to maintain a focus within an interview while still permitting participant’s experiences or insights to surface. Moreover, this combined approach is also very useful when the target sample is of varying ages and experiences, which this cohort was (consisting of different ages, ethnicities, cultures and experiences). Thus being flexible in one’s approach and being able to respond to the demands of each interview is vital.
The above strategies are underpinned by assumptions about the information or knowledge being sought. The interview strategy assumes that the researcher already is aware that information that will emerge related to certain topics or areas of interest. The conversational strategy assumes that the researcher does not know what the interview will reveal. In this study, combining the two strategies potentially provided a robust way to elicit ‘thick’ and rich data from the participants (Patton, 2002).

The interview guide approach was developed through several discussions between my supervisors and myself. Our assumptions were that the majority of second year medical students, being 18 to 19 years of age, might have a limited knowledge of general practice both as a medical specialty and as an occupation. The areas included in the interview guide helped explore what participants ‘knew’, that is, their experiences, impressions, thoughts about general practice and what being a general practitioner was like. At the same time as asking about these areas to do with general practice, I also asked about the discipline of surgery. For example, questions were asked about their own experience with their own general practitioner and/or a surgeon; did students have family members, relatives or friends who were doctors or other health professionals? If so, what (if any) did they learn in regard to these professionals (general practitioners/surgeons)? In regard to media influences questions about television doctor programmes, documentaries or movies they watched and/or any particular literature they read? I also asked what they take away with them from engaging with these programmes and/or literature?

From these topics, the interview guide was then designed and piloted during two interviews. It underwent several iterations during the course of the interviews. The final version appears in Appendix A.

**Analytical Framework**

The overall approach to analysis was interpretive, using Foucault’s concepts of discourse, and power/knowledge as an interpretative framework. This approach can be described as a Foucaultian discourse analysis. A Foucaultian discourse analysis is not prescriptive; there is no one or ‘correct’ way of performing an analysis (Borrell, 2008; Burrows, 1997). Foucault (1974) viewed his work as a ‘tool box’ for others to ‘open up and forage through’ in order to find and use a particular tool useful in their area of research. He writes:

> I would like my books to be a kind of tool box which others can rummage through to find a tool which they can use however they wish in their own area… I would like [my work] to be useful to an
educator, a warden, a magistrate, a conscientious objector. I don’t write for an audience, I write for users, not readers (pp. 523-4).

Here, I outline the elements that constituted this particular Foucaultian discourse analysis adopted for this research. The form the analysis took was informed by some of the general principles of analysing qualitative data when using a ‘general inductive approach’ (Thomas, 2006), combined with some of the considerations outlined when utilising a Foucaultian discourse analysis approach as described by Burrows (1997), Taylor (2001), Carabine (2001), and Willig (2012, 2008). This analysis was also undertaken through the theoretical lenses outlined in the Chapter 3 about Foucault’s notions of discourse and power/knowledge.

This research takes an inductive analytical approach. I used repeated, thorough readings of the raw data (in this case interview transcripts) to derive themes through my interpretation of the data (Thomas, 2006). This contrasts with deductive analysis where data are tested using selected hypotheses (Davidson & Tolich, 2003).

The interviews were transcribed by a professional transcriber. I listened to all interviews and transcribed parts of the interviews where the transcriber was unable to discern what was said accurately. This process allowed me to familiarise myself with the interviews. It was the first step of the iterative process of engaging with, and re-engaging with, the data; the means by which I began to develop meaning in the complexity of the data. All interview transcripts were then uploaded into ATLAS.ti (version 5). ATLAS.ti is a programme to assist the researcher to analyse qualitative data in a variety of ways (Meadows & Dodendorf, 1999). I used this software to help organise and manage the data. Such software allows researchers to be more rigorous and methodical in their analysis and the interpretation that is based on their analysis. During the first reading of the data, in order to begin to identify the significant themes of the data I used the following questions as an analytical guide:

What are the discourses of general practice among second year and trainee intern students in the undergraduate medical programme?

What are the discourses that exist in general practice and surgery? How do they relate to each other?

Why is this of importance?

Which discourses overlap (between years), which are separate?

Where are the discourses coming from?
Are there any counter or contested discourses?

What are the things that have not been said (are there any absences or silences)?

Is there another way of looking or thinking about this?

Have I missed anything?

With these questions in mind, every interview transcript was coded using the ATLAS.ti software. Coding is the process whereby specific codes are linked to specific data segments, in this case, text segments from interview transcripts (Guest, MacQueen, & Namey, 2012). Codes are descriptive labels of segments of text which have something in common about them as discerned by the researcher(s) (Guest et al., 2012; Gibson & Brown, 2009). They show what that piece of text illustrates to the researcher and are a component of a theme or themes. This process generated a total of 37 codes. Using ATLAS.ti, I was then able to isolate each code to examine each one in turn and in more depth. This approach enabled me to look for consistencies and inaccuracies in the way I had coded.

This particular approach of selecting pieces of text and analyzing them in generalized categories called themes is not without critique. It is argued that doing an analysis in this way, removing a selection of text from its original context - a process described as decontextualisation – may alter the meaning of the particular text being analysed (Gibson & Brown, 2009). It is also suggested that some researchers view protecting the data so it remains in context so vehemently, there is a hesitancy to illustrate the salient thematic processes involved for “fear that it will be misused as an analytic shortcut” (Guest et al., 2012, p. 51). As stated by Gibson and Brown (2009), “the contexts in which people speak are fundamental to the meaning which they are creating” (p.189). Thus removal of the context takes away what is needed to understand why the participants responded in the way they did, or as Gibson and Brown (2009) suggest, “why they said it how they did” (emphasis in original p.189). It also depends on the epistemological and methodological standpoints the researcher employs for the type of research undertaken and the research question being asked.

However, as Guest et al (2012) state, a certain degree of decontextualisation occurs in qualitative research concerned with some form of textual analysis. Additionally, the use of this process has it strengths. Thematic analysis is a process that enables the connection of varied experiences or ideas, and compare and contrast different examples and attributes of data (Gibson & Brown, 2009). Moreover, thematic analysis, as indicated below in relation to the constant comparative method, brings to the forefront the differences between data as well
as the similarities (Gibson & Brown, 2009). This is also important when investigating competing and contested discourses.

It is arguable to what degree data are decontextualised during the analysis. The use of a Computer Assisted Qualitative Data Analysis Software (CAQDAS), such as ATLAS.ti in this research, can assist in maintaining the context of the text segment(s) that have been collated to form a code and from there, into a theme or themes (Guest et al., 2012). This is because it is very straightforward and quick to move between the text segment, the code, and the theme, and this facilitates a sensitive and coherent awareness of the context from which the text-segment, code and theme are being constructed. CAQDAS programmes also allow for great flexibility during coding, thus allowing the selection to be viewed as required to aid in maintaining the context of a particular text (Guest et al., 2012).

In order to maintain the integrity and relevance of the context of each theme being constructed, an active engagement is required with the question, “What is distinctive about this piece of data and why might that matter in relation to this category?” (Gibson & Brown, 2009, p. 130). Consistent engagement with this question, helped to preserve the context of the text segments.

During the coding process I employed the constant comparison method as used in the grounded theory approach (Corbin & Strauss, 2008; Glaser & Strauss, 1967). In this method, the researcher moves back and forth between the themes identified and themes beginning to emerge looking for similarities and differences among and between them (Corbin & Strauss, 2008). The constant comparative method was used as it helps the researcher to characterise the extent and distinctiveness of each theme (Watling & Lingard, 2012). When a theme was identified, I then looked at the differences within that theme to identify any subthemes that may have been present (Willig, 2008).

One specific notion that was implicated in the analytical strategy was to ask questions about surgeons and the discipline of surgery. This was purposively done. Discourses do not exist in isolation and are “regulated by their relation with other discourses” (Mills, 2004, p.43) and are places where contestation and tussling continually occur. Therefore, exploring what discourses exist around a similar subject of inquiry (in this case looking at the discipline of surgery and being a surgeon) can illustrate, for example what could not be said in one discipline, and yet is able to be voiced in another discipline. Then one can begin to address how and why this may be the case. Thus, using an alternative discipline to inquire about discourses in the method could illustrate similarities and/or differences about where these
discourses come from, how they are kept in existence and regulated, and possibly why they exist in the first place.

**Reflexivity**

Taking a social constructionist stance, where the epistemological position of constructing the world in which we live, suggests that the research process itself is to be viewed as socially constructed also. Thus, the researcher and the process of conducting the research is embedded in the construction of knowing about the world, as opposed to being outside or removed from this world (which would be more in keeping with a positivist or post-positivist view).

The idea of reflexivity, or the term ‘reflexive’ means ‘bending back on itself’ (Steier, 1991). When situated in the research process a definition offered by Finlay and Gough (2003) defines reflexivity “as thoughtful, self-aware analysis of the intersubjective dynamics between researcher and the researched” (p. ix) or even further “the project of examining how the researcher and intersubjective elements impact on and transform research” (p.4). Therefore, the notion of reflexivity and an examination of it, is of prime importance and a necessity within a social constructionist perspective because the researcher is a central part of the research process.

Although a definition of reflexivity has been offered, there is considerable variation about the definition, interpretation and deployment of reflexivity (May & Perry, 2011, Finlay & Gough, 2003). This presents various difficulties and challenges to the researcher from both a theoretical and practical position. For example, from a Foucauldian point of view, one is unable to speak from outside one’s own discourse (Foucault, 1972). Moreover, from a practical viewpoint Harding (2004) offers the following challenge that the “assumption that individuals are capable of voluntarily identifying all of the relevant cultural assumptions that shape their research practices are… self-deluding” (p. 72).

In order to work with these difficulties and challenges surrounding the notion of being reflexive, I illustrate particular details of my current professional role and also the assumptions I hold about my own research question regarding the notions of what the discourses surrounding general practice among our undergraduate students might be. This is combined with the particular reflexive practices undertaken during the research process as a whole, which includes the analysis of the data.
Professional Role

I have been employed as a Teaching Fellow since 2008 for the Faculty of Medicine, Dunedin School of Medicine, University of Otago. Prior to this appointment I worked in various teaching and research positions throughout the University, the majority of them having been in the field of higher education and specifically in medical Education. My own higher education was in psychology (Bachelor’s degree) and mental health (Masters degree).

Amongst my prior teaching experiences was teaching in 2007 at the Dunedin School of Medicine for a semester with medical students in their first year of medical training. Although this was a challenging experience, it was also an interesting and enjoyable one. This experience led me to decide to apply for a teaching position within the Dunedin School of Medicine in what is now known as Early Learning in Medicine (ELM).

Assumptions about my Professional Role

Having gone quickly from a part-time PhD student to a part-time PhD student who was also a Teaching Fellow in the medical school, I had unwittingly changed my status. As my medium of data gathering was via one-to-one interviews, I thought that I now might be viewed as an ‘insider’ and I thought that I would struggle to recruit participants. In addition, I pondered what type of information I would elicit during the interviews: would the students want to tell me what I wanted to hear? Although I was an insider as far as being viewed as staff, being someone who is not a medical doctor, I was potentially viewed as an outsider. Although I teach at the medical school, as I have shown earlier, I am not a medical doctor, nor have I undergone any training to become a doctor.

During the interviews, as I was asking about information concerning general practitioners and also surgeons, I felt that not being a doctor was an advantage because it reduced the power difference or status between me and the students who were my participants. It also and facilitated rapport. However, I was also conscious that this would not diminish the power difference entirely. This information, declaring that I was not a doctor, was made explicit to the students at recruitment phase when I introduced myself, and again in the interviewing phase of the research.
Assumptions about my Research Question

I was very interested to see what (if any) the differences and similarities were in the students responses between second year students and final year students. In general, I thought that second year students would have a more limited repertoire to draw upon compared with those of the final year trainee interns, because their exposure to general practice would be less extensive. I also expected that the responses of the second year students would be similar in content to those of the general public, or at least of a cohort of people who were at a similar life-stage outside the medical school.

I was expecting the final year student responses to reveal their more in-depth and informative knowledge about general practice, as they had been exposed to the discipline of general practice for the previous three years of their study. During the course of interviewing I was hoping to gain a sample of students who were representative of the undergraduate medical degree cohort. I wondered what the similarities and differences would be between the varied in-takes of students. For example I assumed that ‘mature’ students, or those with previous degrees and/or work experience, might have different experiences and espouse different perspectives. Furthermore, I wondered what international students from some parts of the world might say about general practice. I assumed that their views might be different from New Zealand students or limited as information about this area of medicine might be sparse or even absent from the health care systems of many developing countries. These views, I assumed, would vary accordingly to where the international students where from.

I was also very interested in how both cohorts would talk about surgery. I expected that second year students would talk about surgery from less of a personal experience perspective when compared to how they would speak about general practice; because most people visit their general practitioner more often than they go to hospital (Green et al., 2001). Additionally, as there are many popular medical television shows about the surgical discipline, I expected some dialogue about surgery as it is characterised in these shows.

Finally, I was interested to find out where the discourses about general practice were generated. My assumption was that for the second year students, discourses would be from their personal involvement with their GP, their family, and media influences. For final year students I thought that the majority of discourses about general practice would be coming from their clinical teachers and experiences when they were on their attachments.
Reflexivity and the Research Process

During the research process, I kept a research diary in both hardcopy and electronic forms in which I compiled the thoughts, reflections and experiences that occurred during my research journey. This included a record of any thoughts and responses about the interviews I had completed, discussions with colleagues and supervisors and reading from the literature surrounding my topic.

The research diary became very valuable during the analytical process. I kept information during the many phases and iterative passes over the data to keep a record of my thought processes, ideas, and conclusions that emerged through interaction with the data. Using this process helped me to make sense of the volume of interview data that was created from the many interviews with students. This also helped me to reflect upon my ideas and assumptions that may influence how I was interpreting the data. During the analysis phase of the research, my primary supervisor (CJ) and I analysed some of the interview transcripts together. This provided another avenue for engagement with how I was analysing the data in conjunction with my assumptions and positions influencing my interpretations.

Being a teaching fellow, and therefore in contact with undergraduate students, specifically second year and third year students, one is attentive to what students say about general practice and other disciplines in class on a regular basis. There is no way of avoiding this, as it is part of the daily conversation and banter of the class when discussing various topics. Immersion in the everyday ‘chat’ of students on these topics has given me an opportunity to validate or affirm my interpretation of the interview data. The same cannot be said for the final year students as I have no involvement with this group in any context, be it teaching, research, administrative or otherwise.

Ethical Considerations

I view the ethical aspects of this research in two ways. One, is the ethical practice of the researcher, myself. The second is the ethical considerations to my participants who gave up their time to be interviewed and share their views about general practice and being a general practitioner. In qualitative research, “the researcher is the instrument” (Patton, 2002, p.14, my emphasis) and therefore, the idea of the professional ethical researcher as discussed in Mauthner, Birch, Jessop, and Miller (2002) is of utmost important to bear in mind during the research process. I focus on two main aspects of ethical behaviour as described in Mauthner et
al (2002) of responsibility and accountability as a researcher. Below I outline how I took these ethical aspects into account in my study.

Where students taking part in this research were concerned, it was important to consider the possibility of the interview causing some emotional discomfort. Even though the topic itself may not seem like it could invoke feelings of being upset, the nature of recounting one’s journey through medical school which is not always pleasant (Lempp & Seale, 2004), could have produced some discomfort. This is not uncommon when studying sensitive topics (Dickson-Swift, James, Kippen, & Liamputtong, 2009; Cowles, 1988). In fact, one participant did experience discomfort in one interview. A student was recounting an incident of bullying received from a staff member. During the telling of the story the student was emotionally upset. As a counsellor in my previous work, along with my consideration that this may occur, I allowed for the student time to release their emotions. I also conveyed that we could stop to have a break, or stop the interview completely if wished, reminding the student of their right to opt out of the interview. However, the student wanted to finish the interview and after settling, continued on to complete the interview.

The ethical principle of confidentiality was also taken very seriously. First, I was conscious of keeping the participants’ personal information confidential and constructed strategies to ensure their privacy and confidentiality. This is described by Tolich (2004) as ‘external confidentiality’. However, during the interviews, students regularly mentioned names and places of doctors which they had contact with. Sometimes, the students’ stories reflected positive interactions, and other times quite negative experiences. Either way, all information about names and places were removed from the transcripts. The professional transcriber that was used also signed a privacy declaration. This was done before I loaded the documents into ATLAS.ti in order for this information not to be seen by my supervisors, who may have known particular doctors or other healthcare professionals discussed by the students. This could take Tolich (2004) description of ‘external confidentiality’ a step further as an ‘external confidentiality of third parties’.

Limitations

During the recruitment of participants, it is possible that my own students who were also asked to participate, felt coerced into doing so. However, it is also possible that the rapport developed during teaching in small groups positively facilitated these interviews.
Trainee Interns were difficult to recruit in comparison with the second year medical students. First, this was because of their dispersion about the country and second because it was possible to use only their email addresses as a means of recruitment, as compared with recruiting face-to-face in a debrief meeting for example which yielded more participants in the Dunedin School of Medicine. The email databases provided a better ‘reach’, advertising the research project to each individual within the target group to be studied. However, students self-selected to participate, no matter what form of recruitment was used, therefore this limitation was minimised.

Finally, as previously mentioned, focus groups were not considered for practical reasons. However, this should not discount the idea that further discourses could have been explored using a focus group, and so should be noted as a limitation to this research.

**Ethical Approval and Māori Consultation**

Ethical Approval for this research was sought and approved from the University of Otago Human Ethics Committee (application number 07/149).

Initially, the second year email database was going to be used for inviting students to participate in the research. However, the committee requested a letter of approval from the Faculty of Medicine that we could use the database. When the Faculty was approached we were alerted to the review that was happening with that database and that we would not have been able to use it in time. Therefore, more traditional methods were used. Māori consultation was conducted via the approved system of consultation of the University of Otago.

**Summary**

Thus far, I have outlined and described the methodological stance and particular research design and methods used. This provides the framework for how this research was implemented. In Chapters 5 and 6 (Results) and Chapter 7 (Synthesis and Discussion), I illustrate the perceptions offered by medical students in my study. Medical students in their first weeks of medical school along with final year medical students offer a variety of perceptions about general practice and being a general practitioner along with perceptions about surgery and being a surgeon as a foil to consider possible explanations how these perceptions have been constructed. The first two results chapter will portray the thematic analysis of the second year medical students and final year students respectively. The
Chapters 5 and 6 will portray the results of the thematic analysis of the second year medical students and final year students’ interviews respectively. Chapter 7 will then take the results further and relate them to the theoretical perspectives outlined in Chapter 3.
Chapter 5 – Results: The Second Year Medical Students

In Chapters five and six, I present the findings of the research. I show the sets of discourses that underlie the ways in which students talk about general practice and being a general practitioner. The chapters are organised by cohort and then by theme. The findings related to the second year medicine student cohort are presented first, followed by those related to the trainee intern cohort. Each theme and its respective subthemes within each cohort are discretely summarised. Those themes from the second year cohort that also appear in the trainee intern cohort will be acknowledged and summarised, yet not described and outlined in the same detail. This is to allow themes that are not apparent in the second year medicine cohort data, but which appear in the trainee intern cohort data to be fully outlined and also to avoid repetition. I sum-up each Results chapter with a conclusion that relates findings to the argument that these constitute certain discourses about general practice and being a general practitioner.

The following is a descriptive outline of the interview transcriptions and the quotations derived from them which are used throughout the Results chapters. All names in the interviews have been changed to pseudonyms, and places are given a letter (such as A, B, C or X, Y, Z) to preserve anonymity and to keep fluency when reading the transcribed excerpts. The interview transcriptions are dominated by participants and this is reflected in the excerpts used to support the findings presented here. If the excerpts involve dialogue with the interviewer, this is distinguished by using the term ‘STUDENT’ and ‘KELBY’, referring to myself as the interviewer. The numbers below the excerpts in parentheses, indicate the participant number where the excerpt has come from. The quotations themselves are presented as grammatically correct as possible without having altered the meaning, in order to facilitate reading.

In this chapter, I first describe the demographics of the second year student cohort. Following that, I give a brief overview of the medical curriculum for second year medical students. I then present the four main themes and their respective subthemes. These themes are entitled: The discipline of general practice; Being a general practitioner; The value of general practice; and Representation of medicine in television and literature. As described in Chapter 4, the discipline of surgery was purposively used as a point of comparison to general practice.
The Second Year Student Cohort

Here, I outline the demographics of both the second year medical students and the trainee interns who were interviewed. The trainee intern cohort demographic information is documented in Chapter 6. Included in the demographic data for this second year cohort is: age; ethnicity; and gender. It also includes information on previous graduate qualifications as well as whether the participants’ parents are doctors or their parents or close relatives are involved in another health profession. Tables 1 to 4 show the age, ethnicity, gender and entry category information for the second year medical student cohort that was interviewed.

Table 1: Age Distribution of the Second Year Medical Student Cohort

<table>
<thead>
<tr>
<th>Measure of Central Tendency</th>
<th>Age in years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range</td>
<td>18-34</td>
</tr>
<tr>
<td>Mean</td>
<td>21.15</td>
</tr>
<tr>
<td>Median</td>
<td>20</td>
</tr>
</tbody>
</table>

In Table 1, the age range of 18 to 34 years shows the variety of ages of second year medical students who were interviewed, and are reflective of the full cohort of medical students. The median age of the students interviewed of 20 closely reflects the full cohort of medical students studying second year medicine at the University of Otago. The gender split shown in Table 2 is heavily skewed towards females when compared with the main cohort which is 55% female and 45% male. Ethnicity data were collected following the request from the Māori consultation process to identify Māori students, and presented in Table 3.
Table 3: Ethnicity Distribution of the Second Year Medical Student Cohort

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Zealander or New Zealand/European</td>
<td>10</td>
<td>50%</td>
</tr>
<tr>
<td>Chinese</td>
<td>3</td>
<td>15%</td>
</tr>
<tr>
<td>Arab</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>Indian</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>Samoan/European</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>Egyptian</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>Canadian</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>English</td>
<td>1</td>
<td>5%</td>
</tr>
</tbody>
</table>

Table 4: Entry Category into Medical School of the Second Year Medical Student Cohort

<table>
<thead>
<tr>
<th>Entry category</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Sciences First Year (HSFY)</td>
<td>10/20</td>
<td>50%</td>
</tr>
<tr>
<td>Graduate</td>
<td>8/20</td>
<td>40%</td>
</tr>
<tr>
<td>Other category</td>
<td>2/20</td>
<td>10%</td>
</tr>
</tbody>
</table>

As Table 3 illustrates, there were no participants who identified themselves as Māori. Table 4 shows that half of the second year cohort interviewed entered medical school from Health Sciences First Year, with the half from either graduate or other category pathways.

This demographic data of the interviewed cohort are similar to the make-up of the medical school intake. However, the cohort that was interviewed was represented by more females, 70% as opposed to 55% in the medical school intake, and also by fewer students who had entered from Health Sciences First Year which was 50% as opposed to 70% (Shelker et al., 2011).

To establish more background about their exposure to medicine, participants were asked two further questions. First, if any of their parents, guardians or close relatives were doctors and second, if they had a parent or guardian or a close relative who was working in an allied health profession. The term ‘close relative’ was self-defined by the student with uncles and aunts being routinely mentioned. This is illustrated in Table 5.
Table 5: Percentage of the Second Year Medical Student Cohort with a Parent/Guardian or Close Relative Who is a Doctor and/or Allied Health Professional

<table>
<thead>
<tr>
<th>Parent/Guardian/Close relatives</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who were doctors</td>
<td>6/20</td>
<td>30%</td>
</tr>
<tr>
<td>Who work in an allied health profession</td>
<td>8/20</td>
<td>40%</td>
</tr>
</tbody>
</table>

Table 5 shows that six of the students interviewed had a parent, guardian or close relative as a doctor and eight students with a parent, guardian or close relative who worked as an allied health professional. Of the six doctors, two were general practitioners, two were hospital specialists (one was a geriatrician, the other an obstetric and gynaecological consultant) and two did not mention the specific area of medicine their parent was in. The health professions that were not medical doctors included nursing, clinical psychology, pharmacy, physiotherapy and paramedicine.

Figure 1 illustrates what area of medicine second year medical students were considering pursuing. This was self-defined by the second year medical students. Therefore, the responses do not necessarily indicate specific specialties, but areas of medicine they were thinking of entering. Figure 1 shows that for the second year student cohort, the majority were thinking about multiple medical career avenues. It shows that out of the total number of responses, 17% of responses were considering Paediatrics, with General Practice the second highest at 10% followed by Surgery at 10% and Rural General Practice at 7% of responses. It demonstrates that second year medical students, who self-selected for an interview, were thinking about a considerable range of areas and not just general practice.
In this section I give a brief overview of the second year curriculum, in order to give some context to what the students would have been exposed to at the time they were interviewed. Students were interviewed over an eight week period at the beginning of the medical school year. The second year curriculum comprises five main programme modules which include the Medical Science Programme Module consisting of two elements known as block and vertical modules. The block modules are primarily based on body systems. Block modules consist of lectures, labs and tutorials that span 4 weeks. The block modules for the first eight weeks of the second year are Human Interactions, also known as behavioural medicine, followed by the Musculoskeletal System. Vertical modules correspond to disciplines relevant to the majority of medical encounters, for example, bioethics, infection and immunity, cancer etcetera. These modules are dispersed throughout the course through lectures or a series of lectures. During the first eight weeks the second year students interviewed for this study would have been introduced to the following vertical modules: professional development; infection and immunity, pathology; bioethics; epidemiology; public health; pharmacology; blood; evidenced based medicine; psychological medicine; and genetics.
The three of the remaining five programme modules are integrated cases, clinical skills and healthcare in the community. Integrated cases provide an opportunity for students in small groups of ten to work through clinical scenarios. The objective is that students begin to apply their learning in the medical sciences to a clinical situation. During the interview period, students would have been exposed to four cases: trauma; health and illness behaviour; HIV; and painful joints. In the clinical skills programme module, the focus is on the medical consultation. This includes communication skills and basic physical examination skills and medical procedures. During the interview period the students would have been exposed to the communication skills section of the clinical skills programme module. The last programme module is healthcare in the community (HIC). This module aims to provide students with early practical experience about being a health professional and providing healthcare. This module has experiential and service learning at its core, with a significant part of the unit being a clinical attachment in a rest home or community hospital. During the first eight weeks, students would have been exposed to the first unit called Being a doctor, Being a Patient and the second unit called Living with Disability and Being a Carer. The first unit involves students conducting an interview in the community in pairs, usually in the homes of patients. The aim of the task is to provide students with an understanding of the illness experience of people who are currently or have been previously ill.

Second Year Medical Students

Theme 1: The Discipline of General Practice

This theme explores the perceptions (understandings, beliefs and knowledge) that second year medical students who participated in this study expressed about general practice as a medical discipline and profession, and what it is that general practitioners do. This theme includes several subthemes: perceptions to do with the role undertaken by the general practitioner; that general practice involves the “unremarkable” in terms of illnesses seen and in terms of overall practice; the lifestyle perceived to be associated with general practice; the relationships connected to the discipline; the type of patients seen in general practice; and the knowledge students have about the postgraduate training involved in general practice. As noted earlier, as a comparative foil, students’ perceptions about the discipline of surgery and what surgeons do are also described.
Students expressed their views about the role of the general practitioner. The quotation below illustrates their perception that general practice is the first ‘port of call’ when you are feeling unwell. It also suggests the many areas that the general practitioner is involved with. These include dealing with minor illnesses, organising referrals, writing repeat prescriptions and managing chronic conditions of the elderly.

It’s pretty much first port of call for many people. They will deal with a lot of the - like, people who are just generally feeling unwell, if there’s anything that they’re concerned about - and they’ll often refer them on to specialists or to slightly more minor things they’ll deal with them themselves, and refer them on to specialists - other health professionals like physios, some nurses and that sort of thing. They’ll do like ongoing prescriptions and stuff. General, like for old folk there’s - like just checking everything is going all right with all the medications they’re on, that sort of stuff. (6)

Apart from the general practitioner being seen as the first point of access to healthcare if unwell, students also viewed the ability to develop relationships as part of the role of the general practitioner. The two following quotations show students’ views on the importance of developing and maintaining relationships with individuals as well as communities.

Your relationships with your patients, you have to have very good relationships with everyone else in the very wide community. Like - so there’s - which is quite cool because there’s a whole heap of different elements to it which are cool. (19)

I’m just generally - it’s the kind of work that I believe is of the utmost importance and where I can make the most effect in my community. (3)

The quotation below continues the emphasis on the general practitioner’s relationships but with a focus on working with families.

Whereas GPs, you’ve got the chance to get to know people over a long period of time, and there’s a lot more general - you see, there is a whole person and all the medical things that go with them, and their family as well. (6)

Further views on the varying relationship aspects of the work associated with general practice included the continuity of care or the long term relationship characterised by trust that patients share when visiting their usual general practitioner over the course of time.

With the GP, like the same patients will keep coming back to the same doctor. (2)
And probably also the amount of sort of time you'd get to... know your patients better, I think that's sort of probably why I would do it. (11)

Students also described the general practitioner’s role in making referrals to specialist services. This was viewed in two ways. First, when the general practitioner cannot make a diagnosis with a patient then they refer their patient to a specialist.

STUDENT: Also like referring on if it's more -

KELBY: Yeah...

STUDENT: Specialist, and they don’t know what’s going on. (1)

Second, as illustrated in the next two examples, the general practitioner will refer a patient to an appropriate specialist because they have made a diagnosis and must refer to secondary services in order to secure treatment for the patient.

I think a GP is - it’s - he gets people to come to him to talk about, you know, about anything they think is not going well with them. So, I think he is the first person that people go to, and then if the person - if the GP doesn’t seem to know what is really - or he finds that it may be serious, he sends them off to the hospital. (13)

Otherwise, if it’s a serious illness, then generally it’s their [the general practitioner’s] responsibility to refer. (15)

Prescribing medications was considered a significant part of the general practitioner’s role. For example, in this excerpt the student describes prescribing as the usual course of a general practitioner’s consultation.

GP, that’s just like consult patients. Like, they're in one of these clinics and patients come and see them and there is a different programme with each diagnosis, give medication, that's all I think. (10)

For another student, prescribing antibiotics is part of dealing with what is described as small minor problems.

KELBY: Within those small minor problems what do you think they will be doing mostly?

STUDENT: Like - like prescribing antibiotics and things like that for bacterial infections. (1)

Students also perceived the general practitioner’s role as being able to educate patients about their health and to give general advice on health matters.
I guess they have a role in education as well…since they might be the only health professional that a lot of people see semi-regular. (4)

The first quotation below suggests that the advice given by a general practitioner might be practical, and the second quotation shows that a GP might also reassure a patient about how to deal with their own particular health problems.

So, just sort of - I don’t know whether they do - give them like practical advice, like, you know, like taking vitamin c. (1)

They also prescribe medications or whatever for what they need, or just offer reassurance about how to deal with health problems. (2)

Students also suggested the role of the general practitioner included advice to patients on lifestyle changes as seen in the first quotation below. The second quotation suggests that general practitioners give advice as a form of empowerment – providing ways for the patient to obtain their own information for what they need to know.

Kind of everything to do with that person's, like, general health. You know, like their life - information about like lifestyle changes, yeah. (11)

It's guess it’s more about the whole kind of actually determining what’s wrong with someone as opposed to what they come in with in and then trying to, you know, are they given any advice or provide a means to get information that can then, you know, kind of either get a treatment or refer to somebody that would be able to give the treatment to them. (18)

Students also commented on the range of illness a general practitioner would see in their role. The first quotation illustrates the way that many students talked about the illnesses and conditions that a general practitioner would see in general terms, that is, they would see a diversity or ‘variety’ of conditions. The remaining quotations illustrate the students’ views regarding some of the specific areas of chronic conditions and psychiatric or emotional issues.

And I suppose you get to deal with a whole variety of different things, whereas if you’re just a heart surgeon that’s all you do. (2)

I think it - to me GP sounds like someone who knows – like…it sounds like a chronic – they [patients] have chronic diseases, and they come in every three months or something just to get things checked up and they are going smooth. I think that’s pretty much what a GP does, yeah. (13)

I suppose there’s also like as a GP you have to deal with all the psychological issues, or whatever. The people are more likely to open up to you and explain their whole life’s problems…everything that’s ever happened to them. (2)
1.2 The Role of Surgery

Students shared their perceptions about the discipline of surgery and the role of the surgeon. The first quotation below demonstrates that the surgeon’s role is to work with sick patients who have been referred to them by general practitioners and patients who have acute conditions or injuries.

Well, surgeons sort of handle what’s been referred to them or first they handle the emergencies, I guess, at hospitals, broken legs, whatever that comes in that needs surgery, they’re going to deal with that. Then they are going to handle referred stuff where probably GPs, maybe other doctors have seen there is a need for surgery and have passed the patient on to them. (17)

Yeah, a surgeon, I've never really met a surgeon before, but I would - I'm pretty sure it would be the surgeon that would come and talk once a patient had been referred to hospital, it would be the surgeon that would come and sort of explain what was going to happen to the patient, and then they would sort of be organising the rest of the team for the operation, and then just actually doing the actual surgery. (11)

In the quotation directly above, this participant viewed the role of the surgeon to meet the patient, explain to the patient about the surgery they were going to have, organise the team that will be involved in conducting the operation and finally, doing the surgery. Students also commented on the type of relationships involved between the surgeon and the surgical patient. The quotation below illustrates common notions, articulated by students, that surgeons tended to be ‘distant’ from their patients as they do not see their patients on an ongoing basis.

I always imagine surgeons to be a bit more, like, removed, or they don’t necessarily get so personally involved with their patients because they don’t see them so regularly. (2)

The final quotation below emphasises the students’ perception that the role of the surgeon is to do the surgery, with very little patient contact.

My impression is that you don’t have as much patient contact. I mean like you do, you know, see them before and after the surgeon and stuff, but you really are just there to do the surgery. You are not that worried about the whole process really. (19)
1.3 The Unremarkable

A prevalent view expressed by students about the discipline of general practice was that the types of illnesses dealt with are boring, uninteresting, mundane and non-challenging ‘minor problems’ such as coughs and colds and not ‘life threatening’.

I guess they’re - the people who go to when they’re sick or have got a cold or something minor, something really minor, which seemed to be quite busy with older people. That’s my perspective. And, really it must be quite boring. They don’t really do much. Their job is like sorting out who the people you will see next, they either go home and rest, or pass them on to some specialist for a certain problem. (14)

And most of the time they deal with like, not, like life threatening things. It’s more just every day sort of things or when someone wants an opinion about whether they need to go to hospital, or if they need further surgery. (2)

I suppose like people may not want to just deal with the mundane things in life. Like, so although you get a wide variety it’s not as - not necessarily as interesting or as severe to deal with. (2)

I’d say, well, they see people at their first stage of discomfort or illness, and if they can fix it, or alleviate it, like if it’s something minor, and they’re the ones who are doing the prescribing of drugs or giving advice to not do x activity so often. Otherwise, if it’s a serious illness, then generally it’s their responsibility to refer. I don’t, I suppose, kind of stereotype, I don’t see them as doing a lot of difficult doctor stuff. (15)

The last quotation of the three above also illustrates that general practice is not responsible for looking after people with ‘serious illness’ or that general practitioners do anything seen as ‘difficult’. Perceptions that general practice deals with issues that are not acute or exciting were also demonstrated by second year students.

Quite a lot of - like, the sort of things that sort of spring to mind is kind of like the tedious, just sort of not entirely exciting cases. (12)

Minor stuff would be something that it’s - it’s probably - it’s including stuff that would go away over time, and it’s not really acute. (14)

I don’t, I suppose… I don’t see them as doing a lot of difficult doctor stuff. Like the ER in House, running through an emergency unit, blood transfusions, and operations and stuff. (15)
1.4 The Remarkable – Surgery

In contrast to students’ descriptions of general practice, the two quotations below show that students perceive the discipline of surgery to be demanding, challenging and situated within a high pressured environment. Additionally, the discipline of surgery is perceived to be more ‘life and death’.

Surgery you want kind of something a bit more demanding and a bit more challenging. (8)

Well, I suppose it’s more life and death, so there’s a lot more, not necessarily risk associated with it, but - I can’t think of the right word - but it’s more high pressure. (2)

The final quotation suggests that the discipline of surgery is ‘full on’ involving exciting or ‘adrenaline running’ activities. This is compared with a general practitioner who sees ‘every day’ types of conditions.

Well, I guess I’m sort of comparing it to, you know, surgery and all that kind of stuff. It’s more kind of - more, like, full on. Kind of like get the adrenalin running kind of things. Whereas, a GP is more - what am I trying to say? More like kind of every day type conditions. (12)

1.5 Lifestyle

Students also considered the type of lifestyle afforded by the discipline of general practice. This included views on the hours worked by the general practitioner; the impact of general practice on family life; the stress and demands of the discipline; the advantage of owning your own practice; and the ability to travel.

The workload in general practice was seen as predictable compared with other medical specialties and included working certain set hours and days a week. This perception led many participants to express the opinion that general practice is a discipline compatible not only with having a family, but also with having more family time.

Well, you’ve got set hours, like if you just work 9.00 to 5.00 everyday rather than having - I don’t especially like having things thrown at me at the last minute. I like to have a plan, and, you know, I plan on having a family and so, you know, I’d like to be around more for kids and stuff. (2)

General practice was also frequently described as a profession that was not as busy or stressful when compared with other areas of medicine such as surgery.
And maybe if you want maybe a quieter life which is not so hectic and busy. (9)

My interest is because I think it would be easier for a family and that type of - you’d probably have more set hours, you know when your hours are going to be. A little bit - probably stressful, but probably a little bit [less] stressful than surgery, possibly a bit less tiring, less physically demanding. (8)

The quotation below suggests that general practice is a profession where personal life and professional life can be kept separate because there is no ‘expectation’ or demand from peers or ‘colleagues’ that being a general practitioner dominates one’s life in the same way that surgery does.

Whereas other specialties, like GP, it seems to be slightly more accepted by colleagues that that’s more of a lifestyle option and working three or four days a week is completely normal, and you’re not expected to have that as the only thing in your life, which seems to be more the impression that you get around surgery. (4)

Students also considered that owning one’s own practice and being self employed was a means of having some flexibility with hours compared with working in the public hospital system as a salaried employee.

You know, with general practice you could start your own practice. So, there's sort of that opportunity to sort of be more, you know, self-run almost. Whereas, you know, in a hospital you're in a hospital. Yeah, kind of thing. So, yeah, probably also comes back to the freedom of hours. (11)

Students felt that general practice is a discipline that enables professionals to be internationally mobile and widely employable, thus, offering a lifestyle of travel and more flexibility.

I don’t know - I quite like the idea of general practice as a kind of somewhere you can - because I’d really love to travel a bit, and I think a medical career is probably not a bad thing to travel with because it’s so applicable in lots of places. (18)

1.6 Lifestyle – Surgery

In some of the views expressed by students presented above about to the lifestyle afforded to different specialties, surgery was perceived by students to be more stressful, tiring and physically demanding. Below, the perception of students viewing surgeons as leading a busy life in their discipline is illustrated. The second quotation affirms the perception that the lifestyle associated with surgery is not only stressful, but also gruelling.
It probably isn’t that dramatic as what you see on TV, but. Yeah, I assume that they lead rather busy lives, spend a couple of hours in theatre doing surgery, that sort of thing. (16)

Yeah, just sort of - and in most other, yeah, we sort of - we all sort of have this perception that general practice would be better for that kind of lifestyle. Whereas, you know, you think of surgery, it’s kind of like, …horrible hours and, …I thought that’s pretty much what my friends sort of perceive. (11)

1.7 Patients

Students expressed views about the type of patients seen in general practice and characterised them in two ways. First, students described a patient base consisting of predominantly elderly people.

Just general problems that people have, and maybe more sort of like you’re dealing with older people for their check-ups and prescriptions and things like that. (9)

Students also thought that a wide variety of patients present in general practice in terms of life stage from young children to teenagers to adults. A focus on elderly people is also still evident.

I guess you would see a lot of pretty much different life stages, so I guess you would see a lot of young children, before the age of 5 and 6, mainly for vaccinations, and there might be a lot of more illnesses which their parents bring them in for. And then I guess through young kids you probably will see a few as well, but I guess teenage, very adult years, it’s just if someone is about to have an illness, an ongoing illness, that’s probably a main port, just every six months you will probably see people for check-ups, and then probably more of the elderly. You would start to see them quite a bit at the end as they get more illnesses, things like that. (8)

1.8 Patients – Surgery

Students did not offer much comment on the type of patients seen by surgeons. When they did however, it consisted of the perception that it also involves seeing a variety of patients including young people through to elderly patients.

It [surgery] did also give the impression that they do modify the solution depending on the patient and their needs. That they will go to maybe larger efforts to get full rehabilitation on younger people compared to 80-year-olds. (4)
1.9 Knowledge of General Practice Vocational Training

Students expressed views about the vocational training involved in general practice. It was predominantly perceived as shorter compared with specialties – the example in the quotation below was one year compared with 14 years for specialties. Apart from training length, the second quotation shows students also viewed the vocational training in general practice as easier, or less intensive, than other training programmes such as surgery. The second quotation also demonstrates a perception that general practice is more orientated towards females compared with other specialties.

KELBY: What are your impressions about the same time for a general practitioner?

STUDENT: Shorter time, but I’m not sure - I think it’s - isn’t it one year? yeah, that’s what I thought it was. So, it’s a year as opposed to some specialities have like 14 years of study. (1)

I think the time commitments - I hate to say it, but I think if you’re looking at having a family or anything it’s [surgery is] probably not orientated towards females, and that’s just the reality of the situation, and I wonder if that’s why general practice perhaps has - you know, it’s easier to get into a fellowship. You don’t have such long exams etc, whereas surgery has that real intensive training programme. (17)

I think I was talking to my tutor for Clinical [Skills] who's a GP, and she said that once you're sort of doing, like once, you know you're in general practice it's quite hard to then get accepted into like a surgical college if you want to - if you decide to change. Whereas, it's easier to sort of change from surgery to a general practice. She didn’t say why. I think it's - I think, I don't know. I think it's just quite hard to get into surgery, perhaps not as hard to get into general practice. (11)

The quotation above offers a further perspective regarding general practice postgraduate training. This suggests that general practice can be a barrier for a trainee who changes their vocational training but not for those switching vocational training to general practice from another programme. It also reinforces the impression in the previous quotation that general practice is easier than other training schemes. It is worth noting that all medical graduates must complete a two year pre-vocational training programme overseen by the Medical Council of New Zealand. Then general practice vocational training consists of a three year programme overseen by The Royal New Zealand College of General Practitioners (The Royal New Zealand College of General Practitioners, 2014a). This gives a total of five years after graduation from medical school. The surgical education and training (SET) takes about five-
six years (Royal Australasian College of Surgeons, 2013), after completing the two pre-vocational training programme years, giving a total of about seven to nine years.

1.10 Knowledge of Surgical Vocational Training

In the quotations shown above, surgery was seen as a discipline that is not very accessible to females. Surgical vocational training was also seen as intensive, consisting of long exams. The quotation below further illustrates the perception of vocational training for surgical programmes as consisting of long hours and highly demanding.

Also that it’s a really long and demanding specialty, the training to get there…once you’re there they’re working really long hours and, yeah, it’s always quite highly demanding, the training. (4)

Summary

Second year medical students perceived the discipline of general practice in particular ways. Students viewed general practice as a patient’s point of access into healthcare when unwell; a discipline with a high degree of involvement in relationships with individuals and communities, and characterised by continuity of care over time for patients. The general practitioner’s role involved referring patients to specialists, prescribing medications and educating and advising patients which included empowering patients to seek information they needed to help deal with their own illness. Moreover, students thought that general practitioners encountered a diverse array of conditions with an emphasis on chronic conditions and psychiatric and emotional issues.

Additionally, students perceived that the types of conditions that general practitioners dealt with are boring, mundane and non-challenging minor problems which are not life threatening. Moreover, it was thought that general practitioners did not look after patients with serious conditions nor handle those issues that were difficult, acute or exciting.

Students shared their perceptions of the lifestyle associated with general practice. They suggested it was associated with predictable work hours (which included flexible hours if the GP was self-employed), compatible with having and being involved with a family and a discipline that does not dominate one’s life. General practice was also viewed as being less busy or stressful compared with other disciplines. Furthermore, students perceived general practice to be a discipline where one could achieve better work/life balance than with other more demanding fields.
Students described the patients typically seen in general practice as covering the lifespan, however with an emphasis on seeing elderly patients. Finally, students perceived vocational training to be shorter and easier for general practice as compared with specialties and more attractive to women than the specialties.

In contrast the discipline of surgery was perceived to deal with patients who have been referred to them with a known problem, and then to inform patients, organise and perform the surgery that is required. Students viewed the surgeon’s role as being distant from their patients, and including very little patient contact and no continuity of care. Students also viewed surgery to be a demanding, challenging, exciting and high pressured environment involving acute conditions that were ‘life and death’ as compared with everyday conditions seen in general practice. Students perceived the lifestyle associated with surgery to be stressful, tiring and physically demanding encapsulating a busy lifestyle with a heavy workload and poor life-work balance. Finally, students perceived the surgical vocational training to be highly demanding, intensive, consisting of long hours, and unattractive to females.

**Theme 2: Being a General Practitioner**

This theme covers the perceptions that medical students have about being a general practitioner. This not only includes the personality, skills and characteristics associated with being a general practitioner, but also the knowledge set associated with being a general practitioner.

**2.1 Skills and Characteristics of the General Practitioner**

There were many views about the skills and characteristics of the general practitioner raised by second year students. Below are excerpts that illustrate the variety of perspectives about the people skills, approaches and characteristics required of the general practitioner.

Probably like a friendlyish type of person, and so I think I said before, get along with people, you need to be able to develop trust in them. (8)

The rapport between the patient and the doctor, and so the patient will feel safe and secure with disclosure of information, and sometimes just like telling the doctor about how he or she feels will make the patient feel better, yeah, will make them feel better. (10)

You've got to be really, I think, sensitive because you'd be dealing with - like, and sensitive with, people like dealing with other cultures
and religions and people with different ages who may have different beliefs and opinions on what's appropriate. (9)

The above four comments highlight the importance of developing trust, developing rapport and being sensitive to patients in general practice. The ability to be able to work with people in an empathetic and sensitive manner was very strongly expressed in all the interviews and was a significant characteristic attributed to being and practicing as a general practitioner.

Perspectives about communication skills, including the importance of listening, attending to non-verbal behaviour, being empathetic and being non-judgmental were also discussed as part of the general practitioner’s characteristics.

Oh, you’ve got to be able to listen, and I think you’ve got to be able to pick up on the signs the patient is giving you without necessarily saying it. So, be able to pick up on moves, that sort of thing. (17)

But, yeah, you've probably got to…be able to show empathy and compassion to people. (9)

And then especially communication, not be judgmental, things like that, because, you know, when you get people who don't take their medications, or like if you’re facing - so, yeah, if someone goes on to stop smoking and things like that…(13)

Students also talked about the personality characteristics associated with being a general practitioner. The four comments below illustrate the variety of characteristics offered by second year students.

The first thing that sort of comes to mind is like being a more approachable person and - I guess I see GPs as talking more, like sort of they're the first kind of doctor that a patient will come in contact with, so they're kind of the initial person to, you know, get the history and get the - yeah, all the symptoms and do that initial interview and things. (12)

Kind of like a warm kind of friendly person, a patient person. You know, cos especially if you've got the same people coming back that haven't changed their lifestyle, you'd definitely need to be patient. (11)

Yeah, again, being trustworthy so you can gain their confidence. (12)

They will also need to be able to be quite honest, I think. (14)

Definitely, yeah, there'd definitely be times as well where you needed to sort of be - like, sort of emotionally strong. Like, at times sort of just lay it down and be like, you know, this is sort of, this is where you're heading, you know, times like that, yeah. (11)

Here, an expectation that the general practitioner is an approachable and warm person is evident. The attribute of patience was often identified as an important characteristic for
general practitioners. In the second quotation presented above, patience is seen as particularly important when patients are not compliant regarding lifestyle changes. Characteristics of being an honest and trustworthy person were also seen as important for being a general practitioner. The last quotation emphasises the characteristic of general practitioners being ‘emotionally strong’.

Illustrated below, students also talked about the importance for general practitioners of appearing confident to patients. The last quotation below in particular suggests that the general practitioner should still appear confident if uncertain.

Well, a GP will be made to act confident, be made to put up an appearance that seems professional, which gives the patient confidence in you. So that they will give you information which you need. (14)

I think you still also have to show confidence, you want someone to walk into your office and say, ‘oh actually I’m not sure’ type thing. Like, if they’ve told us the right - so you don’t know, but you probably don’t want to admit that to the patient all the time. (8)

Second year medical students also offered perspectives on the clinical skills of the general practitioner.

Quite good interpersonal skills because your entire job is largely history taking and stuff, and you see patients constantly. (15)

I would probably need to know basically how to examine every part of the body because people could come in with anything. (9)

You'd need, like, the basic like blood pressure and being able to listen to the chest and the heart and know what was going on, and be able to do all that. (9)

Students emphasised the broad skill sets of the general practitioner such as taking patient histories as well as examination of all the parts of the body and ascertaining signs and symptoms of disease such as blood pressure. Further clinical skills predominantly mentioned by students were to do with diagnostic skills consisting of problem solving ability and logically thinking through issues in order to arrive at some diagnosis.

Oh, you’d need clinical sort of diagnostic sort of skills, be able to problem solve - problem solving skills. (5)

But I guess also you probably need a bit more - not even problem solving, but you do need to be able to be quite logical, figure out, go through - the person might present to you saying something, but it could be something completely different. So, you need to be able to figure that something out. (8)
You’d have to be able to - well, kind of read people a lot more, like read the body language and stuff, and be able to work out what’s the real underlying problem, or work out that they’re - the symptoms they’re not telling you about, or symptoms that they haven’t even thought to tell you about, and to be able to determine whether it’s a big thing or not, big enough to refer it to someone or just deal with it. (15)

2.2 Skills and Characteristics of the Surgeon

Students also discussed the skills and characteristics of the surgeon. Students perceived the surgeon to be a ‘strong’ type of person. This was discussed in two different ways. First, being a ‘strong’ type of person was described as someone who can lead others and who has confidence in their knowledge and ability in making judgments and decisions. This is illustrated in the following excerpt.

STUDENT: Quite a sort of a strong type of person.
KELBY: Okay, strong physically or –
STUDENT: Probably for some. Like, for some - like for some surgery physically strong, but more sort of being able to sort of lead, you know, the people around you and sort of have sort of confidence in yourself that "I know what I'm doing", and making sort of - making those judgments and decisions, if you're sort of the person in charge of the surgery. (11)

Second, the perception of a surgeon being a 'strong' type of person also referred to physical strength and stamina. This related to the ability to stand for long hours while performing the surgery, ignoring imperatives of hunger and other bodily functions. Being strong was also mentioned in relation to the sub specialty of being an orthopaedic surgeon – needing to be strong to perform the surgical techniques necessary (such as breaking and sawing bones).

KELBY: You mentioned the wider physicality of surgery - what do you mean by that exactly?
STUDENT: Well, you have to stand for hours…and, I mean, you actually need to be rather strong, I guess, to make incisions sometimes, especially if a person is quite big and in the area of orthopaedics you need to be quite, you know, really really strong. (16)

I see it being quite a taxing job anyway, like, you know, surgeries, you hear of surgeries that go on for hours and all that kind of thing, so you need to, you know, have stamina and that kind of thing. (12)
Furthermore, students expressed views about surgeons as having the ability to work in high pressure situations and cope with the stress that comes with being a surgeon. Students considered that surgeons would not only need to be able to separate their working life from their personal life; but be better at doing so than the general practitioner due to the demanding nature of their work.

You need to be able to work under high pressure situations and cope with stress a lot more, and you probably need to be much better [than a GP] at separating that from your personal life, and leaving work at work because it could be more severe. (2)

The following two comments portray other attributes that students associated with being a surgeon. The first quotation shows characteristics of being determined and focused, and someone who likes a challenge. This quotation also highlights again the perception students have of surgery as a discipline with a high pressure environment and as a surgeon, one needs to be able to handle that pressure.

I guess you need to be really focused, like really into what you are doing, because you know, it’s quite a few more years study to get up there to do that, so you have to, yeah, be really determined - a determined and focused person. Like, what I said before, a person that likes a challenge, and likes doing different stuff and things with their hands, yeah. Like pressure because I guess for a surgeon surgery is pressure. Being able to handle pressure and stuff. (19)

The next quotation illustrates further qualities associated with being a surgeon. These include being highly motivated, and doing the best you possibly can to the point of being a perfectionist.

Well, to be a good surgeon I’d say you need to be - you need to be driven, that’s for sure. You need to want to always do the best that you possibly can, maybe be a bit of a perfectionist. (16)

Particular skills were also perceived to be associated with being a surgeon by the students. Although people skills were seen as necessary for surgeons, the most common perception was that being a surgeon required a lesser degree of people skills as seen below.

Obviously it has slightly less demand on your people skills…you’re not going to end up being as negligent as a surgeon if you’ve got poor people skills. (4)

One of the most important skills needed by a surgeon as identified by students was that of fine motor skills. These included being coordinated and highly skilled with your hands.
The first thing that springs to mind is really good sort of, you know, actual physical capabilities, you know, hand/eye co-ordination and all that kind of thing, and skilled with your hands. (12)

Decision making was identified as another necessary attribute for surgeons. Making quick decisions in an emergency or under pressure might save the life of a patient was expressed frequently by students.

I think a surgeon must be like very calm and also be able to make quick like decision very, like, fast, and able to when they have this kind of emergency when they have some failure in the surgery they will be able to make quick decision on how to actually, like, save the life of a patient. (10)

Last, skills in leadership were also associated with being a surgeon. This was in the context of being in the role of needing to lead a team of people, especially when in the operating theatre.

You need to be able - I guess, you do need to be able to tell people what to do because you are running an operating theatre, so you need to be able to take a leadership role in there. (8)

2.3 Knowledge of the General Practitioner

Views about the various types of knowledge associated with being a general practitioner were also espoused by second year medical students.

And obviously you have to have a good grip on your knowledge and what you need to know. (2)

A GP it could be anything in the big wide range of things. So, they’ve got to have a broad range of knowledge. (17)

So, you are going to have to have an interest in all aspects of medicine. (4)

It's really good like with my GP because she understands all the funding, or seems to...so maybe have an interest in the government health policies and what’s available to them outside of your health service. So, you need to be interested in the broader picture. (4)

These comments above suggest that the general practitioner requires a breadth of knowledge that covers all the medical disciplines. Students also considered that a knowledge of health systems, including appropriate funding, combined with a knowledge of health services to help patients should be part of the general practitioner’s knowledge.

Although second year students mentioned a breadth of knowledge as part of a general practitioners knowledge, this was distinguished from a general practitioner’s ability to see the
‘big’ or ‘whole picture’. In the first quotation below, seeing the whole picture refers to the ability to see the patient as a whole person, rather than just their disease alone. Demonstrated in the second comment below, students also discussed the limitations of a general practitioner’s knowledge. Having to realise there is a limit to one’s knowledge and not being ‘afraid’ to refer to someone else or acknowledge one’s own limitations was highlighted.

You would have to be able to look at the whole picture…it’s dealing with the situation perhaps more than the disease maybe than the surgeon. (6)

I guess you’ve got to realise what are your areas of expertise and not go beyond them. You know, not be afraid to refer someone on, or not be afraid to say this is not an area that I know a lot about. (17)

### 2.4 Knowledge of the Surgeon

The knowledge set associated with being a surgeon was also commented on by students. The next quotation illustrates students’ perceptions that a surgeon’s knowledge is focused on one specific area in depth.

I guess it’s - the whole thing about surgery just how to you know, such a specialty that you don’t have to - like, I mean I guess you do have to have the understanding about the other parts of the - and other functions we’ve got - because I guess it kind of feels like your receptive knowledge is quite a lot thinner - a lot deeper thinking, it’s understanding a lot more about a specific thing, but you don’t need to understand about the rest. (18)

The following excerpt illustrates students’ views that a sound knowledge base of the biomedical sciences is an essential component of the repertoire of knowledge belonging to the surgeon. It also reiterates the earlier point that a surgeon does not require the same degree of people skills as does a general practitioner.

Steady hand, but then sound knowledge in systems, physiology, anatomy, that sort of thing. Usually not so - personal skills not quite in the same level as a GP needs it. (5)

Finally, the quotation below shows the students’ view of the surgeon’s work as narrowly focused on the disease – fixing the disease through surgery, rather than taking a more wholistic and patient centred focus more typical of general practice.

Surgeon is like - I don't think they usually socialise at all with the patient, they just perform the surgery and the follow-up will be just like follow-up for a little while, but they don't really understand the person - the patient as a person. (10)
Summary

Second year medical students perceived being a general practitioner in particular ways including a characteristic skill set. These included the ability to develop trust and rapport and to be sensitive with patients. Being empathetic with patients was a predominant characteristic. There was also an emphasis on listening skills and being non-judgmental. Particular personality traits were afforded to general practitioners as well. Students perceived the general practitioner to be a warm friendly person; patient, honest and trustworthy along with being emotionally resilient. Portraying confidence was also perceived to be an important characteristic by students.

Certain clinical skills were seen to be associated with being a general practitioner. The perception of the students was that general practice required an emphasis on consultation skills, examining all parts of the body as well as ascertaining signs and symptoms of disease. Problem solving skills and logical thinking were also viewed as skills associated with the general practitioner. Students perceived the general practitioner to have a breadth of knowledge that covered all the areas in medicine. General practitioners were seen as having knowledge of health systems, including funding, but also wider services including community agencies and services. General practitioners were also seen as having a wholistic focus which included the illness experience of patients. Lastly, students considered it important that general practitioners recognise the limitations of their knowledge.

Second year students commented on the skills and characteristics associated with being a surgeon. Their perception was that a surgeon was a strong person, both physically, but also in terms of leading a team and having confidence in their knowledge and ability to make judgments and decisions. Students also perceived the surgeon to have abilities to handle pressure and cope with stress and be able to separate their personal and professional lives. Further characteristics of being a surgeon included being a focused, determined and driven person.

Students also articulated the skill set associated with being a surgeon. Their view was that surgeons had less need for people skills when compared with a general practitioner. The skills emphasized by student included having excellent fine motor skills (using your hands) and also being skilled at decision making, specifically under pressure. Students considered that surgeons had great in depth knowledge of a specific field of medicine. Finally, students
perceived the surgeon to have a sound knowledge of the biomedical sciences and that surgeons were focused on the disease aspects of illness.

**Theme 3: The Value of General Practice**

This theme describes the students’ perspectives about how the discipline of general practice is valued and additionally, how general practitioners are valued by the profession of medicine. It also captures perspectives about the value given to the knowledge associated with primary health care. The first two sub themes examine the discipline of general practice and are entitled ‘Low Status’ and ‘Not a Specialty – Default Vocation’. The following sub-themes examine the general practitioner themselves from the perspective of students. The fourth sub-theme explores students’ perceptions of the remuneration associated with working as a general practitioner. The final sub-theme theme presents students’ perceptions about the particular knowledge that is valued in the medical school and in general practice and surgery.

### 3.1 Low Status

The quotation below reflects students’ perceptions about the relatively low status of general practice within the hierarchy of medical disciplines and specialties.

> It’s so often 'just a GP', and that’s pretty common across the board, like in my meetings with doctors and other scientists and things and, you know, it came out 'just a GP'... Mr. X [specialist] said, ‘oh, no-one is allowed to use that kind of language at my home’, because his wife is a GP, and Mr Z’s [specialist] wife is a GP, you know, so you are not going to be talking like that around here. But, nevertheless it certainly, you know, seems to be all over the place, and even in general practice themselves, you know, it’s 'just a GP', that’s what it feels like. You know, you [the general practitioner] are just there to hold down the fort. (3)

This quotation presents the comment ‘just a GP’ from the student’s previous experiences with doctors and scientists, in this particular case before entering medical school. However, it also illustrates the low status afforded to the discipline of general practice, ‘just a GP’ being pervasive within medicine and general practice. The quotation below illustrates that general practitioners are not as well respected by the public in comparison with secondary healthcare specialists.

> I think people don’t find it - like, they don’t look to a GP as high as they look to a specialised person. So, I think they respect a person - a specialist even more than a GP. (13)
3.2 Not a Specialty - Default Vocation

The two quotations below illustrate students’ perceptions about specialisation. The two comments indicate that general practice is not seen as a specialty in its own right. The second quotation in particular, shows a student discussing interactions with their general practitioner, and commenting on the demarcation between being a general practitioner and being a specialist. This quotation also reiterates the lifestyle offered by general practice as mentioned before, being favourable to women.

Like, not a lot of people seem to push the whole general practice thing. But a lot of people - like, if you are - I’d say that if you ask like all the med school you’d probably get probably 60 or 70% of the people saying I want to do, you know, specialities… (18)

STUDENT: She [a GP] asked what I was doing and stuff - she tried to talk me out of it from being a GP anyway.

KELBY: What were her comments when you told her you were doing medicine?

STUDENT: She just said it’s really hard on women, and like she’s got kids and she works part-time as a GP. And she’s - but she did obstetrics I think first and then became a GP. So I guess she was saying that if you want to specialise it’s pretty hard to have a family. (1)

This last quotation below illustrates students’ views of general practice as a default vocation among the medical disciplines. In this quotation, the default position of general practice suggests that an intelligent or well performing medical student will go into the specialties. This is further explored in the following subtheme.

KELBY: What do you think that means, when people are using that particular phrase “just a GP”?

STUDENT: I think what it means is that you haven’t specialised. You sort of, you know, you didn’t know what you wanted to do, or you didn’t want to do it, or you couldn’t do it, so you ended up in general practice. You know, it’s not the specialisation in general practice, it’s the default of general practice or going into general practice. Whereas if you’re on to it, you go into the medicine.
KELBY: When you say “on to it”, do you think - do you mean like more intelligent? Is that kind of what you’re getting at?

STUDENT: that would be the impression. (3)

3.3 Motivation and Intelligence

Students also picked up further impressions about general practitioners and the discipline of general practice. In the first quotation below, students opine that medical graduates consider entering general practice because they lack the motivation to pursue the medical or surgical specialties.

I guess the GP often gets talked about as something - well, not really the lazy option, but yeah, he didn’t really want to put in an effort to do any specialties. (4)

The second quotation illustrates another perception touched on in the previous sub theme above. This is the notion that general practice is the discipline that students enter if they lack intellect or have struggled through medical school. It further considers that the ‘cream of the class’ become surgeons and the remainder become general practitioners.

But students I think a lot of people see it [general practice] as like the - sort of like the one [discipline] that you go to if you’re not really smart like, - general practice. Yeah, sort of I guess that’s like a perception among most of the public really. Like, the surgeons are the cream of the class, and everyone else becomes a GP. Yeah, people - I haven’t heard of anyone that wants to be a GP. (1)

The last quotation below is an excerpt from an overseas student from Saudi Arabia. The student’s perception is that by becoming a general practitioner, or equivalent, in Saudi Arabia, one is somehow a lesser quality of doctor.

I’m not really sure about that, but it’s - yeah, I’m not really sure how the process is, but, yeah, it’s - well, I don’t know if it’s right or wrong, but that’s what they - the social idea about it, if you end up doing GP then you’re not a very good doctor. That’s what people have the idea there. (13)

3.4 Money

The remuneration for general practice work was mentioned by students, albeit infrequently. This view was also mixed among the students who talked about this area of general practice. The first quotations below illustrate the view that general practitioners do not earn as much as
other specialties. The second quotation suggests general practitioners earn a limited income while working long hours.

A lot of people think there's a lot of money in it [surgical specialties], so maybe that would encourage people to do it as opposed to GPs where I think it is seen as not earning as much. (9)

And anyway it’s kind of got the whole you’re in general practice, you earn $80,000 a year and work 80 hours a week, for the rest of your life kind of thing, you know, dig yourself in a hole. (18)

The last quotation regarding the remuneration of general practitioners presents an alternative view that being a general practitioner is associated with good pay.

I have a friend and his Dad is - I think he is a GP, he lives in X. It’s a pretty small practice and there’s not a lot of GPs, there’s only two or three GPs there. So, he’s actually quite busy, and there when people need him. So, that would naturally mean good pay. He’s got a really nice house, yes. (14)

3.5 Primary Healthcare Knowledge

This last sub theme concerns the value of certain types of clinical knowledge. In the quotation below a student describes the model of medical education that is valued at this particular medical school. The student considers that the medical education model is primarily focused on hospital or secondary level care rather than a focus on primary care. Having this dominant focus of secondary care privileges specialists who work in the hospital.

Yeah, I mean definitely the valuation that’s around and the model is ‘hospital’. So, if you are going to work in a hospital, where do you want to be? You want to be at the top of the ladder, so you know those are generally the various sub specialty people. So, you know, primary health care is almost public health care, it’s kind of - it’s almost useless. It’s quite off to the side and it's not what we are really about here. Like, already, you know in our ‘O’ week [orientation week], you know the 5th years came in to talk to us, lovely wee darlings of power and - what’s the word I’m looking for here? Sort of, you know, they had that entitlement to them and they were also the models, you know, these were the people that were successful, and they did say some good stuff, but they said Patient, Doctor and Society, not a mandatory attendance. So there is a devaluation around all those forms of knowledge. (3)

Lastly, this quotation also describes senior students (in this case, fifth years) addressing a class mixed of second and third year medical students during their orientation or introductory week at medical school. During this part of the introductory session the fifth year senior students mentioned that one did not need to attend a particular part of the course named
‘Patient, Doctor and Society’ known as PDS, thus devaluing the knowledge that this part of
the course addresses. This course within the medical curriculum focuses on introducing
“knowledge and skills needed to work with people in the health setting, understand how these
can be used for the benefit of patients, and make wise decisions in medical practice (Faculty
of Medicine, 2007, p.9)” . This course also focuses on a wide range of factors associated with
the health and wellbeing of communities, for example environmental and cultural factors
(Faculty of Medicine, 2007). PDS also included learning consultation skills and an
introduction to bioethics and professional development. It is important to note PDS was
disestablished (unbeknown to the fifth years at the time), although some remnants of the PDS
course are now components of the ELM programme module now called Healthcare in the
Community (HIC) which was outlined in the introduction of this chapter.

3.6 The Value of Surgery/Specialists

In the interviews, students commented on the value attributed to the discipline of surgery
along with being a surgeon. The first quotation identifies surgeons and surgery at the top of
the medical hierarchies. The second quotation illustrates the perspective held by students that
surgeons are highly intelligent.

    Generally, yeah, they probably look at surgeons as like the Holy Grail
    of medicine. (15)

    And [surgeons are] obviously intelligent, and good at like leadership
    with the team of people working around you, and like good at
    organising. (1)

The third quotation illustrates two things. First, it shows students commenting on the money
one can earn in the discipline of surgery, which was mentioned during the interviews but very
infrequently. Second, it illustrates the views that the discipline of surgery and surgeons
involves saving lives on a daily basis.

    KELBY: Why would be people be attracted to do surgery?
    STUDENT: The money and saving lives every day. (1)

In this final quotation, the student discusses the clinical knowledge required of specialists in
comparison with general practitioners. The perception is that specialist knowledge is at a deep
or in depth level and requires greater study than a general practitioner. This student’s view is
also that they do not want to be constrained at the general practitioner’s ‘level’ of dealing with non-serious conditions such as coughs and colds and prescribing medication.

I’d like to really study more – which ever specialty I go into I’d want to study it a lot more in depth than GP level. And now we’ve got - we have lectures and stuff that are quite in depth now from specialists, and in five years time I’m not going to remember them. So, I want to know something really inside out. I don’t want to be just stuck at the level of looking at coughs and colds and prescribing paracetamol and stuff. (15)

Summary

Second year medical students perceived the value of the discipline of general practice and the general practitioner in particular ways. Students viewed general practice as having a low status among the hierarchy of medical disciplines, being referred to as ‘just a GP’. Students also perceived that general practitioners are not as well respected as specialists. General practice was seen as not being a specialty in its own right. Students held the perception that general practice is a default vocation among the medical disciplines. Students also had the perception that students who are entering general practice lacked motivation and ability to pursue specialties and also were not as smart as students who entered other disciplines.

The views regarding the money earned by a general practitioner were mixed, perceived to be both receiving ‘good pay’ but also not as good as other medical disciplines. Last, there was a perception that the knowledge associated with primary healthcare, which general practice is aligned with, is portrayed as lacking value within medical education. The perception was that knowledge associated with secondary or hospital level care was highly valued, thus placing importance on the specialist role.

Students viewed the discipline of surgery as the top of the medical hierarchy, the ‘Holy grail of medicine’. This was accompanied by the perception that surgeons are smart, motivated and highly paid. Students also perceived specialist knowledge to be at a deeper level which was more desirable than to be ‘stuck’ at the lower clinical knowledge base of a general practitioner.

Theme 4: Representation of Medicine in Television and Literature

Second year students also discussed areas of the media and other sources of information they had encountered about medicine and being a doctor prior to entering medical school. This
included talking about medical television programmes and literature such as books and information gathered on the internet, with the former dominating discussion by the students. The interview questions related to these areas aimed to investigate other areas of interaction students that had given them impressions about practising medicine and being a doctor before entering medical school. Students talked about various areas in medicine and being a doctor that they learned from watching the various shows described in the Table 6. These areas included learning about hierarchies in medicine, the hospital environment, different specialties in medicine and also whether these television shows reflected ‘the real world’ of medicine. Table 6 lists the programmes that were watched and by how many of the participants.

Table 6: Percentage of Second Year Students Who Watched Medical Television Programmes

<table>
<thead>
<tr>
<th>Television programme</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grey's Anatomy</td>
<td>60% (12/20)</td>
</tr>
<tr>
<td>House</td>
<td>55% (11/20)</td>
</tr>
<tr>
<td>ER</td>
<td>40% (8/20)</td>
</tr>
<tr>
<td>Scrubs</td>
<td>40% (8/20)</td>
</tr>
<tr>
<td>Shortland Street</td>
<td>10% (2/20)</td>
</tr>
<tr>
<td>Nip/Tuck</td>
<td>5% (1/20)</td>
</tr>
<tr>
<td>A&amp;E</td>
<td>5% (1/20)</td>
</tr>
<tr>
<td>Never watch medical</td>
<td>5% (1/20)</td>
</tr>
<tr>
<td>television programmes</td>
<td></td>
</tr>
</tbody>
</table>

4.1 Hierarchy

Students picked up on the representation of clinical hierarchies when watching certain medical television programmes. The first quotation below talks about how the hierarchal relationships are interesting to view, in particular how the interns get treated so poorly.

STUDENT: Obviously it’s unrealistic like the interaction that goes on in the House school. But it's quite interesting to watch, like the relationships between, like the hierarchy. And how the interns get treated like crap. Yeah, I guess that came through. (1)

The quotation below illustrates the hierarchal layers in medical practice when watching the television programme Grey’s Anatomy. The student specifically outlines the layers of the intern, the resident, chief resident and then ‘the boss’. This quotation also illustrates picking up on the long hours associated with the hospital specialties.
Oh it’s really cool, and you’re like, oh, I know what they’re talking about and its quite cool, you get a bit more into it when that starts to happen, but - like, of the system, that’s like when you have, you know, there’s superiors, and superiors, and superiors, I think, and definitely I’ve taken that out of it, like you have your interns, and then your residents, and then your other chief residents, and then the boss like - so, it’s definitely a hierarchy system. But, the long hours - you know, really long hours, you know. (19)

4.2 Specialties

Much of students’ knowledge about different medical specialties comes from television programming.

I must admit that all of my impressions of surgeons is derived from television series. (16)

The quotations below illustrate not only some of the specialties discussed, but also certain characteristics that are associated with them. In the first quotation below the specialties of neurosurgery and orthopaedic surgery are described in relation to the programme Grey’s Anatomy, with a perception that orthopaedic surgeons are really ‘tough’.

STUDENT: You kind of get a look at all the different specialities as well.

STUDENT: I mean, like, they’ve got the neurosurgeons.

STUDENT: And you’ve got the orthopaedic surgeons, they’re like really tough in stuff… (1)

The second quotation notes the specialty of emergency medicine in the programme ER. Here, the student watches ER because they are interested in emergency medicine and views it as being ‘fast paced’.

ER - one of the other specialties I’m quite interested in is emergency medicine, so I quite like the fact it’s fast paced and that sort of thing, yeah. (17)

While the quotation above makes reference to emergency medicine, students predominantly discussed surgical specialties. The quotations below illustrate many aspects of the area of surgery which students perceived to be a difficult area of medicine, highly competitive, a ‘cool’ profession that has a ‘rush’ combined with being the best at what they do.

I guess, like, Grey’s Anatomy leaves you with the impression that surgery is a really hard profession to be in. Like, your life is in hospital, and so I guess that’s - and you’re always competitive for
what places you can get, and things like that. So, that’s kind of why I like that. (8)

I like the surgery bits and that - that’s quite cool. The rush and the - the gory stuff is quite cool. But I don’t know - the drama that goes with it. (19)

And, yeah, they seem like they all know, and they [surgeons] seemed really good, the best at what they are doing. (19)

4.3 Hospital Environment

Students also talked about impressions of working in the hospital environment that they took from medical television programmes. The first quotation below demonstrates the excitement generated for students from the variety of different conditions that are seen.

It sort of makes me excited about working in a hospital and it shows you all the different interesting sort of cases that come in. (9)

This second quotation illustrates their impressions of the areas of medicine that the hospital portrays, what working in a hospital environment is like, and also the perception that hospital work is stressful. The last comment suggests that the student enjoys watching medical television programmes in order to see what is probable.

I know every day is not going to be like that, but it just shows you the different things, and things like House where they’re solving a problem and trying to find something, it just - it’s just so interesting and I find it helps see all the different sort of areas that I could go into, and what a day in a hospital might be like, it might be really stressful and the sort of things you might have to deal with. I generally really enjoy watching that sort of thing because it helps me to see what’s possible. (9)

4.4 Representation of ‘Reality’

This sub theme presents the students’ perspectives about how credible particular medical television programmes are. The first quotation below shows students’ uncertainty of what is and what is not ‘real’. This particular quotation is in the context of watching the medical programmes ER and House with her father who is a doctor.

I like to sit there and scoff at the way they address people and get frustrated - you get fascinated by the medical stuff. I would never watch them with my parents though – [we] sit down and Dad - we were watching it and Dad said “that is a - aargh, who would do that, that’s incredibly frustrating”, so I was quite happy in my little bubble pretending that it all, you know, happens. Oh, it’s probably about
every five minutes Dad will chant something, so I’m well aware that it’s not all real life, but if it’s just me watching by myself I can’t work out what is and what isn’t [real] at this point in time. (6)

The quotation below discusses certain aspects of the programme House. Here the student perceives the cases as real, yet coming across the cases during a doctor’s lifetime at the same location would be unlikely as the cases seen on House are very rare.

Most of the cases in House they are presented very realistically and most of them are real - well, all of them are real. But they probably wouldn’t - you probably wouldn’t be able to see them all in your lifetime career because they are very rare, and you can’t see them in the same place you are. (7)

The following quotation presents a student’s view about the medical programmes Scrubs and House. Here, the representation of surgery as a pressured environment is seen as realistic, and also a discipline which is competitive to enter.

But I think some parts, like just the pressurised environment of surgery I think that is probably quite real, and the competitiveness to go into each type of surgery is probably also quite a big thing. (8)

Students also shared their perceptions about further aspects of surgical life from medical television, in this instance both quotations are referring to Grey’s Anatomy. The first quotation suggests that the surgical procedures as well as other clinical procedures, such as taking blood, are realistic. In both quotations, students also perceive that the issues surrounding dealing with the death of a patient and the emotional challenges that come with it reflect reality.

Just maybe the surgical procedures. They look quite real, and dealing with like death and stuff is quite prominent in that, so just seeing patients who the characters get quite close to, or start to relate to, and then they die or something goes wrong, and the emotions that come from that seem like they could be quite real. So, yeah, the procedures I can see like even just taking blood and stuff like that. I can see that happening. (9)

Well they do - one thing I think of Grey's is they do allow - like, I mean like the story writers, like do allow their patients to die and things like that, so they do handle, you know, death and all that kind of stuff. They don't, you know, have a happy ending to every story, which unfortunately will never be the case. So, I guess in that sense you realise how emotionally draining it all can be as well. (12)

The quotation below looks at the television programme House. This portrays the students’ perception that the communication, teamwork, and voicing opinions within the group of doctors illustrated in House would represent reality. However, the second quotation, also
discussing *House*, illustrates students’ view that the medicine and treatments in *House* are realistic, but not the structure of how things are done.

Yeah, I think it's like - like the communication part and working with colleagues and team work, because when some - when a patient has something we really don't know what is causing it and I may have this opinion, and then my colleagues may have another opinion. So, it's like together we have to work together to find out what is wrong with the patient, yeah, and then cure it. I think that's the kind of, yeah, matching with the *House* situation. (10)

I don’t know that the way in which they do things is necessarily close to reality. I think that probably the medicine and the treatments and that are close to reality, but the structure and - I don’t know if that’s close to it. I wouldn’t imagine so. (17)

In this final quotation, the student discusses the television programme *ER*. The view here is that *ER* shows something happening all the time, which is considered to not be the case in emergency medicine in reality. The student then expresses a perception of what a surgeon may do in a typical day. This includes performing a surgical procedure once every three days and doing some administrative duties. In response to the question of whether the representation is the day to day work of people on *ER* is a fairly realistic picture, one student commented

I don’t think so. I mean to be honest and to just look at it objectively it’s just not likely that there’s something - there’s always something happening, or maybe two or three things happening at once…I mean I really don’t know but my guess would be a surgeon probably gets a surgery like maybe once every three days or something like that…and apart from that surgery, and apart from doing other admin stuff, they probably just stick in the hospital and do something, yeah. (16)

### 4.5 Literature and Medicine

This final sub theme highlights the literature the interviewees read before they entered medical school and the impressions they gained from this literature. This first quotation describes this student reading the book *Becoming a Doctor* (Konner, 1987). The student learned how difficult going through medicine will be and also talked about the perspectives the book offered of surgeons. They were seen as ‘stuck-up’ and unwilling to compromise.

**STUDENT:** I’d read a book actually, it was called “Becoming a Doctor”. Written by a guy who he’d - I think he’d done a PhD in sort of anthropology type stuff, but then he’d gone through and studied to become a doctor. So, it was about 20 years ago, or 30 years
ago or something. But he wrote a lot about how, you know, back then patients were looked at more as just medical cases to solve rather than actually people who you had to deal with as well. So, it was interesting reading that, and seeing how he coped with things, because he already had family when he was going through this. That gave me a bit of an insight about how hard it is.

KELBY: Did they give you any other impressions reading that about anything else to do with medicine at all?

STUDENT: I think from that I probably got the impression that - was that surgeons are quite stuck up [laugh]. Some of them were very stuck in the old ways and did not like, you know, the young people coming through. And things always had to be done their exact way, they weren’t willing to compromise. (2)

The quotation below is from a student who read a medical student’s diary and also conducted a further search on the internet. The student noted different specialties and what they could expect to accomplish for each specialty in terms of postgraduate training requirements.

I read - there’s ‘diary of a med student from Harvard’, there’s - oh, there’s a couple of others like that. And I did quite a lot of research on the internet just about the different specialties and that sort of thing, and how time consuming each was going - ah, not time consuming, but what you had to do for each, and that sort of thing. (17)

The next quotation below describes a book about general practice which depicted the general practitioner as a heroic individual, who was well known to the community and also looked up to as a role model within the community. This was the only time something positive was mentioned about general practice as portrayed in television programmes or other literature.

I was reading a book a little while ago, it was just like a trashy novel about a GP clinic and the relationship that the GP had with the community was really good, like everyone in the community knew him and he was - but he was aware of all the health problems of everyone, and someone was on the beach, like, drowning and then he went and saved them and called a helicopter or whatever, and it was a really sort of ‘out there’ situation, but it seemed like people relied on him so much and he was really looked up to in their community. (9)

This final quotation shows the lesson taken by a student from reading books about medicine when deciding to change careers or not. The student gained the impression that the discipline of surgery was ‘really high powered’ and a time consuming discipline. General practice was not often referred to in the literature read by the student.
I read quite a lot of books before I decided to come to med school just because of where I was in terms of deciding whether to change careers, and, yeah, that - I mean, surgery always comes across as that really high powered, time consuming side of things. And general practice, again, not often referred to in the books I read, yeah. (17)

Summary

Second year medical students commented on what they learned about medicine from medical television and literature with which they had engaged. No medical television programmes were reportedly watched that were about general practitioners. Students gained the impression of medicine involving a hierarchical system and associated with long hours of working in the hospital. Students commented they acquired their knowledge of surgical specialties by watching television programmes, with orthopaedic surgeons being referred to as ‘tough’. Students also perceived that the surgical specialties were a difficult area of medicine to be involved in, was highly competitive and a specialty which was ‘cool’.

Perceptions of working in the hospital environment were also gleaned from medical television. This consisted of the hospital environment as a site for excitement because of the challenging conditions seen and a stressful workplace. Students also discussed what they perceived to be credible or not when watching medical television. Students considered that the conditions seen were real, yet the likelihood of coming across many of them was unlikely. The representation of surgery as a high pressured environment along with being a competitive discipline was viewed as realistic. Additionally, students also viewed the emotional issues and experience of dealing with the death of a patient along with the emotional challenges that come with it for the doctor in the hospital as realistic. Students also perceived the medicine and treatments to be realistic along with communication and teamwork of working within the team.

Apart from medical television, students engaged with other forms of information such as books and researching via the internet. Students obtained information regarding what going through medicine will be like as well as impressions and about different areas within medicine and how time consuming each area would be.

When commenting on specific specialties, one student noted that surgeons came across as ‘really high powered’ individuals. One student noted that in one book they read focused on general practice in which they were depicted the general practitioner to be heroic (due to ‘saving a life’) and who was viewed as a role model and well liked within the community.
Conclusion

In this chapter I have shown that second year medical students’ view general practice and being a general practitioner in particular ways that are different to the ways in which they view surgery and being a surgeon. Students perceived that general practice was a discipline which involves prescribing medications, educating and advising patients on their own health issues and referring patients to specialists. Conditions encountered were seen to be diverse, with an emphasis on chronic and psychiatric conditions. Additionally, general practice is involved with boring, mundane and non-challenging minor problems which are not life threatening nor does it deal with conditions that are difficult, acute or exciting. The lifestyle afforded to general practice was conceptualized as not being busy or stressful, compatible with having a family, and good work/life balance. Training in general practice was seen as less intensive and easier than specialty training schemes.

Students also conceptualized being a general practitioner in a particular way. General practitioners were viewed as warm and friendly people with an emphasis in the people skills involved when working with patients. Developing trust and rapport, being an empathic person with good listening skills alongside an attitude of being non-judgmental were predominant traits identified by students. Students’ perceived general practitioners to be emotionally strong people with the ability to act or perform confidently. The clinical knowledge of the general practitioner was also perceived in a certain way by students. General practitioners were seen to have a breadth of knowledge of all areas of medicine, knowledge of health systems including funding and community agencies and also a wholistic view of the patient. Students also viewed general practitioners’ knowledge as being comparatively limited (and having to realise and be conscious of this aspect).

The students considered general practice to have a low status among the hierarchy of the medical disciplines being less well respected than specialties. Students also perceived general practice as not being a specialty but a default vocation. The perception that students who entered general practice were lacking motivation to pursue the specialties and were not as intelligent as those who entered other disciplines was also evident among students. There was also a view that knowledge associated with primary care was not valued by the medical school compared with specialist clinical knowledge which was viewed as highly valued. When looking at the representation of medicine in television media and in the literature, there
was no reference to general practice from medical television programmes. There was only one positive reference to a general practitioner in a book read by a student.

I have shown that general practice and being a general practitioner is viewed in particular ways that are distinct compared with the ways in which students refer to surgery and being a surgeon. Students perceived the surgeon’s role to incorporate dealing with referred patients with a known problem, informing the patient about the surgery and then organising and conducting the surgery for that patient. Students also viewed the surgeon as being distant from patients and for surgery to be a demanding, challenging and exciting environment which is high pressured. Conditions requiring surgery were viewed as acute and ‘life and death’. The lifestyle of the surgeon was viewed as one of stress, and physically demanding accompanied by poor work/life balance and a very demanding workload. Vocational training in surgery was viewed as highly demanding, intensive, and consisting of long hours. Being a surgeon involved being a ‘strong person’ physically and in terms of leading teams and making decisions. Students also perceived the surgeon to have the characteristics of being an intelligent, determined and driven person. The clinical knowledge associated with being a surgeon was perceived to comprise of a solid level of understanding of the biological sciences with a focus on one specific area that required a deeper level of understanding.

Students discussed their perceptions of medicine from the medical television and literature they engaged with. Hospital medicine was the predominant focus of views from the students. Students perceived hospital practice involving a strong hierarchical system, long hours, and a stressful yet exciting work environment. Surgery, in particular, was portrayed as a competitive, high pressured discipline with surgeons seen as ‘cool’ and orthopaedic surgeons seen as ‘tough’.

These views and perspectives offered by second year medical students, constitute particular discourses about general practice and being a general practitioner. These discourses were already prevalent within the first eight weeks of entering medical school for the participants involved in this study. Within this time, students have encountered discourses about the discipline of general practice and being a general practitioner. This beginning of students’ taking up discourses about general practice and being a general practitioner illustrates the medical school as a site of an institutional discourse and the curriculum as a discursive field, a site where individuals learn to construct themselves as subjects that are allied with the particular values, principles and knowledge of their profession (Grant, 1997; Frank & Jones, 2003).
However, these results also indicate further discursive sites. The discourses espoused by students do not derive solely from their short experience of medical school or medical student curricula. In addition to an institutional discourse, there is also a public discourse about the discipline of general practice and being a general practitioner, medicine in general, and hospital specialties including surgery. Further discursive fields appear to be evident. Discourses offered by medical television programmes and medical literature, and personal experience from visiting one’s own general practitioner suggest that further discursive fields exist where discourses are generated, and knowledge of general practice and the general practitioner is constructed.

These results also give an indication of who is involved in continuing and producing these discourses. Within the institutional discourse students, tutors and lecturers have been identified. For example, one of the student’s tutors who was a general practitioner was discussing the difficulty of moving from general practice to surgery, yet the ease from surgery to general practice when discussing postgraduate training. Fellow students and peers were also cited regarding their insights about general practice and being a general practitioner. In the public discourse, students mentioned their own general practitioner, friend’s parents who were general practitioners, medical television programmes and other literature. These results show how pervasive discourses can be, as well as where, and from whom, these discourses arise.

Chapter 6 will examine the results from the interviews of the trainee interns. It follows a similar structure to Chapter 5. It outlines the demographic information of the trainee intern cohort and then illustrate particular themes and subthemes that have been constructed about general practice and being a general practitioner. This will then be seen alongside comments made by the trainee interns about the discipline of surgery and being a surgeon.
Chapter 6 – Results: The Trainee Interns

In this chapter I present the findings of my interviews with the trainee intern cohort. I show the sets of discourses that underlie the ways in which trainee interns talk about general practice and being a general practitioner. The chapter is organised in the same format as Chapter 5. Themes and their respective subthemes are described with a summary to conclude each main theme. I summarise the chapter with a conclusion that relates the findings to the argument that these constitute certain discourses about general practice and being a general practitioner.

In this chapter I first describe the demographics of the trainee intern cohort. Following this, I give a brief overview of the medical curriculum for trainee interns. I then present four main themes and their respective subthemes. The themes are entitled: The discipline of general practice; Being a general practitioner; The value of general practice; and Representation of medicine in television programmes. As described in Chapter 3, discussing surgery as another discipline was purposefully done. This was to explore Foucault’s explanation that discourses are created amongst other discourses, and not as de novo entities within themselves. Therefore, after each subtheme I will present comparative data from students’ perceptions about surgery as a discipline and being a surgeon.

The Trainee Intern Student Cohort

Here I outline the trainee intern cohort demographic information. Included in the demographic data for this cohort are: age, ethnicity and gender. It also includes further information consisting of the method of entry into medical school as well as if any of the students’ parents were doctors or their parents or close relatives were involved in another health profession. Tables 7 to 10 show the age, ethnicity, gender and entry category information for the trainee intern cohort that was interviewed.

Table 7: Age Distribution of the Trainee Intern Cohort

<table>
<thead>
<tr>
<th>Measure of Central Tendency</th>
<th>Age in years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range</td>
<td>23-39</td>
</tr>
<tr>
<td>Mean</td>
<td>25.3</td>
</tr>
<tr>
<td>Median</td>
<td>24</td>
</tr>
</tbody>
</table>
In Table 7, the age range of 23 to 39 years shows the variety of ages of trainee interns who were interviewed and is reflective of the full cohort of medical students. The median age of the trainee interns interviewed of 24 closely reflects the full cohort of medical students studying in their trainee intern year at the University of Otago. The gender split shown is heavily skewed towards females when compared with the main cohort, which is 55% female and 45% male (Table 8). As Table 9 illustrates, the participants included three trainee interns who identified themselves as Māori.

Table 8: Gender Distribution of the Trainee Intern Cohort

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>6</td>
<td>30%</td>
</tr>
<tr>
<td>Female</td>
<td>14</td>
<td>70%</td>
</tr>
</tbody>
</table>

Table 9: Ethnicity Distribution of the Trainee Intern Cohort

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Zealander or New Zealand/European</td>
<td>8</td>
<td>40%</td>
</tr>
<tr>
<td>Māori/Pakeha</td>
<td>3</td>
<td>15%</td>
</tr>
<tr>
<td>Malaysian</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>European</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>Asian</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>Malaysian/Chinese</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>Taiwanese</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>Chinese</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>Caucasian</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>New Zealander/Canadian</td>
<td>1</td>
<td>5%</td>
</tr>
</tbody>
</table>

Table 10 demonstrates that over half of the trainee intern cohort interviewed entered medical school from Health Sciences First Year, with the remainder being made-up by graduate, other and international student category pathways. The demographic data of the trainee intern cohort is similar to the make-up of the medical school intake. Yet, the trainee interns interviewed was represented by more females, 70% as opposed to 55% in the medical school intake, and also by fewer students who had entered from Health Sciences First Year which was 50% as opposed to 70% (Shelker et al., 2011).
Table 10: Entry Category into Medical School of the Trainee Intern Cohort

<table>
<thead>
<tr>
<th>Entry category</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Sciences First Year (HSFY)</td>
<td>13/20</td>
<td>65%</td>
</tr>
<tr>
<td>Graduate</td>
<td>5/20</td>
<td>25%</td>
</tr>
<tr>
<td>Other category</td>
<td>1/20</td>
<td>5%</td>
</tr>
<tr>
<td>International student</td>
<td>1/20</td>
<td>5%</td>
</tr>
</tbody>
</table>

To establish more background about the participants and their exposure to medicine, participants were asked two questions. First, they were asked if any of their parents, guardians or close relatives were doctors and second, whether they had a parent or guardian or a close relative who was working in an allied health profession. The term ‘close relative’ was self-defined by the student with uncles and aunts being routinely mentioned.

Table 11: Percentage of the Trainee Intern Cohort Who has a Parent/Guardian or Close Relative Who is a Doctor and/or Allied Health Professional

<table>
<thead>
<tr>
<th>Parent/Guardian/Close relatives</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who were doctors</td>
<td>5/20</td>
<td>25%</td>
</tr>
<tr>
<td>Who work in an allied health profession</td>
<td>7/20</td>
<td>35%</td>
</tr>
</tbody>
</table>

Table 11 shows that five of the students interviewed had a parent or guardian or close relative as a doctor and seven students with a parent or guardian or close relative who worked as an allied health professional. Of the five doctors, one was a general practitioner, and one was a general practitioner as well as a general surgeon. The remaining three did not mention the specific area of medicine practiced. The health professions that were not medicine included nursing and an ambulance officer.

Figure 2 illustrates the areas of medicine the trainee interns were considering pursuing. As this was self-defined by the trainee interns, their choices did not always necessarily reflect specific disciplines, but may designate certain areas of medicine they wish to pursue. Figure 2 demonstrates that for this cohort, the majority of trainee interns were thinking about multiple medical career avenues. It shows that out of the total number of responses, 29% of responses were looking at General Practice, with Obstetrics and Gynaecology the second highest at 13% followed by Paediatrics at 10% and Internal Medicine at 6% of responses. It demonstrates that the trainee interns who self-selected for an interview, were not only thinking about entering general practice but had also considered a range of other areas.
In Chapter 5, I provided a brief overview of the second year medical curriculum, entitled the Early Learning in Medicine (ELM) programme, taught by the Otago School of Medical Sciences, Faculty of Medicine and the Dunedin School of Medicine at the University of Otago. In this section I give a brief overview of the Advanced Learning in Medicine (ALM) programme. This programme covers all three clinical schools (Dunedin, Christchurch and Wellington Schools of Medicine and Health Sciences – University of Otago). Due to some participants coming from medical school in Auckland, I will also include an overview of the curriculum from the School of Medicine, University of Auckland.

At the University of Otago, the three clinical schools teach the ALM programme which includes years four, five and six, the trainee intern year. The ALM programme provides opportunities for learning through clinical exposure to patients. In years four and five, students undertake attachments and placements in hospital-based services such as in-patients and out-patients and community settings that include both urban and rural locations (Faculty of Medicine, 2011). There are also modules such as bioethics and clinical pharmacology taught by lectures and tutorials throughout years four and five (Faculty of Medicine, 2011). At
Otago, there is another option of study in year five. The Rural Medical Immersion Programme (RMIP) is a limited entry programme that medical students can apply for towards the end of their fourth year. Students in the RMIP are placed in a rural community hospital and learn in tandem with the established medical programme for one year (Rural Medical Immersion Programme, 2013). This programme uses an apprenticeship model with self-directed and case based learning at its core (Rural Medical Immersion Programme, 2013). None of the trainee intern participants in this research had been through the RMIP programme.

The sixth year or trainee intern year uses an apprenticeship model of learning with the students based predominantly in clinical environments. A highlight of the trainee intern year is the 12-week off campus elective. The elective provides the trainee interns with opportunities to gain further experience in a specific area of interest (Faculty of Medicine, 2011).

In the School of Medicine at the University of Auckland, during the first two years of study in the medical degree, students engage with basic medical and health sciences along with both the clinical areas of medical practice (Faculty of Medicine and Health Sciences, 2013). In years four, five and six, similar to Otago, students undertake attachments in general practice and teaching hospitals in a variety of disciplines. Students can apply to study in a rural-regional programme in year five (Faculty of Medicine and Health Sciences, 2013). This is a year-long programme located in Whangarei and with smaller rural areas in Northland. The urban programme in year five is where students undertake study in a certain region at various locations in the Mid-North Island (Faculty of Medicine and Health Sciences, 2013). In the last year, year six, similar to Otago students, an eight week elective is taken in an area the student chooses. During years four, five and six, students are required to undertake a year of study outside the area of Auckland (Faculty of Medicine and Health Sciences, 2013).

**Trainee Interns**

**Theme 1: The Discipline of General Practice**

This theme explores the perceptions (understandings, beliefs and knowledge) that trainee interns have about general practice as a medical discipline and profession and what it is that general practitioners do. Several sub themes relating to this broader theme of the discipline of general practice are then outlined and described. The sub themes described here are: perceptions about the role of the general practitioner; that general practice involves the
unremarkable in terms of presenting complaints and in terms of overall practice; the relaxed lifestyle perceived to be associated with general practice; the type of patients seen in general practice and the knowledge students have about the vocational training involved in general practice. At the end of each sub-theme, perceptions about the discipline of surgery and being a surgeon are presented as a comparison. The summary at the end of each theme will detail perceptions that were similar among second year medical students and trainee interns, and then outline either differences and/or additional views what were perceived by the trainee interns.

1.1 The Role of the General Practitioner

Trainee interns expressed their views about the overall role of the general practitioner and what is involved in the discipline. The quotation below illustrates a common perception among this group that general practice is the initial contact with the health system for an unwell patient. This reflects the similar perception that second year medical students had of being the first ‘port of call’ for people when sick.

Okay, so I guess the person that is the first one to address patients problems as it arises out in the community and they are not sure what to do about it, and it’s not significant enough that they feel they need to go to hospital for it, but they do want it sorted out and so I kind of - I get this impression that a GP is there to sort out problems in one way or another, whether that’s treating them with a view to curing, or figuring out when they need to go and see someone else. (29)

Often you see the patient, the same patient, quite a few times over a few years and you might also, like the GP that I was working at they had large families and saw lots of different members of the same family. The patients would come in and they would treat the acute illness or why they were coming in there, but it was - sort of the impression there was a lot more room for follow-up and for seeing the person again to chase up on other things, like rather than as opposed to an emergency department where you see someone and then that’s it. Also, the role of - I guess more of a role of monitoring illness. A lot of the patients that came in - they’d just come in for a cold, but you would check their blood pressure anyway and give them, or ask about, I guess, smoking and giving - yeah, looking at risk factors, monitoring their illness and sort of looking more at a long term effect, a long term goal, I guess, for the patients. (22)

Although trainee interns held a similar view to the second year students of general practice being the first place to go for healthcare, trainee interns were able to elaborate on the role of the general practitioner encompasses. The quotation below illustrates trainee interns viewing the general practitioner’s role as a manager. This was viewed in two ways. Firstly, trainee
interns perceived the role of the general practitioner as having an overview of a patient’s health and responsibility for managing and monitoring their conditions. It also illustrates how trainee interns perceived the prescription of medications. As with second year medical students, initially prescribing medications was seen as a significant part of the general practitioners role; however it was also seen by trainee interns as part of a continual management process of the patient’s illness.

I think it’s - I think of them as kind of more like managers than kind of - you know, they kind of manage people’s health. Whereas, you know, like in surgery for example you can fix something if there’s an acute problem, it needs fixed and you fix it. Like I think of general practitioners as more kind of managing people’s health or not even their kind of health problems, because it can be everything from Well Child checks, immunisation - you know they have more of an overview of the whole person and things that have happened to them along the way, and they manage their medications. (25)

The second way the role of the general practitioner was viewed as a manager was in an administrative context. The quotation below illustrates the filling in and sending referral forms to relevant bodies, Accident Compensation Corporation (ACC) forms and also following up on laboratory results and referral letters and completing the necessary paperwork.

I guess it would depend on GP to GP, but for example the place that I was working at would see patients, have 15 minute slots, half an hour if it was a new patient, and saw the patient, treated the acute illness, often had to send referral forms to - whether it was for an outpatient clinic or an acute referral. A lot of ACC forms were being filled out and then just general paper work like checking lab results…so their main thing was seeing the patients, and following up their own patients, following up lab results, following up referrals, and doing their own paper work. (22)

Another view which was prominent among trainee interns was that general practice involves ‘primary triage’. So, as well as seeing day-to-day problems, the role of the general practitioner was viewed as a ‘gatekeeper’ to the secondary health system. Thus, as a general practitioner one ‘triages’, or determine the priority of a patient’s illness depending on the severity, in order to gain access to the secondary health system.

I guess broadly speaking we kind of think of it as - there is a bit of a buzz word ‘primary triage’ in a sense. You are out in the community and you - I suppose in terms of answering the question, as a GP you are seeing people on the front line day-to-day problem, not so much the acute problems much. I think you - so, in that sense we can give it like primary triage so you are kind of - you are seeing all the people,
and in a way you are the gatekeeper of the secondary health system.
Yeah, I guess that’s what it’s like roughly. (37)

In the first quotation below, trainee interns offered a similar view to second year medical students that general practice involved developing and building relationships with both individual patients and families. The second quotation emphasises involvement in working with families, in particular Māori families. It also reiterates the perception that the general practitioner’s role involves monitoring patients’ illnesses.

But if you are the type of person who enjoys having patients - you know, the same patients for your whole career, enjoy the relationships that you build with your patients, maybe look after their families. (23)

I guess working more with the families. Like, I saw a lot of - yeah, because it was a very family based practice, it had a very large - it was part of a - it was an Iwi provider, it was a large Māori population, and so it had a very strong sort of family feel to it. And you definitely got the feel that you were working with families, and I haven’t had that feeling so much in other runs that I’ve done. Yeah, so I guess the role of GPs is a lot more working with families and monitoring looking at long term goals. (22)

Additionally, the following quotation compares the relationship aspect involved in general practice with that of the hospital setting. This comment from a TI interviewee implies that maintaining a relationship with a patient is difficult. The perception here expressed is that in the hospital setting this will not be a problem due to the transient nature of hospital patients. However, within general practice, relationship maintenance requires greater attention because of the continuity of care implicit in the role of the general practitioner. Hence, in this instance, the general practitioner has to see difficult patients on a regular basis, because general practitioners are providing continuity of care. Also of interest here are the difficulties related to the relationships and communicative aspects of the consultation, specifically in regard to patients perceived as difficult.

I think the difference between when you see people in the hospital and when you see people in GP, if there’s people you don’t get on with - really, if you’re in the hospital you will probably never see them again. Whereas in general practice, if you have a client, a patient, that just pushes your buttons or whatever, you know, and a lot of them are people - they might have psych problems as well, and they are really really draining, and they come in every few days, or every week, because there was some people in my - which only ended up being a three week placement, some people I’d met three or four times by the time I left. And once they’re your patient, they’re kind of your patient. (25)
Below, trainee interns offer perspectives on the general practitioner’s role in disease prevention and public health, including healthcare checks for diabetes, cervical smear and also Well Child checks and immunisations for young children. It also expresses the view that the general practitioner’s role includes health promotion, along with helping with the dissemination of particular public health messages. This quotation also illustrates a view that general practitioners might be involved in health policy but this was not elaborated on.

It's not just a sort of see and treat list in front of them, it’s also about doing some of the health promotion stuff and sort of long term disease control, dealing with, you know, checking blood pressure, checking if they have diabetes, sort of all that preventive type stuff, as well as dealing with the colds that come in or the flues that come in. Also roles in vaccinations and Well Child checks in kids and things like that, and healthcare checks for diabetes. There is quite a varied role there… and yeah, they also do things like cervical smears and things like that. I mean, there’s also the, I guess, public health - some GPs are quite involved in political things and, yeah, sort of getting public health messages out there, although that’s probably not every GP is involved in that. (39)

Trainee interns, as with second year medical students, considered the general practitioner’s role in making referrals of patients to hospital specialists. This first quotation below illustrates the view of the referral aspect of the general practitioner’s role and also highlights one of the predominant perceptions mentioned previously about the preventative aspect of the general practitioner’s role. The second excerpt portrays referrals by general practitioners to tertiary settings when they have patients with conditions that are more complex.

They see people - they are primary care, so they see people in the community and they see huge array of illnesses and they also have probably a little bit more of a role in prevention of illnesses, and they rule out serious conditions and refer on to specialists. (34)

They manage stable chronic health conditions in the community. Involved with caring concerns of patients who show up in their general practice. What else do they do? Minor procedures. Refer on more complex cases to tertiary settings. (38)

The importance of education was also commented on. Trainee interns perceived educating and giving advice to the patient is a part of the general practitioner’s role, as did the second year medical students. This view specifically highlights the importance of educating patients about lifestyle choices.

Also, I think in the sort of primary thing I think one of my big things that I would quite like to do with patients is the chance to educate people about lifestyle and choices and all those, and I think that is mainly the importance of the GP and see the only practice I was in
was quite a big - they were quite big on screening for alcohol and smoking and all those things. (31)

Types of conditions seen by general practitioners in their role were described by trainee interns. As with second year students, trainee interns perceived general practice to be involved with a variety of illnesses. As the first two quotations illustrate, working with chronic and psychiatric conditions were perceived as part of the general practitioners role along with worried patients, a similar view expressed by second year medical students.

I quite like the psych side of things, if I wasn’t going to do public health then I’d do psychiatry. And if I was going to not do either of those things then I’d probably consider some kind general practice, psychiatry flavour, because I don’t think it’s done very well and I think - I think it would be quite rewarding to do in community psych type stuff. I mean, I enjoyed seeing patients and listening to them, and I don’t - I mean, my clinical knowledge isn’t fantastic, but I think that sitting and nodding and listening probably is quite therapeutic, and I wouldn’t mind doing a bit of that, but not forever. (24)

I guess coughs and colds like I said earlier, there was quite a lot of musculoskeletal injuries, chronic pain issues that were sort of being managed but hadn’t ever had a clear diagnosis made and these are the sorts of people that didn’t have any worrying features to their symptoms, and so they hadn’t been referred for anything, they had done the specialists tests for them, they were just kind of being patched up over time. (29)

However, compared with the views of the second year medical students, trainee interns were more specific about the variety of conditions. Apart from the conditions mentioned above, trainee interns also viewed the role of the general practitioner as including the treatment of acute conditions. Trainee interns described their experiences on a rural general practice placement as illustrated in the first quotation. The role involves working with acute scenarios such as suturing and attending traffic accidents. The second quotation illustrates further acute conditions such as cardiac and neurological problems.

Well, I was in a rural GP, which is what I think of what they do, and I really liked that mix of managing patients well, you know, dealing with chronic medical conditions and keeping people well and dealing with little issues that crop up before they become to ‘well, I need an admission’ kind of thing, so then when you are in rural you also get a little bit of emergency medicine, you know, a little bit of suturing, a little bit of attending, road traffic accident, and that sort of thing so you kind of keep your hand in some of that sort of itching skin lesions, that sort of thing. (33)

Then this year it was kind of more kind of an accident and medical type centre, so quite a lot of ACC - like, minor ACC stuff, but then also like acute - like ambulance would bring acute heart patients
and/or neurological patients, immigration medical type stuff, but then GP type stuff as well, like heaps of upper respiratory stuff and feverish kids and, yeah, I think this year I got quite a wide experience. (27)

Further areas of dermatology, musculoskeletal medicine, respiratory medicine and child health are described below along with sexual and women’s health. Although trainee interns articulated a greater variety of conditions, the third quotation demonstrates a continued perception that general practice predominantly involves seeing viral illnesses.

Skin infections, broken bones, pneumonias, lots of pneumonias in winter, bronchitis, COPD, young baby checks. I mean, not that the midwife hasn’t done it right, it's just that the midwife has concerns that come in. (32)

Well, you see psych stuff, minor surgeries, lots of basic ENT [Ear, Nose and Throat] and ophthalmology, like conjunctivitis, otitis media and stuff like that, headaches, back pain - oh, what else have I seen? Contraception, yeah, smears, yeah, women going through menopause. What else was there? What have I done? Yeah, you see kids. No, that’s like - I can’t think of anything else that I - but just like - oh, dermatology, I am just trying to think of what’ I’ve done - yeah, all sorts of stuff. (36)

I think I thought that GPs saw lots of sore throats and immunisations, and I think that I still think they do. And, I suppose, the correct answer would be to say that, no, I’ve got to a much greater understanding of how GPs deal with a multitude of complex medical problems in the community, and they do. But my overall impression is still that you see hundreds of viral illnesses every day. (24)

As well as expanding further on the variety of conditions seen by doctors as compared with second year medical students, trainee interns considered that the general practitioner occupies a more expanded role. This was expressed by trainee interns when discussing rural general practice. The first excerpt reflects the view that within rural general practice rare conditions can be seen because there may not be any readily accessible specialist services available. The next quotation shows trainee interns’ view of the general practitioner having a role in rural hospital settings such as outpatients and casualty settings.

You just tend - when you are in a rural centre you just tend to see sort of rarer things first in a GP setting up there, because they don’t necessarily have the specialist services to refer to. (36)

And in some small rural centres in New Zealand GPs also have a role in the hospital, in small GP run hospitals and taking care of some outpatients, and doing some sort of casualty type stuff. Most GPs have facilities so if someone comes in with a cut hand they can suture that up and things like that. (39)
Trainee interns commented that certain scopes of practice have been taken away from the discipline of general practice. There seemed to be a dominant perception expressed by trainee interns about the withdrawing of obstetric care from the role of the general practice. The excerpt below illustrates this view along with the perception that this is a strong deterrent for them doing general practice.

I wish they would let more GPs do obstetric care. I would be really up for that. If the pendulum swings that way that could be my ideal situation. I had a second thought about why I wouldn’t do O&G and that is tension potentially between midwives and obstetricians, and in the way things are set at the moment that there is a strong deterrent for me doing that, but maybe if the pendulum swayed a bit more so it was a collaborative thing with some GP input in the care then that could be - yeah. (38)

Next, trainee interns consider the scope of practice of the general practitioner to involve two aspects. Here, the trainee intern perceives the expansion of the scope of practice for rural general practitioners in Australia; and also illustrates that a downside of general practice in New Zealand is that general practitioners no longer do maternity care and obstetrics.

Although, again, rural general practice appeals to me because that’s sort of quite - I know in Australia that they have sort of expanded the scope of practice a little bit of what a GPs do when they are rural GPs in terms of practice - things about obstetrics. It frustrates me that obstetrics and maternity care is no longer part of general practice, because that is quite an interest to me and it would have been quite nice to be a GP who was also a GP obstetrician and helped with that side of things but it has been taken away in New Zealand, that’s [the] midwives role and GPs have pretty much been cut out of that completely. So, that’s a downside. (39)

Finally, the last quotation demonstrates two things. First, it shows the reduction in scopes of practice of obstetric and maternity care. Second, it suggests that minor surgeries performed by general practitioners are also being removed from the role of the general practitioner. This is disappointing to the trainee intern as these scopes are perceived as enjoyable and attractive tasks that they want to do, but the opportunity to do so is ‘diminishing over time’.

I guess some of the interventions that GPs in the past have done, you know, like minor surgery in their practices, and like the old GPs who used to practice obstetrics and what have you, a lot of that has been withdrawn from general practice as well, and that kind of disappoints me as well because I see that as something I would quite enjoy doing, but yet the opportunity to do so is possibly diminishing over time. (29)
The business side of the discipline of general practice was commented on by trainee interns. The below excerpt typifies trainee interns’ descriptions of the business aspect to being a general practitioner. Here the trainee intern suggests that managing a general practice business is unattractive. An example given in relation to the business facet of general practice was meetings about bad debtors and not wanting to be ‘tied up’ with bureaucracy. This trainee intern also commented on what this is like compared with the hospital environment – where the doctor’s role is perceived to be devoid of concerns with the costs surrounding healthcare.

I think if you had a good practice - and I think - like, when I was in my younger years, I always thought I didn’t want to do general practice because I want to be a doctor not a business manager, but I’ve talked to people about that and they’ve said, “no, you just get a practice manager to do all that side of things”. But even in the practices I’ve been they have meetings and they talk about bad debtors and, you know, blah blah blah. Whereas in the hospital you don’t have to think about that, and I like not having to think about those issues, and I like not having to think how much stuff costs, which sounds terrible, but, you know, or someone is a bad debtor are you going to see them next time they rock up at your practice, you know. I don’t like thinking about that business type things. I don’t want to get tied up in the bureaucracy, which I think you could do in general practice. (25)

1.2 The Role of Surgery

As with second year medical students, trainee interns discussed their perceptions about the discipline of surgery. Trainee interns frequently addressed the role of the surgeon; the quotation below illustrates the view that the surgeon’s role involves assessing patients who have been referred to them with a surgical problem and deciding if the patient is suitable to be operated on or not.

Okay, so, I guess really most surgeons within the public system my feeling is that they - patients have to be referred to them of course with a surgical problem. So, it’s kind of - it’s already been determined that that patient is suitable to be seen by a surgeon. It’s not like they are picking and choosing who they should be seeing kind of thing. So, in that respect their scope on the patients they see is, of course, limited just to surgical patients really. I guess, they see people, either in the clinics or acutely, and I guess one of the core things that I see with regard to surgeons “Is this person going to need an operation or not?” That’s the kind of question they basically have to ask themselves. (29)
The extract below illustrates the different aspects of working in the role of the surgeon. The trainee intern describes the work involving ward rounds of patients, performing the surgeries in theatre, working on acute cases, checking on the patient post-operatively and attending to patients at clinics.

I suppose the structure - it depends if you have on-call, and I suppose that is the same as GPs, but usually it’s a ward round in the morning if you are on surgery, you know, between half an hour and an hour, and then it might be straight to theatre if there is a list on or if there is an acute list you might spend the whole day in theatre and then come back to the ward and check on the patient, or it might be a clinic in the morning and then theatre in the afternoon. So, it’s quite varied depending on the day of the week and who is on-call. (37)

As with second year students, trainee interns perceived surgery to involve less interaction and involvement with patients. Below, the trainee intern describes the amount of patient interaction to be minimal.

There is a - as I perceive it - a minimal amount of patient interaction, you know, your junior staff predominantly identify the problems and work the patients up. Though sometimes if its complicated you’d be called in - and then you see a patient quite briefly in clinics, which again is sort of triaging whether or not this patient is good to be actually operated on. (33)

This next excerpt illustrates a dominant perception held by trainee interns about the surgeon’s role: to do things and to fix things. In this quotation, the trainee intern discusses surgery, and the rewarding feeling of having the ability to operate on a patient (in this case referring to a stenosis in a major artery) and then having the patient walk around the next day with no problems. This is in contrast to the continual management of chronic conditions, which cannot be instantly fixed, often seen in general practice.

I’m absolutely interested in surgery, that’s definitely for me. I like surgery because I like operations. I find it very interesting for me cutting up people and do this and do that. More rewarding for me. And getting the patient fixed and then in five days down the road, and then if someone had a stenosis of the artery and you fix it, and the next day they can walk, there’s no occlusion in the legs, so I thought it was a quick fix. (30)

1.3 The Unremarkable

Similar to second year medical students, trainee interns also perceived some of the types of conditions and work encountered in the discipline of general practice as boring, unexciting and mundane. In the following quotation the trainee intern suggests that seeing children with
coughs and colds would be boring and that other fields of medicine are where acute exciting conditions or other exciting things occur. It is interesting to note that this student makes a distinction between ‘acute excitement’ and ‘excitement’, suggesting that there are other exciting things to be seen which are not acute conditions.

But, you know, on my general practice run I saw a lot of kids with colds, which was fine while I was doing it, but I imagine some people could get a bit sort of fed up with that, and not having - I mean… I imagine some people could find it a bit - yeah, maybe they might find it a boring, and might prefer to be somewhere where there is more sort of acute excitement or excitement going on. (22)

This next quotation reiterates the perception of what is involved in the discipline of general practice regarding being boring and unexciting. Additionally, it highlights the perception that ‘interesting patients’ and ‘exciting stuff’ is something that ‘other’ doctors do, but not general practitioners.

Just when I have like weighed it up, just the worry is that I will get bored with it, or that it won’t be exciting enough, or that you will just get sick of sending interesting patients off to other doctors for them to do all the exciting stuff. (27)

The following quotation shows the trainee intern specifying mundane events associated with the discipline of general practice. The events described are parents bringing in their children with a possible ear infection along with ‘worried well’ patients – patients coming to see the general practitioner to check if they are sick or not.

STUDENT: If I have to see like one more kid who’s parents have brought them in with a sore ear, like I just like - it’s just a real - like, the mundane real like - or like the worried well coming in just to check that they’re not, you know, that they’re not too sick, or like, you know, all that kind of stuff that you just - you talk to them and you are just like uuhhhhh…yeah. Like, I’d really want something interesting in amongst that to be able to keep me going. (36)

The next excerpt reiterates the perception about the presentation of coughs and colds and the ‘worried well’ in general practice. However, it also illustrates further aspects of the perception of the discipline of general practice regarding ‘menial’ things such as prescriptions, ACC forms and medical certificates. This trainee intern expressed a view of this as frustrating and not related to ‘clinical medicine’, perceiving the role of the general practitioner as a ‘social manager’ of patients.
What I have seen a lot of in my experiences with general practice is people coming with just simply coughs and colds and worried that they are quite sick and often they just need some reassurance that they will make it through these sorts of things. I have seen lots of other, I guess, people just needing quite sort of menial things sorted out like new prescriptions for things, or they need ACC forms filled out, or they need a medical certificate for the work place or something like that - which I found those things to be quite frustrating because they are not encouraging you to think about, I guess, clinical medicine so much as more sort of social manager type of thing. (29)

Lastly, this quotation illustrates trainee interns’ perceptions of chronic care afforded to general practice as uninspiring. The perspective suggests that because of the amount of chronic care general practitioners’ are not making a ‘new’ diagnosis, changing the course of someone’s illness for the better and therefore, are not ‘getting anywhere’ with patients.

I guess a little bit of what deters me is that there is so much chronic care goes on in the community now, a lot of which is managed by GPs and I find it quite unstimulating I suppose - that’s not a very good word - but because you are not really making a new diagnoses or making a really - like a pronounced change in the person’s illness each time you see them I kind of get this feeling you just don’t feel like you are getting anywhere with people to a certain extent. (29)

1.4 The Remarkable – Surgery

In contrast to trainee interns’ description of general practice, the first two quotations below indicate that surgery is perceived to be glamorous and exciting. This was a similar view held by second year medical students. In particular, the second quotation illustrates the view that to fix a patient physically is very satisfying when compared with giving medicine in a chronic health context.

Yeah, it’s surgery a lot more glam than prescribing antibiotics for community acquired pneumonia. (24)

Like, this blood vessel goes and services this part and this blood vessel services this part, and if you do this then its kind of a little bit logical and there is an air of excitement to it. I’ve heard someone say that they enjoy it because unlike chronic health conditions where you give people medicines and they kind of amble along, you are kind of fixing it in most situations, and the ability to do something, sort someone out, kind of is satisfying in the context of surgery, I guess. (38)

Trainee interns also frequently suggested that surgery involves more decision-making in the context of life threatening conditions and was more significant than other types of medical interventions. The view, shared by second year students that surgery is perceived to be more
about life and death situations, was continued by trainee interns, with the last quotation discussing lifesaving paediatric surgery.

I guess because they often tend to have sicker patients and so the decisions they are having to make are more life threatening kind of thing. I guess the interventions they are doing are more significant than most other sort of medical interventions, you might say. (29)

Like, in vascular surgery the interesting thing is you do a lot of transplants. I find that quite rewarding just to do that. Paediatric obviously you - I will say most of the lifesaving operations are actually in paediatric surgery because you know when something severe occurs you fix that and then they live the next 50 years because you fixed them when they were young. You do not fix it, then they die. (30)

1.5 Lifestyle

Just as with second year medical students, trainee interns also discussed lifestyle issues associated with the discipline of general practice. Trainee interns had similar views about: the working hours of the general practitioner; the demands of the discipline; owning one’s own practice; ability to travel; and the family life and involvement connected with general practice. The quotation below illustrates that rural general practice is where one can enjoy some outdoor leisure pursuits. It also suggests that, the discipline of general practice is ‘cruiser’ than working in the hospital, choosing one’s own hours of working and taking time away from the job when needed. The thought of being self-employed in this case was considered in a positive light.

I’ve been talking with my friends, we think it’s about the nature of the work and where they are at life, and the whole lifestyle factor again. You know, I’ve got friends who are wanting to go off somewhere rural and get - you know, a practice, and being able to enjoy the mountains and the outdoorsy stuff at the same time while doing their work. Other people just think it’s a lot cruiser than being in the hospital system, you know, you be your own boss, you choose your hours, you get to spend time with the family, get time off whenever you want. Whereas in the hospital it’s a lot more rigid effects. You can get leave, but, you know, it’s all fixed and you have all these meetings to go to that you won’t as a GP. Just things like that. (32)

The quotation below illustrates the perception held by many of the trainee interns of general practice being a flexible discipline when compared with being a specialist. The discipline of general practice was also viewed as an area of medicine that was easy to practice overseas.
A lot of them want to travel, do medicine overseas, and I think part of being a GP is more flexibility and being able to do that versus being a specialist. (20)

Different areas of medicine including general practice were viewed as attractive and described as ‘lifestyle jobs’. In this particular quotation, the notion of a ‘lifestyle job’ refers to a family friendly vocation.

Well, there’s quite a - I can sort of rule out areas that I am not interested in more than I can rule in areas. I am not interested in internal medicine. I am not interested in general surgery. I am not interested in radiology. I am not interested in ophthalmology. I wouldn’t mind doing psychiatry, O&G, GP, stuff like that, anaesthetics, and the reason why is because I am basically looking for lifestyle jobs because I want to have kids. (36)

This last quotation illustrates the perspective that general practice is a discipline in which you can work variable hours, part-time or full-time, and is a discipline that has flexibility. Because of this, it is attractive for having children, or in the particular case below, extending the family they already have.

I think the interesting thing is that - well, I’ve always wanted to do it because I kind of - I like the fact that GPs work in the community and they are kind of at that level, and I don’t really love the hospital system, which is another big factor. The biggest factor probably is that I have got a wee daughter and I want to have a bigger family so in terms of lifestyle choice I’m definitely keen to kind of work through part-time and then hopefully full-time in the future. So, yeah, that flexibility attracts me. (37)

1.6 Lifestyle – Surgery

Trainee interns expressed views regarding the lifestyle that they perceived was associated with the discipline of surgery. This included areas of family, hours of work, level of stress and commitment to the role. Having to delay a family is illustrated in the first quotation while the second quotation suggests having a family and being involved with that family are difficult in the discipline of surgery.

Being prepared to put off having a family for possibly years. It’s not essential but a lot of people do that. (27)

STUDENT: Yeah, I found it [surgery attachment] really busy and really hands on and you get to do like assists in surgery and do a lot of fun stuff, which I enjoy, but I couldn’t see myself doing it forever.
KELBY: Any particular reason why?

STUDENT: I would like to have children and see them occasionally. (33)

The following three excerpts portray trainee interns’ perceptions about working hours, stress in the job and work intensity. First, it shows that trainee interns perceive that surgeons work longer hours and do not have regular working days. Second, the trainee interns perceive that surgery is more stressful than general practice. The third excerpt reiterates the view of long hours associated with the discipline of surgery. It also demonstrates the perception that surgery as a discipline expects surgeons’ to work hard, often without recognition. For these interviewees, this appears to be a cultural norm in the discipline of surgery.

I guess hours, definitely the hours. You work longer hours and more hours. You never go home on time. (32)

I have to say they are a lot more stressful. The expectations were higher than GP in terms of the hours you would put in, what sort of knowledge you would have, how you will interact with the patient. (39)

I think you are expected to work long hours, and to be very dedicated and to do whatever is necessary, so kind of doing - being at the hospital from eight in the morning until 11 at night is expected, so that is not something that - yeah, I guess you have to work a lot harder, and it’s not - yeah. I think that you just have to work really really hard, and that that’s not recognised, that is just expected. (34)

The quotation below illustrates the trainee intern’s view of the discipline of surgery as an all consuming entity which defines and becomes the doctor’s life. This contrasts to general practice, where trainee interns suggest it is possible to separate the role of the self as a general practitioner from the self as a person who is interested in and does other activities. The general practitioner can have ‘another life’.

I would feel that being a surgeon your career is much more - it’s all consuming in a way. It becomes your life in some respect. You are a surgeon. It’s kind of your life in a lot of ways, and you are much more defined by your career, whereas if you are a general practitioner I feel as though that is not so defining of your life. You know, you are a GP during work hours and things, but the rest of your life you’re just another person, I guess, and you’ve got another life and you do other things. Whereas, I think we kind of get the impression that surgeons it’s kind of your life. It’s all consuming. (21)
1.7 Patients

The types of patients seen by general practitioners were described by trainee interns. As with second year medical students, trainee interns perceived the type of patients in two ways. Initially, the view was portrayed that in general practice one sees a variety of patients, from babies to elderly patients, and all people in between. This view was also similar to that held by second year students.

Well, you see from babies, right through to older people and, I mean, even GPs sort of look after people in rest homes and things as well. (36)

I used to see all sorts. Yeah, so - I mean, ranged through from children, paediatrics, right from six week baby checks right through till elderly palliative care patients as well, and everyone between. (37)

The second way is the types of patients attended to were viewed as specific to the practice the trainee intern was attached with at the time. The excerpt below from this trainee intern shows the patients seen were young girls for sexual health checks as well as older women. The trainee intern attributes this to the practice where they were situated, which was being run by female general practitioners. The trainee intern also offers the view that apart from seeing young girls and older women specifically, they saw a lot of elderly people with multiple co-morbidities generally.

Whereas the practice I was in this year was a predominantly - well, it was run by females, and I got to do like a couple of young girls, 15/16, complete sexual health checks. Lots of older women who were having womanly problems at the other end of the spectrum were coming in. I think I might have only seen two guys in my whole time there. There were - I didn’t see - although I think it is a bit of a family practice and that’s going to be dependent on what the weather is like at the moment, the majority of the people I saw recently were older people with multiple, multiple co-morbidities and it was just this huge management plan for each person. (25)

1.8 Patients – Surgery

As with second year medical students, trainee interns did not talk extensively about the type of patients that were seen in the discipline of surgery. However, from the views offered, with the exception of paediatric surgery, trainee interns perceived that the patients seen were generally older people.
Surgery tends to be, it does need to be more complex or more - sort of stuff carries on for a while, and usually older. I found most people I have seen were sort of sixth decade onwards, handful of 30 or 40 year olds who were just had really nasty cancers, but generally older. (31)

1.9 Knowledge of General Practice Vocational Training

Perceptions about the postgraduate training involved in general practice were also offered by trainee interns. A view was expressed that the training in general practice is easy because the programme is a two-year training programme (where in fact it is a three-year programme). The second quotation demonstrates the view that the training in general practice is a ‘softer option’ and you don’t have to do as much training compared with other areas of medicine.

It just sort of seems easy in a way because it’s only a two year training programme. (36)

If you can say that you’re an orthopaedic surgeon, people are like “oh, yeah”, whereas if you are a GP they’re like “oh, yeah, so you didn’t want to do any extra training, you went straight into general practice”, yeah, I think general practitioners are seen by sort of students, especially at the start of your - the training as a sort of a softer option. You don’t have to do as much training. (28)

This last quotation is that of a trainee intern discussing their understanding about general practice training when they first started medical school. The view here is that once you graduated from medical school, you automatically became a general practitioner. If you wanted to specialise in another area, you then continued onto to study in that particular area.

I was going to say about my perception of general practice when I first started was that - because when we really had no idea about how the system in training worked, and so it wasn’t just my perception, it was everyone’s. It was that you graduate with a degree and then you kind of become a general practitioner, just like that’s the bare minimum and like you specialise on top of that. And I know that lots of other people thought that, so I think that’s quite widespread really in my class. (27)

Although the above illustrate the predominant view regarding knowledge about the general practice postgraduate training programme, there was also a competing view that in order to be a general practitioner you spend a longer time training. Specifically, two years as a house surgeon (junior doctor, known as postgraduate years1 and 2 or PGY1 and PGY2) and then a further three years vocational training in the General Practitioners Training Programme or GPEP (The Royal New Zealand College of General Practitioners, 2014b).
Then there will be like “oh, so you are a GP now?”, and I’m like, “well, a GP takes like five extra, you know, couple of years as a junior doctor in a hospital, plus three years of training at the very minimum to be a GP after graduating. (39)

1.10 Knowledge of Surgical Vocational Training

Trainee interns also commented on surgical vocational training. It was perceived that the postgraduate training in surgery can take a long time, that the course is highly competitive, it is hard to gain entry to and is very stressful.

I think the earliest you can apply is after first year house surgeon, and depending on what kind of surgery you want to get into its five, six, seven years. (23)

I haven’t looked into the training programmes that much, but I hear that it’s hard to get into. It’s quite competitive, and it seems to be quite a long course with long hours, and speaking to some of the registrars that are on the training programme at the moment, they’re just not really enjoying it and they are finding it quite stressful and no sort of flexibility at all. (22)

Furthermore, it was perceived by trainee interns that the vocational training in surgery prohibits women entering a surgical discipline as it is not flexible for women who are thinking about having a family, especially for older females.

There is also the training aspect which precludes a lot of women from the training scheme. Well, I think it’s probably quite difficult - you know, it’s an intense training scheme and it’s quite difficult for women to - who have want to have a family, say, or you know, because most people that come out of medical school, especially if you are an older student, they will have a certain amount of time to have kids, right? And I think that - there is a lot of women that as soon as they finish medical school, they think about settling down and having kids and they exclude them from surgery. (20)

Summary

Trainee interns perceived the discipline of general practice in certain ways. Similar to second year medical students, trainee interns viewed general practitioner as the patient’s point of access into the healthcare system alongside a context where building relationships with patients and families occur through the provision of continuity of care. Trainee interns also expressed views analogous to second year medical students about the general practitioner role. These involved referring patients to specialists, prescribing medications and educating
patients about lifestyle choices. Trainee interns viewed the role of the general practitioner as seeing chronic and psychiatric conditions along with ‘worried well’ patients.

Apart from what is described above, trainee interns elaborated on the discipline of general practice using their experience in rural and urban general practice placements. In addition to being the first point of access to healthcare, trainee interns viewed general practice as the gatekeeper to the secondary healthcare system. A focus on disease prevention and dissemination of public health messages was another view expressed about the discipline of general practice. Trainee interns also perceived the role of the general practitioner to be a manager, involving a range of tasks including, monitoring people’s health to working in the administrative context checking lab results and filling in ACC forms. Relationships with patients in general practice were viewed differently than with patients in the hospital. Due to the continuity of care associated with general practice, some trainee interns viewed this as problematic if you had a patient who was seen as difficult, whereas in hospital medicine this was not perceived as an issue due to the transient nature of patients. It was the relationship and communication aspects of the consultation were perceived as ‘difficult’ in this context.

The types of conditions seen in general practice were then expanded on by trainee interns. They perceived acute conditions and injuries to be part of general practice and also a variety of conditions including respiratory medicine and sexual and women’s health, among many others. Trainee interns viewed an expanded role for general practitioners that included working in rural general practice but also having a role to play working in rural hospitals. Furthermore, trainee interns perceived particular scopes of practice, previously held by general practice being withdrawn in New Zealand. Specifically mentioned was obstetric care and minor surgeries. Comparatively, they considered that in Australia the rural general practice scope of practice had expanded.

In addition, trainee interns, along with second year medical students, perceived some of the conditions and work encountered in general practice as boring, unexciting and mundane. Trainee interns commented on certain menial areas of general practice: ACC forms and medical certificates for example that were viewed as irrelevant to clinical medicine. Trainee interns also perceived that the interesting patients and the exciting aspects of medicine are something that specialists do, not general practitioners. Moreover, the chronic care associated with general practice was perceived to be uninspiring, as there was no ability to change the course of an illness, or to make new diagnosis.
The views concerning lifestyle expressed by trainee interns were akin to those expressed by second year medical students. The lifestyle afforded to general practice was perceived to be predictable working hours, a discipline that is flexible (straightforward to travel and work overseas with), and compatible with starting a family, along with being less busy compared with working in the hospital.

Trainee interns considered general practice to involve a variety of patients of all ages; a similar view held by second year medical students. They also suggested the types of patients seen were specific to the type of practice visited (e.g., female general practitioners seeing many young and elderly women in their practice). The perceived knowledge of general practice vocational training by trainee interns was varied. There was some confusion over what training was required in order to work as a general practitioner.

Similar to second year medical students, trainee interns viewed the role of surgery to examine patients referred to them with a specific problem. Additionally, the role of surgery was seen as providing less opportunity for interaction with patients then general practice. Trainee interns expressed further views about the role of surgery. They expanded on their perceptions of the activities of the role of the surgeon to include, ward rounds, pre and post-operative care and included both acute and non-acute surgeries as well as time spent by surgeons in clinics assessing patients. The role of surgery was viewed by trainee interns to directly fix the problem or condition that was concerning for the patient. Trainee interns viewed the role of the surgeon as a glamorous role which was satisfying due to the immediacy of being able to fix a patient’s problem. The role of the surgeon was also seen to require decisions about issues that were life threatening and to deal with situations that involved life and death.

As with second year medical students, trainee interns shared analogous perceptions about the discipline of surgery. Entering surgery was viewed as a discipline where having a family is difficult because of the stressful environment, long inflexible hours and demanding workload. Trainee interns viewed surgical patients as being predominantly elderly. Along with second year medical students, surgical training was perceived to be a highly demanding and prohibitive to women thinking of having a family.

**Theme 2: Being a General Practitioner**

This theme illustrates the views that trainee interns shared about being a general practitioner. The views included perceptions about type of person, skills and characteristics associated with
being a general practitioner. It also includes the knowledge scope associated with being a general practitioner.

2.1 Skills and Characteristics of the General Practitioner

Trainee interns commented on their perceptions of what general practitioners were like as people. General practitioners were viewed as supportive, honest and seen as ‘ordinary people’ who have studied medicine.

But I have found that they [general practitioners] are always very open and welcoming of students, and they are very supportive and, yeah, just like, you know - I would say my experience would be they are good honest kiwi people. You know, just someone you might meet in - just ordinary people I guess in a lot of ways who have done medicine, very down to earth. (21)

The quotation below suggests that a general practitioner should be a ‘people person’, one who has patience and conveys empathy with their patients. The preceding quotation also illustrates this in such a way that if a doctor had difficulty in relating with people, or found it boring, then being a general practitioner would be an unwise career choice.

It’s actually what I wanted to do [general practice], so I guess it’s something I’ve thought about quite a bit. I think you need to be a people type person, but I think you need to have more of an empathy with people and more patience with people because you are going to see the same people present over and over again, and you don’t necessarily like all your patients, so that’s the way it is I suppose. (37)

I think you have got to want to spend the time with people. If you find people frustrating or if you find difficulty having conversations with people for example, or you are getting bored of people, then it might not really be a good profession for you seeing people day in, day out. That’s what I meant, yeah. I mean, you can be a bad GP if you don’t do the listening and talking well, and communicating well, like PDS sort of stuff. (38)

The following quotation suggests that being empathic, or putting oneself in the patient’s shoes, and also patient, because general practitioners work with chronic illness, are particular qualities associated with being a general practitioner. It also illustrates the need to communicate well with patients, and also to communicate well with other doctors, in particular those that the general practitioner refers to the hospital.

I think you need quite a lot of people skills, like - and a lot of being able to relate to people. Like, you know how to take it from their point of view. So, being able to put yourselves in their shoes. A lot
of patience because things in general practice tend to take time, like especially when you are dealing with a chronic illness and that, you need to be quite patient. You would have to have - I don’t know - you have to have an interest in a lot of areas, so that you - maybe you might have a small bit of knowledge about a lot of things, but you have got to be able to find that knowledge if you need it. I think you have to be a little bit cunning as well, because being able to refer on in a way that the people getting the referral letter will say, “oh, yeah, actually I will take this patient”, yeah, yeah. (28)

Trainee interns elaborated on ‘good’ communication. This included, explaining management plans to patients so they understand it and having good intuition in order to focus and home in on what is important for that particular patient.

Yes, I think you need to be a good communicator because you don’t have a lot of time to explain to what patients what the plan is and make sure that they are going to follow it and use it, you know, give them the pills, you have to make sure they know how to take them themselves. And I think you need to be intuitive, you know, because you can’t ask every single question. You need to be able to identify what’s important and, you know, be able to hone [sic] in on it quite quickly. (33)

Here, a trainee intern discusses the difficulty of trying to work out what is wrong with a patient whilst trying to converse with a patient at the same time. Multitasking skills such being able to reason clinically through a patient’s condition, explaining it to the patient so they understand, and all while performing competently were identified as being part of the general practitioner’s skill set. It also illustrates the important skill associated with reassuring particular patients. The trainee intern gives the example of reassuring a parent who has brought in a sick child with a viral illness.

Even I found some people were really hard to talk to and figure things out. And there is a lot of stuff that comes in and you think I’ve never seen this before, never had to deal with it in this way, and there’s a lot of thinking on your feet and having to explain it to people whilst not looking like you have got no idea what you are doing. And certainly the ability to reassure people. I know I spent a lot of time talking to mothers of children with coughs and colds and saying, “it’s just a virus, we are not giving antibiotics, we don’t need to”, and a lot of them they come and they want drugs. And trying to explain that without aggravating them. (31)

As seen below, trainee interns also perceived the ability to be able to recognise serious illnesses and situations. This trainee intern considered it important to be able to acknowledge the limits of one’s knowledge and to be able to refer. The first quotation illustrates the perception that skills in minor surgeries are required of the general practitioner. The second
The quotation adds analytical and problem-solving skills to the general practitioner’s repertoire of
skills.

I think what you need to have a broad set of skills to be - like, to practice at it because I think that there is such a broader range of things that you need to be able to do. I think you need to probably have a real skill at recognising when there is something more serious that you can’t not do and need to refer on to. I think you also need to have a lot of skills in kind of minor surgery and like skills of incision of lesions and all the injections and stuff to have as a GP. (34)

I think if you don’t like working with people then it would be really hard being a GP. I think you have to have a good sense of what you know and what you don’t know so if you get stuck, or if you kind of are able to - if you are able to refer on and not to hold on to dangerous situations for too long. I think if you are really analytical and really good at internal medicine that you would be a tremendous sort of asset to a community. So, if you are really good at problem solving skills and have a really good knowledge base, you would be good at your job, but then I think that GP practice of disease gets its fair share of common conditions. (38)

Trainee interns identified other particular skills of the general practitioner. The first part of the excerpt below highlights the skills and characteristics that have been shown in earlier quotations above. The second half of this excerpt emphasises special skills that general practitioners possess. These skills, although not specifically identified, involve the doctor/patient relationship. This particular student also makes a distinction between the doctor/patient relationship of a general practitioner and that of a specialist.

I think to do it well you do have to truly be a people person, which other specialities you can get away without being a people person. But I think a GP you do really have to be a good people person, your communication has to be good, and you do have to have very good clinical skills in terms of examination and history taking, and you have to have sort of a very broad base of knowledge. But I think most - in terms of the special skills mainly centre around that doctor/patient relationship and that different kind of doctor patient relationship that GPs and their patients have. That is quite different from the relationship most specialists have with their patients, although some specialists have special patients that come in all the time, that they’ve had a lot of input with and that sort of doctor/patient relationship is probably more close to a most GP doctor/patient relationships. (39)

Lastly, the trainee interns described certain professional skills. The view below is about the importance of having the skills to be able to set boundaries, especially when working in rural areas, along with handling difficult situations well. The skills include being able to exercise ethical judgment so as to protect the interests of the public even when it means overriding the
patient’s autonomy (e.g., notifying authorities, in New Zealand this is the New Zealand Transport Agency, to prohibit a patient from driving). This particular trainee intern also articulated the view that surgeons do not need to exercise this kind of judgment.

I think one of the things that would be most useful would be boundary setting, especially if you are in a rural environment you need to, you know, where to draw the line and when to call in extra help, you know, that sort of thing, and difficult things, you know, like elderly people when you think really actually they can’t keep driving any more but you know that’s going to change their life. You know, the fact that if you are being a good doctor you do get involved with your patients and then how you keep that professional in, yeah. I think that’s not the case for surgeons. (33)

**2.2 Skills and Characteristics of the Surgeon**

When considering the characteristics and skills of the surgeon, students considered surgeons demanding and determined to the point of being obsessive. This follows in a similar vein with second year medical students who perceived surgeons to be determined and bordering on being a perfectionist.

I guess traditionally they have tended to be quite hard lined kind of people and sort of demanding almost or a bit kind of - I don’t know, like obsessive almost in the way they go about things, but to be honest I don’t know whether that’s really a good way to go about things, and I’d like to see that different in the future. Yeah, I guess that’s kind of what turned me away from it a wee bit. (29)

The following quotation illustrates a number of characteristics identified by trainee interns. In the first instance the characteristic described associated with surgeons is that of ‘big egos’. This is linked to the high status and power afforded to surgeons. The trainee intern continues by describing surgeons as predominantly male and surgery to be dominated by men. This male dominance was associated with the previous point about larger egos and gaining status, something which they imply is linked to being male.

I guess it’s not quite so tangible, but usually when I think of surgeons, there’s egos, people with bigger egos. I think a lot of people go into it for the status. I think a lot of people go into it because of the money. Yeah, status, power. Yeah, that’s probably how I would best describe my impression of surgery. Certainly the surgical runs that I have been on, most of the surgeons have been males. There’s been a couple of females. So, I think it’s more still a male dominated field. I think there’s good reason for that because the type of people they associate - you know, surgeons associate with have those qualities, maybe larger egos, have ideas of status that they want to attain. (20)
Surgeons’ temperament and approach to patients was also commented on. The perception was that surgeons were not friendly or approachable, and were also quite blunt and abrupt.

I don’t find many surgeons to be very friendly and approachable people. I also find that surgeons/patients manners are - well, they can be quite short and abrupt to their patients. (22)

There is certain method in feelings and emotions, they are certainly more hard, but I think that’s of benefit if you are going to be a surgeon because I think you do need to be quite focused frankly rather than become distracted by peoples - yeah, I think they are less focused on feelings and emotions. (34)

The physicality of surgeons was also commented on, similar to comments made by second year students. The views articulated in the three quotations below show that physical stamina is a characteristic needed by surgeons combined with motor skills and good hand-eye coordination in order to perform surgery. A certainty of knowing what one is doing as a surgeon was also viewed as a required characteristic.

Well, I mean it’s such a physically involved specialty where you do need to have physical stamina, and measuring and knowing your anatomy really well, because you are actually, you know, cutting into areas, and, yeah, sort of, I guess, just being quite certain of what you are doing as well. (35)

In terms of skills, I don’t know, I guess you need to be reasonably well coordinated with your hands, hand/eye coordination, that sort of thing, and sort of special orientation is always helpful. But, I guess, most of the skills within surgery even, and like anywhere else in medicine, you tend to learn from experience I’d say. (29)

I think you need to be - you need technical excellence - you need, you know, your fine motor skills and all that sort of thing needs to be really highly evolved. (33)

Critical thinking was seen to be a characteristic linked with being a surgeon. This involved managing situations with patients deteriorating quickly, thus making decisions and performing under pressure.

You would probably need to be very good with your hands and be quite intelligent to manage quickly deteriorating situations….nothing else comes to mind at the moment - just be a critical thinker. (38)

2.3 Knowledge of the General Practitioner

Trainee interns also contemplated the knowledge associated with being a general practitioner as did second year medical students. Along with second year medical students, trainee interns
perceived the scope of knowledge of a general practitioner to be broad across many disciplines, as compared with surgery which is about having a depth of knowledge in a specific area. This is seen in the quotation below:

General practice, you need to know a little about a lot, depending on your surgical specialty you know a lot about a little. You know. Yeah, so totally different. But I think as a person, as a doctor, you still need the same, yeah, kind of skills. You hone [sic] in on a different area. (25)

The other similarity with views of second year medical students was that trainee interns perceived that the general practitioner must consider the ‘whole picture’. In the quotation below, considering the whole picture includes accounting for patients’ families and how illness affects people. In addition, further associated areas were referred to by the trainee interns that the second year medical students did not note. In the quotation below, students commented on the type of learning associated with being a general practitioner. Here, due to the sense of isolation as a general practitioner (being ‘on your own’) to learn the knowledge and skills required, it was considered necessary for general practitioners to be self-directed learners. Because the general practitioner often does not have a practice colleague to consult with (compared with being in a hospital environment) they need to have the motivation and the skills to seek information.

I think that you need to be someone who is really motivated for self-learning, because I think in the GP practice you are all kind of on your own, and if you don’t know something, then you need to be motivated to look that up yourself, like you are not going to have someone else at the hospital to ask, so I think you have to be someone who seeks out information, and I think you do have to really like people. I think that you have to like looking at the whole picture and, you know, looking at families, looking at how people - how illness affects people, I think that - I think you would be someone who is more interested in the whole person if you were going to be a GP. (34)

2.4 Knowledge of the Surgeon

As noted previously, second year medical students and trainee interns viewed the in-depth scope of the surgeon to include knowledge of a specifically defined area, as opposed to a general practitioner who has a broad scope of knowledge. As the quotation below illustrates, there is also a view of the surgeon as having an unwavering sense that they, as a surgeon, are all-knowing and competent at all times. The trainee intern here associated this with the negative implications of the surgeon failing at the operating table.
So, to be doing operations on people you have got to be quite adamant that you know exactly what is going on and that you’re got the competence to go ahead and do the operation and not mess it up because the implications of failure, you know, have - are wide ranging, not just sort of an angry patient, but you might lose your licence, you lose all respect from your peers and what have you. (29)

The last two quotations reflect the perception of surgeons having a primacy of knowledge about the body and disease, as compared with the general practitioner, for whom the primacy of knowledge was viewed to be less disease focused.

I didn’t really enjoy it that much because they are not that interested in people, and they are more interested in the body part in fixing it and if they can’t fix it they are not that interested, you know, because they’ve only got a set amount of hours a day so they only can see the people that they know that they can fix. (34)

Sometimes it’s a little bit more focused on the disease than the patient, than some other areas of medicine are, for example general practice. (39)

2.5 Dealing with Uncertainty

Trainee interns talked about issues general practitioners may experience surrounding dealing with the problem of uncertainty in being a general practitioner. Trainee interns expressed views about uncertainty, referring to a need to be ‘comfortable’ with the broad amount of knowledge required when it is impossible to know about the area to an in-depth level.

Courage is also required in order to ‘cope’ when encountering unclear situations. The last part of the next quotation also illustrates the view of having to learn that accepting uncertainty is a necessary part of the general practitioner way of working.

Someone who is comfortable with perhaps having to learn a lot of things which means at times they perhaps don’t know things in such a good detail, and I think that takes a bit of - I guess, a bit of courage in some ways because to be able to cope with situations where you know when you are not going to know everything about what you are dealing with. You have to in some ways accept that there will be situations where because you are covering such a wide range of things you don’t know things in so much depth, so you need to accept that there will be times where things are beyond your understanding. (21)

The next quotation illustrates the difficulty the trainee intern has in being uncertain about the outcome of the patient they have been involved with treating. The trainee intern expresses the importance of having to be more ‘confident’ about being uncertain, as well as being confident that most of their patients they see will be alright. The last part of the quotation indicates that
as a general practitioner at some stage it is inevitable that they will miss something at some point in their career.

I think you would have to be a bit more confident about just watching and waiting, I suppose. I think that totally comes with experience but I still find it hard to kind of send people off on their way home. I just - I’m not really clear about what’s happening, but I think, yeah, you just have to be kind of confident that most people will be okay. If they get sicker they will come back, and you will miss someone at some point. (23)

This final quotation further examines the uncertainty involved in general practice. Here the trainee intern suggests that the general practitioner does not have the same access to resources as a hospital specialist. The example the trainee intern offers is the safety net of being able to admit a patient overnight in a hospital setting, whereas this is not available to a general practitioner. This aspect, along with the generalist breadth of clinical knowledge of general practice, creates a degree of uncertainty for the general practitioner.

I think the skills sort of do centre around relationship and also being able to deal with all the psycho social issues and tease that out and deal with all those sorts of things, and deal with things in a community setting when you don’t have all these things at your fingertips, and there’s more uncertainty in GP practice because you have got to wait longer to get tested, you can even order them up and you’ve got a refer to a specialist before you can get the test done. You know, you don’t have the luxury of saying, “well, we will admit this patient overnight to watch them”. You need to make the call of, you know, whether you are going to send them to hospital, especially when - well, you know, you’ve got to send them away, whether they’re going to stay here, so there probably is a bigger element of uncertainty, and also because you are always working at the edge of your clinical expertise and your clinical knowledge. (39)

2.6 Dealing with Certainty - the Surgeon

Trainee interns did not share any perceptions about surgeons having to deal with uncertainty at any stage. However, what was perceived was that because of the in-depth knowledge of the surgeon, they would not need to deal with uncertainty.

Whereas a specialist, probably as a surgeon, you are much more in your comfortable zone, because you do have much more limited - well, narrow but longer knowledge. Whereas, sort of wide, but short I guess in terms of the GPs scope of practice. So, that’s why I think sort of being able to deal with that uncertainty is probably another skill that GPs sort of have - specially skilled. (39)
Summary

Trainee interns perceived of being a general practitioner in particular ways, specifically in regard to certain characteristics and skills. These included being supportive, honest yet ‘ordinary’. Analogous with second year medical students, trainee interns viewed the general practitioner as being a ‘people person’ drawing on skills of patience and empathy. Excellent communication skills were attributed to the general practitioner by both second year medical students and trainee interns. Although trainee interns expanded on this aspect, which included explaining the management plan to patients well, good communication with other doctors was also deemed necessary of general practitioners. Analytical problem solving skills and ability to recognise their own limitations were also viewed to be part of the general practitioner’s skill set by second year medical students and trainee interns.

Trainee interns added further aspects they perceived to be associated with the general practitioner. These included a specific intuition that homed in on the important issues for the patient and a generic set of skills that involved the doctor/patient relationship. Trainee interns discussed skills in both multi-tasking various activities (e.g. effectively engaging with a patient while clinically reasoning through what could be wrong with this person) all while performing ‘competence’.

Professional skills around boundary setting were expressed by trainee interns (specifically in rural areas) as relating to general practitioners. Finally, being able to handle difficult situations was perceived to be part of the general practitioner’s repertoire. ‘Difficult situations’ in this case was expressed as arranging to prohibit a person from driving.

Trainee interns alongside second year medical students perceived general practitioners to have a breadth of knowledge across a variety of medical disciplines and also to consider the whole picture of a person’s illness. This included how illness affects people, with trainee interns including in this model how it affects patients’ families. Trainee interns also perceived general practitioners needing to be self-directed learners.

Trainee interns expanded on another characteristic associated with being a general practitioner, that of dealing with uncertainty. It was also viewed that the broad and limited scope of knowledge afforded to general practitioners was concerning because this creates a degree of uncertainty. This also meant that courage was needed in order to cope with practicing as a general practitioner. Additionally, the general practitioner needs to accept this uncertainty and be comfortable with the inevitability of missing a diagnosis. They also
expressed a view that general practitioners do not have the same access to the resources available to hospital specialists, adding to the uncertainty around their medical practice.

Trainee interns shared similar views with second year medical students about the skills and characteristics associated with being a surgeon. Their perception was that a surgeon was a demanding, determined, hard-lined individual with attributes bordering on obsessive and perfectionism. Further characteristics expressed by trainee interns were that surgeons required physical stamina and were not friendly or approachable. Skills that were perceived by trainee interns and second year medical students linked to surgery included the possession of effective fine motor skills and hand-eye coordination. Performing under pressure and being an intelligent, critical thinker were also associated with being a surgeon. Trainee interns expanded further by perceiving surgeons to have big egos, pursuing high status and power, and that surgery is a male orientated discipline.

Surgeons were viewed by both second year medical students and trainee interns to have an in-depth knowledge in their discipline and to know a lot in one defined area of expertise. Moreover, surgeons were viewed to have a primacy of knowledge about the body and disease as compared with the general practitioners primacy of knowledge of the patient as person. Finally, trainee interns did not raise any examples of surgeons having to deal with uncertainty but viewed it to be a part of the general practitioner’s repertoire.

**Theme 3: The Value of General Practice**

This theme examines the ways that the discipline of general practice and general practitioners are valued by trainee interns. The following ten subthemes include the comparison with the surgical discipline, this is explored after each subtheme.

**3.1 Low Status**

As with second year medical students, trainee interns described the low status afforded to general practice. The quotation from a trainee intern quotation below mirrors the second year medical students’ perception of the public views of general practice of receiving a low level of respect within the hierarchy of medical disciplines.

Yeah, I don’t know. But I think if you say you’re a surgeon, I think that commands a different level of respect from the public than if you said you were a GP. There’s always that ‘just’, “oh, I’m just a GP”.

(25)
Different levels of respect comparing surgeons with general practitioners were reiterated. However, the excerpt below also shows relating this differing level of respect to saving a patient’s life through surgery, or as they state, ‘save with the knife’. The general practitioner is not viewed in the same way; they do not ‘save the day’.

Yeah, I mean, maybe initially it was. I mean, it didn’t usually - I mean, you don’t have to study for as long so it is easy to get into I think. Different pay. Different - yeah, I don’t know where the thing - I guess there was always a lot of sort of respect for the surgeon and they could save with the knife and things, and GPs weren’t really viewed in the same respect, it’s not sort of their cue to come in and save the day. (31)

When looking at the hierarchy of medical disciplines, trainee interns quite often shared their impressions of other allied health professionals. In the quotation below, a trainee intern suggests that nurses would accord a low status to general practice and high status to surgery. It also shows the perception held by trainee interns of general practice being at the low status end.

I think in terms of allied staff, like nursing staff, I think they will probably put surgeons up on a pedestal as well, they do tend to, and the whole system is set up that way where GPs are just sort of like, you know, more sort of on a lower level of things. (39)

The low status and level of prestige associated with general practice was also expressed by peers. Below is an example that a trainee intern shares illustrating a fellow trainee intern scoffing at the idea that general practice has some level of prestige.

But even yesterday I heard someone in my class, I can’t remember what it was, but something - oh, we are doing a survey on what house officers want to go into, what specialty they want to - a health project, and we were looking at what factors make people choose which specialty, like lifestyle, perceived income, level of interest in that subject, prestige, other things, and then someone mentioned something about prestige in general practice and the other person like scoffed and said, “ha, prestige”, and then kind of had a good laugh about it. and I was like, yep, that’s a good attitude. (27)

These last two quotations by trainee interns further illustrate perceptions of the value attributed to general practice. The first quotation below shows the unwillingness to admit a vocational preference for the discipline of general practice; and secondly the dismissal of such a preference personally. The last part of the quotation suggests that general practice is a ‘safe choice’.
I think the distinction type students in the class would say, “oh, you know, you’re just going to be a GP huh?”. So, I mean, everybody - we certainly went through a phase in about 4th year when people would say, “what did you want to do?”, and no-one would admit to wanting to be a GP, and people would say, “well, you know that 60% of you will be don’t you?”, and we’d say, “oh, really, no, it won’t be us”. Certainly the GP contenders have started to appear since then. But, there is still a proportion of the class who say, “oh, that’s a very safe choice”. (24)

The next quotation below illustrates this trainee intern’s view that throughout their training it has become ‘more okay’ and ‘more acceptable’ to admit a preference for general practice. It also illustrates the condescending manner that general practice is talked about in the medical school.

I think just as I’ve gone through medicine, it’s become more okay for me to admit that I want to do general practice. Like, I always have. Like, I don’t care if some other person in my class is going to look down their nose at me because I’ve said that. But like it’s become more acceptable as I’ve gone through. When we first got in, people would just be like very condescending when I’d say that I’d be going into general practice and like talk about their grand plans. But then I think it kind of like seemed like everyone was doing that, just like ‘oh I’m not doing general practice’. But I knew at that time that most people in the class would be doing general practice eventually, so I was just like, well - but then as we’ve gone through more and more people have said to me “you know, I’m thinking about general practice as well”, and kind of, I guess, after everyone has had experience in general practice attachments either they have seen it as an option for them. (27)

Moreover, these two quotations show that general practice is perceived as an option that students are thinking about as trainee interns. The excerpt below further portrays the low status with trainee interns viewing general practitioners with less prestige and a ‘softer option’ at the beginning of medical school. However, it also portrays that during their education, this trainee intern realises that general practice is a ‘bloody hard job’, is tough and not an ‘easy out’.

I think general practitioners are seen by sort of students, especially at the start of your [degree] - the training as a sort of a softer option. You don’t have to do as much training. You’re sort of - yeah, not as prestigious. But I think by the time people get to the end of it, they realise that actually it’s a bloody hard job, and lots of people actually couldn’t handle it because it’s so - it is so - yeah, so intense and there’s - so, you’ve got so many different things you have to look at, you know that patient is there and its actually quite a hard job, it’s not an easy out. (28)
While general practice is considered by this cohort, it illustrates the struggle, resistance and difficulty students have regarding the low status afforded to general practice and being a general practitioner.

3.2 High Status - Surgery

On the other hand trainee interns commented on the high status afforded to surgery. Here, the suggested surgeons had a ‘high and mighty’ reputation along with being arrogant and seen as ‘God-like’.

I think there is the age old kudos that surgeons are high and mighty and a little bit - I mean, you can tell, even there are guys in my class and we are like 'they will be surgeons', they are the arrogant God complex guys that, you know, the competitive ones. (31)

There was also a view that surgeons had a sense of entitlement about them. This included that surgeons had the right to claim a stance of arrogance and having a sense of power, high status and to do things in an autocratic fashion. This view continues to illustrate that this sense of entitlement can also produce an abuse of power.

I think that the surgeons are having quite a sense of entitlement, and they, I think, I don’t know, they need to be or are made to be, but they are quite arrogant and quite - you know, they do things their way. And particularly - particularly the new consultants I think who have suddenly come into all of the status and power and - and one of my jobs in the team, which I absolutely loathed, was going and putting IV lines into our patients - we had three consultants, one of our consultants did a gastroscopy clinic once a week which was of absolutely negligible educational value, and took me away from the team, when I could have been contributing and learning, and just because he didn’t like doing IV lines. So, there are certainly people who abuse that. I know that - and we students are being bullied or getting a difficult time, and it’s invariably in surgery. So, I wouldn’t want to spend a whole life time among that. (24)

3.3 Not a Specialty - Default Vocation

Trainee interns, as with second year medical students, also shared their perceptions about specialisation in medical practice. The view that general practice is not considered to be a specialty in its own right was continually encountered by trainee interns, a view that was also shared by second year medical students. This is illustrated in the quotation below.

It’s often sort of the registrars and the house surgeons that tend to be a little bit like ‘oh GPs’, you know, it’s not really a specialty. Yeah. There is still a bit of that attitude around. (33)
The quotation below shows further perceptions about specialisation. Here, the trainee intern is discussing their interactions with relatives. It illustrates the commonly held view of the low status of general practice with ‘just a GP’. However, it also shows the perception from others that general practice is not viewed as a specialty, yet at the same time illustrates the struggle from the student to argue that general practice is a specialty in its own right.

Where other specialists could take a bit longer, but, you know, a lot of people don’t really have that - they will say, “oh, are you going to specialise or are you going to just be a GP?”, and so I go through my whole GP is its own specialty. (39)

In addition to the commonly expressed perception by trainee interns that general practice is not a specialty in its own right, general practice was also seen in a similar light to second year medical students. That is, the discipline of general practice was seen as a default option. The quotations directly below illustrates the perception that general practice is a ‘fall-back option’, and seen as anything but a ‘good’ discipline to go into. General practice is also portrayed as a discipline that is not interesting.

There is the perception that there are two options: are you going to do something interesting, or are you going to take the fall-back option and do general practice? It’s never ever seen as like just one of many options. It’s something good or general practice. (27)

I would have heard more people say they will probably end up - it’s awful, people always say “end up” - and I’ll probably end up a GP. (25)

The final quotation in this section is from a trainee intern who views himself as part of a group who advocate positively for general practice, something he describes as ‘atypical’. In this quotation the trainee intern highlights the perception that general practice is the discipline for doctors unable to enter into any other medical discipline because they lack the drive or ability to specialise. This may imply limited intelligence, ability and/or motivation. This is explored further in the next subtheme.

I think our year is a little bit atypical in that there are quite a few of us who are reasonably outspoken, who are very positive about general practice, and I think that colours a little bit of the rest of the class’ opinion because we sort of advocate for it reasonably strongly, but certainly there is still sort of a perception that GPs is what you do if you can’t do anything else. You know, if you didn’t really cut it to do something else. And a little of sort of, you know, it’s all sort of coughs, colds and antidepressants you know, and do you want to do that the rest of your life. (33)
3.4 The Specialisation in Surgery

When students expressed views about specialisation in surgery, it was communicated in a sense that it was self-evident, that there is no other way to describe the discipline but being a specialty. This excerpt further illustrates that surgery is divided into more specialised fields.

I guess they don’t always operate because that is the surgeon’s decision, and then obviously it’s before the procedures, and I think now it’s more and more specialised, whereas a general surgeon used to be a natural general surgeon, whereas now you are a bowel surgeon, or you are a GI surgeon. (31)

The quotation below illustrates a trainee intern’s view about the knowledge scope of surgeons, that is, knowing one area well. This is then extrapolated to all specialists, and specifically excludes general practice.

I think there was something [in surgery] with sort of knowing one area particularly well, and then like sort of really good in that area, which is sort of the difference between all of the - all the specialists compared to GP. (39)

3.5 Motivation and Intelligence

Further impressions about general practitioners and the discipline of general practice from trainee interns mirrored that of second year medical students. Trainee intern perceptions highlight the view that doctors choose general practice because they lack the motivation to get into the training programmes for other disciplines. The last part of this excerpt suggests that anyone, regardless of ability or motivation, can become a general practitioner.

I think there is still a little bit of an idea that like oh if you sort of can’t get into anything, or you can’t be bothered going for the training you think you will just go and become a GP… I think some people have that idea, but I think surgery is still sort of seen as, ‘oh, ah, surgery’, like when are they going to be a surgeon. And, yeah, it’s just anybody can become a GP, but it’s really hard to become a surgeon. So, I think there was still that. (39)

The quotation below directly illustrates the trainee interns’ perception that general practitioners are seen as less intelligent than specialists. It also refers to how this aspect has been espoused by clinicians in the hospital setting calling the general practitioner ‘stupid’.

Well, most of them [medical students] will see a GP as not that smart. That is what people will most of the time because they think that in term of referral and everything, but they just not - I don’t understand - I can’t compare with the - like, what the surgeon say, but what
specialty like paediatricians, they will call a GP, you know, stupid GP, everything with this patient is a small simple case, he could have managed that. But that’s what they think, you know, because they think working in a tertiary hospital is more specializing. (30)

The following quotation reinforces the perspective of trainee interns that general practitioners are seen as less intellectual, bring referred to as ‘aren’t as smart’ and towards the end of the quotation (‘are a little more slow’). In this quotation it is espoused by reference to a referral letter written by a general practitioner who is viewed negatively by the hospital specialist.

In terms of intellectual - I don’t know - it seemed that GPs maybe aren’t as smart as some other doctors, or not all GPs, because there are more GPs out there as there people on any specialty, but when you get a - when a specialist gets a letter, a referral letter from a GP that’s really poorly done and sort of shows the GP’s lack of even basic understanding for whatever condition that they are referring for, the specialists remember that and they show people those, and so I think there is this sort of idea that maybe GPs are just a little more slow than some of the specialists. I think that our class probably has a bit more of a balanced view, but I think there is still some of that feeling out there. (39)

3.6 Motivation and Intelligence - Surgery

When commenting on surgeons and entering the discipline of surgery, trainee interns also talked about areas of motivation and intelligence. In the two quotations below, they suggested that one needed to be highly motivated, dedicated, disciplined and determined.

You need to be highly motivated, extremely dedicated to your work to the exclusion of other aspects of your life, and being prepared to put off having a family for possibly years. It’s not essential but a lot of people do that. (27)

Well, what do you call a type A, you know, you are disciplined, you are determined, you know, you don’t mind working long hours. You are really motivated to do well. (32)

The last excerpt presents the view that you have to be very intelligent to do surgery and that the training programme and discipline is very difficult.

It’s a very difficult specialty for you to go in, so I think the view is you have to be very smart to go into the training and quite persistent, and suck up to the boss…surgical training is about six years - five to six years as long as you pass everything. It usually takes longer than that because the exams and everything and that makes you - yeah. So, it’s a bit hard specialty because you have a lot of exams and everything, very busy especially when you are a registrar, no time. That’s what I think of for there. (30)
3.7 Money

As with second year students, trainee interns considered the remuneration associated with general practice. The perception among trainee interns regarding the remuneration of general practitioners was mixed. The quotation below illustrates the view that they are not sure how much a general practitioner earns, or even a surgical registrar.

I don’t know about the money side of things, so at this stage for me that’s not something that would weigh it up for me because I don’t know how a surgical reg would compare to a GP reg. I don’t think GP regs are particularly well paid. But then again surgical regs would be doing twice the hours. (25)

The pay of a general practitioner seem to be ‘not flash’ and the next excerpt highlights the comparative view that a specialist, in this case an orthopaedic surgeon, can earn significantly more money.

Pay is not that flash. An orthopaedic surgeon can earn a million a year, a GP he can’t ever do that. (30)

Next, trainee interns express the perception about the business side of general practice and compare this with working in the hospital. Here, the view is that all the areas that go into general practice as far as running a business is concerned are not of interest and are seen as deterrents of going into general practice. This quotation also highlights that a spouse’s earnings, or possible future earnings, are also taken into account when thinking about remuneration. Lastly, they indicate that it impossible to live comfortably with the pay received as a general practitioner.

Another thing about GP that I guess is a deterrent is feeling like you have to run your own business, and what I like about being in the hospital is that you turn up, you do work. And someone else organises the money side of things, and accountants and so on, whereas GP is more like a business, and they have got to think about all the business type things, which doesn’t interest me in the slightest. Yeah, I quite - I think also the money is probably a thing, it’s nice to have money especially because my partner is non-medical and he is never going to earn very good money, so it would be quite nice to be able to live comfortably, I guess, but I think you can still do that as a GP. (34)

Finally, this following quotation illustrates the perspective that considering repaying a student loan is a factor that impacts upon the contemplation of remuneration. The view here is that general practitioners do not get paid as much as doctors in other disciplines.
I mean, I do have a big student loan, and there is the whole that GPs don’t get paid as much, but I think hopefully I’ll pay off enough of it as a house surgeon that there won’t be - although there will be a chunk left over if I went in to do the training, I could pay that back. So, I don’t think the money would be a big downfall for me. (39)

3.8 Money - Surgery

The remuneration associated with surgery was always discussed in a positive light by trainee interns. In the views below, the surgeon’s salary was perceived to be high, with some trainee interns perceiving it as a motivating factor for pursuing that discipline.

I think people do it for money as well, that is a big drive for people. Although I think the further along you get through medicine the more you realise that those are bad ideas to do it. (31)

Obviously a lot of people will say they like orthopaedics because it’s straightforward. It’s not my choice fix it and that’s it, and you know why are you doing more, like you just measure it and getting it fixed and that’s it. Good pay. That’s quite a - most of the reasons why people say they like surgery. (30)

3.9 Messages from the Hospital

This particular subtheme explores the perceptions of trainee interns about general practice and general practitioners from within the hospital setting, a site where they undergo a considerable part of their clinical learning. The quotation below illustrates the view that general practitioners are seen as incompetent, looked down upon, and talked ‘down to’ by hospital clinicians.

From working in the hospital though I sometimes get the impression that hospital doctors perhaps look down on GPs a bit sometimes, or you often hear comments about GPs mistakes, or incompetence, or things like that where you don’t really hear or see the good work that GPs are doing. I feel there is a bit of a rift between hospital doctors and GP doctors, and there is a tendency to kind of talk down about GPs in the hospital setting. (21)

Following from above, trainee interns also perceived that errors made by general practitioners are commonly explained by a lack of expertise general practitioners have compared with hospital specialists. This quotation below also illustrates the perception that the medical establishment is quite hierarchical, to the point of continually perpetuating hierarchies.
I think part of it is because GP, perhaps not often but not uncommonly do make errors. Well, not so much errors, but they perhaps don’t do things as well as they could have, or they have made perhaps not the right decision because of their lack of expertise in certain areas, and it is very easy to talk down about GPs when you are, say, you know, working in cardiology and you are thinking about that all the time and you have good expertise, whereas a GP is dealing with a lot of different problems, and they don’t have such good expertise. I think maybe it could be a result of - I feel like the medical system is quite hierarchical as well, and there is always a tendency of people to try and establish hierarchies. I think that could be part of the reason for that as well. (21)

Trainee interns also commented on the range of hospital specialists’ perceptions of general practice and general practitioners. Perceptions demonstrate a negative reputation held of general practitioners by hospital clinicians on the basis of referrals which are seen as dubious. It also shows a positive reputation of general practitioners due to referrals which are seen as acceptable.

You do get - I mean, GPs are often referred to as ‘oh, up in GP land’. They do their own thing. And you definitely get - certain GPs definitely have a reputation around the hospital like you - like, for example, in paediatrics they’ll get a referral and they’ll be like “oh, it’s this GP”. Like, “let’s wait until we see this one”, and then other times you get “oh, this GP is sending someone in, they must be really sick”. So, there is quite a varied opinion of GPs. (22)

Although trainee interns expressed a range of opinions about hospital clinicians’ views about general practitioners and general practice, the quotation below illustrates the view that, within the hospital establishment, there is still noticeable resentment towards general practice and general practitioners.

Yeah, yeah, I guess - a lot of the specialties kind of have this expectation that GPs will sort out all problems that GPs are routinely kind of expected to know how to deal with, and that if someone ends up coming to hospital and seen by a different service or discipline, and that a GP perhaps could have dealt with it earlier then there’s a lot of resentment against GPs for not having sorted it out already kind of thing. And yet these other disciplines will say that without knowing what the background to it all is. You know, that factors that may have influenced the way that the patient and GP situation went down, and why the patient has actually ended up in hospital, because it may not be anything to do with the GP at all. Yeah, I guess that’s quite a prominent thing I have seen. (29)

The excerpt below illustrates many of the perceptions described in this theme of the value of general practice. The quotation below highlights the low status afforded general practice and general practitioners being viewed ‘towards the bottom of the pile’. It also highlights the view
that general practice is not seen as a specialty when compared with other medical disciplines as one should ‘pursue some specialty’. It also demonstrates that if one is not motivated enough to pursue other areas in medicine, one can enter general practice as a default or alternative option.

I think there’s perhaps a bit of a reluctance for people to enter general practice because again because of the theme you kind of get in the hospital that general practice is somehow kind of towards the bottom of the pile. So, I think there’s reluctance for people to say they want to do that or to be set on doing that from an early stage because of that. It’s almost as though you should pursue some specialty, but if you can’t make it or if you don’t feel that committed to medicine then you can do general practice as kind of an alternative. (21)

3.10 Teaching, Learning and Research

This sub-theme explores the relative value of teaching, learning, and research in the discipline of general practice concurrently with surgery. Trainee interns discuss their views about what is taught in general practice and how research is viewed in the discipline. Initially, trainee interns commonly expressed a widely shared view that what is taught in medical school about general practice reflects particular areas, such as consultation skills and models of chronic care, but not all of what a general practitioner’s role encapsulates.

I guess from a student’s perspective like a lot of people don’t enjoy general practice as a student because they find it quite wishy-washy. So, it’s sort of - it’s like the classic term that we all describe it as. Because you are always talking about holistic care and a lot of the focus within general practice modules in med school is about learning good consultation skills and that sort of thing, and chronic care models and, you know, that’s not all that a GP does and I think a lot of people get the impression that that is what GPs do on a day-to-day basis, but I think it’s kind of really useful things that all doctors should have as opposed to just GPs and it’s just unfortunate that that’s the way it kind of gets taught, isn’t it, this is from when it’s coming from the GP department, this is what GPs do. (29)

When discussing surgery, trainee interns frequently noted their perceptions of the type of teaching offered by surgical teams. The quotation below describes a registrar randomly asking students questions during a ward round, which in turn, was making the medical students uncomfortable. The trainee intern perceives this interaction to be more ‘academic’. This may reflect a view that answering questions in the Socratic method demonstrates a certain depth of knowledge which the trainee intern associates with surgery as a specialty.
I think one of the first surgical teams I was attached to, one of the registrars was quite - oh, he wasn’t mean to students, but he liked questioning students, and quizzing them on ward rounds, and making them feel quite uncomfortable. And so you definitely get the feel that it’s much more academic. (22)

In the quotation below, research within surgery and general practice was discussed. Here, the trainee intern perceives surgeons to be involved in conducting research and associates this with academic practice. The trainee intern continues on, and illustrates the perception that this is not present to the same extent in general practice, viewing research in general practice as invisible.

I think a lot of people are very academic, and there is a lot of academia, research involved in it [surgery] as well. So, it’s trying to find new things, try new stuff. Generally I find that most of the surgeons I have worked with are either doing research or have done research or have that kind of air, whereas in general practice, I don’t know if there is, but it just doesn’t seem as obvious. And there was one guy in my practice who works for ALAC and he does research in alcohol, but that is it - but it seemed more like in general practice rather than have research interests, they have an interest in a specific area like dermatology, so they will do postgrad stuff rather than research. (31)

Additionally, research was seen as part of ‘what you do’ as a surgeon, and it was also implied that conducting research and publishing academic papers was necessary to enter a surgical training programme, whereas, this was not perceived to be required for general practice.

You need to know a lot of research - because that’s why they ask you to do. In surgery you have research and do a lot of presentation, so you are actually quite proactive. However, in GP you don’t have to do that I believe. You don’t have to publish a paper before you can actually do GP. (30)

In the quotation below, the academic nature of surgery is associated with being intelligent, conducting research and studying in a training programme perceived to be challenging. This is compared with general practice which was viewed as ‘airy fairy and lovey dovey’.

I think it’s the impression that surgery is a lot more academic, you need to be quite smart to be a surgeon and really wanting to do research and study and quite hard out training programmes, and I think a lot of other people think GPs - a lot of people think GP is a lot more sort of relaxed and airy fairy and lovey dovey. (22)
Summary

Trainee interns expressed views about the value of general practice that were also analogous with second year medical students. This included perceiving general practice as having a low status among the hierarchy of medical disciplines which trainee interns described a commonly held public perception and also one shared by allied health professionals. Trainee interns also expressed views of a low level of prestige associated with general practice. Furthermore, they were unwilling to admit to their peers that they wanted to enter general practice.

Similar to second year medical students, trainee interns shared perceptions about general practice not being viewed as a specialty and also considered a default or fall back option for medical graduates if they cannot do a specialty. Additionally, some trainee interns articulated that it is difficult to explain that general practice is a specialty in its own right.

General practice was considered to be a discipline that was entered if lacking the motivation to specialise. Any doctor, regardless of ability or motivation, can be a general practitioner. Moreover, general practitioners were viewed as less intelligent than other medical practitioners.

Trainee interns offered mixed views about the remuneration that general practitioners receive. These views ranged from being unsure how much general practitioners were paid, to general practice being paid poorly, to being comfortable with the perceived salary they would receive as general practitioners. Trainee interns perceived the business model of owning and managing a practice to be a deterrent to entering general practice. Further considerations relating to money when thinking of a medical discipline to enter included considering a spouse or partners earnings, in addition to how much income was necessary in order to repay student loan repayments.

When training in the hospital environment trainee interns expressed perceptions of general practitioners as incompetent and ‘looked down upon’. The reasons for this were errors general practitioners made because they lacked clinical expertise compared with hospital specialists. The resentment they witnessed against general practitioners among hospital staff was explained by trainee interns for not ‘sorting out’ the patient earlier.

In the teaching of general practice, trainee interns expressed a view that certain areas of a general practitioner practice were highlighted and focused on, and others were not, leading to,
what might be called, a narrow view about the discipline of general practice and what general practitioners do. Trainee interns also perceived that research within general practice is invisible or that it does not seem to exist.

Trainee interns, similar to second year medical students perceived surgeons as having a high status and being arrogant. Trainee interns also perceived that surgeons had some sense of entitlement. Moreover, trainee interns only talked about surgery as being a specialty, which was indicated as knowing one area of medicine particularly well, and which excluded general practice. Surgery being a ‘fall back option’ was not mentioned by trainee interns.

Surgeons were perceived as highly motivated, dedicated, disciplined and determined people who were also quite intelligent and very well-paid. The teaching in surgery was viewed to be an uncomfortable experience because of the common practice of the Socratic method which was also perceived to be more academic. Conducting research in surgery was seen as part of a surgeon’s role and also contributed to being perceived as more academic.

**Theme 4: Representation of Medicine in Television Programmes**

The influence of medical television programmes during their undergraduate training was commented on by trainee interns. In Chapter 5, second year medical students discussed what they learned from medical television programmes before entering their medical degree and while they had recently started their journey through medical school. This included various aspects of medicine and about being a doctor. They commented on hierarchy, the hospital environment, different specialties and also how well these programmes reflected the ‘real world’. Trainee interns discussed medical television programmes in a particular way. As trainee interns at the end of their medical degree, they had completed attachments in many different areas of medicine across both hospital and community settings. Hence, trainee interns discussed medical television programmes in relation to their own experiences in their training. This was portrayed in two ways. The first and most prominent was the degree to which medical television shows were aligned with their own experience of ‘the real world’. The second, was using medical television programmes as a source of clinical information. Table 12 lists which television programmes were watched and by how many of the trainee interns.
Table 12: Percentage of Trainee Interns Who Watched Medical Television Programmes

<table>
<thead>
<tr>
<th>Television programme</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grey's Anatomy</td>
<td>60% (12/20)</td>
</tr>
<tr>
<td>House</td>
<td>60% (12/20)</td>
</tr>
<tr>
<td>ER</td>
<td>50% (10/20)</td>
</tr>
<tr>
<td>Scrubs</td>
<td>40% (8/20)</td>
</tr>
<tr>
<td>Shortland Street</td>
<td>10% (2/20)</td>
</tr>
<tr>
<td>RPA (Royal Prince Albert)</td>
<td>5% (1/20)</td>
</tr>
</tbody>
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4.1 Representation of ‘Reality’

This subtheme explores trainee interns’ perspectives about what they see as credible and incredible when looking at certain medical television programmes. The first two quotations below are trainee interns discussing the television programme House. Both quotations refer to aspects of the programme that they perceive as unrealistic. The first illustrates that the conditions seen in House are very rare, and that it would be fortunate to see any such conditions in the lifetime of most practicing doctors. This student also comments on the many resources used in the programme House which are superfluous in the New Zealand health system.

STUDENT: It [House] really is dramatised. It is quite obvious. To me nothing happens like that, so - only if I had a whole team of doctors looking after just you. No doctor does every specialty and that’s it. I guess it’s just if the disease is something really really rare, that you never ever see, although may be see once in a lifetime.

KELBY: So, rare conditions, but what they are doing is correct type thing?

STUDENT: Basically, yeah. I mean, apart from the fact that in New Zealand I guess we are so resourceful that you wouldn’t order an MRI for everything. (32)

The next quotation below indicates that the scope of the doctors’ practice in the show House is unrealistic because it fails to recognise the role of other health professionals in caring for a patient. This quotation also discusses the patient’s behaviour on the programme House, which is perceived as unrealistic.

I think it’s [House] bollocks really because they do surgery and medicine and lab work and stuff and nobody does that, and like all the
patients have seizures and then wake up and are completely alert and, like, you know, and then die. It’s just stupid. (33)

In addition to trainee intern perceptions of particular shows being viewed as unrealistic, there were aspects of some television shows that were viewed as more accurate or realistic. The three following quotations are about the television programme Scrubs. The interactions viewed on Scrubs between junior and senior doctors are described as ‘horrible’ but perceived to reflect reality.

I forgot Scrubs. Scrubs is brilliant. Just brilliant. Scrubs are probably the most accurate, but it’s more the sentiment rather than the details. Like, it’s more the like the interaction between the junior doctors and the senior doctors and how the space is horrible, but it’s actually quite wise. (34)

The ‘reality’ of Scrubs is also noted by one of the trainee interns. This time the view is expressed in terms of how the trainee interns can identify with the personal struggle of difficulties with communication with patients.

I suppose I watched more Scrubs when they were starting off as interns, so house surgeons, so, I mean, in terms of actual sort of training they are closer in age, so you can sort of identify with that, and then they sort of have a lot of personal struggles and problems in communicating with patients and, I mean, everything is still really exaggerated but you can sort of see, identify a bit more with them. I mean, they are in conference with seniors and all those issues with patients and personal struggle. (35)

Finally, although the television programme of Scrubs is exaggerated, the perception of certain aspects within it being realistic also comes through. Here, the trainee intern discusses the different personalities found in the hospital combined with the different moral and ethical issues as areas that carry and sense of realism of the things they (trainee interns and medical students in general) find difficult at that stage of their training.

I think it’s really realistic, Like, they just- you know, like its slightly exaggerated, but all that stuff actually happens and you get personalities like the different people there, and it goes into the sort of moralistic kind of view and all that kind of stuff too, like what med students find really difficult and how to deal with it and stuff. (36)

4.2 Specialist Medicine as a Learning Activity

This sub-theme looks at how medical television programmes were used as a learning tool in specialist medicine. The first quotation below illustrates how watching the medical television
*House* and using a doctors on-line blog about that specific programme helped with understanding the clinical reasoning underpinning the treatment for that particular patient.

And one doctor has blogs and always discusses *House* and that’s what I always read through, so you watch *House* and then you read through what the flow of ideas and everything, so you can try to get an understanding. (30)

This second quotation illustrates a trainee intern discussing how they watch the television programme *ER* with their peers and also how they use it individually. First, the student discusses watching it with peers to try to discern the diagnosis before the doctors were able to on the programme. Individually, she has found watching *ER* to be a useful tool in learning certain drugs and clinical skills (e.g. intubation).

**STUDENT:** Apart from being a fantastic programme, but I think as I’ve gone through med school as well, like I’ve got seasons 1-12 on DVD or something.

**KELBY:** Right, so a bit of a fan?

**STUDENT:** Oh, yeah. we used to actually watch it together - the other med students, we’d watch it and try and beat each other to the diagnosis, which was awesome if we could beat the doctors to it, or like we’d watch it and we would know what they were talking about.

**KELBY:** Yeah. Did you say you studied from it?

**STUDENT:** Well, yeah, because I actually - well, it was actually initially when I was in sort of 2nd year I’d be watching it, and they’d say stuff way too fast, and I’d be like oh I recognise that, and it would annoy me that I didn’t remember what it did, so I would sort of watch the subtitle and then look up the name of the drug…

**STUDENT:** And certainly the odd time I’ve been asked questions in clinic for something, and they talked about a drug, and I would be like “oh, it’s blah blah blah”, and they’re like “how do you know that?”…

**STUDENT:** Dr Carter is teaching someone to intubate and he talks them through it, and I always remember how he said it, and it’s just like exactly how you do it. So, *ER* taught me how to intubate. (31)
Summary

Trainee interns discussed what they learned about medicine from watching medical television. As with second year medical students, no trainee interns mentioned that they watched any medical television shows about general practice. Trainee interns predominantly discussed whether what they viewed was credible or not when watching medical television. They viewed aspects of *House* as unrealistic due to some of the conditions seen being so rare that a practitioner would be very unlikely to encounter them during their medical career. Trainee interns also expressed the view that the resources available to *House* are not available to medical practitioners in the New Zealand health system. The scope of practice illustrated in *House* along with certain patient behaviours were also considered unrealistic.

Trainee interns also viewed some medical television programmes as representing some ‘real’ aspects of the practice of medicine. The interactions between junior and senior doctors seen in *Scrubs*, described as ‘horrible’ were viewed as realistic along with the personal struggles of junior doctors in the early beginnings of practicing medicine. Problems with communicating with patients in *Scrubs* were also perceived by trainee interns as realistic in addition to the moral and ethical dilemmas faced. Further learning occurring as viewed by trainee interns was from reading on-line blogs to gain an understanding for certain *House* episodes to playing a ‘guess the diagnosis first’ game among peers.

What is significant here, is that trainee interns have identified hospital interactions as realistic because they are from medical television shows which are set in the context of secondary care or hospital based medicine.

There was also no mention of any learning activities that were engaged with from using medical television programmes that were associated with general practice – only specialist or hospital based medicine. Even though students could possibly have related the learning activity competing on a diagnosis with peers in a general practice context, this was not the case. As with second year medical students, there were no television programmes watched that were about general practice.

Conclusion

These views and perspectives offered by trainee interns constitute particular discourses about general practice and being a general practitioner. Unlike second year medical students, trainee
interns have experienced their entire undergraduate curriculum. They have successfully fulfilled the requirements of the undergraduate medical curriculum with its formal and informal teaching sessions (for example, lectures, laboratory classes, individual and group interviews, attachments in hospital and community based medicine). The discourses taken up by trainee interns from their medical education constitutes, as with second year medical students, an institutional discourse in the form of both formal and hidden components of the curriculum. Furthermore these results have also shown further discursive sites, as was seen with second year medical students. In addition to an institutional discourse, there is a public discourse about the discipline of general practice and being a general practitioner.

Along with identified sources from second year medical students such as teachers and fellow student peers, these results also indicate further sources about who and where these discourses are being produced and continually circulated. Within the disciplinary block of the medical school that trainee interns have described hospital discourses appeared prominent. Trainee interns identified doctors, registrars, nurses, and allied health professionals as instrumental in the construction of discourses concerning the discipline of general practice and being a practitioner.

These discourses articulated by trainee interns incorporate elements of the discourses already offered by second year medical students and those discourses based on their experiences in clinical attachments. These results illustrate the constructive, circulative and historical power of the medical school and teaching hospital as a disciplinary block. What these results also highlight is the continual struggle, contestation and resistance of trainee interns who articulate alternative discourses that emphasise the value of general practice and the challenging practice of this generalist specialty.

In the following chapter, I outline the social construction of the discipline of general practice and being a general practitioner in the context of Foucault’s theories of discourse. It is this Foucaultian analysis that has not been attempted before when undertaking research into the general practice workforce shortage. Using a Foucaultian analysis can help look deeper, and from a differing perspective, into the phenomena of how students are conceptualising general practice and being a general practitioner. These theories include the internal exclusionary practices of the academic discipline, principles of rarefaction, technologies of power (along with the conditions of power), technologies of self, the rarefaction of the speaking subject; and power/knowledge within the disciplinary block of the teaching hospital and medical school.
Chapter 7 - Synthesis and Discussion

In this chapter I review my research question and then synthesize the results with the research literature and with Foucault’s theories on discourse, power and power/knowledge. I initially outline the discursive fields in which the research is set and move onto discuss three main discourses of general practice and of being a general practitioner from my interpretation of the results. These are: the dominance of biomedicine; specialization in medical practice; and the values within medical education that medical students pick up which includes learning to value certain areas of medicine.

The Research Question

The aim of this research was to investigate one source of influence on medical student vocational choice in general practice by investigating prevalent discourses within undergraduate medical education. Arising from this aim, my research question was ‘What are the discourses of general practice in undergraduate medical education?’

This research aim and question arose from the decline of medical graduates in general practice across many countries, including New Zealand (Smith-Han, et al 2013b). As demonstrated in Chapter 2, the research literature over the past 30 years investigating this phenomenon has used a predominantly positivist or post-positivist epistemological approach, with many quantitative studies looking at specific discreet factors (such as age) or events (undertaking a general practice attachment at a certain time in students undergraduate education). While some qualitative studies have been conducted to address the lack of depth of information, there are few in comparison to the vast number of quantitative studies produced. Of these studies, many have been descriptive (Petchey et al 1997; Minogue et al 2005 and Thistlewaite et al 2008). The present research uses a qualitative interpretative approach framed by Foucault’s notion of discourse to identify prevalent discourses in medical education that may explain why graduates choose not to enter general practice.

et al (2007), Edgcumbe et al (2008) and Thistlewaite et al (2008) have suggested that general practice is seen as a default or ‘fallback’ option in medicine and has low and poor status among the hierarchies of medical specialties.

The lack of respect by hospital clinicians towards general practitioners is also noted by Tolhurst et al (2005), Ng et al (2005), Minogue et al (2005) and Firth et al (2007). A negative public perception of general practitioners was also reported by Petchey (1997), Minogue et al (2005), Thistlewaite et al (2008). Tolhurst et al (2005) and Hogg et al (2008) reported that family members showed disappointment or expressed negative comments if the medical student entered general practice rather than specialist medicine. In Tolhurst et al (2005), this was described as family and friends in general, however in Hogg et al (2008) family members who were also doctors were reported to make negative comments about general practice.

The finding that general practice is viewed as tedious, boring, less interesting and less stimulating in the present research was also reported by Petchey (1997) Mutha et al (1997), Ng et al (2005), Minogue et al (2005), Firth et al (2007) and Edgcumbe et al (2008). Edgcumbe et al (2008) also reported the perception that specialist physicians get sent all of the acute and ‘interesting’ cases.

Both Petchey (1997) and Minogue et al (2005) reported alternative views which were similar to those found in the present research, that general practice was viewed as a difficult job (Minogue et al, 2005). Additionally, Tolhurst et al (2005) found that a few of their student participants described general practice as varied and interesting. Further validation of the findings of the current study come from Minogue et al (2005) who showed that students’ perception of general practice involved forming and continuing relationships with patients and focusing on the person rather than the disease.

Forming and continuing relationships with patients was perceived by participants in the present research as being part of the role of general practice and this supports Mutha et al’s (1997), Minogue et al’s (2005) and Edgcumbe et al’s (2008) findings. In Minogue et al (2005) it was also evident that general practice was viewed as focusing on the person rather than the disease. Moreover, in both Tolhurst et al (2005) and Edgcumbe et al (2008), participants described general practice as quite isolating and this was also reported by participants in the present study. The media was also seen to portray general practice as less glamorous when compared with the practice of hospital physicians (Firth et al, 2007; Hogg et al, 2008).
The poor pay of general practitioners relative to specialists was mentioned by Mutha et al (1997), Minogue et al (2005), Tolhurst et al (2005), Thistlewaite et al (2008) and Thistlethwaite et al (2008) suggested that an increase in pay would make general practice more attractive as a career choice. Curiously, Edgcumbe et al’s (2008) participants suggested that general practitioners were paid well and Mutha et al (1997) found that level of debt or future income was not deemed to be an issue. However, this was partly explained by participants’ taking into consideration their partner’s or future partner’s income. The present research reflects these findings where pay and level of debt were seen to vary from a significant impact to a minimal to low impact along with highlighting the mixed views of being paid poorly to being paid well.

**Discursive Fields**

When students enter medical school for the first time, as described in Chapter 3, they enter the discursive field of medical education. This discursive field which consists of the medical school and the teaching hospital, contains cultural rules and procedures, that constrain what can be said and what should not be said, regulates behaviours and also generates and supports certain hierarchies. Second year medical students have interacted with other discursive fields before they have begun their medical school journey. These constitute a private discourse (the family) and a public discourse (media/literature) and these, alongside the discursive field of medical education, have played a significant role in the initial construction of the knowledge of general practice as a discipline and of being a general practitioner.

**Discursive Fields of Family and the Media**

These identified discursive fields that included the family have been described as being a part of the ‘private sphere’ (or private institutions). The ‘public sphere’ is associated with institutions such as government, education and the media (Danaher et al, 2000). Although the public sphere is regarded as more highly regulated than the private sphere, the private sphere still plays a role in ‘speaking the truth’ about a subject. This is demonstrated by the medical student watching the medical television programme *House*, with their parent (who was also a doctor) who was highlighting what he considered unrealistic or ‘true’ medicine.

The discursive field of the family also influences the exclusion of certain discourses, or what cannot be said. A trainee intern discusses how her GP father tells her not to say ‘just a GP’ when talking about general practitioners. This illustrates that the low value afforded to general
practice, which is exemplified in the phrase ‘just a GP’, is also part of the discursive site of
the family and not just associated with the discursive field of medical education. As a father
figure, and also a practicing general practitioner, this parent is positioned as an authoritative
figure exercising discursive power to counter the phrase ‘just a GP’ and the low level of status
it conveys. Foucault (1980) described power as ‘circulating’ or “always in the position of
simultaneously undergoing and exercising this power” (p.98). While this parent does not
‘hold’ power, as a significant figure operating within the institution of the family, he has a
greater opportunity to influence how the impetus of power is enacted. In this instance, it is as
resistance to the discourse of low value and status of general practice.

The media was also identified as a discursive field. Here the media offered up discourses
around the hierarchies involved in medicine, the array of different medical specialties and the
‘excitement’ and ‘stress’ of the hospital environment. In particular, the media presented
discourses of surgery consisting of competitiveness, being ‘tough’ a ‘cool’ profession that
gave you a ‘rush’ through Grey’s Anatomy, Scrubs and ER. It is clear that participants were
already familiar with the discourses involving specialist medicine, and in particular, surgery
before they entered medical school. The television media did not offer participants any
discourses around general practice. It must be noted however, that there are modern television
programmes about general practitioners. For example, the show Doc Martin portrays a
specialist (vascular surgeon) turned general practitioner having developed a phobia for blood.
The character exhibits behaviour considered to be rude by patients and community members
(which is contrary to how general practitioners are considered in this research) yet, he is
considered a ‘great diagnostician’ due to his previous role as a specialist. A recent Australian
television series is another example. The Doctor Blake Mysteries set in the late 1950s
illustrates a doctor who takes over his deceased father’s general medical practice and at the
same time works part-time as a police surgeon. In this programme, Dr Blake’s role as a doctor
is glamourised by his role as a police surgeon that offsets his otherwise tedious life as a
general practitioner. These two programmes both exemplify features that are from their
specialist lives (e.g. Doc Martin’s ‘great diagnostic skills’ as a vascular surgeon specialist)
and de-emphasise their general practitioner role (in the case of Doctor Blake, focusing on his
part-time role as a police surgeon).

The only medium mentioned by the participants in this study regarding general practice was a
novel about a general practitioner which offered discourses of community involvement and
heroism (saving someone from drowning). This illustrates the limited amount of information
that the medical students have about general practice in media and other literature compared with other areas of medicine, especially hospital based medicine.

**Discursive Field – The Medical School and Teaching Hospital**

As Foucault stated (1971), “every education system is a political means of maintaining or modifying the appropriateness of discourses with the knowledge and power they bring with them” (p.46). Second year medical students and trainee interns revealed discourses offered by the medical school and teaching hospital. The curriculum in which medical students are immersed is part of this discursive field, where subjects of their medical education are “constructed as individuals to self-regulate, discipline and reflect upon themselves as members of a community/society” (Popkewitz & Brennan, 1998, p.13). In the context of medical training ‘members of a community or society’ would be viewed as members of the medical community, including being members of a specific area of medicine, or specialty. Jaye et al (2006) postulate that developing oneself as a medical professional also occurs through participation in the non-formal hidden curriculum. I extend this argument by proposing that developing oneself as a professional (i.e., a doctor) also involves developing knowledge about the various specialties that the profession encapsulates (e.g. learning about general practice and surgery) along with types of doctor associated with that profession (e.g., ‘the general practitioner’ or ‘the surgeon’). I also argue that learning about the profession of general practice and being a general practitioner, begins within the discursive fields of family and the media (as shown earlier), and then continues within the disciplinary block of the medical school and teaching hospital.

In *Discipline and Punish* Foucault (1975) uses the terms ‘discipline’ and ‘disciplinary blocks’. The term ‘discipline’ refers to a combination of two definitions of the word. For Foucault the term ‘discipline’ identifies a particular body of knowledge (e.g., biomedicine, or psychology) and an associated mechanism of social control (to be ‘disciplined’ or submission and compliance) at both the level of the individual and the population. Therefore as Marshall states (1989), “a body of knowledge is a system of social control to the extent that discipline (knowledge) makes discipline (control) possible, and vice versa” (p.107). Disciplinary blocks, in this case - the medical school and teaching hospital, are where subjects engage with the disciplines, while also being disciplined.

I now move on to discuss the discursive formation, which from Chapter 3 is “a pattern of discourses that bring into being a common object across a number of sites. They are regulated
maps or ways of speaking through which objects and practices acquire meaning” (Barker, 2008, pp90-91). The following paragraph is an outline of what a discursive formation of general practice would include (adapted from Barker 2008, Hall 2001).

This discursive formation of general practice includes statements about general practice and being a general practitioner; particular subjects that constitute the discourses of general practice, for example, the ‘GP’; the rules that deem what is ‘sayable’ or ‘thinkable’ about general practice, that is, certain ways of talking about general practice and being a general practitioner which also includes excluding other ways of talking. It also includes the practices within institutions that deal with general practice and general practitioners (e.g. teaching general practice, or other specialists that interact with general practitioners in a working environment). Finally, how knowledge about general practice and general practitioners acquires authority, a sense of constructing the ‘truth’ about it is considered.

I now describe the discursive formation of general practice, based on the discourses espoused by undergraduate medical students undergoing their medical degree studies. I will use this outline as a structure combined with the theoretical mechanisms outlined in Chapter 3 to illustrate the discourses and how they are maintained. The theoretical mechanisms used in this research include: internal exclusionary practices of the academic discipline; principles of rarefaction; technologies of power (along with the conditions of power); technologies of self; the rarefaction of the speaking subject; and power/knowledge.

**Discourses of General Practice**

**Biomedicine**

Both second year medical students and trainee interns offered perceptions about how general practitioners practice medicine compared with surgeons or specialists. Discourses of general practitioners focusing on ‘the whole person’ or ‘the patient as person’ as opposed to purely focusing on disease were evident. The second year medical students within the first few weeks of the degree had been exposed to the concept of the illness experience, which focuses on the lived experience of the patient and grounded in their own particular social context. This is juxtaposed with the concept of disease which focuses on the organs affected, experimental biomedical research, appropriate clinical investigations and tests combined with particular treatments (Wilson & Cunningham, 2013). The illness experience is fundamental to two relationship tasks undertaken within medical practice. The first is between the doctor and the
patient as person and involves healing, which incorporates, exploring the illness experience, the doctor-patient relationship and attending to suffering. The second is between the doctor and biomedical disease and involves curing, which incorporates diagnosis, investigation and treatment (Hutchinson & Bower, 2011; Wilson & Cunningham, 2013). Both second year medical students and trainee interns equate the notion of healing to the general practitioner and the notion of disease to the surgeon or specialist.

This is further seen in the skills and characteristics associated with the general practitioner in relation to the doctor-patient relationship (empathy, developing rapport and trust, an emphasis on communication skills), again associated with healing and the patient as person.

The notion of curing, referring to the eradication of the cause of disease or reversal of the natural pathway of that condition (Fox, 1997), was firmly associated with the surgeon and the specialties with frequent references to surgeons being able to ‘fix’ things by intervening in the life and death of a patient, and ‘fixing’ a person from dying. Fox (1997) asserts that the care or healer aspects of medicine, such as preventing illness, avoiding premature death, restoring functional capacity, are undervalued due to the dominant emphasis on the curative aspects of approaches. This is supported in the present research. Second year medical students indicated that the medical education model is focused on secondary care, dominated by a curative model, not primary care. This aspect is also illustrated from the role and practices attributed to the general practitioner, for example, the care or healer aspects or approaches that students mentioned regarding the prevention of illness included educating and advising patients on many areas including lifestyle choices. They regarded general practitioners as having a strong role in the long term management of chronic conditions that included avoiding premature death and maintaining functional capacity.

One of Foucault’s internal exclusions on discourse is the notion of the academic discipline whereby parameters are placed around certain subject areas. The medical school re-produces the academic discipline of medicine and specifically the dominant subject area of biomedicine. The biomedical perspective is associated with the task of curing under the disease framework. This approach pervades secondary care and those who work within that system. It is viewed by students as being privileged, and is valued over approaches that emphasise the healing aspects of medicine such as general practice with its emphasis on patient-centred medicine. The biomedical perspective involves the signs, symptoms, investigations and underlying pathology and is under-pinned by the philosophy of “science as applied to normal function and disease within human beings.” (Wilson & Cunningham, 2013,
The doctor, in this approach, is scientific and rational (objectivist) (Hutchinson & Bower, 2011).

Foucault suggested that disciplines and disciplinary structures not only differentiate particular types of knowledge that belong to certain disciplines, but also work on limiting and excluding what does not belong (Foucault, 1981). Biomedicine is a mechanism of the sciences which is based on realism (physical objects exist independent of the observer), materialism (energy and matter are the only things that exist), and is embedded in the empirical nature of the experimental method. However, the task of healing (involving the doctor-patient relationship, the illness experience) is not based within the sciences, or biomedicine, but rather is located within the subjectivist ontology located in the disciplines of the humanities and social sciences. The discipline of biomedicine therefore acts to limit or exclude what is counted as knowledge by whether or not the new knowledge ‘fits’ with its values and assumptions – its disciplinary rules. It allows people to speak ‘in the true’ if it fits, and does not if new knowledge does not meet those criteria.

Thus, through the exclusionary practice of the academic discipline, power is exercised via the practice of biomedicine which limits and excludes the subjectivist ontology and interpersonal nature of the task of healing. This task is associated with the work of the general practitioner, not the specialist in secondary care. This becomes part of the characteristic discourse associated with general practice (i.e. healing), fundamentally seen as poorly valued from within the medical school, and not associated with specialists in secondary care.

**Specialism**

In both cohorts, it was evident that general practice was not viewed as a specialty, nor were general practitioners viewed as specialists.

The process of specialisation in medical practice as it is known today emerged in the in the early nineteenth century in Paris (Weisz, 2003). However, specialists have been recorded in ancient Egypt (Ghalioungui, 1969) and also existed among Roman doctors according to Galen, who was a Roman physician practicing around AD 162-200 (Nutton, 1973).

Rosen (1944) suggests that specialisation in medical practice occurred because of the accelerated expansion of medical knowledge. More specifically, he proposed the move towards specialism was a conceptual intellectual move towards localized organ pathological thinking (and away from the traditional ‘humoral’ theory of disease) combined with new
technologies such as the ophthalmoscope. Ackerknecht (1967), also shares a similar view regarding the focus on organ localism. However, Weisz (2003) proposes that while organ localism played a significant part in the development of specialisation, it was not the sole determinant. Weisz (2003) illustrates that some specialties were organised by other characteristics such as certain populations (e.g., children and women), state needs (e.g., forensic medicine) and also certain surgical procedures (e.g., cataracts).

Other influences on increasing specialisation were: the bringing together of medicine and surgery in regards to professional practice and medical education which was built around the necessity for research; a “collective desire to expand medical knowledge” (Wesiz 2003, p.539); and administrative rationality, where it was thought that the way to manage populations effectively was through grouping individuals together of the same category and then differentiating the categories. What I focus on, which is relevant to this research, are the first two components.

Weisz (2003) and others argue that the fundamental justification for specialisation was its role in the advancement of knowledge and in medical teaching. If one was to specialise in a particular area, it allowed the potential to gain “mastery of the existing medical literature” (Wesiz 2003, p.546). Specialisation also made space for physicians to see many patients with the same condition. This approach was seen as extremely beneficial as this created the ideal environment ‘deemed necessary' for robust medical research and education (and therefore the advancement of knowledge). Supporters of specialisation such as Jean-Emmanuel Gilibert expressed these views in the late 18th century stating that general practice (meaning the practice of physicians at the time, not referring to the discipline as we know it today) was lacking due to these physicians being incapable of exploring any condition in the “depth required” (Wesiz, 2003, p.546). It was thought by Gilibert that by specializing in a specific area of medicine ‘mediocre physicians’ would be able to “improve their practical skills” (Wesiz 2003, p.546). Moreover, Gilibert continued by stating that specialisation among “gifted individuals” may “produce real progress in medicine” (Weisz, 2003, p.546). It was also realised that medical science was becoming a field of knowledge that was too vast and immense for a single physician to master. Therefore, specialisation was seen as a place where someone could “master the entire literature in his field” (Weisz, 2003, p.546).

Towards the end of the eighteenth century, because of the large volume of patients in the general hospitals, for example in Paris and Vienna, it was suggested that hospitals should be separated into distinct scopes of practice (e.g., the maternity hospital, a hospital for the
insane). Apart from the large volume of patients, it was also thought that it would help with the quality of patient care, as certain conditions required special care that needed to be isolated (Weisz, 2003).

At the time, there was no definite demarcation between practicing medicine and conducting research in medicine. Medical research was predominantly conducted in hospitals, and as they were shifting to specific areas of focus, the physicians practicing in these distinct areas also conducted research. The first research conducted in the specialist environment ranged from offering the first lectures on dermatology to laying the foundations of French psychiatry (Weisz, 2003). As Weisz (2003) notes, this research supported the “specialist claims to academic status” (Weisz, 2003, p.554). He further illustrates that specialists in this era were viewed to hold “prestigious posts” (Weisz, 2003, p.555) and patients viewed these posts as “indicators of excellence” (Weisz, 2003, p.555), and lastly, specialists were viewed as having access to and indeed as being the creators of the “most advanced medical knowledge” (Weisz, 2003, p.555).

Here, it can be seen that from eighteenth and nineteenth centuries, specialisation was beginning to gain momentum, and further, that specialisation and being a specialist was associated with: the advancement of medical knowledge; conducting research, in order to advance medical knowledge; the mastering of a particular area of knowledge; and improving one’s skills as a physician. Being a specialist was viewed as a prestigious position along with having the most advanced medical knowledge.

Defining specialism is not straightforward. Upon searching for a definition in the academic literature and finding nothing, I turned to searching the professional organisation websites. For example, the American Board of Medical Specialties, responsible for overseeing the certification of physician specialists in the United States, yielded no definition of specialisation or of being a specialist (American Board of Medical Specialties, 2013). This was also the case when looking at certain specialty professional organizations such as The Royal College of Surgeons (2013) or the Royal Australasian College of Surgeons (Royal Australasian College of Surgeons, 2013). It seemed that what it meant to specialise and to be a specialist is assumed to be self-evident. In light of this apparent lack of definition what it means to be a specialist or to specialise in medicine, medical dictionaries were searched. The Merriam-Webster medical dictionary defines a specialist as “a medical practitioner whose practice is limited to a particular class of patients (as children) or of diseases (as skin diseases) or of technique (as surgery); especially: a physician who is qualified by advanced training and
certification by a specialty examining board to so limit his or her practice” (Merriam-Webster, 2013). This definition mirrors Weisz’s (2003) notions of a variety of possibilities about what can constitute a specialty (e.g., by class or disease). This definition also highlights the governance associated with being a specialist. Doctors are required to apply for the specialty of their choosing to the appropriate professional college that is accredited to admit, train, examine and award the relevant qualifications and certification to practice as a specialist in the specific field under study.

However, as general practice was not seen as a specialty by second year medical students and trainee interns, I postulate that certain discourses would be identifiable regarding what constitutes a specialty and what does not, with discourses for general practice focusing on the latter.

The trainee intern participants reported that they were not aware of research being conducted in their general practice placements, or if it was, it was not as obvious as research conducted within the hospital specialty surgery. A strong component of specialisation is the advancement of knowledge through research, therefore the lack of obvious research activities within general practice might indicate that it is not a specialty and cannot contribute any advancement in medical knowledge. This seems an important consideration, as it was seen in Chapter 2 that a positive relationship with primary care research was associated with higher percentages of graduates entering primary care disciplines (Grayson, 1996).

It was apparent that respondents lacked knowledge about the vocational training in general practice programme run by the New Zealand College of General Practitioners entitled the General Practice Education Programme (GPEP). What is involved in becoming a general practitioner was variable from both cohorts, with some trainee interns mentioning that you automatically became a general practitioner after you graduated from medical school, that is, as a default position in lieu of postgraduate vocational training. In New Zealand, admission into the general practice training programme requires the completion of two years of hospital based training and six runs (e.g. emergency medicine, psychiatry) of a possible seventeen (The Royal New Zealand College of General Practitioners, 2014a). After this initial two years of postgraduate experience, the trainee can enter the GPEP and complete an additional three years of training. This includes completion of a set amount of clinical practice time (a total of 36 months FTE if full-time on GPEP), completion of formative and summative assessments, passing the Fellowship assessment visit, a certificate in resuscitation skills and a certificate of Good Standing from the Medical Council of New Zealand (The Royal New Zealand College...
of General Practitioners, 2014b). Upon the completion of these requirements, the trainee is
granted Fellowship with the Royal New Zealand College of General Practitioners. Then, they
are able to apply to the Medical Council of New Zealand (MCNZ) for registration within the
vocational scope of general practice (The Royal New Zealand College of General
Practitioners, 2014c).

It can be seen here, that general practice in New Zealand has a professional body that oversees
the training of general practitioners and is involved in their certification and authorisation, in
conjunction with the Medical Council of New Zealand, and for providing New Zealand with
vocationally registered general practitioners. Thus, it is clear that general practice has a
professional governance associated with being a specialty, yet this discourse of general
practice as a vocation with its own advanced training programme is largely unknown by
undergraduate students, that is, by both second year medical students and trainee interns.

Although general practice does have the appropriate governance of a specialty with the
formation of the Royal New Zealand College of General Practitioners in conjunction with the
Medical Council of New Zealand – do these professional bodies view general practice as a
specialty?

It was not until 1974 that the Medical Council of New Zealand “had unanimously approved in
principle the establishment of Family Practice as a specialty” (Council minutes, cited in
Wright-St Clair, 1989 p.93). It should be noted that at the time in New Zealand, general
practice was also known as family practice and the names were used interchangeably as
illustrated in the quote below. One year before this announcement, the Family Medicine
Training Programme (FMTP) began in December of 1977; “an essential first step towards the
time when general practice, or family medicine, becomes a specialty in its own right” (New
Zealand Medical Journal, cited in Wright-St Clair, 1989 p.93). Thus, it appears, that it was not
until the late 1970s when general practice was officially recognised as a specialty by the
Medical Council of New Zealand and also the current government of New Zealand at the
time.

Looking at documents from the Royal New Zealand College of General Practitioners, it is
clear that this organisation considers general practice to be a specialty. In the Fellowship
Pathway Regulations of the College the first page is called “The discipline and specialty of
general practice” (The Royal New Zealand College of General Practitioners, 2014c, p.2). It
then continues to define general practice as follows:
General practice is an academic and scientific discipline with its own educational content, research, evidence base and clinical activity. It is a clinical specialty orientated to primary health care. It is a first level service that involves improving, maintaining, restoring and coordinating people’s health. It focuses on patients’ needs and enhancing links between local communities and other health and non-health agencies. (The Royal New Zealand College of General Practitioners, 2014c, p.2)

Mastery of a particular area of knowledge was an aspect that Weisz (2003) identified to be associated with specialism. In this research, the body knowledge associated with surgery, a specialty, was viewed as ‘in-depth’ knowledge or praxis about the discipline. As noted above, the knowledge or praxis of the general practitioner was described in terms of a ‘breadth’ of medical knowledge lacking the depth of expertise. Additionally, general practice was also acknowledged, by both second year medical students and trainee interns, as having explicitly to ‘deal with uncertainty’. It was evident in the present research that because general practice was viewed as ‘knowing a lot about a little’ that the general practitioner would often have to manage difficult problems that challenged their clinical skill set. This acknowledgement of practicing with uncertainty in general practice along with the ‘breadth’ of knowledge attributed to general practice does not illustrate a mastery of a particular area of knowledge. Comparing this with surgery, dealing with uncertainty was not talked about by the second year students or the trainee interns. This may be possibly due to the ‘depth of knowledge’ attributed to the surgical specialist, dealing with uncertainty was not considered, as they are viewed to have a mastery of knowledge.

Weisz (2003) illustrates that specialism, or being a specialist was perceived as a prestigious position along with having the most advanced medical knowledge. The low status and prestige afforded to general practice and being a general practitioner was illustrated in both cohorts with the common phrase uttered repeatedly of ‘just a GP’. This along with a trainee intern’s scoff at the notion of prestige existing in general practice were just some instances illustrating general practice as having low status and prestige among the medical disciplines. As discussed in the previous paragraphs, general practice was not viewed by the cohorts as advancing medical knowledge or the mastery of knowledge in a particular area. Furthermore, general practitioners were also viewed by both cohorts as being less intelligent and also lacking in motivation or ambition when compared with their specialist colleagues.

This notion that general practitioners are less intelligent or lacking motivation compared with their specialist colleagues is not new. Wright-St Claire (1989) commented; “Even more slowly came the realisation that a general practitioner required special postgraduate training
and was not just a “failed specialist” or “lacking in ambition” (p.89). Moreover, Wright-St Clair (1989) illustrates this further by reference to a letter by Dr C.D. Chilvers to the New Zealand Medical Journal regarding the compulsory registration of general practice as a specialty: “Doctors who have used general practice as the end point of their career having failed in their attempts to enter the established specialties, bring their same failure to general practice” (p.96). The above suggests that the perception that general practitioners were doctors who lacked motivation for the specialties and were seen as not good enough to get into any of the specialties has been in existence in New Zealand for at least over twenty years.

This research illustrates that the discourses that construct general practice and the role of the general practitioner do not construct the specialisation of general practice, even though the professional bodies associated with general practice, The Royal New Zealand College of General Practitioners and the Medical Council of New Zealand, declare that general practice is a specialty in its own right, among the medical specialties that exist. Why do these discourses continue, even after 30 years of being registered with the Medical Council of New Zealand as a specialty in medical practice?

**Extending the Principles of Rarefaction**

In this section, I illustrate the extension of Foucault’s ideas of “principles of rarefaction” (or internal discursive constraint) in relation to specialism. When examining principles of rarefaction, Foucault (1972) suggested that distinctive practices are evident within each discursive system:

> Within its own limits every discipline recognizes true and false propositions, but it repulses a whole teratology of learning…In short a proposition must fulfil some onerous and complex conditions before it can be admitted within a discipline; before it can be pronounced true or false it must be, as Monsieur Canguilhem might say, ‘within the true’ (pp. 223-224).

Thus, it is plausible to make the supposition that discourses about the construction of specialisation must do so as well. When statements are made challenging the recognition of general practice as a specialty, they are notably insightful when establishing the principles of rarefaction. I suggest that one or more of the principles of rarefaction regarding specialism are being utilised in statements to the effect that general practice is not a specialty.

In establishing an affirmative contention to claim that a specialty is a specialty, there needs to be some combination of the following areas, outlined previously, established under the
inspection of the medical school and teaching hospital: the mastering of a particular area of knowledge and set of skills; to be research active (in order to advance medical knowledge); having the most advanced medical knowledge and skills; is viewed as a prestigious position and finally a defined professional body which oversees the advanced training and governance of the specialty in question.

Along with these five identified principles of rarefaction involved with specialism, certain mechanisms, which are evident in this research, exercise and operationalise these five principles that delegitimize general practice as a specialty. For example, the knowledge of general practice being viewed as broad rather than in-depth accompanied with the practice of that knowledge involving uncertainty are mechanisms that serve to exclude general practice from the first specialism principle of the mastering of a particular area of knowledge. The invisibility of general practice research excludes general practice from the second principle of conducting research in order to advance medical knowledge. As shown in the previous section on biomedicine, the knowledge, skill and practice of a general practitioner (e.g., the task of healing) which was evident in discourses from both cohorts, was not associated with the dominant discipline of biomedicine in medical education. Therefore, general practitioners are not being viewed as having the most advanced medical knowledge and skills, as compared with practitioners in disciplines that are deemed to ‘fit’ the values and assumptions of biomedicine. The perception of general practitioners as not being intelligent is also a mechanism for exclusion of the principle of having the most advanced medical knowledge and skills.

Statements of ‘just a GP’ or ‘Ending up a GP’ being exercised continually combined with the view that medical graduates enter general practice because they lack motivation are exclusionary mechanisms of the principle of not being viewed as a prestigious position. Lastly, although general practice has a professional body that governs the discipline, statements illustrating no or little knowledge of any vocational training or with varying views on what is involved with vocational training are mechanisms for exclusion of the last principle of a defined professional body which oversees the advanced training and governance of the specialty in question. When looking at surgery, this research illustrates it is associated with all of the rarefactive principles outlined. Although the last principle is also evident of variable understanding of the surgical training pathway, all students knew it existed, while the same could not be said for general practice.
Thus, all of these mechanisms operationalise and exercise the identified principles of rarefaction around specialism. They are evident from this research and act to limit and exclude general practice from being seen as a specialty in its own right.

**Values and Valuing**

I have illustrated in this thesis that there is a discourse of general practice as lacking value as a medical discipline and also of general practitioners lacking value relative to surgeons and other specialties. This emerged as a dominant theme. Second year students viewed general practice as having a low status, being a default vocation, rather than a vocation of choice, having poor remuneration and a low value for knowledge. Trainee interns viewed the value of general practice in a similar light to second year medical students (apart from the low value of the knowledge associated with general practice). Trainee interns added that messages from the hospital setting of medical education devalued general practice and general practitioners along with teaching and research activities within the discipline of general practice.

Values inform our thoughts and behaviour. We actively construct the experienced world with values and at the same time are constructed by the values we espouse (Harland & Pickering, 2011). Values are learned, that is, are a social and cultural element that can also change over time. The act of valuing something, as Harland and Pickering (2011) suggest, is about the process of making choices and judgments. Because values are a key component of the process of constructing the world around us they propose:

> To think of higher education as a values-enterprise with everything we do, as teachers and learners, being value driven. This includes the choices we make in what we teach, how we teach, what we select for our research, how we conduct ourselves and how we organize our activities. (p.9)

Medical education then, is also part of a ‘value-enterprise’. Apart from teaching the subjects that have utility value, such as anatomy, cardiology and the like, values are on the whole, “implicit and unspoken” (Harland & Pickering, 2011, p.27). Academics, clinicians and other teachers also communicate values through the ‘hidden curriculum’ as outlined in Chapter 3 and it is this unconscious modelling that Harland & Pickering (2011) argue is “the most powerful method for passing on values and changing a student’s value position” (p.29). These values and normative perspectives are learned by medical students. As Harland and Pickering (2011) portray, ideas, things, objects, concepts can be viewed as important, “worthwhile” or “desirable” (p.10) according to the value judgment placed on them. It is evident here that
many discourses surrounding general practice and being a general practitioner are undesirable. How are they kept in existence? Here, Foucault’s notion of power is used as a means of understanding how this may occur.

As illustrated in Chapter 3, Foucault viewed power, not as a possession, or something held by a particular person, but rather a strategy or certain forces that establish positions or ways of behaving and influencing people in their everyday lives. Here, power is a productive force that “brings about forms of behaviour and events rather than simply curtaining freedom and constraining individuals” (Mills, 2003, p 36). Thus, rather than purely exercising repression, Foucault’s concept of power also exercises influence.

Medical educational environments of the medical school and teaching hospital are sites where students learn not only about disciplines such as biomedicine, they are also learning about professional values about becoming a doctor (Jaye et al, 2006). I suggest that while medical students are learning the professional values about becoming a doctor they are also learning about the values associated within a certain specialty, as well as learning to value the medical specialty itself. Moreover, I propose that students’ learning about values and valuing certain aspects of medical practice also extends to learning to value certain types of diseases and ill-health.

Initially, I discuss value with regards to prestige hierarchies in medical specialties and diseases. I then argue that particular technologies of power and technologies of the self are mechanisms by which medical students learn the values and of valuing general practice and being a general practitioner.

**Prestige - a Value Judgment**

In both cohorts of second year medical students and trainee interns, the conditions or diseases associated with general practice carried quite specific value judgments. Both cohorts described these as ‘mundane, minor, non-challenging, not serious, difficult or not exciting’. Conversely, surgery was perceived to be ‘glamorous and exciting’ and involved saving lives and being involved in ‘life threatening’, and conversely, life saving decisions. Additionally, general practice was perceived to have low status and prestige compared to other specialties. This view was expressed by both second year medical students and trainee interns.

Prestige is defined as “respect, reputation, or influence derived from achievements, power, associations etc” (Oxford English Reference Dictionary, 2003, p.1145). The notion of prestige
is inter-subjective; it is a shared understanding within a community and culture. Prestige is also relative. A prestige position is always relative to other positions (high versus low). Therefore, prestige is a concept based upon value judgments. A prestige hierarchy exists within the healthcare system with medical doctors occupying the top with other allied health professions towards the bottom (Aguirre, Wolinsky, Niederauer, Keith, & Fann, 1989). Hinze (1999) further illustrates there is a prestige hierarchy within medical specialties.

The majority of research into prestige looks at individual persons and social groups. However, research by Album and Westin (2008) investigated if diseases in the medical community had a prestige hierarchy - similar to that of medical specialties - via a survey taken by senior doctors, general practitioners and senior medical students. At the same time, the authors administered a survey asking the same three groups to rank medical specialties. Album and Westin (2008) reported that, of 38 diseases ranked – all three groups surveyed viewed the following as the having the highest prestige: acute myocardial infarction, leukaemia, spleen rupture, brain tumour and testicular cancer. In fact all three groups were in agreement about the top eight ranked diseases, although not all in the same order. Among the lowest ranked diseases were psoriasis, fibromyalgia, hepatocirrhosis (cirrhosis of the liver) depression neurosis and anxiety neurosis. Similarly, all three groups were in agreement regarding the bottom eight ranked diseases, although again, not all in the same order.

The authors argue that the high prestige ranking between diseases is associated with the immediacy, invasiveness and degree of technological sophistication in critical organs situated in the upper area of the body. Conversely, the lower ranked diseases were associated with chronic conditions that were situated either in the lower area of the body, or having no specific location. Additionally, this was associated with diseases having treatments that were less visible. The authors suggested that it was evident that conditions that did not have any ‘objective diagnostic signs’ were ranked as low prestige. They noted that the diseases considered fatal tended to have a higher prestige rank, and a higher standing amongst the medical community. The authors attribute this to the social drama associated with death.

The same three groups were also asked to rank 23 medical specialties. Their results were similar to other studies, with the exception of paediatrics which was ranked highly in their study, but lower in other studies. The specialties ranked at the top were neurosurgery, thoracic surgery, cardiology, anaesthesia and paediatrics. The specialties ranked at the lower end were geriatrics, dermatovenerology, physical medicine, psychiatry and general practice (Album & Westin 2008). The authors’ interpretation of the prestige hierarchy for specialties was
associated with similar aspects to that of the disease prestige hierarchy: the immediacy, invasiveness and degree of technological sophistication in critical organs in the upper area of the body. The lower ranked specialties were associated with chronic conditions concentrated in the lower area of the body, no particular location, or concentrating on any particular organ. The research by Album and Westin (2008) and Hinze (1999) on prestige rankings of diseases and medical specialties offers some explanation into the findings of this research.

In my research, general practice was perceived to hold a low prestige status, with the discipline of surgery perceived to hold a high prestige status. This is consistent with the findings of Album and Westin (2008), Hinze (1999) and Matteson and Smith (1977). When discussing what was involved in each discipline, both cohorts of second year medical students and trainee interns viewed a significant part of general practice involving chronic and psychiatric or mental health conditions. The role was also seen to include a significant focus on prevention and education with prescribing medications as a primary source of treatment. This is consistent with the areas identified by Album and Westin (2008) as being associated with low prestige. Hinze (1999) proposed that three areas that bestowed prestige were time, effort and skill. Time referred to the number of hours attributed to the discipline (in terms of the number of hours and years spent in training), effort referred to how difficult and demanding the training for the discipline was and skill referred to particular and specific skills that were accomplished. General practice was perceived by both cohorts to be ‘flexible’ in hours (time), a short and undemanding training scheme (effort), with little mention of specific tangible skills acquired, except communication skills. Hinze (1999) also proposed the idea that passive medical specialties attracted a lower status than active specialties. In the present study, surgery was considered an active specialty; the necessity of ‘having to be good with your hands’ was frequently espoused by participants in both cohorts. General practice on the other hand, was considered to be dominated by communication and relationships; what Hinze (1999) defined as more passive activities and attributes such as sitting down and talking.

The diseases and conditions perceived to be associated with general practice were largely chronic conditions, mental health issues, and also diseases that had less visible treatments (or less invasive ones). For example, the viral illnesses, where no treatment is required, or lifestyle and preventive issues where advice may be given or worked through with a patient, with no direct treatment. Additionally, these diseases and conditions were not associated with ‘saving lives’ (or being of a fatal nature). All of these aspects are considered to be associated with low prestige by Album and Westin (2008). This is in contrast to the discipline of surgery
which was perceived to being able to ‘fix’ things that also involved saving lives or involving ‘life threatening’ decisions.

This research therefore supports previous research findings by illustrating the low prestige level of general practice and the associations attributed to this low status. These associations (the immediacy, invasiveness of certain professions or diseases) arise from value judgments. The more acute a disease and the more invasive the treatment for it – the higher the prestige. It also illustrates the dominance of biomedicine; the more objective signs available for a disease, the more the body and particular organs are involved, the more activity around the body, the greater the value assigned to the disease and specialty. This thesis shows that students have learned the prestige of specialties and diseases. The following section examines the learning of these value judgments can be learned with Foucault’s notions of technologies of power, the self and also rarefaction of the speaking subject combined with the authority of expert knowledge.

**Valuing Knowledge of the Profession - Technologies of Power**

Technologies of power and technologies of the self form a key component of Foucault’s concept of disciplinary power as illustrated in Chapter 3. The subtheme from the trainee intern results chapter ‘Messages from the hospital’ (Chapter 6), suggests that general practitioners and general practice are under constant surveillance by the hospital physicians and staff. Surveillance here is defined as closely observing and evaluating the professional work of general practitioners. Surveillance singles out individuals (in this case it also singles out a profession as well as individual general practitioners), and enables comparisons to be made (Popkewitz & Brennan, 1998). This mechanism of surveillance upon general practitioners by specialists in secondary care is specific to medicine and remains, I suggest, largely un inspected in both primary and secondary healthcare settings. Foucault (1975) states “A relation of surveillance…is inscribed at the heart of the practice of teaching, not as an additional or adjacent part, but as a mechanism that is inherent to it and which increases its efficiency” (p. 176).

The results show that statements are frequently made regarding general practitioners’ competence. These statements are made comparing general practitioners’ competence (the competence between different general practitioners’) and also comparing the competence of general practitioners relative to secondary care physicians. The mechanism of surveillance enables these particular comparisons to be made.
These comparisons lead to judgments. This relates to another mechanism of power called normalisation or “normalizing judgments” (Foucault 1975). Foucault (1975) noted that normalizing judgments frequently occur via comparison so that individual actions are referred “to a whole that is once a field of comparison, a space of differentiation and the principle of a rule to be followed” (p.182). I suggest that in terms of teaching values, what is being offered to students are normalizing value judgments about general practice and general practitioners. This surveillance and normalization produces the normalising value judgments low prestige, status or respect, a default vocation (‘something good or general practice’). They are normalized because these value judgments are evident throughout the students’ undergraduate medical degree, are frequently repeated, and are accepted as truth.

Nicholl (1997) suggests that normalisation operates within an institutional context of learning as judgements over statements of truth and correctness are decided. True or correct knowledge is traditionally decided by the teacher. The teachers in the hospital setting are offering professional values and behaviours, and in this case values regarding other disciplines. When these values go unchecked and unchallenged, it is reasonable to suggest that these can be seen as a kind of ‘cultural norm’ within secondary care. These normative judgments are exercised through subtle positive and negative reinforcements from within the learning environment as successive generations of doctors teach the next generation of doctors what it needs to know (Jaye, Egan, Smith-Han, & Thompson-Fawcett, 2009; Wear, 1997).

**Technologies of the Self**

Normalizing technologies of the self are what Foucault (1990) described as mechanisms whereby individuals regulate and discipline themselves through the discourses and discursive practices of the institutions they are involved with; in this context, the medical school and teaching hospital. Where previously, the technologies of surveillance and normalizing are discursive practices where the institution exercises power, technologies of the self are where individuals exercise power upon themselves. Normalizing technologies of the self is the process of aligning oneself with what is expected, in this case, what is expected of a doctor. I infer that students utilise technologies to internalize these aforementioned value judgments. By this means, value judgments continue to be exercised but also reinforced.

For example, the discourses of general practitioners having less motivation and intelligence as specialists combined with the ‘truth’ of low status and prestige of being a general practitioner
constitute technologies of the self. Within the context of normalizing value judgments about general practice, students align their aspirations with the truths they learn about general practice; as a default vocation for those unmotivated or incapable of completing the gruelling specialty vocational training. This helps to explain the common epitaph espoused by general practitioners of being, ‘just a GP’.

Valuing Knowledge – Conditions of Power

The findings from this study highlight the dominant high values associated with the hospital or specialist and the lesser value of primary care including general practice. Here I explore the conditions necessary in order for power, as Foucault describes it (1975), to be exercised. These are to do with an institution’s role in the organization of space, time and capacities.

In the first instance I return to the perceived lack of value assigned to primary healthcare knowledge by the medical school. This perception was seen from senior medical students informing the junior students that one particular module (known as Patient, Doctor and Society or PDS) was not a mandatory attendance (Chapter 5). The module referred to in this instance was the Patient, Doctor and Society module, which was mentioned in the results as being a space in the curriculum that drew on a wide range of knowledge involving interaction in community healthcare settings. The fact that attendance at these classes is not recorded, can be interpreted by students as an indication that lack of attendance at these classes is of no consequence. This reinforces a value judgment regarding this type of knowledge from the medical school.

This example provides an illustration of the use of space in power mechanisms within disciplinary institutions. As Foucault (1975) states, “In the first instance discipline proceeds from the distribution of individuals in space” (p.141). A space in the curriculum has been created for students to attend these classes, but because this curricular space, unlike other spaces in the curriculum, is not mandatory, students receive a message of ambivalence about the utility of the classes relative to classes which are mandatory.

Another condition of power is time. “Its [the time-table’s] three great methods – establishing rhythms, impose particular occupations, regulate the cycles of repetition – were soon to be found in schools, workshops and hospitals” (Foucault, 1975, p.149). Activities are planned and scheduled to a timetable. Here those exercises deemed pertinent to the discipline combined reoccur on a regular basis and are thus reinforced. As an example, students on their surgical attachments are expected to attend surgery research presentations. It is easy to do this
because student’s placements and the research seminars occur within the hospital setting. On the other hand, students are not exposed to research activities during their general practice attachments with its community placements and are not expected to attend the general practice research seminars because of the scheduling and transport difficulties. This scheduling enables research within surgery to be made visible, and research in general practice to be invisible.

Lastly, the condition of capacities is considered, or what Foucault called “The organization of geneties” (Foucault 1975, p.156). The term refers to the organisation and creation, and therefore pedagogy and curriculum design, of what is needed to be taught (skills abilities), divided into particular stages. Each stage will build on the previous stage (e.g., building knowledge and skills throughout the six year undergraduate medical programme). These activities that are considered suitable are dependent “upon that discipline’s ‘true discourse’ or the knowledge of people, processes and activities which has been established through an exercise of power within that disciplinary block” (Marshall, 1989, p.106).

What is taught in general practice by trainee interns reflecting on their undergraduate degree (e.g., consultation skills, chronic care models) also carries with it, the ‘truth’ about the discipline. This ‘truth’ illustrates what is valued by the department of general practice or states what is valued in the discipline of general practice. As the results indicate, it also portrays what the academic general practitioners value via illustrating what they have not included.

**Rarefaction of the Speaking Subject**

As well as the role that technologies of power, technologies of self and institutional conditions play in exercising these discourses of value, the internal exclusion of rarefaction of the speaking subject is also considered in terms of contributing to the production of a discourse on the worth or value of general practice and general practitioners. Foucault (1971) rejects “the philosophy of a founding subject” (p. 21) or a self-knowing individual, and, rather, portrays the individual subject in discourse as “a particular, vacant place that may in fact be filled by different individuals” (1972, p.95). However, that ‘vacant place’ cannot be assumed by just anyone. Rarefaction of the speaking subject refers to the limitation or exclusion “placed on who can speak authoritatively” (Mills, 2003, p.61) due to particular rituals that exist in certain societies of discourse, kept in existence, according to specific rules.
Mills (2003) offers the example of how universities contain ‘unwritten rules’ which govern “who can speak at certain times” (p.61), combined with “whose statements are considered to be authoritative” (p.61) with the example of a teacher’s comments on assignments determining how a student is graded and assessed. The teaching hospital is also a higher educational institution. It combines a working environment (providing clinical patient care) and a learning environment (learning about clinical care and being a doctor) and offers further examples of rarefaction of the speaking subject.

In the tensions of the hospital environment between providing clinical care and a learning environment for health professionals, the primary function is the provision of healthcare to patients, with learning tasks placed secondary. Therefore, activities that attend to the first priority of patient care can take precedent over learning opportunities. When examining teaching and learning in the hospital ward Jaye et al. (2009) illustrated the difficulties students have in the teaching hospital with these two conflicting tasks of teaching clinicians providing clinical care to patients and facilitating the learning needs of students. The authors give an example of situation where during a ward round three doctors (the consultant, registrar, and house surgeon) were having a conversation regarding a patient’s diagnostic test, however, although students were physically present, and could hear everything that was being said, they were not participants in the conversation, nor were they invited to be. Here medical students were being excluded from speaking among the doctors involved in discussion of the clinical care of a patient and from the daily activities and interactions of patient care.

The example above illustrates “whose statements are considered to be authoritative” in the hospital environment. Mills (2003) shares the example of a teacher’s comments on assignments determining how a student is assessed. In the teaching hospital, this is also evident in the ways that clinical teachers assess students’ performance on the ward. However, I would also further extend the idea of “whose statements are considered to be authoritative”. As qualified physicians teaching in the secondary care setting, clinical teachers can lay claim to a privileged space - to have authority and legitimacy over a subject and expertise in the discipline of medicine and the clinical care of the patient – to make statements that should be considered authoritative. Yet, within this authority, there is also another element in existence which is constantly being enacted in the teaching hospital, and that is the element of medical hierarchy.

The characters portrayed in the example given by Jaye et al. (2009) above are part of the teaching hospital hierarchy. At the top of the hierarchy is the consultant, followed by the
registrar who is in pursuit of fellowship, followed by the house surgeon, and then the medical students. In turn, the medical students have their own hierarchy of the trainee intern, the fifth year student and lastly in the clinical medicine years, the fourth year medical student.

This notion of clinicians occupying a privileged, legitimized space along with individuals participating in the hierarchy within the medical institution, may bring into question Foucault’s rejection of the possessive notion of power, or power not being held by any particular individual. Although Foucault would hold this view – that certain people cannot hold power anymore than anyone else – this does not mean that particular individuals or groups do not “have greater opportunities to influence how the forces are played out” (Danaher et al, 2000, p.73). The medical hierarchy is one of these places, where particular individuals (e.g., the consultant) and groups (e.g., a group of doctors) (having a dominant status) have a greater opportunity to exercise certain power relations. In this case, it happens between doctors and medical students, who have a subordinate status because of their place in the hierarchy. With these three mechanisms in existence, certain rituals or ‘unwritten rules’ are played out. For instance, students rarely speak during a ward round unless invited or instructed to (Jaye et al., 2009).

Therefore, the working environment, the privileged space of clinicians and the hierarchy, produce limitations on students’ ability to speak or act. Rees and Monrouxe (2010) discuss their research on medical students’ explanation of behaviour following professional dilemmas (e.g., an ethical dilemma), stating that at the time of the students’ professional dilemmas (an example could be during a ward round), some students “narrated the path of passivity, silence and obedience” (p.434). It has also been shown that within the daily clinical activities, the hierarchy of medicine makes it difficult and intimidating for those at the lower end of the hierarchy to ask questions (Jaye et al., 2009). Furthermore, research into nursing students’ belongingness illustrated behaviours of conformity and compliance when witnessing incorrect behaviours, so not to ‘rock the boat’ or get ‘offside’ with their senior, and therefore dominant, nurse colleagues (Levett-Jones & Lathlean, 2009). When looking at medical students and their perceptions of ‘whistle blowing’, reasons given for not ‘whistle blowing’ by a focus group of medical students included: self-preservation; not the student’s responsibility; retaliation by peers and lastly; although the behaviour witnessed is wrong, it is an accepted norm (Rennie & Crosby, 2002).

Continuing my discussion about clinicians having a privileged space – to have the authority and legitimacy and expertise in medicine - I also add the legitimacy of claiming expertise of
that particular specialty. The results in this study illustrate general practitioners’ participation in the co-construction of the low value of general practice: ‘just a GP’, and also the notion that general practitioners are not seen as specialists. This position of influence, by being a general practitioner, also makes these discourses appear self-evident, commonplace and immensely difficult to challenge.

The privileged space of a practicing clinicians (including general practitioners), the hierarchical structure of the medical profession and the learning and working environment of the teaching hospital are mechanisms that enact Foucault’s notion of the rarefaction of the speaking subject. I propose that this is another means of keeping these value judgment discourses regarding general practice and general practitioners in circulation among medical students.

**Competing Discourses - Power and Resistance**

In Foucault’s view, power can only exist where resistance is present. “There are no relations of power without resistances; the latter are all the more real and effective because they are formed right at the point where relations of power are exercised” (Foucault, 1980, p.142). The word resistance, from the Latin word ‘resistere’ is defined as “to resist, make a stand, oppose” (Harper, 2014). Exercising resistance can take on many forms. Ashforth and Mael (1998) illustrate different aspects of resistance which can be: directed at the threat (targeted) or not directed at the threat (diffuse); striving toward institutional goals (facilitative); or in opposition to institutional goals (oppositional); operate within an institution’s rules (authorized) or outside an institution’s rules (unauthorized); be enacted by individuals (individual) or groups (collective).

There are many discourses circulating at any one time. Thus, there are discourses that are constantly competing and providing points of resistance. In medical education settings for example, discourses of caring compete with discourses of competence in clinical work (Good, 1995). Furthermore, patient-centred medicine is a discourse incorporating a set of practices and values that are in competition in the teaching hospital with parochial discourses of patient care (Stewart, Brown, Weston, McWhinney, McWilliam, & Freeman, 1995). The contradictions in the perceptions of second year medical students and trainee interns illustrate further examples of competing and contested discourses. These competing discourses are also acts of resistance which portray some of the different dimensions outlined in Ashforth and Mael (1998) above.
In the present study, trainee interns portrayed general practice as a discipline working with predominantly chronic or mental health conditions. Additionally, general practice was viewed as lifestyle friendly and a discipline that was not overly demanding in terms of its workload or knowledge. However, their experience in general practice placements are a source of competing discourses that, although only rarely mentioned, described the treatment of acute conditions, and referred to general practice as ‘a bloody hard job’ (Chapter 6). The discourse around specialisation, specifically that general practice was not seen as a specialty, was also contested. Furthermore, these views of general practice as being a busy, demanding and difficult discipline and a specialty in its own right, illustrate a competing discourse on the value of general practice.

However, these competing and contested discourses were not powerful enough to challenge the more dominant discourses perceived to be prevalent in medical education. In any case, these competing and contested discourses suggest that there are discourses of resistance that medical students encounter when journeying through the medical institutions of the medical school and teaching hospital regarding general practice and being a general practitioner.

**Power/Knowledge**

Foucault utilised the term power/knowledge or “power-knowledge relations” to illustrate that power and knowledge were not separate concepts, but enmeshed together;

> that power and knowledge directly imply one another; that there is no power relation without the correlative constitution of a field of knowledge, nor any knowledge that does not presuppose and constitute at the same time power relations. (Foucault, 1975, p. 27)

In *Power/Knowledge*, he again reiterates the description of knowledge as being bound by power relations “it is not possible for power to be exercised without knowledge, it is impossible for knowledge not to engender power” (Foucault, 1980, p. 52).

The present study offers an illustration of how this power/knowledge supposition operates. For example, the academic discipline of biomedicine is a dominant discourse in medicine, acting as an exclusionary and limiting mechanism that excludes other knowledge primarily associated with general practice. The five principles of rarefaction determine what is ‘known’ as a specialty and what is not. Technologies of power, technologies of the self, and the notion of rarefaction of the speaking subject illustrate how value judgments are learned about general practice and also about the diseases and conditions that general practice is involved with. These examples illustrate Foucault’s thesis that power is exercised with knowledge and that
knowledge engenders power. Although I have highlighted certain aspects of Foucault’s theories and approaches with certain aspects individually, it is important to highlight that these are operating all the time:

Power must be analysed as something which circulates…Power is employed and exercised through a net-like organization. And not only do individuals circulate between its threads; they are always in the position of simultaneously undergoing and exercising this power. (Foucault, 1980, p.98)

In the following chapter I conclude my thesis. I discuss the implications the results have within medical education and for the future health workforce. In medical education this includes addressing issues at the level of the institution, curriculum, research and vocational training and the individual teachers involved in teaching medical students, our future doctors. Finally, I discuss potential directions for further research and end with some concluding remarks summing up my thesis.
Chapter 8 - Conclusion

Implications from the Research

Health Workforce

This study focused on identifying discourses about general practice and being a general practitioner in the context of declining numbers entering general practice. I now examine possible implications from this research, for undergraduate medical education. With populations increasing in New Zealand and around the world and with the burden of chronic conditions forecast to increase, combined with proposals to move some secondary care to general practitioners, a responsive, adaptive and valued workforce in primary care, which includes general practitioners is needed.

Chronic disease is the major cause of death in nearly all countries (World Health Organisation, 2005). It is estimated that chronic diseases account for over half of all causes of death globally (World Health Organisation, 2005). A continual growing proportion of the population is living with chronic conditions in New Zealand. For example, the number of New Zealanders that are diagnosed with type 2 diabetes is forecast to double from 200,000 in 2006 to approximately 400,000 by the year 2028 (National Health Board, 2010). Among the ‘change pressures’ identified by the National Health Board document ‘Trends in Service Design and New Models of Care: A Review’ (National Health Board, 2010) is an increase in the prevalence of certain chronic conditions associated with lifestyle choices (e.g., poor nutritional eating habits, limited physical activity). In the same document, the deteriorating health system workforce shortages and implications for these pressures are highlighted. One pressure signalled is the increased degree of specialisation in medical practice. This may result in decreasing numbers of generalists in primary care, of which general practice is a major part, during a period when there are predicted increases of chronic and co-morbid conditions (National Health Board, 2010). Supporting this claim is The New Zealand Medical Workforce survey conducted in 2012. Between 2006 and 2012 the number of general practitioners only increased by 488 (Medical Council of New Zealand, 2012). During the same period, the number of specialist doctors increased by 1,100 which is more than double that of general practitioners (Medical Council of New Zealand, 2012).
The review document (National Health Board, 2010) suggests that patients will have increasing difficulty accessing general practitioners because of increased demand, activity, ageing of the population and rise of chronic conditions accompanied by “workforce supply issues” (p.15). There is also evidence of practices of not admitting new patients. Because of many pressures underlying healthcare delivery, new trends have emerged in the design of delivering a national health service (National Health Board, 2010). One of the major new design strategies focuses on prevention, and for patients to self-manage their own conditions, along with a move towards home-based services with technology and “greater staff mobility” (p.16). This directive then suggests that general practitioners, among other primary healthcare staff, will “teach and encourage patient self-management” (p.19) and will become more efficient in aiding self-management of patients.

Another major trend is the integration of family health centres and teams. This has several aims. One is for primary healthcare to take on a larger role in delivering secondary healthcare based services. This is connected with devolving particular hospital services, part of an international trend (National Health Board, 2010). Another major trend is for secondary care to focus on core services and as mentioned, passing other services which are not considered core services to primary health care settings (National Health Board, 2010).

The shift in focus that the Ministry of Health review document describes is already beginning to take place in New Zealand. This is seen in the Southern District Health Board’s strategic plan of 2013/14. For example, The Southern Health Alliance, which is a relationship between the Southern District Health Board (SDHB) and the Southern Primary Healthcare Organisation (SPHO), has been established. The Alliance is considering relocating minor elective procedures to the community and using the general practitioner with a special interest (GPSI) to perform certain procedures (Southern District Health Board, 2013). Another initiative is increasing general practitioners’ access to community services in order to better support vulnerable elderly patients in acute crisis and avoid secondary emergency department care (Southern District Health Board, 2013). The SDHB plan also refers to particular actions to improve the performance of management programmes for cardiovascular disease and diabetes. Of these actions, the SPHO is looking at locating ‘clinician champions’ in order to develop expertise of patients with chronic conditions (Southern District Health Board, 2013). These three examples illustrate the move towards shifting some healthcare services away from secondary care and towards primary care. They also illustrate increased focus on chronic care for primary care physicians, including general practice.
The findings of this research offer certain challenges for the current future trends of healthcare service delivery outlined by the National Health Board in 2010 which are beginning to be implemented. With chronic care developing into a large area of importance for healthcare services, and placing even more significance on the role of primary care and general practitioners, it is essential to assist medical students to understand and value an approach towards doctoring that values healing and caring as much as curing. For example, if a future directive supports increased self-management by patients of their own conditions, then valuing and supporting this approach to healthcare needs to be seen as part of a doctor’s role. This is quite the opposite to ‘doing medical care to the patient’. The professions that are heavily involved in chronic care, such as the specialty of general practice, also need to be valued if a workforce is going to respond and be effective in dealing with this increase in prevalence of people with chronic care conditions.

The shifting of secondary care healthcare delivery into primary care may herald several challenges. This study has highlighted the negative esteem and low value that some hospital clinicians have of general practitioners. Redeploying clinical jurisdictions from the secondary to the primary sector may create further tensions in the relationships between hospital clinicians and general practitioners. This may also create interesting opportunities for general practitioners to expand their scopes of practice.

Medical Education

The Institution

My research into the discourses of general practice and being a general practitioner offers challenges to the medical school and teaching hospital institution, the knowledge and practice that informs it, the curriculum, to individual teachers involved in delivering the curriculum, and medical students. If general practice is to be viewed as a valued specialty in its own right, a specialty that students see as a worthwhile and a desirable vocation rather than to be seen as a default vocation, then these discourses need to be challenged.

The medical school and teaching hospital institution has a significant role to play in: the employment and professional development of staff; and the design of the medical curriculum. This includes deciding what is necessary, relevant and important, and therefore valued, to teach and learn, and also where it will distribute its resources.
The institution can play an active role in employing general practitioners to teach in all aspects of the undergraduate curriculum. This would be beneficial as a legitimized and authoritative platform to then challenge the dominant discourses that are involved in medical practice and education by offering up alternative discourses. Additionally, the institution can raise awareness of the discourses that are produced about general practice and how they are kept in circulation through a commitment to the professional development of staff in relation to teaching. Staff development in medical education with a focus on the practical aspects of teaching can take precedence, for example teaching a clinical skill or learning how to facilitate a small group discussion, or how to give useful and appropriate feedback. However, staff development that specifically focuses on the hidden curriculum, and what particular discourses can produce should also be considered if the dominant discourses are going to be effectively challenged. If the hidden curriculum is to be challenged, it first needs to be “outed”.

The medical school and teaching hospital have the difficult yet major role of deciding what will be involved in the curriculum, in the process signalling what is valued. Having a working knowledge of the hidden curriculum and an understanding of the power of its effects on students, can help shape and guide its development and structure. Therefore, giving the appropriate space, time and equal standing to areas of the curriculum to illustrate a significant positive value is important. For example in this research, requiring mandatory attendance to teaching that is relevant to primary care will confer explicit equal value. Further examples could also be allowing space, or even creating one, to formatively and summatively assess these forms of knowledge and practice, which may in turn, by their nature, need alternative and creative initiatives for assessment. However, showing students that these aspects are important, by allocating appropriate space, time, equal standing and assessment, will communicate to students that these things are important and valued.

The Curriculum

Along with the institution as a whole needing to show that activities deemed important are allocated appropriate space and time throughout the undergraduate medical school curriculum, departments within the institution should also be aware of the same issues. Academic general practice departments should be mindful of the explicit and implicit messages they are teaching and what students are learning in the general practice attachments they have in the clinical years of their undergraduate education. Included in this purposeful consideration of allocating necessary space and time, is the participation of students in a
research environment of general practice. This also would help facilitate a culture of research associated with the specialty that is seen as a norm, rather than either not being seen at all, or on the fringes of the specialty. This would enable students to see research being undertaken in general practice, and secondly, can demonstrate the advancement of knowledge and practice in medicine via conducting research and aligning itself as a specialty. Next I detail other ways students can be exposed and then involved with general practice research, outside a general practice attachment.

The undertaking of allocating appropriate space and time in an undergraduate medical curriculum is immensely difficult. The medical curriculum is subject to increasing pressure, as medical knowledge expands. As shown in Chapter 6, the general practice attachments are through years 4, 5 and 6 in both the three Schools of Medicine associated with the University of Otago and similarly at the School of Medicine, University of Auckland. These attachments vary in length from –four to seven weeks. Trying to illustrate the ‘full picture’ of general practice due to the breadth of the specialty within these attachments is a difficult undertaking. Innovative ways to expose students to the breadth of the specialty of general practice need to be explored. The question of ‘what’ to include and ‘how’ within the constraints of space and time are crucial when communicating to students the positive value of general practice in the community and in medicine. Discerning what is taught is a considerable challenge, yet contributes significantly towards the ‘truth’ about general practice as a discipline.

**Research and Vocational Training**

As well as academic general practice departments having a role to play in exposing medical students to general practice research within their clinical attachments, an early exposure (from the first year of medical school) to research in general practice creates an opportunity for students to participate in the construction of an alternative discourse that research is conducted in general practice before they enter their clinical years. This can be accomplished in many ways including being in partnership with RNZCGP.

An event where students can get to know what encompasses general practitioner research could be incredibly valuable. For example, what does general practice contribute to the field of medical knowledge and practice? What are its foundations and research methodologies? What are the many areas of research that make-up general practice? Moreover, introducing who the academic general practitioners are and their respective research areas that can signal the projects that may be coming up or offered that students could be involved with to provide
a personal connection to the discipline. Utilising this platform, research opportunities that students can get involved with can also be disseminated. Examples could include a focus on specific upcoming projects that also highlight early the possibilities for undergraduate medical student, such as doing an intercalated PhD while studying, or summer scholarship opportunities and even a Bachelor of Medical Science.

A stronger exposure for students to research within general practice settings would reinforce the message that the specialty of general practice conducts research that advances medical knowledge. This exposure would begin to generate an alignment with the discursive constraint of conducting research, and move general practice towards being viewed as a specialty.

When looking at the last principle of rarefaction for being regarded as a specialty that of ‘A defined professional body which oversees the advanced training and governance of the specialty in question’ there are opportunities to portray general practitioner vocational training in detail. The RNZCGP in partnership with academic general practitioner departments around New Zealand could be more active in highlighting the pathway of a general practitioner and detailing what is required to enter general practice, the duration of the vocational programme along with what is involved and promoting this to students early in their undergraduate training. This approach could begin to address the lack of knowledge about general practice as a vocational pathway. Furthermore, it introduces students to the existence of the professional body of general practice in New Zealand and dispel the misperception that a medical trainee will become a general practitioner by default when they graduate.

**Individual Teachers**

Apart from particular institutional and curriculum structural educational initiatives, attention needs to be focused on the individuals who teach students in general practice and hospital based medicine. As stated previously, staff development should consider purposively addressing important elements of the hidden curriculum and its effects. In this case, it can be seen that discourses espoused by general practitioners and hospital clinicians contribute to the production of normalizing value judgments about general practice and general practitioners which consist of low prestige, status or respect or a default position of medicine.

Furthermore, teaching and non-teaching clinicians may benefit from awareness raising campaigns of the effects of the medical hierarchy and structure that are constantly played out in the teaching hospital. For example, illustrating the limitations on students’ ability to speak
or act which contributes to the normalizing judgments that can go unchallenged and lead to the reinforcement of discourses of low prestige, respect and default vocation. I have also illustrated that general practitioners and hospital clinicians occupy a legitimised authority and privileged space. Therefore, explicitly articulating this aspect and creating an acute awareness of this dynamic can illustrate how certain discourses can contribute to the construction of general practice and being a general practitioner. Some discourses can show value, respect, a specialty in its own right and a specialty that students pursue, and others quite the opposite. This links with the idea of clinicians being role models for the medical students to emulate. However, as well as modelling their professional behaviour with patients, knowledge and skills associated with their profession, they are also role modelling appropriate discourses which illustrate a professionalism and respect of other fellow medical professionals.

**Constructing Contested Discourses**

I have argued that the academic discipline of biomedicine acts as an exclusion mechanism and limits what is viewed as knowledge in medical education. Offering discourses which routinely contest this dominant academic discipline in medical knowledge and practice is something which needs to occur if there is going to be a shift in valuing the aspects of medical knowledge and practice involved with healing and caring and away from an all encompassing view of curing. This represents a challenge as it involves a significant ontological and epistemological shift away from the positivist paradigm which currently underpins and is the foundational basis of biomedicine. However, there has been significant research looking into these more subjectivist areas of medical knowledge and practice.

Whilst this thesis is not the place to explore this body of research in depth, much of it has been brought together in the book by the two general practitioners, Hamish Wilson and Wayne Cunningham (2013) *Being a doctor: Understanding medical practice*. Here, these authors emphasise whole person care which includes the doctor-patient relationship, exploring the illness experience of the patient and attending to a patient’s suffering, the tasks associated with healing (Wilson & Cunningham, 2013). While also maintaining the tasks of the doctor involved in curing, that is, diagnosis, investigation and treatment of physical and psychological symptoms, it also outlines the tasks that identify particular links between personal issues, feelings that exist between the patient as person and certain psychological and physical symptoms. This text also contains vignettes of real patient scenarios where this model is practiced and illustrates positive outcomes in patients (and doctors!) which offer points of resistance to the dominant biomedical paradigm (Wilson & Cunningham, 2013).
Medical education in the first year needs to address discourses that contest the dominant expectation of what a doctor does explicitly, and offer alternative discourses which illustrate the importance and emphasis of areas of medicine that are not fixated on purely disease, curing and fixing the body.

This text (Wilson and Cunningham 2013) may also offer prescriptive avenues in which it outlines mastering a particular area of knowledge and set of skills, one of the first principles of rarefaction that validate and legitimize a specialty. For example, general practitioners could construct themselves to be mastering the knowledge of the doctor-patient relationship, illness without disease, co-morbidities and of attending to suffering and healing. This, accompanied by reframing the breadth acknowledged in the scope of general practice as their depth of mastery and expertise of knowledge and skills that is needed in the specialisation of general practice. Such a reconstruction to be considered would need a partnership between the RNZCGP, the general practitioners in New Zealand, and the medical schools in New Zealand to agree and espouse these discourses from their respective roles in educating and training our possible future general practitioners. Whether or not this could be accomplished, it portrays the many institutions and individuals that would be involved in order to do so and also shows the dominant discourse of the biomedical approach along with the influence of specialisation in medical practice.

Implications for Further Research

This research has explored overarching discourses of general practice and being a general practitioner in the medical school and teaching hospital using Foucault’s ideas of discourse, power and power/knowledge. Yet, this leaves many more areas to investigate from a micro perspective such as analysing the discourses that may be present in set texts (for example case or problem based material, and also looking at discourses evident in whole class lectures, laboratories, small group environments and also various hospital as well as other workplace settings like general practice surgeries. Further work into how these discourses continue to be operationalised, that is, how they are constructed and exercised is also needed for these other contexts.

Investigating the ways in which different students take-up, resist and offer alternative discourses would also be worthy of further research. Medical schools around the world offer undergraduate, post-graduate education or a mix of both. Students entering medical school later in life may, from their previous life experiences, respond differently to certain discourses
than students who do not have the same extent of life experiences before they enter medical school. Exploring discourses of general practice among recently graduated medical students, general practitioners who are just starting out and those who are more experienced would also add to an in-depth examination of the discourses medical students and the general public may be exposed to when they enter hospital or visit their general practitioner.

Apart from general practice, several other medical fields specifically in New Zealand are also underserved. These include psychiatry, pathology and rural medicine (Health Workforce New Zealand, 2013). Research into these disciplines may also benefit from an investigation of the particular discourses that are evident about the particular specialty in question.

**Conclusion**

When I began this research in 2008, there was a critical shortfall of medical graduates entering general practice vocational training programmes. This motivated me to investigate why medical students were not choosing general practice as a vocation, against the rising need and the role of general practice into the future as particular areas of secondary care are being dissolved into primary care.

Using Foucault’s theories of discourse, power and power/knowledge I have shown there are three key themes that contribute to the discourses of general practice and being a general practitioner. These are the dominance of biomedicine, the specialisation of medical practice, and particular values encompassed in undergraduate medical education. Although undergraduate education contains many elements of medical practice that are not biomedical science (e.g. bioethics), it is clear from this research that the philosophical paradigm of biomedicine still permeates undergraduate medical education and practice. This acts as an exclusionary mechanism that renders the professional attributes and skill set associated with general practice visible in negative terms relative to medical specialties.

General practice is not seen as a specialty in its own right by many medical students in this research. The components that are seen to comprise medical specialisation act as a barrier to the recognition of general practice as a specialty. Being seen as a specialty, I contend, is important if general practice is going to maintain a growing workforce. Specialisation in medicine conveys many facets that medical students pursue during undergraduate training and also beyond, for example a mastery of advanced knowledge and skills in a given area. A reconstruction of general practice as a specialty by members of the public, medical students, secondary and tertiary care specialists and general practitioners themselves is needed to
illustrate clearly what defines general practice as a specialty and why this is so. Having an ‘us and them’ view of specialists and general practitioners is also counter-productive to facilitating collegial and professional relationships, and is not conducive to patient care and medical education.

Students enter medical school and bring with them their values. In this research students attributed a low value towards general practice as a discipline and general practitioners as professionals. During their journey through medical school learning about professional values in medical practice is part of their education. However, students also learn to value particular medical disciplines and specialties and within these disciplines, the value of certain types of diseases and ill-health they work with and also to value particular knowledge within medical practice. General practice is poorly valued by many medical students compared to other specialties. The values that are communicated and picked up by students cannot be helping them to consider positively a career in general practice. The question remains for the medical community, and in particular those involved in educating our future medical doctors, how to challenge these dominate discourses that are evident in medical students’ training from the first day they arrive in medical school to the last day they leave as graduated medical professionals.

This difficult task remains a challenge of the medical education institutions of the medical school and the teaching hospital, curriculum planners, medical educators, general practitioners and medical students to contest the dominant discourses that students pick up and offer alternative discourses. These alternative discourses need to illustrate the validity in other forms of knowledge that are relevant and lead to positive patient outcomes (but are also just as challenging) to implement in medical practice which conflicts with biomedicine. Furthermore, an alternative discourse is needed which constructs general practice to be seen and regarded by all health professionals, including general practitioners themselves, and medical students as a specialty. Constructing these discourses would be fruitful in seeing general practice and the work involved in being a general practitioner more valued among the public, medical students and health professionals.

The international and national trend is moving towards super-specialisation accompanied with devolving secondary care services to primary healthcare. Therefore, the role that general practice plays needs to be genuinely recognised and valued if the government via the Ministry of Health continues to pursue this trend. The onus is on the medical education institutions, professional bodies, curriculum planners, teachers and general practitioners themselves to
make general practice a vocation that medical students upon graduation view as challenging, valuable and a vocation worthy of actively pursuing to compete successfully with the other specialties. Future work should investigate ways in which we can operationalise the messages in this thesis and thereby making general practice a positive and desirable and appealing vocation so it is no longer ‘Just a GP’.
References


Faculty of Medicine, (2007). Patient Doctor and Society (PDS): Semester One Course Book. Dunedin: Faculty of Medicine, Division of Health Sciences, University of Otago.


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Appendix A

Semi-Structured Interview Plan

1. Informed Consent Process/Information Sheet
2. Demographic form to complete
3. Warm-up questions
   a. – How are they doing at medical school so far?
   b. – What are their first impressions of Medical School?
4. Opening question(s):
   Tell me about what do you think a General Practitioner does in their role?
   Tell me about what do you think a Surgeon does in their role?
   [Prompt about different aspects of those disciplines after going through both disciplines e.g. types of patients, process, consultation etc…]

Depending on what is responded the following are questions around certain zones of questioning to elicit information from the assumed sources of information:

   Can you tell me about your experience with your own GP?
   Can you tell me about any experiences you have had with Surgery?
   [family or friends who have had operations etc…]
   Do you have relatives who are GPs or Surgeons? What is your impression of them?
   Why do think someone would be attracted to General Practice or Surgery?
   Can you think of any difficulties or things that may deter someone to become a GP or Surgeon?
   Do you think you have to have any particular characteristics (or type of person)/skills/personality for a G.P. or Surgeon? Why?
   What would you rather be? Why?
   Have you had any experience with G.P’s or Surgeons? If so, what was that like?
   Do/Have you watch any T.V. programmes like Scrubs etc…? Which ones? Why? As a medical student, what do you find you get out of these programmes?
Apart from T.V. and film, are there any other sources of information that have given you a picture of General Practice or Surgery?

Have you heard from other medical students/staff about the pros and cons of GP and/or Surgery?

Are there any other comments you would like to say regarding General Practice and Surgery?

5. Closing the interview

Thank them for their participation. Remind them to pass onto others about being interviewed, and contacting regarding the transcripts.
Appendix B

List of Publications Arising from this Thesis

(a) **Refereed Journal Articles**


(b) **Refereed Conference Proceedings (accepted, to be presented in July, 2014)**

Smith-Han, K. (2014). Values in Medical Education – what are we communicating to our medical students? *Proceedings of the Conference of the Australian and New Zealand Association for Health Professional Educators*. Gold Coast, Australia: ANZAHPE.


(c) **Refereed Conference Proceedings**

