Gender and the Social Construction of Occupations: The Case of Clinical Coders

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Attestation of authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Julie Douglas

Date:
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Abstract

Labour market position is socially constructed through the complex and intertwined relationships embedded in gender, skill, power and occupational status. These interactions are located in the social structures of patriarchy and the capitalist labour process. These concepts explain the persistence of the subordination of female skills and female-dominated occupations. This thesis examines the relationship between these structures, within a women-dominated clerical occupation located in the public health sector - clinical coding. The influence of contextual factors such as employment law changes and public health restructuring are also considered.

As a critical socialist feminist researcher my aim was to critique the dominant structures that entrench the disadvantage that women experience. A mixed method approach was used and included focus groups and two surveys, one for clinical coding managers and the other for clinical coders. This provided a snapshot of the working conditions of clinical coders and enabled their views, concerns and aspirations to be voiced. The data collected was analysed using a thematic approach and where appropriate, compared with earlier research on clinical coders conducted in Australia.

The findings of this thesis demonstrate that clinical coders are similarly impacted by the disadvantage that women experience generally in society and the workplace. Although these workers have good job security and above average wages, the status of their work remains undervalued and the perception of their skill level is poorly understood. Work that is deemed clerical is embedded in certain assumptions; usually woman dominated, and as women's skills are valued less than men's skills, it follows that clerical work is not perceived as skilled. These basic assumptions allow the continuation of discrimination and disadvantage that women experience in the workplace. Occupational status contributes to labour market position and irrespective of the significant level of expertise and knowledge demonstrated by clinical coders they have been unable to improve their labour market position within the District Health Boards.

This thesis highlights the need for labour market models and industrial relations theorists to develop an understanding of the impact that gender and patriarchy have on the working experience of all workers. The pervasive influence of the capital labour
process is addressed but often the effect of patriarchy is absent from research and analysis. However, both the structures of patriarchy and the capitalist labour process, equally and synergistically create disadvantage for women. Workplaces are created before workers enter them and an approach to labour market studies is required which confronts these mechanisms which so effectively work to confer privilege and disadvantage along gendered lines.
Chapter One: Introduction

Women have remained in restricted locations in the labour market since industrialisation radically shifted the work landscape. This labour market position is socially constructed by the intertwined relationships embedded in gender, skill, power and occupational status. Located within the broader social structures of patriarchy and the capitalist labour process, these concepts explain how and why female skills and female-dominated occupations are often subordinated. The research study is contextualised by the New Zealand socio-political environment and how these influence labour market position. In particular, gender, skill and power are examined as they impact on women's labour market position.

Gendered relationships are manifest in a number of spheres in the workplace: remuneration, occupational segregation, skill differentials and associated occupational status. Although women are now well represented in tertiary education and educational achievement they do not enjoy similar success to men in the workplace, and are still over-represented in a narrow range of occupations, which generally attract lower remuneration (McGregor, 2012). Gender is a key factor in the determination of labour market outcomes and this influence is demonstrated in the pattern of occupational segregation that exists. Occupational segregation gives rise to women's and men's jobs to a large extent, and social status is reflected in these gendered jobs. Both the occupational status and the perception of the skill involved then directly affect the level of remuneration. The resultant labour market position for women often carries lower job security, recognition, and prospects. These disadvantages experienced by women have existed in the labour market since before industrialisation (Grint, 2005). However, women as a category are neither cohesive nor homogenous and while women may experience disadvantage attributed to their gender other aspects of identity, such as class and ethnicity result in different types and levels of disadvantage (Acker, 2004; T. Rees, 1992).

Occupational segregation and the structure of women's work in particular contribute to the gender role issues found within most Western industrialised societies. Although women make up nearly half (46.9 percent) of the work force in New Zealand they generally are found in a narrow range of occupations in an even narrower range of industries (Statistics New Zealand, 2012b). Women are predominantly found in just
four of the sixteen industry classifications. These are "Retail Trade and Accommodation", "Professional, Scientific, Technical, Administrative and Support Services", "Education and Training" and "Health Care and Social Assistance". Together these account for nearly two-thirds (61.3 percent) of all women workers. When considering occupational choices nearly three-quarters (71.8 per cent) of women work in just four of the nine occupational categories used by Statistics New Zealand: "Clerical and Administrative Workers", "Sales Workers", "Community and Personal Service Workers" and "Professionals" (Statistics New Zealand, 2011b). As Blau and Kahn (2007) argue, this industry and occupational "overcrowding" by women also has the effect of driving down wages.

This thesis looks specifically at the clerical occupation including the evolution of modern clerical work. Clerical work in nineteenth century Britain was primarily the domain of males until new technologies were introduced along with increased demands for more workers, which eventually opened opportunities for women (Crompton & Jones, 1984; Crompton & Reid, 1982; Crompton & Sanderson, 1990; Willis, 1988). The high status that male clerks previously attracted did not transfer to the large numbers of women who became clerical workers using the new technologies (Braverman, 1974). Continuing industrialisation required an increase in the participation of women in the clerical workforce to meet the growing demands of industry. The clerical role within organisations was to provide administrative support to management in monitoring and controlling production. Importantly though, the changed nature of clerical work and the influx of women into the occupation was associated with a reduction in the perceived skill and status of the work, in part due to the introduction of new technologies such as the typewriter. Criticism that the value of work has little to do with the work itself, but rather the gender of those undertaking the work, may account for the difficulty women in clerical positions encountered in maintaining the previous standing of the occupation (Acker, 2004; England, 2010; McCall, 2005; Reskin & Maroto, 2011; Witz, 1986, 1992). The shift to female domination of the clerical occupation created a decline in the status of the work and a significant change in the perceived skills required. Ultimately this resulted in a decrease in the remuneration.

Women's work and jobs, generally, still attract lower remuneration rates when compared to men's jobs. This persistent differential is demonstrated in the pay gap. The pay gap, expressed as a percentage between men and women's ordinary time
earnings (not including overtime or extra payments), reflects this ongoing gender
discrimination and inequality in the labour market, and the gap has not closed despite
more highly educated women entering the workforce. As Blau and Kahn (2007) and
others argue, a variety of reasons account for the gender pay gap. The first is the greater
role that women take in unpaid domestic responsibilities, which often results in less
time in the labour market than men, and their higher incidence of part-time work. One
consequence of this pattern of participation by women is that men may have more
labour market experience which allows for higher wages. Secondly, as a consequence
of industrial and occupational segregation, the gender difference may be a result of
women being excluded from "male" jobs and industries that often command higher
wages and this can create an over-supply of labour to "female" jobs. This in turn acts to
depress the wages in the jobs available to women. Thirdly, the undervaluation of
women's skills leads to lower levels of remuneration (Blau & Kahn, 2007; Dixon,
2004). Lastly, a significant factor in the gender pay gap is the manner in which wages
are set. Drawing on Australian research, the greatest disparity between men and
women's wages has occurred as bargaining has moved from centralised award systems
to enterprise bargaining (Equal Opportunity for Women in the Workplace Agency,
2012).

In New Zealand, when the Equal Pay Act was introduced in 1972, the pay gap between
men and women was 30.1 percent (Department of Labour, 2011). This was not
dissimilar to other Commonwealth countries such as the United Kingdom, Canada and
Australia, and these countries still have gender pay gaps of 9.6 percent, 21 percent,
and 17.5 percent respectively (Australian Bureau of Statistics, 2012; Office for
pay gap is calculated using all workers' ordinary time hourly earnings, excluding
overtime payments, across all sectors. Considerable movement towards its reduction
has taken place but this has not happened at the rate for which many have hoped. In
1988, the gap was 26 percent, 17 percent in 1998, 12 percent in 2003, then crept up to
15 percent by 2008, and 14 percent in 2011 (Dixon, 2004; P. Hyman, 2010; Statistics
New Zealand, 2009, 2011a). During the 1980s and 1990s in New Zealand, workplace

1 In the UK the gender pay gap is the difference in the average gross hourly ordinary time (excluding
  overtime) earnings of all men and women.
2 In Canada the gender pay gap is a reflection of the average weekly ordinary time (excluding overtime)
  rates across all workers and sectors.
3 This figure reflects the average weekly ordinary time earnings of all full-time workers across all sectors
  in Australia.
downsizing and substantial job losses, particularly in the male-dominated manufacturing sector, resulted in a real reduction in men's wages and this explains, in part, the narrowing of the gender pay gap at that time rather than real improvements in women's earnings.

The gender pay gap has persisted despite many legislative and educational initiatives promoting greater equality and equity between women and men. The Equal Pay Act 1972, Maternity Leave and Employment Protection Act 1980, the 1984 ratification of CEDAW - the Convention on the Elimination of all forms of Discrimination Against Women, the establishment of the Ministry of Women's Affairs in 1984, the Pay Equity Act 1990, and the Human Rights Act 1993, all aim to reduce discrimination against women. These initiatives aimed to increase equality and equity, either directly through wage levels, or indirectly through institutions established to develop policy and alternative courses of action, for example the Ministry of Women's Affairs (McGregor, 2012).

The persistence of the pay gap and other forms of subordination of women's work, notwithstanding attempts of legislative reform, suggest that women's position in the labour market is deeply embedded in the nature of our society. Throughout this thesis I argue that today's society is still influenced by the dual operation of the structures of patriarchy and capitalism. These two structures combine to ensure that women do not progress as easily to the same level as men (Crompton, 2006; Crompton & Sanderson, 1990; Danieli, 2006; Hartmann, 1979). Within this context the thesis builds an argument as to how the social construction of gender, skill, power and occupational status in relation to women results in their disadvantage, while traditional industrial relations models fail to adequately explain their labour market position.

Traditional ideologies construct the labour market position of occupations and workers, and are shaped by the demands and effects of contemporary societies structured by capitalism and patriarchy. The factors that are involved in these influences reflect underlying social norms, such as traditional views of women's and men's roles within society. These basic positions are the basis for notions of worth and worthlessness about different groups (Acker, 2006; Hartmann, 1979; McDowell & Pringle, 1992; Phillips & Taylor, 1980). In many countries an enduring belief prevails that the place of women in society is subordinate to that of men. English Common Law held until the last decade of the nineteenth century that women lost their property rights upon
marriage, in effect becoming the chattels of their husbands. In New South Wales, Australia, the *Married Women (Lecturers and Teachers) Act 1932* required married women to leave their positions and excluded other married women from taking up such positions ("*Married Women (Lecturers and Teachers) Act *", 1932). It was not until the end of the 1960s that the bar on married women as permanent employees in the Australian Public Service was eventually lifted (Markey, 2001). New Zealand passed the *Married Women's Property Act* in 1884, which enabled women to own property in their own right, although an ongoing diminished level of rights for women, particularly married women, was evident in their exclusion from permanent employment in the New Zealand public sector (Corner, 1988). A further indication of the poor status of married women as autonomous individuals is shown by the income tax arrangements up until 1972 in New Zealand, which required married women's wages to be taxed at the higher secondary tax rate because it was assumed they were dependent on men's income (Else, 2012).

The view of women's role in society as belonging to men, doing their bidding and taking responsibility for reproductive matters is in stark contrast to the reality of many women's lives today. Economic pressures have meant many women need to work out of necessity either as joint or primary income earners. Industrialisation, though, has not led to general equality for women. Indeed, equality still does not exist for other groups within society, for example on the grounds of race and class. This thesis focuses on women's place in the New Zealand labour market and the presence of persistent disadvantage that women experience, while acknowledging that groups defined by race or class are similarly disadvantaged.

While part of this thesis draws on the industrial relations literature, it must also be noted that it has been traditionally dominated by the perspectives of male academics. A fundamental and important criticism of traditional industrial relations theories has related to the dominance of empirical research focused on blue collar workers. Traditionally this has been factory-based male workers, as the subjects, supporting the general acceptance of the white male worker experience as the norm, in effect making women invisible. Most traditional theories of labour markets locate women in the vulnerable peripheral or secondary section of the market (Anker, 2001; Beechey, 1983; Craig, Rubery, Tarling, & Wilkinson, 1982). A dominant male academic lens in industrial relations has conventionally overlaid a bias in understanding the experience of women in the workplace and labour market. Several industrial relations theorists have
argued that industrial relations theory is not gender neutral or even gender blind, but actually presents models that are normatively male. More recently, there has been a belated growth in the literature that places women at the heart of industrial relations theory (see for example Healy, Hansen, & Ledwith, 2006; Holgate, Hebson, & McBride, 2006; Pocock, 1997).

**Research Aim**

Labour market position is socially constructed by a range of concepts such as gender, skill and occupational status. This thesis seeks to identify and explore the complex interactions of these social mechanisms within the larger context of capitalist and patriarchal structures, and examines how this impacts on the conception of professional or occupational status for particular groups of workers. As social constructions, gender skill and occupational status are concepts that do not have any inherent quality themselves, but rather take on the values and assumptions reflecting social practices (Grint, 2005). The research draws on several inter-related areas of literature: industrial relations, labour history, feminism and patriarchy, power and professions.

Clinical coders provide a particularly apposite case study into various influences on labour market position. They are a small group of highly skilled clerical workers located in the health sector. The concept of skill is discussed fully in Chapter Three of this thesis and identifies two perspectives: the necessary inputs needed to undertake work, and the socially recognised concept of skill. For the purposes of introducing this group of workers clinical coding work is characterised by no pre-employment qualification requirement, an absence of a national standard in training or qualification, and a heavy reliance on on-the-job training. They are skilled in the sense that clinical coders apply a complex coding system to unique individual patient records and this requires a high level of understanding and knowledge. Clinical coders are predominantly women and their work tends to be invisible within the large District Health Board organisations where they are employed. District Health Boards are responsible for delivering public health care and services in New Zealand and there are currently 20, run by publicly elected bodies accountable to the Minister of Health. A detailed discussion on the history of clinical coding and the specific New Zealand environment of clinical coders follows later in the thesis. Suffice to say over the last 30
years there have been many wider political and social initiatives that might have been expected to improve clinical coders’ labour market position. There have been fundamental changes and reforms in the New Zealand public health system and also significant changes to employment legislative frameworks. It is only by also looking at patriarchal and capitalist structures in the workplace that it may be possible to understand why the case of clinical coders has not gained greater traction in improving their occupational status.

Clinical coders categorise information on the diagnosis and treatment of all in-patients at hospitals. This data, when aggregated, becomes part of the information used by the Ministry of Health to determine funding for District Health Boards. Restructuring in the public health sector have had a flow on effect on the work of clinical coders. The timeliness and accuracy of their work has become more critical to the sound business practice of District Health Boards and other health organisations as funding levels have become linked to financial accountabilities set by the Ministry of Health (Ministry of Health, 2003; World Health Organization, 2010b). In 1998, clinical coders expressed concerns regarding the working conditions across the sector, the quality of their outputs and training and a general dissatisfaction with their status within the District Health Boards (Douglas, 2004). The disparities in their conditions and training have become more significant as a result of the health sector reforms. While more is demanded of them with regard to throughput and accuracy, they argue that they have not gained a corresponding enhancement of status, or clear, well developed career pathways.

Statistics New Zealand categorises clinical coders as Clerical and Administrative Workers within the sub group, "Other Miscellaneous Clerical and Administrative Workers" (Statistics New Zealand, 2007a). Clinical coders have taken issue with their categorisation as clerical, arguing that they are professionals and the work they undertake is that of a profession. The divergence of views on occupational status forms part of this enquiry.

The determination of occupational status as a profession, skilled, semi-skilled or unskilled, combines both objective standards such as educational qualifications and subjective valuations of concepts such as skill. As More (1983) and Phillips and Taylor (1980) concluded, if skill is merely a social construction, then an understanding of how and who defines skill is required. Professions are occupations that hold a privileged position within the labour market and generally attract superior rewards. They have
traditionally been male-dominated fortresses. The groups in society able to control the status of an occupation, such as a profession, hold a powerful societal position (Freidson, 1986). The associations and regulatory bodies that control professions also act as gatekeepers. The gatekeepers control who are admitted to the specific labour market and, by manipulating the supply of suitably qualified workers, are able to maintain the privileged position and influence the remuneration and benefits associated with the positions. In New Zealand, the Law Society and the New Zealand Medical Association are classical examples of bodies acting in this way. This gatekeeping function affords the professional associations considerable influence and power (Freidson, 1986).

A healthy debate exists regarding the definition and theoretical underpinning of professions, which suggests that caution should be used when classifying occupations as professions (see for example, Freeman, 1997; Freidson, 2001; Johnson, 1972; Leicht & Fennell, 2001). More recent discussion has highlighted the absence of gender and power analysis in earlier work on professions (see for example, Alvesson & Billing, 2009; Anker, 2001; Danieli, 2006; Leicht & Fennell, 2001). Clinical coders claim their work is a profession and, without doubt, they are a highly skilled group of workers who take great pride in their work and show great commitment. However, such claims do not necessarily make the work professional. Workers generally demand and desire to be recognised for the value they bring to an organisation but this is insufficient substance to fulfil the criteria of a profession. What is at stake is the ability to recognise workers’ contribution and to value them within an organisation. Central to this thesis is the aim of identifying and understanding the barriers that prohibit clinical coders from being seen by the District Health Boards as committed and expert workers. Indeed, it may not be the trappings of a profession that clinical coders seek but rather, recognition of the value they contribute.

**Background**

My interest in the issues that have been discussed arose from a small research project on clinical coders undertaken in 1998. The clinical coders’ representative body, Health Information Association of New Zealand, sought data to confirm whether or not there was an increasing variation between the wages and conditions of clinical coders
employed in District Health Boards. The research revealed marked variations between District Health Boards, particularly in relation to starting and top end salaries (Douglas, 2004). During this project the passion and enthusiasm of these workers for their relatively obscure occupation was palpable. Their willingness to discuss their situations reflected an absence of other avenues to be effectively heard and acknowledged. My own earlier experience working in the health sector in a technical "back room" occupation allowed me to easily develop a rapport with them over many issues.

In the fourteen years since 1998 I have revisited the wages and conditions of clinical coders on another two occasions: first, in 2004, with a replication of the earlier project in 1998, and now as part of this thesis. The 2004 survey occurred after a change of government and the introduction of new employment legislation, the Employment Relations Act 2000. This legislation reinstated unions as exclusive agents in collective bargaining and aimed to increase workers' voice in the workplace (Wilson, 2004). However, the 2004 survey showed little improvement in the position of clinical coders despite the changes in law (Douglas, 2004). There are limitations to any comparability with the earlier work as these surveys sought responses only from the managers of clinical coders. The current work is a much more extensive investigation into the occupation of clinical coders. The research central to this thesis goes further than earlier work, which was basically descriptive of the conditions of clinical coders employed by District Health Boards, and analyses broader political and social influences that have resulted in the organisational position in which these workers find themselves. These influences include how concepts of skill, power and occupational status are formed in the context of a female-dominated occupation.

Clinical coders are worthy of study because they so clearly demonstrate the labour market outcomes that result from the influences of patriarchy and gender on mechanisms such as skill differentiation and remuneration. As a female-dominated occupational group undertaking functionally critical tasks, they do not appear to follow expected labour market or organisational models with regard to organisational position and status. Clinical coders work autonomously in their job tasks. Due to their essential function in the fiscal health of District Health Boards, their skills could be recognised and valued more than they are. Librarianship has some similarities with clinical coding, as both are located in the area of information management and are female-dominated occupations. Librarians are upgrading their skills and occupational status as a result of
technological advances and are demanding a higher public standing for their role. The same process has not occurred for clinical coders.

A substantial body of literature from the United States, Canada, Australia and the United Kingdom suggests there are some common issues internationally concerning clinical coders and their position in health institutions (see for example, Campbell, Campbell, Grimshaw, & Walker, 2001; Khwaja, Syed, & Cranston, 2002; Lorence, 2003; see, McKenzie, Walker, Dixon-Lee, Dear, & Moran-Fuke, 2004; Meyers, 2004; Northcott & Llewellyn, 2002; O'Malley et al., 2005). These issues include recruitment and retention of qualified and experienced clinical coders, and ensuring a consistently high quality of coding output. In New Zealand the issues for the clinical coding workforce are similar in terms of the challenges and obstacles they face. The relatively small number of clinical coders potentially impacts on the workforce in New Zealand, in part due to the close proximity of the Australian labour market. Both countries share the same qualifications for clinical coding and this realistically allows for the labour pool of clinical coders to include both nations. This potential for trans-Tasman mobility of clinical coders, predominantly of New Zealand workers moving to Australia, may create scarcity in New Zealand and thus enhance their work opportunities and leverage in collective bargaining for improvements in wages and conditions in New Zealand. The combination of this potential mobility and the changes in the health sector that promote the importance of clinical coders' work could be expected to strengthen their bargaining position.

**Thesis structure**

Occupational status is a result of the process of social construction mediated by skill, gender and power, and the following chapters will show how these factors and others contribute to the shaping and moulding of this particular occupation. Clinical coders' claim to be a part of a profession, whether or not this claim has substance, may well be overshadowed by other more entrenched and influential social systems.

Chapter Two provides a literature review of labour market models presenting different approaches to understand labour market position. The chapter begins with an examination of neo-classical labour market economic theory, then of segmented labour market through to radical models of labour market theory. This literature review has at
its core a critique of these models' ability to adequately explain women's place within labour markets. A gendered labour market discussion follows and identifies other approaches emerging in the industrial relations academic field. These different approaches may be able to provide a more meaningful way to assess women's position. Contemporary work has revisited earlier concerns over the lack of visibility of women in industrial relations research (see for example, England, 2010; Hansen, 2002; Pocock, 2000). This chapter introduces alternative ways to view women's work contributions and motivations and this is revisited in Chapter Three, where skill and the rewards for women's work are explored in depth.

As already identified, this thesis argues that gender, skill, power and occupational status will ultimately determine labour market position. Chapter Three investigates the link between the participation of women in education, training and development, occupational segregation and the capitalist labour process. An analysis of the dominant industries and occupations chosen by women is then presented. The skill required to undertake work may be real but the recognition of skill value is much more arbitrary and constructed by those with societal power. There is an underlying sex bias in both the categorisation of skill and the value attributed to those jobs deemed less skilled (More, 1983; Phillips & Taylor, 1980). An overview of the history of skill development and technological advancements illustrates Phillips and Taylor's (1980) view that sexual bias has infiltrated all things relevant to determining women's worth in work.

Skill and the prospect of deskilling, as a result of the capitalist labour process, constitute a substantial part of Braverman's (1974) influential work. Labour process theory focuses on the mechanism of management control of workers to convert labour power (the potential for work) into labour (actual work effort). The driving force behind this is the desire for continual capital accumulation. Braverman analysed capitalist labour relations from a Marxist perspective and argued that there is a distinction between labour and labour power, formal and real subordination of labour and an inevitable tendency for deskilling of the workforce. His starting point is the Marxist concept of alienation. This alienation, whether the worker is skilled or unskilled, results in the worker and their contribution becoming merely part of the production process, along with the other production components such as raw materials and consumables. Through the subdivision of tasks, management desksills workers and enables managers to take greater control of the production process. The loss of skill creates downward pressure
and cheapens their labour and renders workers easier to control because of a loss of job discretion and autonomy (Braverman, 1974).

Clinical coders are not productive workers in the Marxist sense, as they do not produce surplus value; however, they are working in an environment demanding fiscal responsibility and accountability for the public funding involved. These financial pressures result in management control over workers and wages to minimise costs, and therefore creates the alienation to which Marx refers. The shift to "new public management" (Hood, 1991) in many OECD countries during the 1980s focused governments particularly on slowing government growth and spending and introduced privatisation of public services. This has resulted in a managerial approach to service delivery and greater control of outputs. Goals have been defined quantitatively and resource allocation linked to performance (Hood, 1991). In the health sector, outputs became financially rather than socially oriented, and workers needed to increase efficiencies as institutions were required to produce a return on the capital investment made by government; in effect a profit (Gauld, 2001).

Braverman particularly analysed the historical development of clerical work and the shift from an occupation functionally linked to capital owners to a modern occupation organised along industrial production methods. The introduction of new technologies has, to some extent, deskilled clerical work in many areas. Although Braverman uses a Marxist perspective of clerical work, emphasising management control of the production process, he acknowledges that many clerical functions are largely subjected to the same production process mechanisms as those workers being controlled. Traditionally the workers in this study would be considered unproductive labour in the Marxist sense as they work in a sector that is not concerned with the creation of surplus value for capital (Marx, 2011). However, the required profit goal in the health sector may result in clinical coders' work being considered productive labour as it contributes to the financial goals. Braverman's contribution to understanding the capitalist labour process has generated major debate (see for example Beechey, 1983; Crompton & Reid, 1982; Elger, 1983; More, 1983).

Chapter Four reviews the literature on professions and power. Clinical coders feel strongly that the work they do constitutes a profession and they view themselves as professionals. The chapter reviews the definitional problems of the concept of professions and some of the models employed to assess the status of occupations.
Trait Model and Forsyth and Danisiewicz’s Grid approach to defining professions particularly are critiqued in light of the absence of gendered perspectives and the omission of any power analysis (Abbott, 1988; Forsyth & Danisiewicz, 1985; Leicht & Fennell, 2001). The persistence of a gender neutral understanding of society again is shown to be flawed.

This discussion leads to an examination of power within organisations and how power, often informal, shapes the labour market position of clinical coders. Class has long been used as an explanatory concept in studies of organisational power linking it to labour market positions. Acker (2004, 2006) develops the concept of inequality regimes based on the complex interaction of class, gender, ethnicity and sexual orientation to understand the mechanisms for creating occupational status and power.

The chapter then offers two case studies of occupational groups that have engaged in a professionalising project to lift their occupational status to that of a profession. The history of nursing in New Zealand and its success in this type of project is relevant to the case of clinical coders. Nursing and clinical coding are both female-dominated and located in the health sector. There are also significant differences; nurses have always been held in high regard by the public and constitute by far the largest occupational group in health services, although still subordinate to the male-dominated medical profession. The second case is that of archivists, who have begun a professionalisation project but have yet to conclude it. They have similarities with clinical coders in that they are generally hidden from public view and as a result their data and information handling type work is little understood. They are also a numerically small group of workers.

Chapter Five outlines the choices made regarding the epistemology, methodology and method used in the research. My feminist background supported the choice of a critical socialist approach to the research. As Lather (1991, p. 71) states, “the overt goal of feminist research in the human sciences is to correct both the invisibility and distortion of female experience in ways relevant to ending women’s unequal social position”. The discussion in Chapter Two of industrial relations traditions highlights the issue of gender blindness and the invisibility of women in academic work. This choice of research paradigm is highly appropriate to address the research questions.
A mixed method approach is discussed and its application in this research justified. This approach permits several different methods to be employed in the research, allowing the voice of the participants to be counted and heard. Both quantitative and qualitative data was collected to extend understanding of participants' aspirations and to provide a detailed picture of their environment. This approach allowed for an understanding of clinical coders and the influences on their labour market position in the public health sector. Semi-structured discussions in focus groups generated a rich source of data. These focus groups were also used to support the development of subsequent questionnaires. Two questionnaires were used; one to survey the clinical coding managers in the District Health Boards, while the second questionnaire sought feedback from the 193 clinical coders that made up the total clinical coding workforce employed in the District Health Boards. The questionnaires provided both quantitative data relating to clinical coders' employment and also qualitative data depicting their experiences working as clinical coders. The chapter includes details of the problems encountered in executing the research.

Chapter Six provides an overview of industry and sectoral influences and labour market institutions that affect clinical coders. The chapter begins with an account of changes in key employment legislation since the mid 1980s. These legislative changes have directly affected the workplace organisation of clinical coders. The right to engage in collective bargaining and the exclusive right of unions to represent workers during this time have been severely curtailed. Since 2000, legislation sought to recollectivise the workplace. The chapter details these changes to employment legislation over the fourteen years that three studies have been undertaken on clinical coders. The discussion follows the links between these changes and the working environment of clinical coders.

Parallel to these employment law changes by successive governments was a series of radical changes in the funding of the public health sector. The public health sector has experienced four major restructurings since 1983. The introduction of greater accountabilities from health service providers to government has driven a need for timely and accurate data to support a business decision making model (Gauld, 2001). A consequence of the health reforms has meant the work of clinical coders has increased the importance of sound operational information for the District Health Boards, as their output provides the data for the basis of Ministry of Health funding. These changes have brought the need for training and development of these workers into stark relief.
because of the need for accuracy in their work. The chapter provides the background to the current Ministry of Health structure and also a history of clinical coding. The standardised approach used in New Zealand follows the requirements of the World Health Organisation and has evolved since the first basic classification system was introduced in 1750 (World Health Organization, 2010a). The work environment of clinical coders is described and the various avenues for a collective voice, training opportunities and the structure of the District Health Boards that employ them. The chapter finishes with a summary of a survey conducted in 2002 in Australia of clinical coders and compares the findings with international research from Canada, the United States and the United Kingdom (McKenzie & Walker, 2003). This work allows for comparisons and contrasts to be drawn with clinical coders in New Zealand.

Chapters Seven and Eight present the research findings. The two chapters are divided between the focus group discussions (Chapter Seven) and the survey results (Chapter Eight). The focus group discussions are presented in a thematic way, first as a summary of each discrete group, and then as a comparison between the three groups. In Chapter Eight, descriptive statistics are utilised to present the quantitative survey findings. The open-ended questions are then thematically summarised as appropriate.

The discussion of the research in Chapter Nine draws the findings and contextual literature together to discuss the research aims. The issue of women's disadvantage in the labour market, and the manner in which society confers favour and value on some occupations and not others, is explored. The chapter illustrates the continuing deficit in industrial relations models due to the lack of attention and understanding of the gender bias inherent in traditional models. The findings support the contention by feminists that patriarchal mechanisms still hold an insidious influence over gender roles and societal expectations.

The final chapter considers the implications of the research findings in respect to industrial relations theory and the need to include meaningful gender analysis in labour relations work. The relationship between gender, skill and occupational status was confirmed in the research project and it highlighted the need for greater attention on this in work on employment and work. The issue of patriarchal structures in all social relations cannot be underestimated and is significant in women's continued disadvantage in society.
Chapter Two: Labour Markets

The focus of this study is a group of clerical workers located in the public health sector of New Zealand. These clerical workers, clinical coders, undertake work that is specialised in its language and context, and work independently on a day to day basis. Clinical coders’ work is fundamental in the statistical collation of the work of the organisation that employs them, and it is used by central government to distribute general funding for the sector. Clinical coders collect and process data from the discharge records of patients regarding morbidity, procedures and treatments. While clinical coders’ work is central to the District Health Boards, as a group they still exhibit characteristics indicative of a more marginalised occupational group. This apparent contradiction challenges the usefulness of several labour market theories to explain and understand the labour market position of clinical coders.

To appreciate the social process that have clinical coders located in their labour market position a wide ranging survey of academic literature must be taken over many sub disciplines. Clinical coding is predominantly a female occupation and therefore the areas covered will include a general examination of labour market theory, and in particular, gendered labour markets.

Labour market models

There are competing explanations of labour markets, and this chapter does not attempt to find which one exclusively accounts for the labour market position of clinical coders. Instead, the chapter presents a range of models that allow for a deeper understanding of the factors that influence the final position. The chapter firstly explores orthodox neo-classical labour economic theory because its influence in public policy decisions continues. Institutional labour market theory follows on from the neo-classical position as its development was in part a critical reaction to the orthodox position. The third approach discussed is the radical theoretical school, which includes labour market segmentation. Following this is a discussion on the impact of gender on labour market determination.

Labour market studies show that clerical work dominated by women has traditionally been marginalised and undervalued (Crompton & Jones, 1984; A. Rees, 1994). Clinical
coders in New Zealand are a good example. This occupational group is characterised by a predominance of women, geographically widely spread with low levels of formal representation. Within clinical coding there are no standard qualification requirements or career pathways. The work of clinical coders is often poorly understood by their employing organisations and this contributes to the weakness in their labour market position.

**Neo-classical labour economic theory**

The neo-classical or competitive approach to labour markets remains a dominant school of thinking of labour economists in the Western world. The labour market is seen as a single perfectly competitive market, not substantially different from any other commodity market, and as such, economic laws of supply and demand determine opportunities and rewards in the labour market. This model constructs labour as highly mobile, responding primarily to the wages and demands for its skills (Whitfield & Ross, 1996). Neo-classical labour economics assumes that individuals seek to maximise their utility via their choices of work and leisure. An individual’s choice is constrained by the inability to influence the market because they have no power and so respond to demand from firms for their labour and the price/wage offered. This theory argues that in the long run the "invisible hand" of market forces will adjust the price for wages at the right equilibrium, following basic rules of supply and demand (Kaufman, 1994). This economic approach to labour markets is primarily concerned with economic efficiencies through wage setting (Fevre, 1992).

Despite this apparent homogeneity, the idea of a "right" price or wage is vigorously contested. A simplistic approach of supply and demand influences ignores other factors which need to be included in the wage setting process. In support of the competitive labour market model, Thurow (1983) argues there is in fact a moral dimension to the equilibrium wage, thereby giving the model legitimacy. Thurow argues that the competitive labour market model allows for workers to be paid at the "right rate" according to their “marginal productivities” and therefore reflects what they morally deserve (Whitfield & Ross, 1996, p. 23). Marginal productivity theory is central to much of neo-classical labour market economics. The theory argues that a firm is only willing to pay labour an amount that is less than what that labour can generate in profit
for the firm. Therefore the "right" price is one which is in part determined by labour itself due to its productivity (Gottschalk, 1978).

Thurow supports the neo-liberal economists’ argument that individuals, with no power to influence the market, are price takers, and does not suggest that this is problematic. The argument that this price taking position could then lead to some notion of a fair and moral outcome is strongly contested by theorists such as Rawls, opposed to the neo-classical economic world view that is founded on competitive free markets (1971). Rawls clearly establishes the need to look past free market principles of equality and choice to show there are many other bases for the distribution of wealth in the labour market. He argues that it is because the worker generally has little ability to influence the price/wage that the fair distribution of the wealth/profit generated by capital ventures cannot be left to market forces (Rawls, 1971). Rawls does not support any notion that the competitive neo-classical labour market model gives rise to a wage level that has an ethical or moral framework or outcome. Arguably the neo-classic model can only claim economic legitimacy at best.

One outcome of the neo-classical labour market model approach is a strong argument for the absence of unions as they are seen to distort and corrupt individual choice. Unions create market imperfections and the purpose of neo-classical economic policy is to reduce these imperfections to allow as free as possible operation of market forces (Whitfield & Ross, 1996). Consequently, union activity and legitimacy have been under threat at times when public policy has been predicated on the neo-classical model. This approach to the labour market gained some traction in New Zealand in the mid 1980s and 1990s, when the political and economic climate was driven by neo-classical ideology. Employment legislation introduced in 1991, the Employment Contracts Act, favoured the mechanism of the market to determine the employment relationship by abolishing specialist employment relations law. Unions lost their legal recognition to represent workers exclusively in bargaining and advocacy. Union power was restricted significantly, and as membership of unions declined and the use of individual contracts of employment increased, wages generally moved downwards to a new market driven equilibrium (Harbridge & Honeybone, 1996).

At the core of the neo-classical labour market model is the reliance on econometrics for analysis. Critics challenge the ability of such a reductionist approach to adequately reflect humans and the obviously imperfect choices they make when considering utility.
The desire to make sense of all actions and events by economic mechanisms alone may be useful if attempting to develop economic policy, but does little to make sense of the phenomena of the social aspects of the labour market (Whitfield & Ross, 1996). Individuals are not equal in information, education, desires, needs or wants and so it is difficult to apply broad assumptions to predict and determine behaviour. This labour market model does not assist in understanding the place of clinical coders in the small annexe of the health sector where they are located today, as they do not follow expected outcomes. Clinical coders do not exhibit the mobility suggested by the model of workers moving to take improved employment opportunities, nor does the scarcity of experienced qualified workers appear to drive up wages.

Neo-classical labour market theory is underpinned by an individualist ideology and accordingly, argues that an area where individual workers do have choice in the workplace is usually the level of personal investment in their human capital. Human capital investment consists of the resources “invested in an individual today in order to increase his or her future productivity and earnings” (Blau, Ferber, & Winkler, 2006, p.160). Calculations of contemporary cost in light of future wage benefits impact on these choices. This investment can be either through formal education undertaken outside of the workplace or on-the-job training funded by the employer. In the case of "on-the-job employer funded training" the firm aims to retain the worker in the job so as to retain the learning in the firm (Whitfield & Ross, 1996). While this explanation satisfies the neo-classical economist, this treatment of human capital does not attempt to explain the social constructions of barriers and discriminations that also impact on worker choice such as gender, age and ethnicity. Cultural roles and gendered stereotypes create expectations around education and career choices and who has access to these. Fevre (1992) argues that the way in which human capital is presented by neo-classical labour economists does, in effect, legitimise inequality and wage inequality in labour markets by placing all responsibility for labour outcomes on the individual. Human capital theory will be discussed more fully in Chapter Three as part of the discussion on training and education.

Traditional economists’ views of the labour market are problematic as the approach assumes that labour is merely a commodity in the production process. This view requires labour mechanisms to follow general economic principles but it is difficult to see the labour market operating in a perfectly competitive manner. To consider individuals solely as rational utility maximisers, as the neo-classical economics school
does, denies a useful understanding of the motivations and influences (such as status, geography and aptitude) that contribute to the employment decisions of employers and employees (Whitfield & Ross, 1996). Absent from the analysis of this traditional neo-classical economic model is the role of power; the neo-classical model fails to take account of the fundamental employment relations issue of the dynamic of the power struggle between employer and employee (Mylett, 2003).

**Institutional labour market theory**

In contrast to the individual focus of neo-classical labour market theory, institutional labour market theories focus on the firm. Institutional labour market theories developed as a response to the perceived failure of the neo-classical perspective to adequately explain the functioning of the labour market. This firm-based approach looks to understand the behaviour of the firm in employment relations and, unlike the neo-classical approach, disputes that labour can operate in a single market (Whitfield & Ross, 1996). Institutional labour market theorists, such as Doeringer and Piore (1971), Camuffo (2002), and Osterman (1994b; Osterman & Burton, 2005), introduce the complexity of the labour market and the players in it, and draw from a wide group of social science disciplines. These theorists suggest there are many barriers which limit the choices of labour as constructed under the neo-classical model. The competitive model relies on the fact that workers are motivated to maximise economic utility and it is this point that institutional theorists dispute, as they see many other factors which impact on the ability of labour to make free choices (Mylett, 2003).

Institutional labour market theory retains an interest in the economic efficiencies of the firm as an outcome of labour processes, but importantly, introduces an explanation of labour market advantage and disadvantage through the internal labour market (Osterman, 1994b). The concept of an internal labour market identifies how the labour process segments the labour market (Camuffo, 2002). This segmented labour market cannot be seen as a homogenous perfectly competing commodity market. The internal labour market is characterised by “one 'point of entry', a training programme and an established career ladder (even though that ladder may be very short). In any event, the consequence of such a system is that existing employees are recruited to the better jobs in the firm or organisation” (Fevre, 1992, p. 32). The decisions on wages are not dependent on the external labour market but have more to do with the needs of the firm
itself (Doeringer & Piore, 1971). Whitfield and Ross (1996) argue that most employment situations are like this, with each firm constituting their own internal labour market. Baker and Holmstrom (1995) further clarify the link between the two labour markets, internal and external, and argue that the starting wages are usually influenced by the external labour market while the internal labour market controls future wage levels.

Internal labour market efficiencies are realised when workers have organisation specific skills. These skills are usually acquired on the job and as such, have the potential to keep the worker in that firm as their skills are best valued there. Training is usually at the expense of the employer, especially as the skills cannot be used elsewhere (Mylett, 2003). In the case of clinical coders, the occupation specific nature of their skills and experience, which they develop once in the job, works to discourage them from seeking work in other occupational areas. This internal labour market within the District Health Boards for clinical coders is likely to be relatively stable as a result.

Building on the concept of the internal labour market, Doeringer and Piore (1971; 1983) developed their dual labour market hypothesis. The dual labour market separates labour into primary and secondary sectors. The designation of primary and secondary sectors is important as this also indicates allocation of training and development opportunities. Those in the primary sector usually receive organisational investment in training as employers wish to retain those skills. The primary sector can contain any number of internal labour markets. Jobs in the primary market are characterised by security, relatively good pay in relation to the market rate, firm specific training with career prospects and are located in the core or internal labour market (Camuffo, 2002). In the public health sector in New Zealand for example, permanent jobs as doctors, medical laboratory technologists and nurses would be considered in the primary sector, but each of these groups is quite discrete and would constitute separate non-competing internal labour markets. One advantage to a firm with a core primary labour market with employment security is the higher likelihood of those workers helping new or junior workers by sharing knowledge. The provision of internal career prospects is beneficial to the firm as it retains training and development skills within the firm. In contrast, in a competitive labour environment there is no rationality for workers to share knowledge and experience with new recruits as this could undermine their own position and advantage (Burchell & Rubery, 1994).
The secondary jobs have little or no job security and are vulnerable with regard to wages, conditions and tenure. These workers may be temporary/contract workers who are brought in as required and are generally used by the firm to create a level of flexibility in their labour practices (Camuffo, 2002). Workers are less likely to be offered training and development opportunities due to their lack of tenure, reducing their long-term benefit to the organisation. Secondary labour market workers’ skills are not necessarily highly valued and these workers are often in precarious employment. This can result in frequent changing of jobs with no significant improvement in conditions (Deeks & Rasmussen, 2002). Using again the public health sector, examples of jobs in the secondary labour market may be agency nurses, locum doctors and casualised workers in support occupations such as catering and cleaning.

As Anker (2001) suggests, it is not difficult to see how easy it would be to overlay this notion of the dual labour market with that of occupational segregation by sex, as statistically women and women-dominated occupations are often found in this secondary sector, for example part-time work particularly in retail and service occupations, or cleaners and catering staff in the public health sector. While the secondary segment is often typified as lower skilled, skill itself is not just a technical creation but also very much a social construction. As such, assuming particular abilities and skill levels of members in the secondary market may not be useful in terms of understanding what they actually do or of what they are capable. The same job may be done in different organisations by different people, for example, women in one and Pakeha\(^4\) men in another, with one group seen to be in the primary and one in the secondary segment (Whitfield & Ross, 1996). Chapter Three discusses in more depth the gendered distribution of occupations and industries.

The presence of non-competing labour markets appears to provide an explanation as to how distinctive groups exist in society showing no signs of shifting to equilibrium in wealth or income. The lack of competition allows each labour market to define its own internal equilibrium without influence from others. However, the idea of separate labour markets also allows the continuation of discrimination against particular groups as there obviously is no perfect competition operating that would allow movement between labour markets (Rubery & Fagan, 1995). This can be seen within firms that have separate employment agreements and varying wage scales for groups of workers.

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\(^4\) Pakeha is generally accepted as meaning a New Zealander of European descent. Some extend this meaning to include all non-Maori (although not other Polynesian ethnicities) (Anon, 2012).
Perfect competition is a market structure where all firms sell an identical product, are price takers and have a relatively small market share. In this market, buyers know the nature of the product being sold and the prices charged by each firm and so have perfect knowledge. Firms, under perfect competition, have an ease of freedom to enter and exit the industry without barriers.

The dual labour market hypothesis still generally uses economic rationality to explain the secondary labour market. However, Doeringer and Piore (1971) do give some attention to labour market advantage and disadvantage and they suggest that it is difficult for workers to move from secondary to primary employment because they are characterised by negative work attributes, e.g. absenteeism, tardiness, insubordination and a propensity to move on to other jobs reasonably quickly. The workers themselves are more likely to have low education achievement, have experienced discrimination, to live in areas remote from primary work and to have discontinuous work histories. Doeringer and Piore (1971) see many of these characteristics being shaped by the employer, demonstrating the employers’ ability to create segmentation. The workers are trapped in the secondary market by the employers' assumptions before they even enter any specific firm.

Some authors argue that the segmented notion of the labour market does not exist and cannot be defined as simplistically as has been attempted (see for example Whitfield & Ross, 1996). The issue of whether workers are locked into either the primary or secondary segments with little prospect of mobility into a better, more secure segment is not addressed. In response Osterman (1994a) advances dual labour market theory by incorporating the complexities of organisational politics to explain the location of workers. Osterman also calls into doubt the continuing relevance of internal labour markets given the increasing number of layoffs of white collar workers and the increasing use of temporary workers to fill any kind of jobs. These changes destabilise the assumed job security within internal labour markets (Osterman, 1994b). Thurow (1983) introduces the concept of job competition rather than wage competition, suggesting that employers select workers who need the least training. As a result of job competition in a tight labour market, an employer can just drop the entry standard to ensure the attraction of staff, rather than raise wages.

Segmented labour market theorists argue that human capital theory does not work. While human capital theory predicts that investment in education and training by
individuals will improve their prospects and increase incomes, those in the secondary labour market are less likely to perceive reward for any personal investment. As stated, the segmented labour market is seen as a social construction and therefore attitudes and experiences regarding education and esteem are carried forward into work life. “It is argued that the market cannot be blamed for inequality, low pay and the like – it merely reproduces the inequality which is brought to it” (Deeks & Rasmussen, 2002, p.147). Social statistics demonstrate clearly that some groups in society, based on class, gender and ethnicity, fare poorly in a range of areas which would lead to a reluctance to invest in their human capital (Deeks & Rasmussen, 2002). Human capital is discussed more fully in Chapter Three. From the organisation's perspective, flexibility can be increased through the precarious nature of workers in the secondary sector, and the level of education and skill development of those workers will not necessarily lead to a move into the primary sector as this will not further the firm's goal of flexibility (Lepak, Takeuchi, & Swart, 2011).

Within the segmented labour market, unions play a fundamentally different role to that taken in a neo-classical labour market approach. Unions are regarded not as market imperfections, as in the competitive model, but rather as legitimate organisations able to exhibit a natural reaction to organisations which hold enormous power. Thus, the neo-classical frame of reference for employment relations is unitarist, while the segmented labour market model is pluralist. This pluralism leads segmented labour market theorists to accept some degree of government intervention in the labour market, in contrast to the neo-classicists. With regard to the type and acceptance of intervention there are two schools of thought (Whitfield & Ross, 1996). The first, the “liberal collectivists” suggest the best approach to handling conflict is through collective bargaining. This should be both decentralised and democratic. The second sees a greater role for government intervention in the labour market. If left to itself, the labour market will result in inefficiencies and inequities and therefore, the state must intervene to ensure a "just" society (Whitfield & Ross, 1996).

The dual labour market begins to explain some of the inequalities seen in the labour market. The neo-classical approach completely denies the reality for many in society who experience disadvantage and discrimination and places an unfair responsibility on individuals for their career prospects when in many instances they have little control over the outcomes. But while the dual labour market creates a primary and secondary market to reflect the security and prospects of different groups it does not always
explain the situation for some, particularly women, who may engage in occupations that have aspects of both markets. Examples of this arise in occupations where although the work women do is skilled, the occupation has been classified as semi or unskilled. For example, many early childcare workers are stereotyped as baby sitters rather than educators. This also highlights a major criticism of Doeringer and Piore’s (1971) work, by Baker and Holmstrom (1995). They argue that since Doeringer and Piore’s initial research used only blue collar workers, their findings could not easily be transferred to white collar workers in the labour market to explain their experiences.

This bias towards research on blue collar workers may also explain why clinical coders would not fit neatly into the model suggested by Doeringer and Piore (1971). Clinical coders are not blue collar workers, they have job security and do skilled jobs requiring training, but they also generally have low status, low organisational value and poor career prospects. The low status and value accorded to clinical coders is reinforced by most clinical coders being covered by the conditions of general clerical workers’ collective agreements (Douglas, 2004). It is evident that clinical coders do have an occupational internal labour market, due to the specialisation of task and low numbers. Craig, Rubery, Tarling and Wilkinson note emphatically that the secondary labour market position women often experience is not because the jobs they do are “feminised because they are deskilled, but deskilled because they are feminised” (Craig, et al., 1982, p. 84).

**Radical labour market theory**

While Doeringer and Piore’s (1971) early work opened up debate on labour markets that challenged traditional views, radical labour market theorists use labour market segmentation theory to further the analysis of labour markets. The debate as to whether labour market segmentation theory is part of institutional labour market theory continues but Mylett’s distinction is useful: “theories that identify employers as the key actors in the labour market are commonly tagged ‘radical’ while theories that describe labour market outcomes in terms of efficiencies are tagged ‘institutional’” (Mylett, 2003, p. 56). This distinction locates labour market segmentation theory in a radical paradigm and at the same time acknowledges the overlap of a focus on institutions and employment relations policies (Rubery, 2005; Rubery, Tarling, & Wilkinson, 1987).
The patent lack of equality that exists for many groups in the workforce is the stepping off point for this radical approach. Rather than a dual system, this approach allows for many segments around characteristics such as class, industry sector, gender, ethnicity and age. This allows for fewer generalisations when considering how the affect of a segmented labour market works. Each segment will have particular characteristics as well as sharing others. Early writers, Reich, Gordon and Edwards (1982; 1973), argue it was political-economic forces that led to labour market segmentation and as a result, linked the existence of multiple segments in the workforce with capital accumulation and control mechanisms of employers. This segmentation could be both horizontal and vertical across the occupational structures (Reich, et al., 1973). The segments give rise to hierarchies of disadvantage and privilege.

The process of segmentation allows employers to divide the workforce along pre-existing groups such as gender and race and therefore reduce worker resistance that may arise through collectivity and solidarity (Reich, et al., 1973). The control of the workforce in this divisive manner explains the definition Mylett (2003) uses to distinguish between institutional and radical labour market approaches. According to Reich, Gordon and Edwards (1973), labour market segmentation was a process of employer control of the labour process. The segments that constitute the labour market exist prior to an individual entering the labour market and therefore, any advantage or disadvantage that exists as a consequence of the particular section affects the prospects of the individual when they enter. Mobility between the segments is difficult due the social construction along lines such as gender, race and class, although this mobility is not impossible.

The Cambridge School extended labour market segmentation theory and included a greater range of demand-side factors and the existence of resistance to these factors. Leading researchers in this area, Grimshaw and Rubery (1998) conclude that the impact of the state, unions and regulations in the employment relationship contribute to the segmentation process that occurs. They argue that advantage and disadvantage observed in wider society is replicated and reinforced in workplaces. Employers can use this to their benefit by exploiting the more disadvantaged segments in the labour force through differential terms and conditions of employment, and offering poorer opportunities (D. Grimshaw & Rubery, 1998). Countering these employer strategies, there is struggle through trade union and worker resistance, which will itself influence the employee's labour market position (Mylett, 2003).
This radical theory approach describing the labour market as being constructed of multiple segments may offer a better model for explaining the position of clinical coders. Clinical coding is a female-dominated occupation located in the public health sector. The employer usually provides some ongoing training opportunities and low turnover is desirable to retain the investment in the skills of the workers. In spite of this possible location in the primary sector, clinical coders experience some common issues indicative of the relative disadvantage women often encounter in the labour market. These issues are: classification of the job’s skill as menial, the task being generally under-valued by the organisation and this flowing on to low status and poorer prospects for pay and progression (Wetherspoon, 2006, personal communication). Therefore, their labour market position is explained more adequately through the multiple possibilities of labour market segmentation than the more simplistic dualism of institutional theories such as the dual labour market.

**Gendering labour markets**

The previously discussed models of labour market theory are usually assumed to be gender blind but as many feminist authors argue, rather than being gender blind or gender neutral, these models are actually assuming the actors and institutions are normatively male (Danieli, 2006; Dickens, 1989; Hansen, 2002; Healy, et al., 2006; Holgate, et al., 2006; Ledwith, 2012; Pocock, Williams, & Skinner, 2011; Wajcman, 2000). These researchers identify the need to attend to the impact that gender has on the experiences of women and men in the workforce. It is argued that traditionally industrial relations research has focused on practical empirical work that has led to a tendency to under-theorise (Pocock, 1997). By maintaining a primary focus on institutions and collective bargaining, which assumes the actors are not gendered, at the expense of social processes, many women and women's work become invisible (Hansen, 2002). Both Pocock (2000) and Hansen (2002) point out that within Europe, Canada, Australia and the United Kingdom research into gender and research into women, while not new in the industrial relations field, "has been looked on - at its best - as a supplement to the "real" research, and at its worst as being outside the IR tradition" (Hansen, 2002, p. 200). Often it has been academics in other fields such as sociology and women's studies who have contributed to the understanding of women and women's experience of work.
A common but problematic practice in industrial relations research is the tendency to conflate the concepts of women and gender (Pocock, 1997). Conflating these terms results in only women being seen as gendered. Conversely, men are constructed as the norm or non-gendered. Holgate, Hebson and McBride identify that "[t]he problem with this approach is that gender is read as a female experience rather than as a social process whereby women and men experience work and its institutions in markedly different ways" (Holgate, et al., 2006, p. 31). As Cockburn (cited in Pocock, et al., 2011, p. 3) states, "women are not by virtue of being oppressed, innocent of the oppression of others". Not all women are disadvantaged, nor are all women disadvantaged in the same way.

In employment though, McDowell & Pringle (1992) comment, "all women are constructed as gendered subjects in the labour market and are always 'women workers' rather than just 'workers'" (p. 160). This homogenising of women workers denies the reality of the range of women's experiences and therefore limits the wider understanding of women as workers. Gender can be a problematic category to use when discussing class and work (hooks, 2000).\(^5\) As a category, gender is neither cohesive nor homogenous. The impact of complex and multiple identity intersections such as ethnicity, class, sexual orientation, able-bodiedness, education, and gender all give rise to a variety of experiences and locations in the labour market (Acker, 2004; Alvesson & Billing, 2009; T. Rees, 1992). Irrespective of these variations between different groups of women, women still generally experience inequalities in wages, conditions and opportunities when compared to men. Since women constitute 46.9 percent of the labour force it is important that the discipline of industrial relations broadens the understanding of gender and work to include both men and women in its analysis and theorising (Statistics New Zealand, 2012b).

**Gendered Labour Market Segmentation**

Most Western democracies have labour markets that are clearly segmented into non-competing groups, supporting the radical school of labour market segmentation. Women constitute separate and often clearly disadvantaged segments of the labour market. Most mainstream theories and theorists have not applied significant attention to

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\(^5\) The use of lower case letters for bell hooks is consistent with her legal name.
the origin of this disadvantage and position of women in the labour market (Grint, 2005). The feminist analysis which began to develop from the 1960s onwards has enabled discussion and critique to flourish and to find a place in the mainstream debates. As bell hooks writes, “women are exploited economically in their jobs, but they are also exploited psychologically. They are taught via sexist ideology to devalue their contributions to the labor force” (hooks, 2000, p.103).

England's (2010) research from the United States, suggests that while the feminist movement's actions since the 1960s resulted in more women entering the labour market, and into higher education, this improvement in women's labour market position has not been universal for all women. The devaluation of activities done by many women persists, for example in the caring occupations. England argues there has been a marked shift in the sex segregation of many previously male-dominated occupations as more women choose to enter them (for example management, law and medicine), but there has not been a corresponding strong migration of men into women-dominated occupations, such as nursing, teaching and social work. Women have a strong incentive to enter men's occupations given the improved remuneration and status this often brings, whereas there is little incentive for men to actively choose traditionally women's work, which attracts generally lower remuneration and a devalued status.

A crucial argument within England's work concerns which women are occupationally mobile. England uses the concept of "class based" resources as an indicator of class. Therefore, her referral to middle class is indicative of the education levels achieved by those with greater wealth. Conversely, her use of working class is reflective of a group that have not had access to education opportunities due to a lack of economic resources. England argues that middle class women are more likely to choose to enter managerial and professional occupations and this has accounted for much of the reduction in sex segregation. As this group of women generally hold higher education qualifications their mobility options are increased, and by moving into men's occupations they are able to profit from the higher wages and benefits associated with these positions. Working class women on the other hand, have not significantly changed occupation choices and United States figures suggest the gender proportions are similar to those recorded in the 1950s (England, 2010). She argues that this can be explained by the choices and education levels of this group. Rather than enter male-dominated occupations where they are able to increase earnings, England makes the case that a more compelling pathway is to gain more education and move into better paid women's work. Women,
she argues will not challenge the gendered occupational barrier unless there is no other pathway to employment improvement (England, 2010). For example, a woman working in assembly work might improve her employment prospects by taking courses in book-keeping to move into office work, rather than remaining in assembly work but training to enter a male occupation in that area such as a fitter and turner.

England (2010) uses a class approach to explain the differing experiences of women in employment and their place in the labour market. Others argue that any discussion on inequality between men and women must begin with some attention given to patriarchy and its mechanisms, which underpin occupational choice. Debate as to the relevance of patriarchy has lost some of its vigour (see for example Hartmann, 1979, Eisenstein, 1981, Mitchell, 1975, as cited in Witz, 1992, Calás and Smircich, 2003), although undoubtedly patriarchy is still relevant as it is embedded in all social relationships. Walby (1989) offers a useful and generic definition of patriarchy as “a system of social structures, and practices in which men dominate, oppress and exploit women” (Walby, 1989, p. 214). Social scientists may use patriarchy to expand understanding of ethnicity, economics, sexuality and the labour market. Patriarchy has been utilised by theorists to understand the inequalities seen between men and women in the labour market as patriarchal domination underpins the foundation of workplaces. However, to believe that inequality is solely the result of institutions is superficial and indicative of the fundamental embedded nature of patriarchy and inequality. Indeed, sexism and inequality between men and women existed long before the institutions of capitalism evolved (Grint, 2005). The division of labour along gendered lines was evident in pre-capitalist societies and continues in non-capitalist societies (Blau, et al., 2006; Hartmann, 1979).

While England (2010) focuses more on the supply side of workers’ occupational choices, others, such as Reskin and Maroto (2011), argue that she overlooks the influence the demand side has on these choices. Recruitment and job management is usually at the manager’s discretion and this allows for personal biases or prejudices to influence these recruitment choices. These choices will ultimately reinforce the trend of traditional occupational segregation (Reskin & Maroto, 2011). These often unconscious acts render it extremely difficult for entrenched patterns to be changed easily through merely the desired occupational choice of workers. As Bergmann (2011) points out, legislative responses are often required to shift such fundamental attitudes in the workplace to allow for equal opportunities.
In New Zealand the latest census\textsuperscript{6} figures on occupation and industry choices support England's findings (Statistics New Zealand, 2007a, 2007b). The persistent pattern of gender segregation and inequality for women continues. In New Zealand there are laws championing equality, contemporary rhetoric suggesting change has arrived, increased quality of living standards, new technologies in the workplace, and women are holding positions in high public positions, but still the average female worker is not breaking out of the traditional occupational patterns. Women's work and the work women do are too often seen as providing less value than men's work (McGregor, 2012).

\textit{Marx, Weber, Engels and radical feminism on women as labour}

The role of patriarchy and how this impacts on gender inequalities is viewed differently by Marxists and radical feminists. Nevertheless, both groups are concerned with the power imbalance and exploitation experienced by groups in society. The focus for Marxists is the division in society that exists between labour and capitalists and, based on Marx, class is defined in the relationship to the means of production. The bourgeoisie or capitalists are owners or controllers of production and employers of wage labour, while the proletariat are the class of wage labourers owning or controlling no means of productions and, therefore, reduced to selling their labour power (Marx & Engels, 1888). Marx generally avoids analysis of the inequality between men and women, focussing instead on the inequality between working class women and capitalists.

Contrasting Marx, Weber's sociological approach to work and labour argues that social class is occupationally based, and did have an underpinning consciousness relating to class that could still be realised in the formation of political action (Weber, 1905). Weber's theory of bureaucracies explains the hierarchical nature of power and systems, and suggests that classes or occupations are able to hold more or less powerful positions within these structures. Although Marx views the professional occupations as working class in one sense, as they have no ownership over the means of production, functionally, professions and other white collar workers' work involves aiding capitalists to control and manage the labour output of the working classes. For

\textsuperscript{6}Although New Zealand conducts a census every five years, the Canterbury earthquakes of 2010/2011 resulted in the cancellation of the 2011 census. Consequently this thesis has used the 2006 census data where required and this represents the latest complete data for the New Zealand population.
example, accountants may not own the factory but their work is designed to allow good financial information to assist owners in economic efficiency control of worker inputs and outputs. Weber's description of class as occupationally based allowed for professions to be located without conflict, within the bureaucracies of capitalist organisations (Ritzer, 1975). Weber accepts a traditional role for women in society, which was primarily located in the private realm, and his work reflects little critique of women's equality. It was Weber's wife, Marianne Weber, who as a leader in the women's movement, wrote on the position of women in society. She argues for women's right to become fully human by participating in work and society equally with men (van Vucht Tijssen, 1991).

Although Marx does not write on the gendered relationship between men and women specifically, Engels does particularly in *The Origin of the Family*. Here Engels argues that women's inequality historically began in the family and he predicted that eventually equality would become a reality once capitalism and rights to private property were destroyed (Engels, 1884). Engels accepts though, that women were often exploited in their role of unpaid provider of labour by their husbands, and believed that women would need to engage fully in the labour market to overcome the power differential at home. Marx, Engels and Weber all assert that the origin of women’s subordinate position came from property rights and consequently, a man's right to control their family and other chattels (Blau, et al., 2006; Engels, 1884).

For radical feminists, such as Mary Daly, Andrea Dworkin and Shulimith Firestone, oppression of women is also located firmly within the home rather the workplace (Firestone, 1970; T. Rees, 1992). Radical feminists see the overthrow of patriarchy as liberating women from oppression, rather than the Marxist position of class conflict being the dynamic behind women's disadvantage in society. The existence of capitalism is irrelevant to radical feminists as the exploitation occurs regardless of the economic system (Walby, 1999). “They believe that the particular economic system is largely irrelevant to their concern with patriarchy, just as Marxists believe that patriarchy is irrelevant to their concern with the economic system” (Blau, et al., 2006, p.55). Radical feminists seek a separate women's culture as a way to address inequality that patriarchy creates (Calás & Smircich, 2003).
Socialist feminism, patriarchy and work

Socialist feminists rather than seeing the concepts of patriarchy and capitalism as being exclusive, argue that the situation of women in the labour market is a result of the interaction between both patriarchy and capitalism (Blau, et al., 2006; T. Rees, 1992; Witz, 1992). The danger of presenting patriarchy and capitalism as separate abstract systems is that patriarchy alone does not explain the complexity of the intersection between class and gender (Alexander & Taylor, 1981; Pollert, 1996; Rowbotham, 1981; West, 1990). While there is hierarchal stratification among men based on class, "men as a group dominate and control women, as a group, through a system of gender" (Calás & Smircich, 2003, p. 304). As Hartmann said, "capitalism grew on top of patriarchy; patriarchal capitalism is stratified society par excellence... Patriarchy, far from being vanquished by capitalism, is still very virile; it shapes the form modern capitalism takes, just as the development of capitalism has transformed patriarchal institutions. The resulting accommodation between patriarchy and capitalism has created a vicious circle for women" (cited in Witz, 1992, p. 14).

While patriarchy existed before the capitalist economic system, capitalism has continued to extend and shape patriarchy through mechanisms such as occupational segregation. This segregation has resulted in women being restricted to a narrow range of occupational groups. Hartmann (1976) argues this job segregation “is the primary mechanism in capitalist society that maintains the superiority of men over women, because it enforces lower wages for women in the labor market” (p. 139). This superiority is not only desirable and perpetuated by male capitalists, but also by male workers and their unions, as the resultant depression in women’s wages makes them economically dependent on men and ensures higher wages for men (Blau, et al., 2006). This notion of the male "breadwinner" or primary financial provider is seen as normative in the sex-related division of work, although is now on the decline in many Western countries. This is due, in part, to the higher rates of women's participation and also the decline in men's secure full-time positions (Warren, 2007). Calás & Smircich (2003) argue that the focus of any critique of capitalism should include the "relations of inequality and power" (p. 292) rather than solely the classic economic approach of exchange patterns and outcomes of market forces and processes.

7 The "class" referred to by socialist feminists is the definition provided by Marx and Engels.
Traditional research on labour markets has generally focused on manufacturing, and specifically, male manual workers. This research bias towards male manual workers in this industry sector is abating but there is still much more known about this section of the population than the burgeoning service and clerical sectors, where many more women are employed (Pocock, et al., 2011; Wajcman, 2000). This narrow study of male participants within labour markets does not adequately reflect the substantial changes in the work organisation that have been occurring across the Western world. In New Zealand there has been a dramatic decline in the size of the manufacturing sector, while women’s participation in the labour market, especially the tertiary service sector, has been rapidly increasing (Statistics New Zealand, 2012a).

To better understand the contemporary labour market dynamics Mylett (2003) offers a different perspective of the internal labour market concept to that proposed by Doeringer and Piore (1971). Rather than defining the internal labour market in relation to the external labour market, it is more helpful to see the internal labour market as merely the employment practices that relate to the firm. This approach allows for the many segments of the labour market to be seen in relation to the context of the firm. As the nature of work becomes more fragmented and increasing non-standard work arrangements become the norm, earlier categorisations of primary and secondary jobs, or core and peripheral designations, are less useful in conveying meaning to workers labour market position. Contemporary workplaces use a variety of secondary sector worker strategies to carry out core tasks, for example permanent part time workers, contracting-in expertise for specific projects and outsourcing manufacturing. While secondary sector jobs and peripheral workers are often characterised as vulnerable, having less job security, poorer career prospects and less negotiating power to improve wages and conditions, this is not always the case. The increase in precarious work reflects a mixture of not only disadvantaged workers as traditionally described, but also workers who for a variety of reasons choose to engage with the labour market differently. These workers are not necessarily disadvantaged as job security may not be their primary aim, and highly skilled workers may opt to move freely in the labour market, cherry picking the best opportunities as they arise. Osterman will have to concur with Mylett’s revision of the internal labour market as, “at the end of the day, the ILM\textsuperscript{8} idea is about how social, political, and economic forces act together to determine

\textsuperscript{8} ILM - internal labour market.
what happens to people at work. It is this mixture that gives the idea so much interest and power” (Osterman & Burton, 2005, p. 428).

**Hakim and women in the labour market**

Hakim offers an alternative way to look at women in the labour market. Hakim argues, like others, that many theories have been based on observations of mainly blue collar working men and that the reality for this group is not necessarily able to be generalised to the wider population, and particularly, women (Hakim, 1998). Hakim's Preference Theory reflects a contemporary position and starts from the premise that the world of work for many significantly changed in the 1960s when the contraceptive pill was developed and widely used. As women began to have autonomy and control over their reproductive lives they were then also able to create the ability to have real choice between a career and motherhood, or a combination of the two (Hakim, 1996).

Consequently, rather than viewing women as merely temporary workers whose main focus is in the home, and constructing part-time work and occupational segregation as problematic, Hakim sees these as a reflection of women's active choice. She is also critical of authors such as Crompton and Harris, who Hakim says have a position, particularly on part-time work, which is reflective of "victim feminism" (Hakim, 1996). Other labour market models such as dual labour market theory frames a secondary labour market that is characterised by disadvantage through employment insecurity. For men located in that secondary labour market such insecurity could be construed as disadvantage, particularly if they are in the role of primary financial supporter of a dependent family. Hakim believes that for many women, flexibility and insecurity are two sides of the same coin. For some women being able to move in and out of the workforce is beneficial for them, and their employers. A flexible workforce is not expected to have a high level of commitment, and employers will not necessarily need to invest heavily in training and development of employees. This situation may allow those women who wish, to be able to better juggle family and work commitments, to do so. This choice may reflect a primary concern for family responsibilities rather than career. While a location in the secondary labour market may meet some women's needs, Hakim is clear that it is about choice and that women, as a non-homogenous group, have varied interests and needs (Hakim, 1998).
Hakim suggests a threefold typology to gain understanding of women's choices. The three categories are; home-centred women, (usually 20 percent), adaptive women, (usually 60 percent), and work-centred women, (usually 20 percent) (Hakim, 1991). She argues that the home-centred women preferred not to work and were not affected by employment policy as children and family were the main priorities. Work-centred women tended to be child-free and highly career focused. They invested largely in qualifications and therefore, in their career or human capital, as required to progress in their career. The largest group, the "adaptive" women, was most diverse and included women who wanted to combine work and family and also women who were "drifters" and did not plan their careers (Hakim, 1991).

These "adaptive" women wanted to work but were not totally committed to a work career and, therefore, often found work best suited them when they could have more flexible options, such as part-time work, and free movement in and out of the workforce without a high investment in training and development. The desire for flexibility by Hakim's "adaptive" women is reminiscent of some of the characteristics attributed to those workers located in the secondary labour market (Hakim, 1991). Rather than the secondary labour market creating a non-secure unenviable environment that creates real disadvantage for its occupants, it may well be that for many women this environment allows a better way to meet the need to balance work and family responsibilities. This situation may then, for some workers, also result in increased job satisfaction as there is less tension between the demands from work and domestic spheres. Hakim presents a strong alternative perspective to traditional views of gender segregation in the labour market that may better understand and explain the motivations of, and the choices available to, women in the workplace. However, while Hakim’s analysis rests on women’s choices being viewed as positive rational decisions, it does avoid acknowledging the impact of patriarchal and other social mechanism which undoubtedly shape and influence these decisions.

Conclusion

In conclusion, it appears that with regard to clinical coders, their position in the labour market may best be explained by labour market segmentation theory. Clinical coders are located within a separate segment of the labour market that is dominated by women
within the other occupations and areas of the health sector. They are characterised by an internal labour market and experience good job security and some level of employer training is provided, although in some instances the responsibility for advanced training falls on the individual. Clinical coders develop non-firm-specific occupational skills, which are transferable between employers. Prior to 1991, an award, in effect, created an occupational internal labour market for clinical coders but this changed with the introduction of the *Employment Contracts Act 1991*. Under the earlier award, all clinical coders were employed across the public health sector under the same terms and conditions. These terms and conditions included criteria around training and qualifications and progression in salary steps. The current situation with just four multi-employer collective agreements covering the work of all clinical coders in the District Health Boards recreates, to some extent, the previous award system. At the same time that clinical coders are undoubtedly in a more advantageous position relative to other clerical workers, the question remains around their ability to command a stronger labour market position that reflects higher status and value within the internal labour market of the public health sector organisations.

This overview indicates the need to explore the complex interactions of gender, patriarchy and skill, and how the labour process has actively worked to constrain mobility within the labour market, particularly in the clerical occupation. The following chapter examines these interactions. These influences are reflected in the statistics for women's participation in particular occupations and industries. The historic development and acceptance of skill status has influenced the perception of the work that clinical coders undertake. Capitalist labour process theory is then used to illustrate the possible deskilling of clerical work and how this may relegate women into an inferior position within the labour market.

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9 In New Zealand, the term 'award' originally referred to an award or 'ruling' of the Arbitration Court, which was established in 1894 and survived until 1987, apart from the period from 1973 to 1977 when its functions were divided between an Industrial Commission and the Industrial Court. The 1987 *Labour Relations Act* repealed this split of functions, replacing the Arbitration Court with an Arbitration Commission and a Labour Court. The award generally referred to any document on wages and conditions agreed to by unions and employers through a process of conciliation and, if both parties agreed, of arbitration. On the registration of such a document with the Arbitration Commission, it became legally enforceable through the Labour Court. After 1991 the awards system ceased in New Zealand (Deeks & Rasmussen, 2002, p. 52).
Chapter Three: Human Capital, Skill and the Capitalist Labour Process in Clerical Work

The previous chapter's discussion on labour market models highlights the gendered nature of these models and how traditional labour market theories have overlooked the impact that gender plays in their assumptions. As a result of the literature review clinical coders' labour market position is best described using labour market segmentation theory. They are also in an internal labour market typified by good job security and training opportunities. Within the health workforce they are a clearly separate segment of the labour market and do not experience the same advantage as other segments, such as the medical labour force.

Women's participation in education, access to training and development and social conditioning contribute to occupational choices and human capital. The effect of gender on the investment in human capital and the sex segregation of education choices and training are presented in this chapter. Following this is an examination of the fundamental sexual bias present in the social construction of skill and how this has historically resulted in the skills in male-dominated occupations being regarded as superior to those in predominately female occupations. This arbitrary allocation of skill status has often trapped women in occupations and industries that fall into the secondary or peripheral labour markets. The impact of women's skills and occupations being deemed of less value directly affects remuneration.

The female-dominated occupation of clerical work is then considered through a capitalist labour process theory lens in order to understand the relationship between employer and employee. Braverman's (1974) thesis of inevitable deskilling of workers to achieve managerial control is explored as part of the capitalist labour process. His study of clerical work and how workers resist management control provides a useful lens to discuss clinical coders. The final section of the chapter presents research on the motivation to join unions, which act as collective resistance to managerial control. This is an important aspect of clinical coders' work to explore because they are considered part of the clerical workforce and are highly unionised.
**Human capital theory and occupational segregation**

Human capital is the "skills, knowledge, and capabilities of the workforce of a firm, or of the population of a country, as well as the organizational arrangements and networks of relationships those people have formed that enable them to be more productive" (Blair, 2011, p. 49). This definition, therefore, includes factors such as worker's good health, adaptability, ability to lead, relationships with other workers, emotional labour and general knowledge of business operations. The definition implies the capabilities of workers are essential in the production process and also that the resources spent or invested in the training and education to develop human capital is able to be understood in a similar way to physical capital. Simply, the theory explains why workers with different levels of skill and knowledge also differ in their productivity and therefore account for workers receiving different levels of wages depending on their degree of skill (Blair, 2011).

Investment in human capital can take the form of informal or formal on-the-job training, formal pre-employment qualifications, or on-going formal qualifications once employed. Blau et al (2006) raise an interesting point that the formal qualification itself might not directly result in the expected rise in wage prospects but that the qualification becomes merely a screening tool which may act to increase or decrease the chances of initial job application success.

Human capital theory fits well with a competitive labour market analysis that places the onus on individuals to invest in their education so as to improve their position in the labour market. In this competitive environment, employers in search of skilled workers generally have the choice of applicants who have already invested in their training and education, except in the situation where skill shortages exist. Since workers assume personal responsibility for their training it reduces the need for employers to invest significantly in the training and development of workers in basic skills. While many occupations may require continuous knowledge and skill development, this is not necessarily at the expense of the employer. The determination of who invests in this further training is usually dependent on whether the skills and knowledge attained is firm specific. The more generic or transferable the skills are, the more likely that the cost of the skill attainment is the responsibility of the individual worker (Blair, 2011). It is only rational for a firm to invest in capital they are able to own and control. Therefore, it is in their best interests to retain skills and skilled workers in their firm so
as to gain an economic return on that investment. At the same time, the shift away from lengthy job tenure to a greater reliance on precarious work by some firms has also encouraged the shift of responsibility and cost for skill development onto individuals.

The presumption that human capital is akin to physical capital is problematic (Becker, 1964). Individuals’ choices around education and training are complex and it demeans the individual to consider these choices as merely instrumental implying that they only perceive themselves as commodities in the labour process of the firm. Becker (1964) regards education as a consumption good rather than an investment, and the social and cultural context of education or training is in danger of being overlooked if a purely economic investment approach is adopted. In strong contrast to this simple relationship between individual effort and reward, the segmented labour market theorists introduce the complexity of multiple groups and their varied inclinations and opportunities into the investment in human capital (Osterman, 1995; Piore, 1983).

Women as a whole are such a group. Until the 1970s women across most Western democracies were not encouraged to continue into higher education and, for many, education was viewed as a luxury not required for women destined for a domestic role in life. School curricula reflected this, with girls’ education more focused on subjects such as home science, rather than vocational subjects such as sciences and mathematics. By the early 1970s, in most Western countries, this was being challenged and changes were evident. The demand for women in the labour market, skill shortages and the political impact of feminism all contributed to this change. Regardless of this shift, "gender images continue to help shape sex segregation, the continuing gender stereotyping of jobs, and the symbolic construction of desirable workers" (Acker, 2004, p. 34).

Considerable effort has been made in New Zealand to enable and encourage girls and women to enjoy greater access to a wider range of occupations. Since the 1970s women have participated in higher numbers across all subjects in tertiary education and supporting legislation has attempted to reduce institutional barriers and discrimination that prevent women from full participation in the labour market (for example, Equal Pay Act 1972, Human Rights Act 1993 and Parental Leave and Employment Protection Act 1987). In spite of this, more subtle barriers still exist, denying women full freedom and choice. Although women constitute 46.9 percent of the labour market, the highlighted information in Table 1 below shows, nearly three quarters (71.8 percent) of
women work in just four of the nine occupational categories. These are the categories used by Statistics New Zealand: Clerical and Administrative Workers, Sales Workers, Community and Personal Service Workers, and Professionals (Statistics New Zealand, 2011b).

Table 1 Persons employed by sex and occupation using the Australia and New Zealand Standard Classification of Occupations, (ANZSCO). December Quarter 2011

<table>
<thead>
<tr>
<th>Occupational Category</th>
<th>Female (%)</th>
<th>Female ('000s)</th>
<th>Male (%)</th>
<th>Male ('000s)</th>
<th>Total ('000s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managers</td>
<td>33.0</td>
<td>126.4</td>
<td>67.0</td>
<td>257.1</td>
<td>383.5</td>
</tr>
<tr>
<td>Professionals</td>
<td>54.2</td>
<td>280.9</td>
<td>45.8</td>
<td>237.6</td>
<td>518.5</td>
</tr>
<tr>
<td>Technicians and Trade Workers</td>
<td>19.6</td>
<td>54.2</td>
<td>80.4</td>
<td>221.7</td>
<td>275.9</td>
</tr>
<tr>
<td>Community and Personal Service Workers</td>
<td>69.8</td>
<td>146.6</td>
<td>30.2</td>
<td>63.3</td>
<td>209.9</td>
</tr>
<tr>
<td>Clerical and Administrative Workers</td>
<td>80.6</td>
<td>207.9</td>
<td>19.4</td>
<td>49.9</td>
<td>257.8</td>
</tr>
<tr>
<td>Sales Workers</td>
<td>59.9</td>
<td>118.9</td>
<td>40.1</td>
<td>79.7</td>
<td>198.5</td>
</tr>
<tr>
<td>Machinery Operators and Drivers</td>
<td>12.8</td>
<td>17.2</td>
<td>87.2</td>
<td>117.6</td>
<td>134.8</td>
</tr>
<tr>
<td>Labourers</td>
<td>37.8</td>
<td>94.9</td>
<td>62.2</td>
<td>156.4</td>
<td>251.3</td>
</tr>
<tr>
<td>Residual Categories</td>
<td>40.3</td>
<td>2.7</td>
<td>59.7</td>
<td>4.0</td>
<td>6.7</td>
</tr>
<tr>
<td>Total All Occupations</td>
<td>1,049.7</td>
<td>1,187.4</td>
<td>2,237.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: (Statistics New Zealand, 2011b)

The above table presents actual numbers of workers in each occupational classification broken down with regards to gender, while the percentages relate to the percentage of women and men in each of the occupations. Women make up 80.6 percent of the workers in the Clerical and Administrative Workers category. This supports a clear designation of clerical work as a female-dominated occupation. There is some variation in the threshold, which determines the domination of an occupation by either sex. Gwartney-Gibbs (1988) talks of a 67 percent threshold and van Mourik (1989) argues the threshold is either at 60 percent for women or 80 percent in a male oriented occupation. Irrespective of the threshold measure used, the case for clerical work being a woman-dominated occupation is established.

Data from the 2006 New Zealand Census lists clinical coders in the Clerical and Administrative Workers sub-group of Other Miscellaneous Clerical and Administrative
Workers (599915) (Statistics New Zealand, 2007a). In 2004 research showed that 84 percent of clinical coders identified as women, which is slightly higher than all other clerical worker groups (Douglas, 2004).

The narrow range of occupational categories is also found in a very limited range of industries. Drawing on 2011 ANZSIC06 industry codes' data, women in New Zealand are predominantly located in just four of the 16 industry areas and these are highlighted in Table 2 below. Retail Trade and Accommodation, Professional, Scientific, Technical, Administrative and Support Services, Education and Training, and Health Care and Social Assistance, accounted for 61.3 percent of all female workers (Statistics New Zealand, 2011b). The Health Care and Social Assistance industry workers in 2011 are 80.9 percent women employees. The 2006 Census data indicates that women constitute 94 percent of the clerical employees within the Health Care and Social Assistance category (Statistics New Zealand, 2007a).

Table 2 below presents actual numbers of workers in each industrial classification broken down with regards to sex and the percentages given relate to the percentage of women and men in each of the industries.
Table 2 Persons employed by sex and industry, using the Australia and New Zealand Standard Industrial Classification, (ANZSIC). December Quarter 2011

<table>
<thead>
<tr>
<th>Industry</th>
<th>Female (%)</th>
<th>Female ('000s)</th>
<th>Male (%)</th>
<th>Male ('000s)</th>
<th>Total ('000s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, Forestry and Fishing</td>
<td>31.2</td>
<td>47.8</td>
<td>68.8</td>
<td>105.3</td>
<td>153.1</td>
</tr>
<tr>
<td>Mining</td>
<td>4.4</td>
<td>0.3</td>
<td>95.6</td>
<td>6.5</td>
<td>6.8</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>28.8</td>
<td>73.9</td>
<td>71.2</td>
<td>183.0</td>
<td>256.8</td>
</tr>
<tr>
<td>Electricity, Gas, water and waste Services</td>
<td>33.3</td>
<td>5.6</td>
<td>66.7</td>
<td>11.2</td>
<td>16.8</td>
</tr>
<tr>
<td>Construction</td>
<td>15.1</td>
<td>23.5</td>
<td>86.9</td>
<td>155.3</td>
<td>178.8</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>31.9</td>
<td>34.8</td>
<td>68.1</td>
<td>74.3</td>
<td>109.0</td>
</tr>
<tr>
<td>Retail Trade and Accommodation</td>
<td>57.6</td>
<td>193.3</td>
<td>42.4</td>
<td>142.2</td>
<td>335.5</td>
</tr>
<tr>
<td>Transport, Postal and Warehousing</td>
<td>27.3</td>
<td>27.1</td>
<td>72.7</td>
<td>72.3</td>
<td>99.4</td>
</tr>
<tr>
<td>Information Media and telecommunications</td>
<td>41.3</td>
<td>17.0</td>
<td>58.7</td>
<td>24.2</td>
<td>41.2</td>
</tr>
<tr>
<td>Financial and Insurance Services</td>
<td>59.8</td>
<td>39.8</td>
<td>40.2</td>
<td>26.7</td>
<td>66.5</td>
</tr>
<tr>
<td>Rental, Hiring and real Estate Services</td>
<td>43.3</td>
<td>15.3</td>
<td>56.7</td>
<td>20.0</td>
<td>35.3</td>
</tr>
<tr>
<td>Professional, Scientific, Technical, Administrative and Support Services</td>
<td>47.7</td>
<td>116.8</td>
<td>52.3</td>
<td>128.0</td>
<td>244.9</td>
</tr>
<tr>
<td>Public Administration and Safety</td>
<td>45.3</td>
<td>57.5</td>
<td>54.7</td>
<td>69.4</td>
<td>126.9</td>
</tr>
<tr>
<td>Education and Training</td>
<td>72.6</td>
<td>144.7</td>
<td>27.4</td>
<td>54.5</td>
<td>199.3</td>
</tr>
<tr>
<td>Health Care and Social Assistance</td>
<td>80.9</td>
<td>188.4</td>
<td>19.1</td>
<td>44.5</td>
<td>232.9</td>
</tr>
<tr>
<td>Arts, recreation and Other Services</td>
<td>47.2</td>
<td>59.6</td>
<td>52.8</td>
<td>66.6</td>
<td>126.2</td>
</tr>
<tr>
<td>Not Specified</td>
<td>54.5</td>
<td>4.2</td>
<td>45.5</td>
<td>3.5</td>
<td>7.7</td>
</tr>
<tr>
<td>Total All Industries</td>
<td></td>
<td>1,049.7</td>
<td>1,187.4</td>
<td>2,237.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: (Statistics New Zealand, 2012a)

In addition to this gendered occupational and industry segregation women often spend less time than men in the workforce as they may take breaks from employment to attend to domestic responsibilities. These career breaks impact on the decision of how much to invest in human capital pursuits. Socialisation of, and social pressures on, women's roles and expectations also shape this decision (Blau, et al., 2006). These pressures will also influence the types of occupational groups that women "choose" to enter.

Access to on-the-job training is also an important means whereby workers are able to increase and invest in their human capital. Again though, there is a gendered difference in the uptake and impact of these opportunities (England, 1982). Employers assume that as women take domestic related breaks from employment that the investment in
women’s training and skill development will be ultimately lost to the workplace (Kochan & Litwin, 2011). Not investing in women’s careers and skill sets generally means that women are at risk of offering a more unskilled and cheaper labour option than men (Rose, 1986). Due to the breaks women may take from work they risk missing opportunities, when they are offered, for training. Women may also encounter barriers to on-the-job training, which requires long out-of work hours commitment if they also have domestic responsibilities (Blau, et al., 2006). The difficulties faced by some women, (lack of opportunity and competing domestic responsibilities) means it is less likely they will choose to increase their human capital and this directly impacts on their prospects when competing for secure jobs.

Investment by employers in workers’ training can occur in four forms: first, by paying for the workers’ training and giving them work time to undertake the training; second, by only giving the worker time off to study and expecting the individual to fund the training; third, paying for the training but expecting the employee to use their leisure time to pursue the qualification; or fourth, providing neither time nor funding to assist workers in ongoing training and development. Where the last option is the case, employers may reward workers on achievements.

In 2004, of the 18 District Health Boards that responded to a survey conducted by the author, ten had no pre-employment qualification requirement for clinical coders (Douglas, 2004). The absence of a requirement for prior knowledge of the job tasks and skills assumes that training will be carried out on-the-job in either a formal or informal way. Two-thirds of the respondent District Health Boards indicated they carried out in-house training regularly, with the remaining District Health Boards offering no in-house support, education or training. No feedback was sought regarding the organisational support (time or money) that clinical coders received to undertake the expected ongoing training and only four respondents indicated that qualification attainment was linked to salary progression (Douglas, 2004). It would appear that while clinical coders required fairly specialised skills and knowledge to effectively carry out their tasks, there was no systematic and comprehensive approach to the training and ongoing development across the sector.

Employers need to find the balance between ensuring a good return on their capital investment and retaining competent staff. Staff retention is generally improved through sending signals that demonstrate employees are valued and seen as an asset to the
Developing the skills of employees is beneficial for the employee and the employer. Reluctance by employers to invest in such a manner is often linked to a belief that better skilled workers will leave to find more challenging positions which they may be able to secure due to their improved skill offerings. Countering this position is one that suggests workers feel more valued by the investment of the firm into their human capital develop a greater sense of commitment and loyalty to the firm, and are more likely to stay (Green, Felstead, Mayhew, & Pack, 2000). However, employers in different sectors use different strategies and this often depends on whether employers rely on the external or internal labour markets for staffing. When the training required is very firm specific this reduces the general turnover rate, whereas general or transferable education or training has no specific impact on retention figures (Green, et al., 2000). Other factors, such as alternative employment opportunities and the ability to relocate if required impacts on the mobility of skilled workers.

In the case of clinical coders, with no national training standards or pre-employment qualification, the skills and training they develop through the achievement of coding qualifications and experience is highly specialised and although not firm specific, is occupationally specific. This may account for a general reluctance for District Health Boards to invest heavily in clinical coders' human capital, and the responsibility ultimately remains with the individual coders. As several District Health Boards are geographically close, for example Auckland, Waitemata, and Counties Manukau District Health Boards, the possibility of head-hunting skilled staff is very real. Other strategies need to be implemented to retain skilled staff in these situations, and workplace conditions and culture offer other factors that may work to retain staff (Kochan & Litwin, 2011).

Human capital theory is concerned with the acquisition and development of skills, but the concept of skill itself is arguably a gendered and socially constructed idea. The following part of this chapter examines the mechanism by which skill is socially constructed.

**Construction of skill**

There are several ways skill can be defined. More (1983) offers two definitions, the first is a broad perspective - skill is “a necessary input to the efficient production of
goods” (More, 1983, p. 109). These inputs include training, qualifications and experience. However, skill is more than just technical competence. A second more problematic definition of skill is “a social artefact which comes into being through the artificial delimitation of certain work as skilled” (More, 1983, p. 109). As Bennet argues, "skill is an ideological construction in that there is no a priori reason for valuing certain characteristics .... rather than others, and that socially recognised skill reflects the greater bargaining power of those who claim its title” (cited in, West, 1990, p. 251). When occupations are categorised as skilled, semi-skilled or unskilled, the outcome shows significant differences in employment, social status and benefits. Indeed, More's two definitions of skill are not mutually exclusive as each shapes the consequence of the other (More, 1983). The social value placed on qualifications, training and experience gives rise to differences in the status of skills. For example, tertiary degrees by their nature are considered superior to certificates, or budgetary knowledge gained through running a childcare centre is deemed less worthy than that derived from running a small industrial workshop. If, as More suggests, recognition of skill is merely a social construction then it is necessary to understand how and who defines skill. Phillips and Taylor (1980) agree, and further argue that skill is not only a subjective classification derived from the imposition of ideological thinking but is also contained within patriarchal hierarchies. The idea of patriarchy and therefore, gender, again need to be considered.

Gender, class and ethnicity all contribute to the social definition of skill. In some situations, the issue of who is doing a job and where the job is located in the labour market and society may result in a job classification of skilled or unskilled. The focus on the job holder rather than the designation reflecting the actual skill level required in the job (Horrell, Rubery, & Burchell, 1990; Wajcman, 1991). Horrell, Rubery and Burchell (1990) also find that perception contributed to the apparent level of skill in jobs. Women were more likely to identify personal and social skills as their strength and overall, men were more likely to identify their work as highly skilled. Significantly Horrell, Rubery and Burchell's research indicated that the greatest difference in skill perception was between full and part-time work. Where job content was perceived as similar, full-time male workers were far more likely to identify their jobs as skilled than part-time female workers (Horrell, et al., 1990). Although this difference was based on type of employment, it must be noted that women are more likely to be part-time workers. In New Zealand 15 percent of men and 39 percent of women work part-time
and overall nearly three-quarters (72 percent) of all part-time workers are women (Statistics New Zealand, 2012a). It is reasonable to assume similar research in New Zealand would reveal comparable results to Horrell, Rubery and Burchell’s (1990) earlier work. How skill is acquired also contributes to the perceived status of skill. These findings support the contention that gender is a significant factor in the perception and therefore, the definition of skill.

Phillips and Taylor (1980) argue that the manifestation of gendered skill and its effects operate in the capitalist labour process; it is not capitalism per se that gives rise to the gendered differences in skill determination, but rather the impact of patriarchy on this construction. They assert that classification of skill bears little relation to the actual amounts of training or education and the ability required to complete the job. Phillips and Taylor boldly describe the concept of skill as being “saturated with sexual bias” (1980, p. 79). When women leave the home to enter the workplace they take with them their sex and this impacts on their perceived level of skill. Whereas men will take ethnicity and class into the workplace women will also take gender as well as class and ethnicity.

Since the industrial revolution in Western countries women have been pigeonholed into occupations where the skills required are those of dexterity, caring, obedience and patience to carry out often repetitive tedious tasks. Women were considered more suited to these occupations, especially when they had fewer choices (Phillips & Taylor, 1980). Women are still predominantly employed in these types of occupations, such as poorly paid assembly, domestic, service or retail work. Beechey argues that “the work of women wage labourers has rarely been defined as skilled because historically women have not been very successful at following any of the routes to the acquisitions of skill – education, training and apprenticeship in the case of objective skill, and successful collective bargaining in the case of conventionally defined skill” (Beechey, 1983, p. 65). Contrasting Beechey's historical picture of women's participation in education figures now show that in New Zealand girls and women are dominant in tertiary education achievement and participation (Statistics New Zealand, n.d.). It would be expected that the increase in formal qualifications women gain will positively affect the skill and perceived skill levels that women bring to the workplace. The perception of skills also impacts on the accessibility of sections of the labour market for women as well.
The artificial delimitation of work by skill protects occupations from open entry, and maintains higher wage levels through the attainment of relevant qualifications (More, 1983). While More does not apply the patriarchal analysis lens used by Phillips and Taylor (1980), the result in the workplace is similar from their perspective; certain occupations have historically been protected from women's entrance ensuring higher wages for men. This advantageous economic outcome for many male workers was pivotal to ensure the labour market segregation of men and women.

The gendered labour market segregation is illustrated in the white-collar work of clerical and administrative occupations. Although in different firms or settings the same task might be categorised differently, i.e. clerical rather than administrative or vice versa, the clerical jobs are more likely to be carried out by women and administrative positions more likely to filled by men (Wajcman, 1991; West, 1990). Generally administrative jobs are perceived as more highly skilled than clerical work, and so this further reinforces the link between gender and skill. Men's skill is often regarded more favourably than women's and this can also lead to better wages and conditions (Davies, 1990).

As mentioned in passing earlier in this chapter, developing a theory of patriarchy offers the possibility to understand the fundamental inequalities between women and men. Hartmann (1976, cited in Phillips & Taylor, 1980) argues that it is the mechanism of patriarchy that has allowed capitalism to maintain male hierarchy and dominance within the economic system. Capitalism can be seen as opportunistic and uses patriarchy and also racism as ways to undermine workers' solidarity and to create conflict and hierarchies where there are competing labour market segments. This competitive element allows a mechanism of cheapening the wages or cost of these groups. Capitalist processes operate to produce inequalities and one of the key ways is through utilising patriarchal structures. Skill perception also works to create inequalities and this is affected by patriarchy as well. The use of patriarchy to create a gendered hierarchy renders women's skills as subordinate to that of men's skills and consequently, reduces the perceived value of women's work.
Capitalist labour process

Capitalist labour process theory focuses on the workplace as the site at which social relationships of production allow the accumulation of wealth under capitalism. The capitalist labour process is the means by which management control workers for the conversion of labour power into labour (Braverman, 1974). Braverman seeks to update Marx's critiques of the capitalist labour process through a focus on the degradation of work in the twentieth century. Braverman's argument was three-fold: the distinction between labour and labour process, the formal and real subordination of labour, and the deskilling dynamic (Braverman, 1974). Labour (actual work effort) is the commodity the worker sells; and labour power is the capacity or potential to work (Marx, 2011). Marx argues that, contrary to a neo-classical view of labour as a simple commodity, labour is a social relationship where capital merely purchases the worker's capacity to work rather than the actual work itself (Littler & Salaman, 1982). Capital therefore, requires measures to control and facilitate the process by which labour power is converted into labour. Marx argues that as workers moved away from individual autonomy and became more involved in work practices that utilised machinery, there was also a shift in the control process. This involved a greater division of labour practices to introduce formal subordination of workers by capital. Strategies of both formal and real subordination of workers were employed in manufacturing practices that utilised capital controlled machinery, "machinofacture" (Marx, 2011).

Braverman argues that Marx pre-empted the historical point at which formal and real subordination occurred, and that this did not happen until much later when automation in workplaces became more widespread. For Braverman this coincided with Frederick Taylor's Scientific Management principles of efficiencies, which became influential especially in North America with its economies of scale, from the 1910s. Taylorist principles aimed to; minimise skill requirements and job learning time to achieve job fragmentation, separate labour from work planning and introduce optimum job performance through exact measurements using time and motion studies (Littler & Salaman, 1982). The shift to automation and reduced worker control is argued by Braverman to naturally, and inevitably, lead to a deskilling of workers. As Spencer notes "[i]f capitalists are to fulfil their management function in the workplace, they must seek to minimise the cognitive and technical input of their workforce into the production process" (Spencer, 2000, p. 225). Hartmann argues that capital has...
systematically deskilled and reduced work down to being "dull, dreary and degraded" (Hartmann, 1976, p. 83).

Braverman uses Marx's deskilling thesis, which argues that this process alienates workers from their tasks and recreates them as merely part of the production process. The cost or wage of this deskilled labour is also cheaper than skilled labour (Braverman, 1974). Braverman illustrates the deskilling thesis with the example of clerical work shifting from a high skilled male-dominated occupation, to a female-dominated occupation exhibiting many of the characteristics of deskillling and subordination to managerial control. The case of clerical work is revisited in more depth later in this chapter.

While Braverman sparked a renewed interest in capitalist labour process theory, he has received criticism. The assertion that capital is purely concerned with the subordination and control of workers with a desire to deskill labour and fragment work is too simplistic. As Thompson (1990) argues, the central purpose of capital is to amass wealth rather than to control workers. The control of labour power is only necessary to achieve the surplus value produced by labour. The surplus value is owned by capital due to ownership of the means of production. Although deskillling does occur in some occupational areas through the introduction of machinery and/or automation, this does not mean that all workers universally experience this phenomena (Beechey, 1983; Elger, 1983; Robertson & Alston, 1992). The introduction of new technologies also requires some workers to upskill to use or maintain the innovations. The introduction of new technologies has allowed for a reduction in many menial tasks. Indeed, as Attewell (1987) observes, the introduction of automated processes is most likely to replace tasks that are already deskilled and repetitive. Therefore it is unskilled rather than skilled labour that is under threat through the mechanisation and automation of work. As more time is made available, other tasks can be included in workers' jobs (Thompson & Newsome, 2004). For example, the computerisation of organisations may allow direct data entry at the point of information generation, and as information/paper is handled less, more time becomes available for a shift in emphasis to quality audits and a general improvement in work processes and outputs.

Many opportunities have been created in new higher skilled work and occupations, often due to the increased use of computer technology and the influence of subsequent human relations and behavioural approaches to management. The impact of
computerisation has been felt across many industries and occupations, such as forestry, manufacturing, farming and creative industries. For example, the laborious, skilled work of typesetters had all but disappeared by the 1980s with the introduction of computer-based desktop publishing and graphic design. These new jobs are skilled occupations requiring specific training and qualifications and bring different workers into the communications industry. Nevertheless, some occupations have been deskillled, but as Thompson (1990) argues the decision to deskill or upskill workers, from the perspective of capital, is whether or not this strategy will result in the further accumulation of wealth.

In addition to the critiques of Braverman's work on deskillling and control, West (1990) highlights the absence of gender in his theory of capitalist labour process. Although Littler states "the distinctive social and economic relations of capitalist society shape the nature of the labour process" (Littler, 1990, p. 78), West argues that patriarchy is equally responsible for the shaping of work and women's place in it and therefore, also the capital labour process (West, 1990). She suggests the location of men and women in the workplace are often dependent on whether the jobs are capital or labour-intensive. "Men tend to dominate capital-intensive, and women labour-intensive jobs" (West, 1990, p. 249). Where an industry is generally characterised by capital-intensive jobs, the gendered division of labour often appears between higher and lower levels of capital investment in various jobs within the firm. Armstrong's (1982) study of women in the labour market shows that skill allocation was also linked to whether the work was capital-intensive or not. Male-dominated capital-intensive jobs were deemed skilled and the women filled the labour-intensive jobs and were seen as unskilled.

Although this thesis is primarily concerned with gender in the construction of skill and occupational status, many of the same mechanisms are played out with ethnicity and race. Ethnic minorities and immigrant labour are often over-represented in vulnerable and precarious work arrangements. This leads to an undervaluing of skills of these workers and difficulties in securing good well-paid work with ongoing promotion prospects. The subordination of these groups is real and not to be overlooked when discussing disadvantage, but at the same time gender is still relevant as women in these marginalised groups generally fare worse in employment than men in these groups (West, 1990). The graph below in Figure 1 demonstrates the average hourly earnings in New Zealand in 2011 based on gender and ethnicity. The graph shows that across all ethnic groups, men have higher earnings than women. In New Zealand, Maori and
Pacific peoples on average earn less than all other ethnic groups, with Pacific women in the most adverse position. The average hourly earnings for those in the Middle Eastern, Latin American and African (MELAA) group may be reflecting targeted skill immigration policies.

**Figure 1** Average hourly earnings ($) for those earning income from wage/salary jobs by ethnicity and gender at June quarter 2011

Source: (Statistics New Zealand, 2011a)

**Clerical work**

Clinical coders are used in this thesis to explore the influences of gender, skill and occupational status and how this impacts on labour market position. They are categorised as clerical workers although contemporary clerical workers share little resemblance to the first clerical workers. The evolution of British clerical work since the mid 1880s provides some insight into how the factors of gender, skill and occupational status influence labour market position. Early clerks were usually men; they were few in number and generally occupied a role in business that today would be seen as semi-managerial. Census figures from Britain in 1851 indicated recorded clerks constituted 0.8 percent of the total workforce. At this time less than one percent of clerks were women (Braverman, 1974). Clerical work was classified as a skilled
occupation, predominantly because it required a high level of literacy (Grint, 2005). Girls commonly did not attend school past a very basic level and so were unlikely candidates for a career in clerical work. Historically, clerical work was seen as prestigious in itself and therefore, staffed by men (Crompton & Jones, 1984). Wages and the status of the clerical worker were much closer to that of the manager than any labourer employed at this time.

Post the nineteenth century the "new" clerical occupation began to be dominated by women and as a result, the status of the work became downgraded to lesser skilled women’s work. As such, clerical work provides a good example of how skilled work can be downgraded, deskilled, or upskilled through social processes. Clerical work today has little in common with the first wave of clerks that worked in businesses up until the later years of the nineteenth century. A significant aspect to this change of status is the use of technologies such as the typewriter, which moved clerical work from a handwritten craft to mass production. As demand increased for clerical workers there was a concomitant rise in management approaches to organise and control this work. Taylorist Scientific Management principles were applied, which tended to break down job complexity and in effect, deskill tasks (Braverman, 1974). The largest expansion of clerical jobs came after the First World War, as many economies began to grow rapidly and workplaces expanded and this, in turn, required more clerical and administrative support. This new clerical work differed from pre-war times. Beechey (1983) suggests that rather than clerical work becoming feminised with the influx of women into the positions, there was actually the creation of a new occupation as a consequence of the deskilling that occurred due to the Taylorist management practices (Jordan, 1996; Markey, 2001). While the title of the occupation remained the same, a very different occupation and status appeared in the workplace.

The growth in the numbers of clerical workers resulted in a stratification of the task involved. The Babbage principle holds that it is not logical to under utilise educated labour on tasks that do not fully utilise their potential skills and abilities (Attewell, 1987; Braverman, 1974). This separation of clerical work to specific workers freed up production workers to focus on production tasks and not engage with administrative parts of the process. Managers or owners also employed clerical workers to undertake the menial administrative parts of their jobs (Braverman, 1974). At the time of the expansion and demand for clerical workers, clerical work went from solely the provision of information and support for owners or proprietors, to a complex work
environment, with some areas of clerical work and tasks established to support other areas of clerical work (Braverman, 1974). The clerical function of record-keeping was a means for the control of production, and was able to enhance the breaking up or deskilling of the labour process of production work (Deacon, 1989).

The increased participation of women in clerical work allowed many women previously unemployed, under-employed or in more manual types of occupations to take up the new opportunities available (Braverman, 1974; Markey, 2001). These women constituted part of the "reserve army of labour" in Marxist terms. The workers in the reserve army are a disadvantaged section of the labour market and perform two functions. Firstly, their presence regulates wages as they provide alternative workers for employers as they compete for jobs held by employees. Secondly, the reserve army supplies labour when there are sudden increased demands for production (Marshall, 1998). Braverman describes the reserve army as "a variety of forms in modern society, including the unemployed; the sporadically employed; the part time employed; the mass of women who, as house workers, form a reserve for the "female occupations"; the armies of migrant labor, both agricultural and industrial; the black population with its extraordinarily high rates of unemployment; and foreign reserves of labour" (Braverman, 1974, p. 386). The members of this reserve or surplus labour may be workers who move in and out of employment frequently; workers whose skills have become redundant through technological advances; and the most marginalised workers who experience high levels of casualisation and irregular work.

Other scholars argue that women as a group do not respond in the way of other groups identified in the reserve army. Crompton and Jones (1984) argue that the pattern of women in non-manual work does not reflect the pattern of the reserve army. The members of the army are available to fill gaps in the workforce when needed and move out of the workforce when the demand reduces or ceases. As Crompton and Jones state, “female clerks have from the first been valued for their skill and cheapness; the incorporation of women into the clerical labour force has been a constant upward trend, rather than manifesting the cyclical pattern that might be anticipated in the case of the ‘reserve army’” (Crompton & Jones, 1984, p162). This would suggest that the clerical occupation quickly became a female identified occupation with no return back into the occupational area by males when the circumstances changed (Greene, Ackers, & Black, 2002).
West (1990) argues that from a feminist perspective Marx and Braverman's reserve army of labour thesis does little to explain the ghettoisation of women's work and sex typing of women's jobs. The reserve army thesis suggests that management's decisions to expand or contract their labour force are to gain economic efficiencies but it is clear that this is not the case when, although women's wages are cheaper than men's, men may still be given preference. The logic of the capitalist labour process explains the manner of deskilling in production, but it does not account for why women rather than men are concentrated in deskilled, low paid work at the bottom of this hierarchy (West, 1990).

Although this early version of mass clerical work appeared deskilled compared to when it was a male domain, it has continued to evolve. Disagreement exists between feminist groups whether technological change results in a widening of the skilled and unskilled gap, with women more likely to be marginalised in the unskilled group, or whether technology can bring down barriers to equality and allow a reintegration of the labour process (Pringle, 1988, 1998). Crompton (1984) though, argues that deskilling has been a deliberate and systematic process for clerical workers, particularly with the introduction of electronic and computerised technology. In all, labour process theory risks overlooking the fundamental impact of gender, particularly in clerical work. Labour process theory needs to be seen in interaction with gender theory. In the case of office work, Pringle (1988) argues that rather than a battle between capital and labour, a more insidious battle rages around gender and sexuality. Control in this environment is often played out with male domination over females. The division of labour is clear in the office environment: those who make or service machines tend to be men but those that use them tend to be women (Braverman, 1974). Willis's (1988) argument that the introduction of technologies are positive for workers overlooks the distribution of the benefit and burden of the changes often brought by the technology on a gender basis. Clearly the introduction of new technologies in the office environment allowed patriarchal influences to ensure progress and promotion for some male workers into technical and supervisory roles.

Equally, others, such as Bell (1973, cited in Willis, 1988) argues that the introduction of technology was an overwhelming positive for workers because of its ability to reduce mundane repetitive tasks and that would ultimately lead to more attractive work. In the area of clerical and administrative work, the introduction of book-keeping machines and
typewriters radically altered the workplace. This also opened up more clerical work to women as more generic clerical jobs were carried out en masse, for example in typing pools (Barker & Downing, 1980; Crompton & Jones, 1984).

More recently the widespread use of computerised technology, including computer-mediated communication (CMC), in most aspects of clerical and office work has undoubtedly reduced many routine tasks and allowed for enhanced job content for many (Wajcman, 1991). The clerical occupational group spans a wide range of work roles including word processor, receptionist, and file clerk through to human resources clerks. Irrespective of the type of clerical work undertaken, access to computers (incorporating diverse software and information utilisation) and CMC has transformed employees' work experiences, in many cases increasing autonomy, job complexity and satisfaction (T. Rees, 1992). Although Crompton and Reid (1982) once argued that early computerised processes, such as batch processing of accounts, had effectively deskilled clerks and reduced them to mere appendages to computers, the subsequent shift to terminal-based on-line systems has reintroduced worker control over the work process and arguably, a level of upskilling. Where these clerks are women, the danger remains that the skill acquisition required to function in this new environment will not be recognised. Ramsay, Baldry, Connolly and Lockyer (1991) found the introduction of universal terminal-based computerised workplaces tended to also result in the burgeoning of a technical support department, usually male-dominated. It is the technical departments that are viewed generally as the more skilled, which reinforces the gendered aspect of skill determination and leaves women's tasks undervalued (Adler, 2007). Modern clerical work is varied in tasks, with repetitive work such as photocopying still required but many clerical tasks are now enhanced because of computers and software development. Many contemporary clerical workers are certainly more skilled when compared with workers in the pre-computerised office (Attewell, 1987; Jaros, 2006).

Clinical coders have experienced an increase in the use of computer based coding; now all clinical coding is computerised. This may be considered a deskilling of their work as the computer is able to prompt and suggest appropriate codes and identify inconsistent code input, but unless individual coders have the underlying knowledge of the classification system and complex variations some circumstance require, they would not be able to code accurately. The computer software development also allows for coding to be completed more quickly, allowing more time for individual coders to
review and audit work, and potentially to engage in training for higher vocational qualifications.

The main body of literature on labour process has focused generally on workplaces such as factories and offices in the private sector. There is some difficulty to translate a theory concerned with the production and capture of surplus value for the purposes of private wealth accumulation, to the public sector. The public sector, in contrast to the private sector, is often funded or subsidised by the state and may have not-for-profit objectives and goals (Coombs & Jonsson, 1991; Dent, 1991). In New Zealand the public health sector has a particular set of tensions that arise from a service that, since the health sector reforms of the 1990s, has required some form of business approach. Chapter Six details the history of this reform in New Zealand, including the period when the public health institutions were compelled to return a profit under a competitive market forces model. The public health sector institutions are now required to be more accountable for their budgets and this has resulted in a more managerialist approach to the organisations' administration. Dent (1991) suggests that from a Marxist perspective the labour processes in the public sector are unproductive as they rarely create goods and services for the market. However, there is still a need in this sector for the conversion of labour power into labour and this process still involves once more, managerial control and worker resistance.

The hierarchy within health locates the medical profession firmly at the top with lesser professions and then non-professions laid out below. Each professional area also contains hierarchies within them; for instance, radiologists reading x-rays and radiographers taking x-rays, or registered nurses administering pharmaceuticals and nurse aids giving bed baths. At each lower level there is a higher level of managerial control over the work process and tasks. Most health work occupations have professional status and as such have professional bodies that create rules and regulations, which are used for control of members by members of the profession. This organising takes the controlling role away from managers in the traditional sense, and as Daly and Willis (1988) suggest, creates a form of resistance by the professional body to external interference and control.

Within the hierarchy of the health sector, clerical workers and other non-clinical occupations do not hold influential expert positions. Clinical coders, as part of the clerical occupation, do demonstrate a high level of knowledge of medical terminology
and pathologies but do not plan or design their work, which would indicate a level of professional autonomy. They use computer based software of a universal categorisation system (ICD-10-AM), and while they need to understand the medical context to correctly input data, they themselves do not create either knowledge or the system. Consequently they do not have the type of power that other medical professions are able to exert (Douglas, 2004). There is also no evidence that they have any greater organisational power or influence than other clerical workers in the health sector. However, within health clerical work, clinical coding may be seen as more skilled and an internal labour market of a clerical hierarchy may develop, separate from the other internal labour markets.

**Employee resistance**

Braverman's account of managerial control over workers discounts the occurrence of worker resistance (Braverman, 1974). Braverman adopts a neo-classical view of organisations, which presumes the complete commodification of labour and a unitarist view of employment relations (Thompson, 1990). The organised collective resistance of workers is against management control (Spencer, 2000).

Traditionally, unions have been the main vehicle for collective resistance and influence in the workplace. Influence can be defined as power in action and this influence is strongest for workers as a result of collective processes (Blyton & Turnbull, 2004). This is particularly critical where workers, such as clinical coders, who are few in number and unable to create their own critical mass or influence, are members of a large union covering many occupations. The resistance to job fragmentation, deskilling and deterioration of job security is also an attempt to resist a downward pressure on wages (Jaros, 2006). Although from a labour process perspective union membership would appear to be a logical choice by workers to combat capital's desire for control, this is not necessarily borne out in practice. Many other factors influence the decision to become part of a union.

The gender structure of the union movement has shifted substantially. In New Zealand, a cultural shift occurred in the 1970s in many attitudes towards women's role in society. The impact of feminism on women and their choices and the changing economic circumstances resulted in increased female participation in the formal labour market.
Currently nearly two-thirds of women participate in the labour market (Statistics New Zealand, 2012b). Women now constitute 46.9 percent of the labour force in New Zealand and represent the majority, 55 percent, of all union members, although this represents just 22 percent of women workers (Feinberg-Danieli & Lafferty, 2007; McGregor, 2012). The higher levels of female unionisation are due to women comprising a significant proportion of the public sector (where union membership is substantially higher than in the private sector) and the demise of employment in much of the traditionally male-dominated and highly unionised manufacturing sector (McGregor, 2012). Healy and Kirton (2002) found that in the categories of managers and administrators, professional occupations, and associate professional and technical workers, women are more likely to be union members than men. This British research has also found that women who were represented by trade unions were able to secure better wages and conditions than those women not covered by collective agreements. Significantly, where unions are weak or absent, the work women do is more likely to be categorised as unskilled or semi-skilled (T. Rees, 1992).

The motivation for workers to join a union has attracted some attention in New Zealand as well. A survey by Tolich and Harcourt (cited in, Rasmussen, 2009) conducted in 1999 of Engineering, Printing and Manufacturing Union members indicated that the most important reason to join a union was: to provide protection at work 33.5 percent; direct economic benefit 27 percent; ideological reasons 23.6 percent; and, 8.8 percent gave group solidarity as their main reason. Given the political environment in 1999 and that the labour environment was governed by the Employment Contracts Act 1991, these results are not surprising. Under the Employment Contracts Act, unions did not have exclusive representation rights for workers and the active political discourse sought to diminish the role and power of unions. As a result, many workers either did not join unions or resigned as the union was often no longer an effective body for furthering workers' rights. A fuller discussion of the political and legislative context is found in Chapter Six.

One of the main drivers for union membership is the perception of effectiveness of unions (Clark, 2000; Fiorito, Jarley, & Delany, 1995). Currently, New Zealand unions enjoy exclusive rights to member representation and collective bargaining, which allows them to advocate for improvements in wages and conditions of work. This exclusivity of the unions should contribute to a perception of effectiveness of the union by workers as it is the union that can negotiate on their behalf for desired outcomes. This might be
expected to allow clinical coders an effective degree of representation in the workplace given their union is a significant one.

Research by Boxall, Haynes and Macky (2005; 2003) based on the 2003 New Zealand Representation and Participation Survey, presented results that explain workers attitudes to union membership under the new legislation. They used three broad categories of motivation to join unions. The first category is “dissatisfaction or threat motives”, where workers have negative attitudes regarding their work and employment experience and workers unite as an effective way to counter their environment. The second category of “utility or instrumentality motives” is related to perceptions of union performance or effectiveness to which they may, or could belong. Lastly, the “ideological motives and political beliefs” category relates to the individual’s personal political views (Boxall, et al., 2005). Boxall, Haynes and Macky (2005) found the main predictor of union membership was the second category, utility or instrumentality in relation to their appropriate union along with a weaker correlation between ideological position and membership. Therefore, the dissatisfaction or threat motives were not a predictor of union membership. This result also supported the earlier findings of Tolich and Harcourt (cited in, Rasmussen, 2009). The contention in labour process theory that workers will resist employer control may not be reflected in this research, but the workplace and the employment relationship is more complex than the broad research questions posed by Boxall et al of motivations to join unions. The level of actual worker resistance will also be influenced by loss of control, breach of the psychological contract, job satisfaction and motivation for work (Turnley & Feldman, 2000).

Other variables that appeared to support union membership were longer tenure, being female and working in the public sector, education and health systems. Occupation also revealed differences in union density levels. Haynes and Boxall (2003) found that Manager/Professionals and Technical/Other Professionals had union density figures of 34.1 and 37.1 percent respectively, and Clerical/Secretarial only 20.2 percent. Age appeared linked to union membership with union density of 16.3 percent of participants under 35 years and 33.4 percent in those 35 years and over, although was not statistically significant (Boxall, et al., 2005).

The research on union membership and the motivations to join a union would suggest that clinical coders are likely to be union members due to the highly feminised nature of the workforce and also as the work is located in the public health service. Haynes and
Boxall’s (2003) work suggests that if clinical coders were professionals rather than clerical workers this would further increase the likelihood of union membership, but their work does not investigate the impact of the location of employment, whether it is in the private or public sector. Clinical coders’ perception of the utility or effectiveness of their unions could also be expected to have a significant impact on their decision.

Clinical coders face issues with regard to their visibility and ability to influence the workplace. They are a small group within the larger grouping of clerical workers in public hospitals, and their interests may be overlooked or misunderstood. Clinical coders are employed predominantly in the public sector and this sector is traditionally a unionised workforce. Unions are able to influence the working environment but influence can also be exerted through other forms of participation of a representative and direct kind (Walters & Nichols, 2007).

It is not the intention to introduce an in-depth discussion of worker participation into this literature, although an understanding of the different types of worker participation is appropriate. Hyman and Mason (1995) conceptualise three distinct types of participation; industrial democracy, employee participation, and employee involvement. Industrial democracy requires meaningful power-sharing between employers and employees and as a result, is not common in capitalist organisations. Employee participation is defined by the authors as indirect participation provided for in laws and regulations, and includes collective bargaining, union representation, and health and safety committees (Markey & Patmore, 2011). The employee involvement Hyman and Mason (1995) refer to tends to be direct participation that is employer-initiated and controlled, such as autonomous work groups, job enrichment and job design. The rationale for involving employees is primarily to enhance employee motivation and commitment to improve overall organisational efficiencies.

Knudsen, Busck, & Lind (2011) find that participation, both direct and indirect, by workers in decision-making caused increased well-being amongst the staff and created a high quality working environment. Conversely low participation resulted in feelings of a low quality work environment. Quality was measured across the physical and psychosocial environments, and well-being indicators of stress, fatigue and work-life balance. Where there was a high level of quality of work environment and job satisfaction in the environment there was a low desire expressed by the workers for more influence in the workplace (Knudsen, et al., 2011). Therefore, it might be
expected that if clinical coders have effective task autonomy in their work they may also have a significant amount of influence in other areas of their work environment. Where there is little or no direct participation by workers in their immediate environment, reliance is on indirect participation through union representation.

**Conclusion**

In summary, this chapter has explored the relationship between gender, skill, and occupational status within the frameworks of patriarchy and capitalist labour processes. The disadvantage that clinical coders receive in their employment maybe a result of the value society places on women's skills. This chapter has identified the way in which both the structures of patriarchy and capitalist labour processes operate to ensure women's subordination in employment.

The skills required by clinical coders are specific to the job and both continuous on-the-job training and qualifications are needed to develop a proficient practitioner. However, although the demanding work that clinical coders undertake requires extremely high levels of accuracy due to the critical use of their outputs by the organisation, there is a conflicting message sent by the Ministry of Health and District Health Boards. There is no national standard of training for clinical coders or pre-employment qualification requirement. This situation is indicative of Phillips and Taylor's (1980) claim of the sexual bias that pervades the manner in which women's work and skills are distinguished. As a clerical job, clinical coding is viewed as low down in the hierarchy of occupations within the health sector.

Braverman's deskilling thesis is not borne out in the case of clinical coders. Although the introduction of more computerisation has meant a more efficient recording of allocated codes, the process of selecting appropriate codes is still a task reliant on the knowledge and experience of the classification system by individual coders. The ability of clinical coders to retain control over the coding process affords them a level of job autonomy and resistance to managerial processes.

Ultimately it is the influence of patriarchy that results in women's skills and women-dominated jobs being designated as of less value than men's skills and work. Patriarchy works within capitalist processes to disadvantage women in the labour market. In this
way, different groups in this case women, are disadvantaged through poor skill recognition, remuneration, occupational status and career opportunities. The next chapter looks at occupational status specifically with a review of the literature on professions.
Chapter Four: Professions, Professionalisation and Power

As shown in the previous chapter, the complex interactions of gender and skill within the structures of patriarchy and capitalist labour processes, result in women's skills and women-dominated occupations being valued less by organisations. In spite of low occupational status, clinical coders need to acquire expert and specialised skills to autonomously complete their job tasks.

The evolution of clerical work, in Anglo-American countries, from a male-dominated high status occupation in the nineteenth century to the current women-dominated occupation involved a downgrading of the status attributed to the work. Today, clerical work, even the more skilled areas, cannot be described as constituting a profession. Professions are an elite type of occupation, which attract privilege and reward. Clinical coders claim to be undervalued and ultimately overlooked as a profession, yet they have been unable to influence a change in their occupational status.

This chapter begins with an exploration of several theories relating to the identification of professions and the bias that is inherent in these approaches. How professions fit in the labour market is then discussed, which leads to insight into the power those professions and other occupations exert power within organisations. The chapter concludes with two cases of occupations that have been through a professionalising project to improve their occupational status.

Professions

The lack of control over the process that some clerical workers have in their work and lack of recognised educational achievements too often keep them locked into a disadvantaged position. Women generally appear to have much lower occupational mobility and are easily trapped in less advantageous or secondary labour market sectors. In part this situation can be explained by a lack of support from employers and a lack of developed career paths (Llewellyn, 1981). I have already noted in Chapter Two that historically women were less represented in tertiary education but now women outnumber men in New Zealand’s tertiary enrolments. Now, it is only courses in the
fields of agriculture, engineering and architecture which male students dominate (Callister, Newell, Perry, & Scott, 2006).

While women in the past have often found it difficult to enter male-dominated professions, female-dominated occupations potentially are able to engage in a systematic project to increase their occupation status. A professionalising project has the ability to raise the occupational status of a group through the creation of educational and structural frameworks based on registration, standards and forums for disciplinary hearings to maintain the integrity of the professional group. Hinings describes the professional project as being able "to control the conditions of work (the labour process and the labour market) and to increase and maintain status and power" (Hinings, 2005, p. 407). Professional projects describe a variety of processes that aim to improve and reflect on an occupation’s prerequisite and ongoing education, quality and standing with a view to improvement, professionals and professions are highly contested concepts. As Forsyth and Danisiewicz provocatively write,

The terms “profession” and “professionalization” are virtual nonconcepts, since there is little consensus about their meaning. As Freidson (1970a:4) notes, the occupations to which the word has been applied are so varied as to have nothing in common save a hunger for prestige” (Forsyth & Danisiewicz, 1985, p. 59).

This element of cynicism tarnishes any idea that all professions are idealistically driven by a desire for “good” and community. Earlier, the professions were not just seen as standing apart from others due to their altruism but indeed, in 1930s Britain they were hailed as having the moral fortitude to be the stabilising element against challenges to democracy (Johnson, 1972). Generally in society though, professions are perceived as more secure, prestigious occupations, to be respected within communities. This prestige and status though, is socially constructed and is subjective and value laden. The professions and members have significant power and influence as there are substantial remuneration, reward and benefits that are attached to professions.
**Profession definitions**

There are many different academic approaches to understanding the concept of professions. Many sociologists have linked the study of professions to class theory, but others, such as Freidson (1994), argue that a profession is merely an occupation and certainly not a class. Freidson argues the creation of a profession is as much created through public perception as any rules or regulations set by a body to construct knowledge and entry requirements. It is the confidence that the public has in an occupation to act in a professional manner which ultimately allows it to be seen as such. Freidson (1994) argues the “future of profession lies in embracing the concept as an intrinsically ambiguous, multifaceted folk concept, of which no single definition and no attempt at isolating its essence will ever be persuasive” (p. 23).

This denial of the existence of any homogenous class of occupations called professions has not stopped them being the focus of much research. The concept of professions has not been completely left in the hands of the public to determine. Theorists have attempted to develop models to further the study of professionals and these models use varying bases. Early writers in the 1950s and 1960s developed models based on trait or attribution theories. Trait theory suggests the following as the defining characteristics of professions:

1. knowledge based on theory; complex intellectual techniques;
2. mastery of knowledge base requires long period of training, usually university based, which is technically specialised and designed to socialise trainees into the culture and symbols of the profession;
3. tasks are inherently valuable to society, relevant to key social values (health, technological progress, legal rights, etc);
4. practitioners are motivated by service to client’s welfare and to the profession;
5. performance of tasks characterized by high degree of autonomy;
6. practitioners exhibit long term commitment to their profession;
7. practitioners enjoy a well developed sense of community within the profession; and
8. the profession has a well developed code of ethics that guides professional behaviour and defines professional values

(Leicht & Fennell, 2001, p.26).
Leicht and Fennell (2001) and others dismiss this model as it is based on lists of traits that are arbitrary and lacking a general consensus as to which are essential and which are superfluous. Therefore as a model, trait theory is less useful as a checklist to determine the existence of a profession than as a useful picture revealing important areas to consider when evaluating levels of professionalisation. A lay or non-professional person would reasonably expect these areas/traits to be present in a profession. As Johnson (1972) points out, this type of functionalist approach focuses on the core elements of the “true” or traditional professions (i.e. clergy, lawyers and doctors) and then uses these same elements to measure all other potential professions. In doing so, the model fails to give attention to the multiple power dimensions that are present. Consequently, the major feature missing from a trait theory approach is the analysis or consideration of the role power plays in defining the function of a profession.

Academic work on professions needs to be clear whether the study is the actual activity of the occupation, (i.e. the nature of the work), or whether the object of the study is the institutions that control the occupational activities, i.e. the professional bodies and their role (Johnson, 1972). Johnson firmly argues that a profession is not actually an occupation but in fact a process of control over an occupation. The institution that controls, the professional body or gatekeeper, also creates job protection and limits access to the benefits to members. Most professions are bound by legislation which establishes the professional bodies, their duties and responsibilities, and their jurisdiction.

Later writers, from the mid 1970s onwards, have shifted away from an attribution approach. The discussion of professions focuses on the autonomy the professional has from either the client or the employing institution (for example, Forsyth & Danisiewicz, 1985; Freidson, 1994, 2001; Macdonald, 1995; Turkoski, 1995). The refocus on autonomous power to define or understand professions does not succeed in revealing the underlying social powers which construct the status and role of professions. Forsyth and Danisiewicz (1985) developed a model of professionalisation that places occupations on a grid to determine the relative autonomy exercised by workers towards both clients and employer. The occupation being assessed has to be a client-serving occupation that is essential, exclusive and complex. Then, the occupation is analysed according to its relationship with clients and employers. High autonomy from both leads to a designation of “true profession”. Under the model semi-professions only
exhibit autonomy from one of the determinants, for example, nursing may be seen as semi-professional in this model, because although nurses are very client-focused there is also a high level of employer control, either from medical staff or the management of the organisation.

Occupations that behave like a profession but have little autonomy from client or employer are categorised as "mimic" professions. Mimic professions may have well developed processes such as codes of ethics and other characteristics of professions, but lack any real power gained through autonomy. Critical to Forsyth and Danisiewicz's (1985) model is the acceptance by the public of an occupation being a profession. A mimic profession will not have public support as they are not seen to act in an independent manner. Forsyth and Danisiewicz are quite clear that where an occupation does not display autonomy on at least one of the determinants it is “not evoking the profession relationship” (1985, p. 65). An example of a mimic profession from Forsyth and Danisiewicz's (1985) model is that of librarianship. Other scholars, such as Abbott (1998), would contest this finding, and label librarians as semi-professionals. He posits that the group “professional” has a fluid membership, which is affected by time, technology and education. He also points out that the decision into which group an occupation is placed, professional or semi-professional, has more to do with whether it is men or women who undertake that work (Abbott, 1998).

Abbott (1998) argues that a job analysis carried out within an occupation is the only way to determine the occupation’s ability to be classified as a profession. This can be difficult at times if a group is working to protect their status and obscuring a clear view of the work itself. For example, the contemporary role fulfilled by an accountant is substantially different to the role prior to computerisation. Many basic tasks undertaken by accountants can now be completed by technicians with less educational qualifications. To maintain their professional status, accountants need to move into higher levels of financial expertise. They are protected by registration and law and are therefore able to maintain their status and standing as a profession in spite of the deskilling occurring in previously important parts of their work tasks (Abbott, 1998).

The fluidity of labelling occupations with the higher status title of profession is pragmatically dealt with by Pemberton (1994). He argues that within occupational groups there are usually different levels of expertise carried out by individuals. In his research into records and information management he identifies the clerical workers
who file under systems, and then identifies the more expert individuals in that area of work who, with higher education backgrounds, develop these systems. While on the face of it both groups undertake clerical type work he only defines the workers that develop and create systems and structures as professionals.

Trait theory can also be used to categorise these workers (Pemberton, 1994). Overall professionals take a broader conceptual approach to knowledge, whereas semi-professionals are concerned with task knowledge. To categorise workers Pemberton (1994) draws on, as Abbott (1988) does, to the nature of the work. Librarians are not the clerical workers who issue books at the desk; they usually require an undergraduate degree to enter into post-graduate courses in library studies and are extensively involved in information retrieval and management. Forsyth and Danisiewicz’s (1985) requirement for public acceptance for a profession to be credible explains why librarians struggle to gain acceptance as a profession. The public view of librarians is as the book issuer and shelf filler.

Cynics suggest the process of professionalising is about a desire for higher status in society and that the process is merely credentialing. In itself, such a critique is not very helpful or constructive. Whether or not a professionalising project results in an occupation fitting the classification of a profession, semi-profession or even mimic profession, the process itself has merit. The benefit gained from the reflective process, which looks to improve or standardise qualifications, education and quality of work, is still able to contribute positively to the occupation.

Missing from all these earlier approaches to defining professions is the place that gender plays. The language of classifying occupations as professional or semi-professional is challenged vehemently, several writers suggesting it was a deliberate mechanism to undermine and subordinate women. For example, Healy and Kirton (2002) argue "[I]t is time that the concept of semi-profession was generally acknowledged for what it is, a gendered socially constructed project complicit in the subordination of women's occupational groups" (p. 188). Earlier Witz (1992) plainly states the case as; "because women are not men, semi professions are not professions" (p. 60). Supporting Witz, Abbott (1998) contends that the classification of an occupation as profession or semi-profession may have more to do with whether it is men or women who fill the positions.

Simpson and Simpson hold nothing back when they expand this further;
Thus it was claimed that 'semi-professions' are not professions because women lack occupational motivation, ambition and any drive toward intellectual mastery (sic.), are incapable of exercising authority over men (due to their belief in male superiority), or of forming occupational communities and maintaining constructive colleague relations because they are 'less able than men to disagree impersonally, without emotional involvement ... think in value terms rather than intellectualising a problem' and tend to spend their time comparing notes on clothing styles and child rearing which 'does not have the same professionalizing effect as the task-related contacts of professionally dedicated workers (Simpson and Simpson 1969 p241, cited in Witz, 1992, p. 60).

**Position of professions in labour market**

Authors (such as Freidson, 1994) clearly see professions as merely a type of occupation that may or may not have particular attributes or characteristics. These characteristics result in the public’s acceptance and/or a regulated constraint by an authority. Freidson does this in an attempt to see past the elitist culture of professions to ascertain a more pragmatic analysis. Nevertheless, he does acknowledge that professions are located in the upper tier of the primary sector of the internal labour market, as defined by Doeringer and Piore (1971). He applies Doeringer and Piore’s (1971) dual labour market framework to distinguish the working environment of professional-technical workers. This conceptualisation of the primary sector environment includes stable employment with positive career prospects. The inhabitants of this tier include a range of workers who have expertise: craftspeople, technical experts and professionals. Bell (1976 cited in Freidson, 1994) supports this hierarchy within the primary sector although others (see for example Wilensky, 1964, Etzioni, 1969 and Goode, 1969, cited in, Freidson, 1994) reserve this top tier for only the most traditional of professional occupations such as doctors, accountants and lawyers.

A feature of this upper tier is the strong link to credentials and the requirement for pre-employment qualifications. These qualifications result in a level of mobility for the worker as they can seek employment and promotion across any number of firms; plus the knowledge they have is not firm specific. This requirement creates an element of power and control over professional-technical workers' work not seen in less skilled or expert occupations. Freidson (1994) includes different types of occupations in this top tier, and identifies the type of training or education required as the primary differentiating factor. The more traditional professions, particularly medicine, have a
very extensive and intensive training requirements to achieve membership, whereas technical occupations generally require only two to three years of training (Freidson, 2001). Professional regulatory bodies are essential in acting as a gate-keeper. They set minimum entry requirements, which have the effect of controlling both the standard of entrants and also the number of new entrants. These bodies also have the potential to influence fees or salaries charged by those members within the profession. Importantly, the role of the regulator is to monitor and maintain standards of practice and behaviour of members (Lysaght & Altschuld, 2000).

The issue of who controls or supervises professionals in their work is also important. Freidson (2001) observes that supervision of professionals in the upper tier of the primary sector is carried out by colleagues or peers serving in administrative roles rather than a manager holding hierarchical authority. Such a manager may not necessarily have experience in the occupation itself. An example of this can be seen in the medical profession where it would be seen as completely inappropriate for a practice manager to have some medical supervision role over the medical staff.

In conclusion, it is clear that membership of professions brings status and privilege in society. However, whether that reward is fair and just, may be questionable. The assumption that commonly prevails is the superiority of professions over other occupations. The literature is not unified in how a profession might be defined. Nevertheless there is a consistency in the portrayal of professionals desiring, and usually commanding, more power through qualifications and the ability to exercise some control over their working conditions and workplace. Underpinning the discussion of professions is the unspoken assumption that professionals hold greater value than other workers. This attributed status does cause problems for a society that places considerable weight in a person's occupation to provide an indicator of personal worth. Most occupations and workers seek to contribute worth or a useful outcome through their labours. Contributions may vary but generally have commensurate economic value. An additional short coming identified in the literature is the omission of gender in the analysis and definition of professions. This feature is particularly relevant to this study.

When professions are deliberately constructed as having superior value society is likely to overlook and not appreciate the important contributions that workers in other occupations contribute. Workers who fall outside the given characteristics of
professions are just as likely to be undertaking work that is important in its contribution to the economy and to social goals. For example, the work of surgeons and highly skilled medical staff would not be effective or sustainable if a range of other workers were not supporting them - by removing rubbish, purchasing supplies and sterilising equipment. By privileging the status of the professionals it is difficult to afford deserved status and benefit to others.

**Power and organisations**

The business organisation today is the foundation of the capitalist system. Its importance in Western democracy is so entrenched that at times little analysis or concern is given to its legitimacy of existence. A substantial amount of literature discusses how change within the organisation or efficiencies of processes could be improved but not whether there is a fundamental argument for its necessity. Similarly, the foundation upon which the work organisation is constructed is overlooked in critiques, leaving an assumption that the rationale for its development is valid. Management literature, generally uncritically, assumes the right of organisations to exist and many of the fundamental processes within them. Research and discussion then proceeds to the next layer of organisational design, theory or behaviour. In particular, the construction of power in organisations is researched from an accepted position of legitimate and illegitimate power bases (Hardy & Clegg, 2003).

The evolution of organisations through the time of the Industrial Revolution also developed the location and basis for power relations in workplaces. Prior to the modern organisation, power rested with those that created or made goods and the associated trades and guild organisations. The hierarchy within the trades-located apprentices as the lowest power holders with "journeymen" positioned above. The rung of journeymen held greater knowledge and taught apprentices. The pinnacle of this hierarchy was the "master", who generally owned the means of production (Clegg, 2009). A person who had both experience and knowledge could command and teach those with lesser skills and they held power because of this.

As individuals with capital began to own the means of production and could employ skilled trades-people to labour for them, the power base also began to shift. Rather than power being enshrined in skills and knowledge, power became synonymous with
owning the workplace and having the right to determine the employment and conditions of individuals. Tasks became fragmented and specialised in pursuit of control and efficiencies and as a result, the workforce became more differentiated. Labour's lack of control over its work allowed the modern organisation to establish itself with unitary structures. Indeed, the greater diversity of types of labour associated with the division of labour and lack of cohesion allowed management and owners to fill the power gap. This evolution represents the shift of power from the task doers to a centralised location with the capitalists (Hardy & Clegg, 2003).

Therefore, in the modern organisation the status structure and the functional structure are not necessarily related to organisational knowledge. The power literature has developed from two diverse areas: the functionalist, which gives rise to a managerialist approach; and critical theorists, who focus on power in relation to domination, exploitation and resistance. Marxist analyses explain exploitation in terms of conflict between those who own and those who do not own the means of production. The conflict arises from the extraction of surplus value from exploited workers. Weber took this analysis further to look at relations in production as well as relations of production. He saw power also coming from knowledge of operations, not just economic ownership. The creative/knowledge aspects workers bring when selling their labour is able to be used to change and influence workplaces (Hardy & Clegg, 2003).

As discussed fully in Chapter Three, labour process theory argues that managers need the expertise that labour brings to the workplace but also need to control it. This control is usually maintained through rules and structures that formalise the power relationships and therefore, marginalise the power that workers hold as part of their expertise. Formalisation of managerial power is seen as ‘legitimate’ (Hardy & Clegg, 2003). Littler (1982) suggests that the formal subordination of labour is rarely critiqued, in part due to the acceptance of property rights by men, underpinned by the body of philosophy developed by John Locke in the seventeenth century. Inalienable rights to property by the individual limits government intervention and challenge and underpins many of capitalism's principles of ownership, competition and the profit motive (Schneewind, 2001). Based on these rights, management determines the allocation of resources and workload for the "rank and file" in the organisation. Therefore, whatever discretionary power workers are able to exercise is bounded by this context (Freidson, 1986).
Analysis has been carried out as to why power is always seen as hierarchical, yet power is not static and different influences determine when a party has the ability to exercise their power. For example, in tight labour markets employees may have more bargaining power as their skills become scarce, while at other times in high unemployment the employer has the ability to demonstrate much higher levels of power over employees and their working conditions. Power within organisations is also evident between groups of employees. For example, Thompson (as cited in Hardy & Clegg, 2003) investigated air force crews, both the land and air crews. He observed that between these groups of workers, although the air crews had more power and authority, without the technical expertise, support and commitment of the land crew, air operations could not take place. Thompson concludes it is “the technical design of tasks and their interdependencies that best explained the operational distribution of power, rather than the formal prescriptions of the organization design” (cited in Hardy & Clegg, 2003, p. 625). This distinguished formal and actual instrumental power, however it continues to categorise actual or instrumental power as illegitimate.

Clinical coders have a substantial amount of expert knowledge; both in technical medical terminology and also in the unique categorisation codes used to generate their outputs. Extending the analogy, they are the land-based crews of Thompson's work. While they are not the "flashy flyboys" of the skies, which the medical staff represents, without the fundamental work clinical coders undertake, the organisation would not be able to confidently budget appropriate funding from central government.

Crozier (1964) identifies a different location of power in an organisation. He determined a link between uncertainty in a firm and the power held by those who affect that uncertainty. Crozier observed workers in a French tobacco factory and the relationship between maintenance workers and those in production. The production workers were paid on production, while organisationally the maintenance workers were marginalised and poorly paid. Constant production relied on the machinery operating efficiently. Maintenance was planned and controlled. In the event of machine failure workers were unable to control production and therefore, their reward. At this point the power of control over the uncertainty of the machinery being operational was with the maintenance workers; their haste or reluctance to repair the machines impacted directly on the real wages of other workers and company profit (Crozier, 1964). A similar situation is described about English gas-workers in the late 1880s (Hobsbawn, 1968). These workers were able to gain substantial improvements in pay and conditions and
establish a strong union, due to the essential nature of their work. At this time electricity had not become established as a viable alternative to gas for lighting and heating and therefore, continuous supply was of paramount importance to any company. For clinical coders, their ability to code accurately and to meet the external deadlines of the Ministry of Health directly impacts on the funding the organisation receives. This pivotal position in structural power should give clinical coders as a group some power in the organisation, as they are involved in controlling uncertainty.

Unfortunately, while Crozier (1964) and Thompson (cited in, Hardy & Clegg, 2003) observe interesting events they do not explain why this instrumental power is not then translated into legitimate power in organisations and is exercised in a visible way. Why do clinical coders not experience better status in the District Health Boards? Mann (1986 cited in Hardy & Clegg, 2003) provides some insight into what he describes as “organizational outflanking”. This concept attempts to explain “why the dominated so frequently consent to their subordination” (Hardy & Clegg, 2003, p.628). Mann describes outflanking as having two possible causes; ignorance and cost. Ignorance denies people access to participation. In the case of workers, Mann suggests ignorance could be about the rules that entrench the power dynamic they experience and therefore, they do not know how to change it. It could also be an ignorance of potential allies that could collectively apply and resist power and control. The result of this ignorance is that any resistance is uncoordinated and marginalised. Under such conditions it is relatively easy for management to maintain control in the organisation. The second cause suggested by Mann is where individuals do know what to do to counter dominance but are also aware of the cost of such action and the likelihood of success. A risk assessment of the situation, which has a poor chance of success and which has the potential to result in a backlash, will make individuals less likely to act (Hardy & Clegg, 2003). In the case of clinical coders, the reality of their small numbers and low concentrations may well result in their ignorance of process and the lack of allies in the District Health Boards.

The organisation only recognises legitimate power. The ability of organisations to create a powerful and controlling structure is reinforced by rules and regulations that build on wider social rules, patriarchy and norms of power and influence. The analysis of power has been reasonably extensive across different situations but only since the 1970s has there been an academic body of work that seeks to analyse power with a gendered dimension. The earlier mentioned French tobacco factory case study
completely ignored the fact that the maintenance workers were men and the production workers women. This aspect is likely to have impacted the expression of power that was being played out beyond that of organisational uncertainty (Hardy & Clegg, 2003).

Gender has tended to be invisible in organisation theory. As Acker explains "in spite of feminist recognition that hierarchical organizations are an important location of male dominance, most feminists writing about organizations assume that organizational structure is gender neutral" (Acker, 1990, p. 139). The underlying assumptions in labour market models assume gender neutrality and this creates an inadequate understanding of women in the labour market. According to Acker and Van Houten (1974), the Crozier (1964) research proves the existence of sex structuring in organisations. They claim that men are less inclined to take orders from women and this results in deliberate recruitment and structuring in organisations to privilege men in higher positions of authority in relation to women. As Crozier (1964) identified, the sex differences are amplified by the organisational power differential.

Similar problems of understanding occur in organisation studies (Martin, 1990). An assumption of gender neutrality limits a deeper analysis of the dynamics of organisational life. Organisational processes are partly responsible for occupational segregation, and the subsequent gender segregation results in income and status inequalities (Acker, 1990; England, 1982, 2010; Hansen, 2002). Organisational structures create and reinforce the legitimacy of power differentials. As Acker (2006) makes clear, extensive class analysis has been conducted to understand inequalities within the labour process (see for example Braverman, 1974; Burawoy, 1979), but that the complex intersectionality that results in inequality in all work organisations begs to be understood. Acker's (2006) concept of "inequality regimes" attempts to reflect the complexity that class, gender, race and sexuality bring in organisations. She defines inequality in organisations as "systematic disparities between participants in power and control over goals, resources, and outcomes; workplace decisions such as how to organize work; opportunities for promotion and interesting work; security in employment and benefits; pay and other monetary rewards; respect; and pleasures in work and work relations" (Acker, 2006, p. 444). These inequalities change over time and are impacted by legislative changes and cultural influences.

The position that clinical coders find themselves in is complex and brings gender issues to the fore. Clinical coders are located within the hierarchical structures of the medical
institutions and this introduces a more complex dimension to groups' abilities to influence or exercise power. Clinical coding as a clerical occupation has a status which is low in the hierarchy of the organisation.

The previous section of this chapter examined professions. The enhanced status and reward that professions attract creates appeal for different occupational groups to improve their occupational status by engaging in a professionalisation project. In New Zealand two occupational groups relevant to the research area of this study are at various stages of a crucial professionalising process. Nursing has completed this project and is continuing to consolidate its position as a profession. The second case is that of archivists and record managers. Since the 1980s they have been developing a strategy and have been in the process of professionalising their occupation.

The decision to include these two projects is based on the relevance to the current study of clinical coders. The case of nursing is located in the health sector and so has had to contend with the same traditional hierarchical environment in which clinical coders work. The archivist group are similar to clinical coders because they are relatively few in number and undertake work that is hidden from the public gaze.

**The case of nursing**

For women employed in traditionally female-dominated occupations where potentially their worth or value is not recognised by their employers, collective action may be an effective mechanism for change. An excellent example of a female-dominated occupation that has very successfully been able to improve its labour market position is that of nursing in New Zealand. The nursing occupation, by its nature, has always provided stable work for women. Generally, job security is a reasonable assumption and qualified nurses are able to move globally within the health industry with relative ease.

Historically, New Zealand adopted the training and employment traditions of the English model of nursing. Both men and women worked as nurses in the late nineteenth century, then from the turn of the twentieth century only single women were eligible for selection into the occupation (French, 1998). Nursing was not female-dominated but exclusively female up until the Second World War. This was mirrored
by the dominance of men who trained as medical doctors. It was the demand for male nurses working as orderlies in the war effort that prompted a loosening of the entrance of men into nursing, although the men’s training was conducted separately from the establishments that trained women (French, 1998).

The blatant sexual division between male medicine and female nursing has typified the health sector. "The symbolism of the family, doctor/father, nurse/mother, patient/child, has been used more explicitly in the definition of jobs and authority relations here than in any other industry" (Game & Pringle, 1983, p. 94). Nursing was seen as a job for single women, as they were perceived to excel in caring for others. This caring was to be transferred to caring in the private domain once married. The medical profession maintained control over how nursing was run and what training was required (French, 1998). Career prospects for nurses were extremely limited as their training kept them at the lower levels of the health system hierarchy. By 1936 in New Zealand, there was discussion of the need for nurses to receive university training along with medical schools to appropriately equip new nurses for the increasing demands in the job. The Department of Health (as it was then known) invited a US health expert to New Zealand to review the nursing education system and this formed the basis of the discussion. The recommendation of shifting nursing education out of the wards was disregarded as hospital trained nurses were considered to be a pool of cheap labour rather than as new recruits to be trained and educated. In 1968 trainee nurses and nurse aids comprised 67 percent of the nursing workforce (French, 1998). Employers had demonstrated little interest in developing the human capital of nurses.

Several government reviews undertaken in the early 1970s, particularly the 1971 Carpenter Report, recommended a shift of the nurse training into the technical institute sector along with autonomy for those institutions to develop curriculum (Carpenter, 1971). There were fears that allowing nurses to engage in higher education would lead to an undesirable situation of having “overeducated” nurses. In spite of resistance from hospital authorities, tertiary training for nurses was legislated for in 1977, with the last hospital-trained nurses graduating in 1990. This move was vigorously supported by the then nurses union, the New Zealand Nurses Association. Initially, polytechnics awarded diplomas in nursing until the introduction of the Education Amendment Act 1990, which enabled polytechnics to award degrees. Currently, entry into practice as a registered nurse follows completion of a three year undergraduate degree (Papps & Kilpatrick, 2002). As a result of nursing education being located in the tertiary
education sector, a greater number of nursing students and nurses are continuing their education into post-graduate levels. This change in the delivery of nursing education from internal provision to an external provider has also meant the responsibility of nurse education and the associated costs are now being borne by the individuals themselves (French, 1998). Previously trainee nurses gained their training without cost, as they were employees and the training was provided in-house.

The relatively rapid shift in the nursing qualification, changing from a diploma to an undergraduate degree, has not been an initiative driven by nurses, but rather as a result of legislative changes affecting the rights of polytechnics to confer degrees. Institutions quickly moved to develop a variety of degree programmes of which nursing education was one. In this case, it would appear it has been the political and financial desires of polytechnics that have created the standard in nursing education to be at a higher level. The ability to offer nursing degrees allowed tertiary institutions to attract a new cohort of students. A degree-qualified graduate has better prospects for good employment and the qualification has international recognition. As nursing became an undergraduate degree, several universities\textsuperscript{10} have also established nursing departments. From the initial suggestion that nursing should be taught alongside doctors in universities, it took 60 years for this to be realised (Papps & Kilpatrick, 2002).

The shift in nursing education from hospital settings to tertiary institutions occurred as New Zealand was experiencing the effects of neo-liberal public policies. As nursing education became located in the tertiary education sector, there was a corresponding increase in autonomy by nursing students. The strict constraint and control of nurses and the medical profession loosened. As an independent occupation nursing began to explore areas of practice that invited even greater responsibilities and autonomy. More nurses engaged in post-graduate education and the Nursing Council was established. This Council was the means by which the nursing profession could control, regulate and discipline nurses itself (French, 1998). In 2006, as a result of lobbying, nurses finally earned the right to specialise and train in areas that allowed prescribing rights, and for midwives to practice without a doctor’s supervision. Understandably the medical profession resisted these moves as this expanded nursing role undermined the exclusivity of their own professional domain (Moller & Begg, 2005). These changes

\textsuperscript{10} Massey University and University of Auckland. The Auckland University of Technology also offers undergraduate and post-graduate nursing programmes and had done so as the Auckland Institute of Technology prior to gaining university status in 2000.
were not as vigorously opposed by the employing institutions, as on a pragmatic level it enabled cheaper labour to undertake higher skilled tasks (Carreyer, 2002).

Central to the drawn out process that nurses have endured to raise their profile and education as health care professionals has been contestability over the ownership of knowledge. The establishment of the Nursing Council signified an important reduction of the medical profession's control over nursing education. This process has resulted in an improved position for nurses and their experience in the labour market. The "handmaiden" of doctors trained on the job has been replaced by nurses with a higher educational knowledge with potential for ongoing training and autonomous practice. The goal of the modern nurse working alongside, rather than under, doctors and specialists in the health care system may be closer. There are currently 77 nurse practitioners registered in New Zealand and they have a range of rights enabling autonomous practice, including limited prescribing rights. Although these practitioners have a minimum of eight years training, post-graduate education and clinical experience they still are unable to carry out many duties remaining exclusive to the medical profession i.e. writing medical certificates, driving licence medical tests or signing death certificates. While their practice autonomy is legislated for under the Health Practitioners Competency Act 2003 nurse practitioners are still limited by a complex array of other legislation. This political barrier is yet to be overcome (Trim, 2010).

One result of the shift in education provision for nurses in New Zealand is an ongoing issue of standards and quality of the education. Currently there are seventeen different providers of undergraduate nursing education and thirteen providers of post-graduate education. A recent draft report from the New Zealand Nurses Organisation NZNO11, (the current nurses union and professional body) identifies this variety of curricula as problematic for maintaining standards of nursing education, particularly at smaller provincial polytechnic institutions (Clendon, 2010). In what might appear a further elevation of nursing as a profession this draft report suggests that possibly nursing would be better served if polytechnics were not able to offer their degrees in nursing but offer foundation courses for an undergraduate degree from a university. These moves certainly reflect the type of processes seen in professionalising projects when elevating the status of occupations. One of the main roles of professions and professional bodies

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11 The NZNO was formed with the amalgamation in 1993 of the NZ Nurse Association which generally represented public health sector nurses, and the NZ Nurses Union, which generally represented private sector nurses.
is to act as a gatekeeper to the profession. By controlling entry, and in this case through the qualifications required, the actions are indicative of an effective profession with the union, NZNO, acting in the role of professional body. This also illustrates the commonality of interests that exist at times between professional bodies and unions, both acting to protect the interests of their members.

The story of nursing in New Zealand is a very good example of a professional project. According to Leicht and Fennell (2001), professionalisation is the result of a successful professional project. This project is the “attempt to enhance the autonomy and freedom of action for occupational incumbents under a set of well-defined professional norms.... An occupation is professionalized to the extent that it successfully defines a set of work tasks as their exclusive domain, and successfully defends that domain against competing claims” (Leicht & Fennell, 2001, p.8). As with other professions, such as accounting, where a new class of accounting technician is now carrying out the more menial tasks, the emergent nursing hierarchy includes a growing demand for low-skilled health care assistants to carry out many of the more mundane personal care aspects of nursing. These health care assistants and nurse aides are not registered and have varying degrees of training and support (Clendon, 2010).

While the nursing story is one of professionalisation and certainly meets the requirements that a trait theory approach describes as those of a profession, Carryer (2002), however, argues that nursing is still in the process of determining its own brand of professionalism. Carryer accepts that criticisms levelled at the nursing journey (see for example Carter, 1988; Turkoski, 1995; Wuest, 1994) presents a danger to the integrity of nursing practice. This risk is that “acquisition of qualifications, credentials and status does not necessarily lead to an improved focus on consumer need” (Carryer, 2002, p.160). Carryer (2002) believes by maintaining a strong link to their political consciousness around their core value of patient care, this credentialing can still result in an outcome that holds integrity.

The case of archivists and record managers

The second occupational group in New Zealand that is going through the professionalising process has been archivists and record managers. Archivists work with information and they "identify, collect, organize, record, describe, preserve and
display materials that are of historical value. Basically, an archivist's main duty is to present authentic and relevant slices of history in a cohesive way" (Cyprus, n.d.). They "foster the care, preservation and use of archives and records, both to public and private, and their effective administration" and work to "increase public awareness of the importance of archives and records in all matters affecting their preservation and use" (Archivists and Records Association of New Zealand, 2009).

The Archivist Association started the process to improve and standardise the training and development needs of its members in the early 1980s but has yet to fully implement its professionalising plan (Ham, 1994). There are clear similarities between this occupational group and clinical coders, particularly in regard to qualification requirements and opportunities, numbers and gender ratios. Archivists and record managers are few in number; in 1993 the numbers was estimated at approximately 250 in New Zealand (compared with around 190 clinical coders). Both occupational groups have significantly more women than men employed and both groups have no consistent pre-employment qualification required (Douglas, 2004; Ham, 1994).

Initially there were concerns from this group that there was a lack of consistent and locally offered qualifications, including post-graduate study, which had led to inconsistencies in the standard of work. There was a desire from the Archives and Records Association of New Zealand (ARANZ) for the archivists' occupation to take back some control over the future training and quality controlling of its members in an effort to ensure good employment prospects and conditions. As with the NZNO, the ARANZ were acting as gate-keepers to the occupation.

A report commissioned by the ARANZ identified a number of areas of concern for the current and future demands on its members. These were firstly, a need to develop an educational programme that met their needs rather than accepting what an institution was prepared to offer. Secondly, these programmes needed to address both pre-employment and currently employed members’ needs. Thirdly, in the long view archivists should be required to hold a basic level qualification before undertaking professional employment. Fourthly, the qualification offered should be a stand-alone programme rather than subsumed into another programme. Lastly, continuing education was essential and had to be available to all archivists and records managers (Ham, 1994).
Clinical coders find themselves in a similar position to archivists regarding education and training. There is no New Zealand based coding qualification or mandatory requirement for pre-employment qualifications. Concern has been expressed by the Ministry of Health and the Health Information Association of New Zealand regarding the consistency and accuracy of coding work and the readiness of the clinical coding workforce to embrace future challenges for their work. Internationally and locally there is concern over education, work readiness, recruitment and retention of well-qualified clinical coders (Lorence, 2003; Meyers, 2004; Northcott & Llewellyn, 2002). The introduction of a similar professionalising process to that begun by the archivists and record managers may well improve the quality of work, in both meaningfulness and accuracy, of clinical coders in New Zealand. It may also provide clinical coders with internationally recognised qualifications that would enhance mobility and ongoing study and employment overseas.

**Conclusion**

The categorisation of occupations as professions brings substantial benefit to those occupations, as professions attract superior reward and status in society. Therefore, the process by which this determination is made needs to be examined. As this chapter has demonstrated most theories of professions are gender blind, which highlights the oversight of historic patriarchal structures that have influenced the establishment of traditionally recognised professions. Access to tertiary education and the gendered conception of skill, as discussed in Chapter Three, have in the past both barred women from meeting entry requirements to professions and prevented women's work being seen as deserving of professional status. The two case studies introduced in this chapter offer an insight into how occupations address perceived disadvantage in occupational status. For nursing the process for greater occupational recognition has produced a positive outcome although the process itself was very challenging and drawn out.

Clinical coders work in a specialised field with a high level of autonomy over their job tasks, but struggle to demonstrate a position of power within the organisation. While clinical coders' commitment and dedication to their work is not in question their occupation is unlikely to be viewed as worthy of professional status due, in part, to the regulatory aspects. Clinical coding is not regulated by statute, there is no regulatory or
disciplinary body, there is no pre-employment or minimum qualification required and the qualifications that are offered are not at an advanced level.

To examine the conditions that prevail for clinical coders and how this influences their labour market position a mixed method research approach was adopted. The approach captured a range of information, including the wider socio-political context, the actual working conditions of clinical coders and the views of both clinical coders and their managers, which led to an analysis of the research questions. The selection of an appropriate research method approach also had to embrace the world view and bias introduced by the researcher as well. The following chapter details the choices made in determining the research method adopted for this project and discusses the rationale for the decisions.
Chapter Five: Methodology

The consideration of research methodology requires location within a broader context that acknowledges the diversity of world views and their applications. As an approach is selected which satisfies and reflects the researcher’s values, further consideration is given to the nature of the research questions and the suitability of the research approach to aid in the answering of them.

Researchers bring to their research, beliefs about the world and their role and influence within it. While some researchers argue it is possible to bring a detached view and analysis of events, I argue, along with others, that it is not possible to divorce our assumptions and preconceived ideas from our interpretations (Guba & Lincoln, 2005). As a researcher embarking on a project to understand others’ perceptions and positions it is necessary first to take account of the influences and prejudices that create and underpin my world view that may influence the understanding of the research data.

Underlying assumptions, values and paradigms shape research decisions. Paradigm refers “to the discrete, often competing research traditions, historically and socially located, which characterise the social sciences in the present time” (Grant & Giddings, 2002, p. 11). The choice of paradigm is crucial as it provides a frame of reference for the way in which the research is organised and reasoned (Sarantakos, 1998b). Paradigms are fundamental orientations that support the conceptualisation of the research process and reflect underpinning beliefs and assumptions about the nature of reality, the relationship between researcher and the subject of the research, the role of values in the study, and the actual research design employed (Delport & Fouche, 2005). Although there are distinct paradigms that are described and qualified as independent of each other there are also overlaps between them (Grant & Giddings, 2002; Guba & Lincoln, 2005). In spite of this, there still needs to be an internal logical consistency between ontological, epistemological and methodological choices.

Ontology consists of perceptions about the nature of the social world and the nature of reality (Grant & Giddings, 2002). This ranges along a continuum from objective reality, a reality that is fixed and independent of humans, through to a subjective reality that is socially constructed through shared meaning and has multiple interpretations (Grant & Giddings, 2002; Morgan & Smircich, 1980). From the ontological position an epistemological position develops. Epistemology “defines the nature of the relationship
between enquirer and known, what counts as knowledge, and on what basis we can make knowledge claims” (Grant & Giddings, 2002, p. 12). A consistency between ontology and epistemology must be maintained, so as to ensure a coherent logic throughout the research framework. So the objectivist ontological view that sees fixed realities requires an epistemological position to be an objectivist one that is seeking to identify the relationships between the fixed realities. It would be inconsistent and meaningless to pursue a subjectivist epistemology with an objectivist ontological position. It follows then that a subjectivist ontological position, which supports reality being socially constructed and having multiple meanings, requires an epistemological position that seeks to understand how social reality is created and the processes people use to create their world (Morgan & Smircich, 1980).

A methodology emerges from an understanding of epistemology and ontological considerations which supports subjectivist or objectivist underlying assumptions. Methodology is the theory of how research is done, the underlying assumptions and principles that guide the selection of the actual strategies used to collect data (Guba & Lincoln, 1994). Ontology, epistemology and methodology, needs to have an internal consistency and this overall theoretical stance will give rise to the actual methods that will be employed to investigate the research questions.

Positivist, interpretivist and radical paradigms are critiqued to establish the most appropriate choice for this research. This choice is influenced by academic and personal considerations. In addition to the paradigm chosen, the impact of axiology and reflexivity is introduced and their role in the research process discussed. The notion of a feminist communitarian perspective is explored and how this has influenced the overall research approach. An examination of the different research methodologies available follows, and a justification for the choice made for this research project. Finally, the chapter introduces the research method and design that has been employed and discusses how this was constructed and implemented. This last section also includes a description of the analytical approach taken.
Research Paradigms

Positivism

There are many useful frameworks to study different paradigms (for example see Denzin & Lincoln, 2005; Giddings & Grant, 2006; Grant & Giddings, 2002; Guba & Lincoln, 2005). The positivist paradigm is based in the belief that there are objective “truths”, independent of humans that are able to be scientifically proven or not proven through logical experimentation. In this instance, the objective researcher is the expert and observes or measures the subject. Positivists often use quantitative methods, which they claim can be rigorously monitored for validity and reliability and can be replicated. The positivist or scientific paradigm has its roots in “hard” or experimental science, which seeks to verify hypotheses, predict outcomes and arrive at some absolute immutable “truth”. Some researchers find this rigidity unhelpful in understanding the complexities of human experiences and it fails to adequately take context into account. Guba and Lincoln (1994, 2005) suggest the clear boundaries between competing research paradigms are becoming blurred with the increasing combination of disciplines and the complex nature of research questions. Although still dominant, the hold of the positivist paradigm has weakened, as in the last twenty years social science research has moved away from only positivist research approaches (Guba & Lincoln, 2005). A fundamental flaw for social research in the positivist paradigm is the assumption of researchers’ value neutrality, as it is not feasible for an individual to separate out their values and beliefs and to avoid their influence (Grant & Giddings, 2002). For example, making decisions about questionnaire design invariably will be determined by the position of the researcher and influenced by their biases (Guba & Lincoln, 2005).

Interpretivism

In contrast to positivism there are a growing number of research paradigms that acknowledge the role of the researcher in the process as an influence. In social science research there is a burgeoning literature on the philosophy of interpretivist research (Guba & Lincoln, 2005). The interpretive paradigm steps away from the rigidity of uncovering one objective reality and purports that truth exists within the experiences of both the researcher and the “subjects”. The researcher needs to understand the meaning of participants’ experiences rather than simply observe and place the researcher’s own
meaning onto them. Interpretivism requires researchers to not interpret observations through their own understandings alone but to allow the voice of participants to be heard. This approach promotes a higher level of interaction between researcher and participant, often in the way of a conversation or dialogue. The paradigm is more relativist, acknowledging that different communities have different knowledge of reality, opening up the possibility of multiple realities. The interpretive paradigm is usually associated with more qualitative methods, as it allows the voice of the participants to be heard more clearly, contrasting with the positivist approach. Presenting participants’ subjective experience and understanding interpretivism requires an acknowledgment of the role the researcher has in relation to the participant (Grant & Giddings, 2002). The researcher's role is a vehicle through which the participants' views, beliefs or experiences are able to be collected and presented. Positivists view the interpretivist stance as producing “soft” research, as it does not imbed methods or results in a scientific verifiable manner. The methods commonly used within the interpretivist paradigm are phenomenology, case studies and participant observations (Holstein & Gubrium, 2005). In these methods, data collection does not set out to test hypotheses but rather to make meaning from the experiences of the participants.

While the interpretive paradigm seeks to understand the complexities of the social world and the experiences of those in it, this approach stops short of demanding change and social adjustment where inequality or oppression is identified.

**Radicalism**

The radical paradigm looks to the fundamental structures that give rise to the social world, as this is where inequality and oppression is entrenched and maintained. There are two main bodies of theory underpinning this approach; critical social theory and feminist theories (Calás & Smircich, 2003; Grant & Giddings, 2002). Together these strands of theory agree that the world is based on power structures and results in inequality particularly along gender, race and class lines. Research conducted within these approaches is aimed at addressing this inequality and provides an impetus for change. Methods may be participatory and involve consciousness-raising, of both participants and the researcher.
Critical theory has a goal of social emancipation (Guba & Lincoln, 2005). Critical theory and critical research is made up of many stances. Underpinning this range of theories are thinkers as diverse as Kant, Hegel, Foucault, Habermas, Freire, Marx and Irigaray (Kincheloe & McLaren, 2005). Kincheloe and McLaren (2005) argue that:

Critical research can be understood best in the context of the empowerment of individuals. Inquiry that aspires to the name “critical” must be connected to an attempt to confront the injustice of a particular society or public sphere within the society. Research thus becomes a transformative endeavour unembarrassed by the label “political” and unafraid to consummate a relationship with emancipatory consciousness (p. 305).

A critical approach to research is best described by Kincheloe and Steinberg (2005) in the following quote:

We are defining a criticalist as a researcher or theorist who attempts to use her or his work as a form of social or cultural criticism and who accepts certain basic assumptions: that all thought is fundamentally mediated by power relations that are social or historically constituted; that facts can never be isolated from the domain of values or removed from some form of ideological inscription; that the relationship between concept and object and between signifier and signified is never stable or fixed and is often mediated by the social relations of capitalist production and consumption; that language is central to the formation of subjectivity (conscious and unconscious awareness); that certain groups in any society and particular societies are privileged over others and, although the reasons for this privileging may vary widely, the oppression that characterizes contemporary societies is most forcefully reproduced when subordinates accept their social status as natural, necessary, or inevitable; that oppression has many faces and that focussing on only one at the expense of others (e.g. class oppression versus racism) often elides the interconnections among them; and, finally, that mainstream research practices are generally, although most often unwittingly, implicated in the reproduction of systems of class, race, and gender oppression (p. 304).

While this quote is long, I have reproduced it in full as it conveys very well, the complexity and multi-faceted nature of this theory. This critical approach challenges the researcher to take seriously the responsibility of the research role and to view the research process beyond the personal to consider outcomes and impacts for participants and society.
A critical approach is suitable, and indeed required, when investigating the place of women in the labour market. The place of women in the labour market is influenced by the labour process and the tension between labour and capital. This is overlaid with patriarchal influences and the result is a group within society vulnerable to persistent disadvantage. This research aims to identify the socially constructed factors which keep the female-dominated occupation of clinical coding locked into the undervalued position in District Health Boards. Kincheloe and McLaren (2005) refer to the need to be unembarrassed by the label political and to challenge injustice where it is located. In New Zealand today there is a rising backlash against society's perceived political correctness, where understanding and inclusion of difference is often constructed as weakness. In light of this trend many feminist issues are again being pushed out to the fringes of mainstream public dialogue. For example, the dismantling of the Pay and Employment Equity Unit in 2009 removed the mechanism by which the impact of gender on pay levels was able to be ascertained (Department of Labour, 2011). The absence of dialogue does not mean that issues have been resolved. It is important for a critical theory approach to research, so as to ensure ongoing power issues are not overlooked or ignored.

Paradigm choice

As the researcher, I am influenced by a background of active participation in feminist, human rights and socialist activities, and share these ideologies of social justice. These values of justice, fairness and equality are pivotal to critiquing experiences and outcomes in the world. This background has been fundamental in developing my world view long before any engagement with intellectual scholarship. In part, these experiences have assisted in the selection and process of the current research.

While my aim may be to change the world the reality of producing a coherent, timely piece of research dictates a need for compromise. Nevertheless, it is important that the research is useful and will provide an opportunity for the participants to consider their occupational position and the choices available to them.

The present research is informed by the radical paradigm and in particular, by critical socialist feminist thinking (Calás & Smircich, 2003). Socialist feminists critique the radical feminist paradigm on the grounds that it often attempts to universalise the
patriarchal process with little understanding or inclusion of specific cultural or historical influences. A radical feminist position would be to emphasise separateness between men and women, whereas social feminists find ways to work with men in understanding and restructuring society for equal benefits. Socialist feminism developed in the 1970s as part of the women's liberation movement and sought to create a world view from a gendered perspective, and to integrate class perspectives inherent in social structures. This complexity includes the intersection of race, class, sexuality and gender. In this research the construction of the clinical coding occupation is influenced by many processes within society, particularly the capitalist mechanism of economics and the patriarchal control of women. There is a desire to understand the experience of the participants and to connect it to the larger industrial relations context of the political and economic environment with the opportunity for change because of raised awareness of the controlling mechanisms.

A critical inquiry approach needs to be utilised with this socialist feminist perspective as the sites of oppression within capitalism and patriarchy are fundamental, deeply rooted and generally obscured by hegemonic rhetoric. Often women or women's issues are invisible in theory and research and perceived as something peripheral to the main body of knowledge. As Lather states, “the overt goal of feminist research in the human sciences is to correct both the invisibility and distortion of female experience in ways relevant to ending women’s unequal social position” (Lather, 1991, p. 71). As has been demonstrated in earlier chapters, in industrial relations frequently the basic assumption is that whatever women are doing, they are women first and foremost, whereas men are constructed as workers and never just as men (Forrest, 1993). Language creates an assumption of the norm as male when considering gender and the workplace. This results in men not being assigned gender and women being defined primarily by their gender.

Lather (1991) notes that critical inquiry "is a response to the experiences, desires and needs of the oppressed people" (p. 63). By actively involving participants in the research design data collection can challenge any preconceived ideas held by the researcher. This research did involve participants in a way that allowed their areas of concern to be included in the subsequent survey instruments that were used.

Kincheloe and Steinberg (2005) provide an excellent exploration of factors affecting the research process and the role of researcher as social critic. These factors include the
recognition that capitalist processes (including the capitalist labour process), impact on the social construction of society and the role of privilege in society. The research process itself can unwittingly reinforce and generate the very systems of oppression trying to be overcome (Kincheloe & McLaren, 2005). A critical approach accepts that experiences are shaped by the forces of social, political, cultural, economic, ethnic and gender values. It follows, therefore, that in this research there will be an inspection of the labour market and how these factors have constructed the experience of workers within it. Clinical coders’ status within the labour market is determined, in part, by these gender and socio-political dynamics.

**Ethical considerations**

Alongside the considerations of the research paradigm and methodology the dynamics of the researcher’s ethics and politics must be considered as these will impact on the role of the researcher in relation to the research participants. Ontologically, ethics, politics and research are intertwined and the underpinning values systems of each require an internal consistency within the researcher and with the research project. For this researcher, the feminist communitarian perspective best reflects these values - an ethics of care. This ethical position flows from a socialist feminist radical paradigm. Feminist communitarianism “serves as an antidote to individualist utilitarianism” and has its roots in many philosophers’ frameworks (Christians, 2005, p.150). This approach also “presumes that the community is ontologically and axiologically prior to persons” (Christians, 2005, p.150). Gilligan and Noddings both reject the dominance of early Western philosophy that is based on normative principles external to the person and pursue a different social ethic where relationships and reciprocity through that connection serves as the basis for morality (Christians, 2005; J. Grimshaw, 1993). The principle of relationships being at the core of moral thinking and practice aligns well with a subjectivist research approach. It supports the need for seeing the participants and their experience as legitimate as they experience it.

There is no apparent contradiction between feminist communitarian and critical research approaches. Both are employed in social understanding and challenge entrenched social mechanisms that create oppression and disadvantage. The communitarian aspect allows for a research focus that will potentially benefit the common good. This focus
encourages an approach which is looking for an outcome that involves all; rather than
the researcher having a primary role. The researcher may also act as advocates or
activists for the participants. If the point of the research is to investigate the
mechanisms of power/patriarchy, oppression or social injustice this should not be done
at the expense of another group. A communitarian rather than an individualistic
approach to research is congruent to this perspective. This communitarian focus is
important as the researcher has had an ongoing research relationship with the group and
it is important not to mislead the individuals as to the focus of the project. By having a
goal of greater social benefit and a focus on relations that respect and care for
individuals, the ethics, politics and research itself become internally consistent and
upholds a level of integrity that is threaded through the research process.

A critical approach requires the researcher to be reflexive in her/his actions. Without
reflexivity occurring alongside the research methodology there is a real danger of the
researcher's background and bias tempering the outcomes. As Scheper-Hughes notes
"the cultural self that all researchers take into their work is not a troublesome element
to be eradicated or controlled, but a set of resources" (cited in Olesen, 2005, p. 250).
The researcher is in a position of relative privilege in the research and this necessitates a
reflexive position to ensure there is never any unwitting replication of androcentric
perspectives, where the researcher's beliefs or value frameworks overlay those of the
participant's world view (Olesen, 2005). While Scheper-Hughes' position is not upheld
by those operating within a positivist paradigm, where researchers are assumed to be
neutral, it does reinforce the interpretivist and radical paradigms' view of the researcher
as holding biases and creating part of the research process.

One potential issue in the research project is the risk that participants in the research
may misconstrue the researcher’s role. The research is focused on a group of workers,
many of whom are women and are located geographically or organisationally at the
margins. As an under-researched group of people, the intrusion of a researcher keen to
listen to their experiences and stories may rouse an expectation of the researcher as
advocate (Asselin, 2003). The risk of this role confusion of the researcher by the
participants has the potential for them to modify their responses (Rubin & Rubin, 1995).
Clearly outlining the researcher role, the purpose of the study and the intended use and
audience of the research outcomes at the outset of the research reduces the risk of any
confusion arising.
The understanding of ontological, epistemological, axiological and reflexivity allows for a clear choice of an internally consistent paradigm containing these components. As discussed, this research is driven by goals of social justice. Broad paradigms do not preclude researchers from adopting a mixed approach to a research problem (Giddings & Grant, 2006; Guba & Lincoln, 2005). This mixed approach embraces an acceptance and acknowledgement of the fundamental inequalities within social structures on gendered lines and promotes social change as a goal (Calás & Smircich, 2003).

Research methodology

Ontological and epistemological positions inform subsequent methodological choices, and the research method is the practical way the social world is researched. The methodology needs to reflect a consistency with the underlying assumptions of the research paradigm chosen.

I have already asserted that this research is underpinned by a critical socialist feminist thinking within a radical paradigm, and emerges from a feminist communitarian values base. This approach also supports the use of a mixed method approach for data collection, and drawing on Giddings and Grant’s (2006) and Creswell & Plano Clark's (2011) work, a decision was made to utilise a mixed method design. The approach was chosen for this research for several reasons. Firstly, it fits well with the research paradigm. Based on a radical paradigm with socialist feminist underpinnings and carried out with feminist communitarianism principles the mixed method allows for qualitative methods which give voice to the participants, as well as quantitative methods capturing the current working conditions of participants. This enabled clinical coders to express their perceptions and experiences about their work and prospects. Gathering numeric data about the group as a whole also provided information that ultimately may be used to alter the current position of clinical coders.

Secondly, as Giddings & Grant (2006) explain "mixed methods are a research tool rather than a methodology in its own right" (p. 4). Research methods are "a-theoretical and a-methodological" (Sarantakos, 1998a, p. 34), and this allows them to be used across a range of paradigms where appropriate. Limitations of methods can occur if contradictions are created when used in a mixed method approach or when the method
itself contradicts the research paradigm or research pursuit (Creswell & Plano Clark, 2011; Giddings & Grant, 2006).

Lastly, the choice of mixed methods was made because of the strengths it would bring to the project. By its mixed nature, qualitative and quantitative methods are able to gather a greater diversity of information and are able to better capture complex social phenomena. Each research method has strengths and weaknesses. By combining approaches in one inquiry any shortcomings in one method may potentially compensate another method. Using more than one method in an inquiry there is also a better opportunity to identify and critique the methods themselves and also to establish triangulation of results (Tashakkori & Teddlie, 2003). A mixed method research design is not to be confused with a multiple method design. Multiple methods approach consists of strategies or methods which could each be seen as complete enquiries on their own. Morse's (2010) definition describes a mixed approach as having at least two components, with one being the 'core' project and the others supplementary. This core project can be seen as an isolated exercise which is a complete method in itself. Any supplementary strategies are usually incomplete in that it "is not comprehensible or publishable apart from the core project" (Morse, 2010, p. 340).

**Research method**

The research method choice is a result of the decisions already reached regarding paradigm positions. Ultimately the research method employed needs to secure the best relevant and desirable data, enabling a rigorous analysis, altogether providing a response to the research question (Creswell & Plano Clark, 2011). The aim of this research was to explore factors such as gender, skill determination, power and occupational status, within the wider socio-political environment that determine the labour market position of an occupation. To do this, the research employed a mixed method design (Creswell & Plano Clark, 2011; Giddings & Grant, 2006).

**Design of the study**

Both qualitative and quantitative research and document analysis methods were used in the collection of appropriate data for this research project. The background of the New
Zealand public health sector, and the many reforms it has undergone since the early 1980s, was drawn in part from documents and materials sourced from government websites and agencies. Focus groups and questionnaires were used to collect data. The sample size for the individual clinical coder research was all those coders employed in District Health Boards, and a further sample consisting of all the employing District Health Boards. All clinical coders and all 21 District Health Boards were contacted during the research. Communications with expert informants in the clinical coding area and relevant unions were also undertaken.

After initial focus groups, the main data collection was carried out through surveys. This was a sequential process in time, although these two methods were not sequential in the sense that one method built directly on the work of the earlier method. The surveys were designed, though, to include questions that picked up on points made across the focus groups. The two methods were carried out sequentially in time rather than concurrently (Giddings & Grant, 2006). The surveys gave opportunities for the participants to provide information on demographics and feedback on attitudes, such as satisfaction and aspirations. Due to the earlier contact with this group and the two studies undertaken, I had already established myself as a researcher that had successfully formed a relationship with the key people both within the Ministry of Health and the clinical coding body, the Health Information Association of New Zealand (HIANZ). At the outset there was a reasonably high expectation that the study would elicit a good response rate for both focus group participation and also for the surveys. As this project took shape I was invited to speak at the HIANZ annual conference in Wellington in 2006 and was able to outline the project aims and invite those present to participate. This opportunity allowed for many questions and queries to be addressed and several conference attendees approached me with contact details and a willingness to assist in focus groups.

My credibility with this group was enhanced because of my own work history, which included a number of years working in medical laboratories. This experience gave me a good understanding of some practical aspects of clinical coders' work, such as the technical jargon, and also a point of connection and commonality with the coders. I understood not only what their work entailed but also the hierarchical nature of the District Health Boards, and the experience of being a small part in a larger organisation. As a consequence this meant many clinical coders did not see me as a complete outsider in the research process. While this enabled and eased access to many clinical coding
departments and their staff, it created a risk that the clinical coders may have perceived me as advocate rather than a researcher. The connection I was able to establish with the clinical coders was a result of my interest demonstrated through earlier work. An advantage was the potential for a very good participation rate but the risk of a misunderstanding of my role as researcher needed to be managed as well. This was done by clearly addressing the issue of the researcher role at the outset of each focus group and ensuring the participants understood the purpose of the research project. This tension illustrates the point that researchers are not objective agents dispassionately observing the world and its participants. Research processes can be enhanced by greater researcher knowledge of subjects and their environments (Olesen, 2005).

Focus groups

The initial stage in the research involved focus groups because subjects who feel some involvement in the process are more likely to participate and contribute to the research (Grant & Giddings, 2002). Generally focus groups are valuable as they allow for exploratory events to be aired (Fontana & Frey, 2005). Kamberelis and Dimitriadis (2005) identify many users of focus groups, from the military and market researchers through to Marxist revolutionaries (such as Freire) and feminists. The authors note that focus group usage varied, "independent of their intended purpose, (they) are nearly always complex and multivalent articulations of instructional, political and empirical practices and effects" (Kamberelis & Dimitriadis, 2005, p. 887). The rich focus group data make the method highly effective. The ability of focus group forums to quickly create safe environments for participants to freely discuss topics contributes to empowerment. Focus group members are able to generate dynamic conversations within the group and with the researcher. "In particular, the synergy and dynamism generated within homogeneous collectives often reveal unarticulated norms and normative assumptions" (Kamberelis & Dimitriadis, 2005, p. 903).

It is possible that the clinical coders who participated in this research had little opportunity before the project to discuss issues important to them as a group. It is unfortunate that the research project was not able to follow up and gauge whether the focus group process itself had an ongoing impact on those clinical coders and their workplaces. The focus groups did allow for a sample of clinical coders to identify their
main concerns and issues in their work. The information from the focus groups then led, in part, to the development of the survey instrument.

Clinical coders from three District Health Boards participated in the focus groups. The selection of the participating District Health Boards’ clinical coders was done on the basis of ease of access by the researcher to those District Health Board clinical coders who had shown interest at an earlier conference.

**Procedure**

An effort was made to identify a range of types of District Health Boards for the focus groups and direct contact was made with the team leader or clinical coding manager to solicit participation. The first two focus groups both had five clinical coders participating and the third group had seven coders present. All three focus groups were audio taped with their permission and completed within a two-week period. The audio taping of the sessions ensured less note-taking was required and allowed the interviewer to focus attention more closely on the discussion. Indeed, as the participants in the focus groups relaxed and became more confident, the discussions quickly lost some of the structure and ranged over a variety of topics. The process of transcribing the audio tapes allowed the researcher to make some sense of the discussion content. In addition, audio taping facilitates the capture of tone and pace of the conversation which, in itself, conveys meaning (Arksey & Knight, 2002). The duration of each focus group was approximately 90 minutes. Unfortunately, the first focus group facilitated was only partially recorded due to technical problems.

All three meetings were held on the District Health Boards’ premises and during working hours. Two of the meetings were conducted wholly during work time and the third began in the participants’ work time but ran considerably into their lunch time. The clinical coders’ immediate supervisors were supportive of their employees’ participation in the research and were also keen to discuss clinical coding issues with the researcher.

The questions were developed to allow wide-ranging discussion of their work and experiences. This was very much an exploratory beginning, and while the main questions drew on earlier research and new areas relating to the research question, the
The key aim was to create comfortable and informal settings and to let the groups have some control over the process. The general outline of the questions asked in the focus groups was as follows:

- What things could you see to improve your ability to do your work?
  - Organisational support?
  - Training?
- Do you feel you have a future in your current job?
  - Do you want a future in clinical coding?
  - Are there promotion opportunities within this organisation?
- Is there challenge in your work?
  - Would more training provide opportunities that you would enjoy?
  - If offered would you want to undertake more formal training?
- What kind of satisfaction do you get from your work?
- Do you have confidence in the union/s that do/could cover your work?
- Do you have confidence in the professional bodies that represent clinical coders?
- How would you describe the nature of work as an occupation ie clerical, technical or professional?

The focus groups were very informal and all the participants appeared to enjoy the opportunity to discuss their views openly. There was no difficulty in arranging the focus groups and the coding managers contacted were very helpful in facilitating the groups, the interview space and time for participation. The managers of the clinical coders in the focus groups were apprised of the research aims and were keen to become involved as they could see little threat as well as the potential to benefit clinical coders and clinical coding generally.

**Questionnaires**

The second stage of the project was a survey that involved questionnaires. Two different versions of the questionnaire were used. The first was anonymous and sent to
all clinical coders employed in District Health Boards in New Zealand. The second survey was sent to the managers of the Clinical Coding departments to gain an organisational response.

These questionnaires captured not only numerical data, but also the feelings, perceptions and attitudes of individual clinical coders and representatives of their District Health Boards across New Zealand. As the sample size of both was small, it allowed for direct contact with the District Health Board clinical coding managers to alert them to the study and to allow for queries to be answered prior to the survey. The survey distribution enabled an accurate census of clinical coders employed. It was also hoped the relatively small sample of clinical coders might increase the likelihood of the completion and return of the survey sent to them, as the discussion within the generally small work departments may have raised the profile of the study.

In developing the survey, the data collected from the focus groups and an Australian clinical coding survey was used as a basis for drafting the questionnaires. The base allows for some comparative analysis beyond New Zealand. The questionnaire also allowed for data collection to build on the two earlier surveys completed on clinical coders in New Zealand to add a valuable longitudinal perspective on wages and some working conditions of clinical coders.

**Questionnaire Development**

The questionnaires included forced answer questions for predominantly demographic information and employment issues such as qualifications, experience and salary, while Likert scales to assess perceptions, attitudes and feelings on issues, structured closed questions and open-ended questions inviting comment and feedback.

**District Health Boards questionnaires**

The key areas examined in the District Health Board surveys were:

- staffing issues;
- training and support issues;
- employment issues; and,
- future issues for clinical coding.
The purpose of the organisational surveys was to gather an understanding of how the organisation perceived and treated clinical coders, and the place of coders in that organisation.

*Clinical Coder questionnaires*

In comparison to the District Health Board questionnaire an expanded range of areas was explored with the clinical coders and included:

- general demographics;
- work environment; and,
- professional affiliations.

The individual surveys sought a wide range of information to better understand how the qualifications and experience of clinical coders translated into how the clinical coders viewed their value to the organisation and the broader health sector.

*Procedure*

Once the final survey instruments were approved by the AUT Ethics Committee, the researcher contacted each of the District Health Boards and spoke with whoever was responsible for the clinical coders at that site. This was variously a Clinical Coding Manager, Medical Records Manager or Clinical Services Manager. A telephone conversation was held with this person explaining the research aims and they and their unit were invited to participate. At this point it was relatively easy to address any concerns they had that might have been a barrier to participation. Some of these managers were temporary caretakers of the clinical coding function and appeared to have less interest in, or understanding of, the research. Of the District Health Boards contacted only two expressed some reluctance about the surveys. Their issue was whether or not the clinical coders were expected to use work time to complete the survey. They were assured that this was not an expectation. Once this reassurance was given they were happy to participate personally and to distribute the surveys. All the managers spoken with were very positive about the research being undertaken and several took the opportunity to discuss issues they were experiencing with regard to coding work. Nearly all of the managers were aware of the researcher’s earlier research work on clinical coders and some expressed the usefulness of this at different times with
their District Health Boards. One manager, who did not have any knowledge of this earlier work, asked to see the work and was subsequently sent a copy along with the questionnaires.

One issue that did arise resulted from the regional structure of the organisations. Two District Health Boards had formed a regional alliance for some services including the clinical coding areas. These organisations required a slightly different approach to the data collection. After discussion with the regional manager, the decision was made for that regional manager to fill in their District Health Board survey and for the team leader at the other District Health Board to be responsible for that organisation's survey. Although the two District Health Boards had combined some of their departments and functions they were still two distinct and separate entities with separate management and employment environments.¹²

All (100 percent) of the District Health Board individuals contacted agreed to participate and to distribute the individual forms to their clinical coders. During this contact the exact number of clinical coders employed by them was established to enable the correct number of surveys to be printed and distributed. Confirmation of contact and mailing details was also sought.

Distribution of questionnaires

Distribution of the two questionnaires followed the phone contact with the managers. Each District Health Board Clinical Coding manager, or equivalent, received a mail out which contained:

- Covering letter;
- One District Health Board questionnaire, (white);
- One District Health Board participant information sheet;
- Individual Clinical Coder questionnaires, (green);
- Individual Clinical Coder participant Information Sheets, (green);
- Stamped addressed envelopes for returning questionnaires; and,
- The researcher’s business card attached to every questionnaire providing contact details.

¹² Subsequent to the study the two District Health Boards merged in 2010.
The different colours for the questionnaires were used for ease of sorting responses on their return. Both the District Health Board questionnaires and individual questionnaires had unique identifiers on them. This was to enable the researcher to establish the origin of the forms on their return and to follow up if no forms were received from a particular District Health Board. This information also allowed for certainty that a good cross-section of types and locations of District Health Boards was received, and therefore more generalisable statements could be made. Although the District Health Boards were identifiable to the researcher this information was not disclosed in the analysis, and similarly, although individuals could be identified by their employer this information again was not part of the analysis. Only aggregated data was used in analysis. This was a challenge for the research as the small sample size meant the potential for identification was higher and in places, decisions needed to be made around some data’s ability to be used in a way that ensured anonymity.

Comments on several returned questionnaires indicated dissatisfaction with the identifying number but this identification number in no way compromised the confidentiality of the returned questionnaires. This concern may have affected the responses given by these participants.

Most of these packages were sent through NZ Post except for the larger packages, which would have attracted higher postage charges. These were distributed via courier, which gave the added assurance of tracked delivery. Within four days completed questionnaires began to be returned. After two weeks follow up calls were made to Clinical Coding managers where the District Health Board survey had not been completed and returned to confirm receipt of original post-out. Simultaneously, a one-page poster was sent to all District Health Boards to be posted on staff notice boards thanking them for their participation and the surveys received, and encouraging those who had not done so to complete and return the form before the due date.

As the deadline approached, one particular District Health Board site had returned neither organisation questionnaire nor any of the individual questionnaires. A follow-up phone call was made to the contact person; unfortunately they were on leave until four days before the deadline given for returns. On the date of their return to work another call was made to them. During this conversation it was found that the person delegated to distribute the questionnaires during the manager’s absence had chosen not to do so. An assurance was given that they would be distributed immediately and an extension on the deadline was to be communicated to the clinical coders to give them
time to complete. In an effort to assist the research the manager also allowed the clinical coders specific time during work hours to complete the questionnaire. Unfortunately, this did not prevent a poor return from this site.

**Analysis**

Several approaches to analysis were used in this research project due to the mixed methods of both quantitative and qualitative data collection. As a radical research paradigm was used in this research, the aim was to critique the social mechanisms that may have entrenched disadvantage and oppression in society. Therefore, the analysis of the data also sought to give a voice to the participants and to reflect their experiences as accurately as possible.

The transcripts from the focus group interviews were analysed using a thematic approach. The topic areas from the literature review and the more specific questions from the focus group meetings provided the structure for the analysis to follow. The areas were the political context and influences, perceptions of power and skill, the self-identified occupational status held by the clinical coders and lastly, their job satisfaction. The grouping of these areas captures the discussion from the focus groups in a coherent manner which addresses the research questions. A picture of each District Health Board’s clinical coder focus group was created, as well as a comparative study between the three of them.

The data collected via the individual questionnaires was collated using SPSS for the quantitative responses and the qualitative data received was discussed using the same or similar thematic areas as for the focus groups. These areas were political context and influence, power, skill/profession, status gap, and job satisfaction. This use of the same grouping of areas allowed for comparison between the focus groups and survey findings. The thematic areas used for analysis of the District Health Board questionnaires were: labour market position of clinical coders, occupational status, training and development, employment issues, and future issues. The statistical software was only used to prepare descriptive statistics.
Conclusion

Through a process of personal development and reflection, and academic pursuit I have developed a world-view which now informs this research. In this chapter I introduced and reviewed the main ontological, epistemological, axiological and methodological positions from the literature and those relevant to me and the research, and outlined the justification for the choices made. This research is underpinned by a radical paradigm, derived from a socialist feminist communitarian perspective which accepts that research is of a subjectivist nature, value laden, and striving for exposing and changing areas of social injustice. This approach demands critique of social structures such as capitalism and patriarchy, which may harbour persistent sites of oppression. The methodology choice for the research is a mixed methods approach to allow a wide-ranging and rich data collection of both a qualitative and quantitative nature.

As the research participants were from an occupation largely dominated by women workers located within a large hierarchically organised industry, issues of patriarchy and capitalist labour processes were pertinent to the investigation. Therefore, a robust research approach and methodology that sought to understand and critique the reinforcing social structures was appropriate. The literature identifies that concepts such as status of occupations and skill have a gendered bias and the extent to which the bias manifests is to some extent mediated by the socio-political environment. The following chapter looks specifically at the public health sector structure that clinical coders work in and the reform programmes that have significantly changed the understanding of the core nature of these institutions. These reforms reflect different governing party’s political ideologies and they took place at the same time as other wide-reaching public policies were introduced. Importantly for workers and businesses this included fundamental changes to employment legislation. The following chapter also explores these changes and the impact this had on clinical coders.
Chapter Six: Contextual Influences on Clinical Coding and the Labour Market

In New Zealand the employment relations system and public healthcare structures have been reformed repeatedly since the mid 1980s reflecting radical changes in the wider political and ideological landscape (Boston, Martin, Pallet, & Walsh, 1996). During the 1980s and 1990s a neo-liberal ideology underpinned public policy and achieved far-reaching change in New Zealand society (Bryson & Anderson, 2007; Gauld, 2000). The policy changes, implemented via a programme of structural adjustment, resulted in reduced public spending, the sale of many state assets and, as a result of trade deregulation, widespread job losses as firms closed or moved off-shore.

The reforms that began with a Labour government in the mid 1980s were continued by the National Party that formed the government in 1990. The National Party held office for three terms. It lost the 1999 general election, resulting in the Labour Party forming a coalition government. This Labour-led coalition government adopted a different policy direction, contrasting with the earlier neo-liberal Labour and National governments in power since 1984. According to Wilson (2004), the 1999 Labour-led coalition government "was striving after years of neglect to take responsibility for the active management of the economy" (p. 13). It was believed by both the Labour and Alliance factions of the coalition that reliance on market forces to produce a highly productive and prosperous economy was unrealistic and greater government intervention was warranted (Wilson, 2004). During the three terms of the Labour-led governments greater emphasis was placed on developing partnerships between government and stakeholders, and drafting public and social policy that reflected the inter-relatedness of economic and social goals. The shift in focus led to greater public spending on social programmes and issues.

The Labour-led coalition government retained power until 2008, when it was replaced by a National-led coalition government. This change in government has led to a more conservative shift in the political agenda and policy direction (Wilson, 2010). All these changes in the wider political environment impacted substantially on the health sector.

The clinical coders at the centre of this research sit within the public health sector and are therefore, as an occupational group, strongly affected by these changes. The clinical coders’ role is central to the funding allocation decisions in the New Zealand public
health sector. Coders collect, collate and analyse the patient discharge records of all those receiving treatment as both in or out-patients at public hospitals. The collation of this data using the International Classification of Disease (ICD) system is then used centrally by the Ministry of Health in the determination of government funding for the District Health Boards.

Fundamental changes since 1984 in the employment framework affected how wages and conditions were negotiated by workers. Employment legislation since 1984 has shifted away from a centralised system, which determined awards that covered wages on an occupational or industry basis through Arbitration Court (Rasmussen, 2009). The award system ceased in the 1990s with the introduction of new employment legislation as part of a continuing deregulated environment and as a result, the employment relationship focused at the enterprise level between individuals, rather than an industry focus. The employment legislation changes directly impacted on worker's exclusive right to union representation and encouraged individual employment contracts for workers. The exclusive right of unions to represent and advocate for workers and their interests ended at this time. Reregulation of the employment environment occurred with the introduction of the Employment Relations Act in 2000. Under this legislation provisions encouraged "a return to collective bargaining and recognition of the right of unions to bargain collectively on behalf of their members" (Wilson, 2004, p. 15).

During this same period, successive governments have introduced health sector reforms, which involved the structures and funding in the public health sector. These changes affect many factors which underpin the labour market position of skilled workers. The health reforms required health services providers to be focused on economic efficiencies, and at times during this period, to operate as a profit-generating entity. This economic imperative necessitated the utilisation of a raft of business information models to allow for good business decisions based on accurate organisational performance. These reforms have come full cycle with centralisation of funding through to more recent devolution of fiscal responsibility to local institutions. The role and function of the Ministry of Health is explored, and how the clinical coding function fits within the structure.

This chapter explores the impact of these political changes since the early 1980s in the areas of health service delivery and funding structures and of employment law reform. The chapter begins with an overview of the political and legislative changes that have
occurred in New Zealand, but focuses predominantly on the period from 1990 onwards. This is the period that has seen the most radical changes in New Zealand's history. This overview provides the context within which the health reforms took place. The chapter outlines the reforms chronologically, beginning in the early 1980s, and provides a summary of the role of the Ministry of Health. Following this is a section on clinical coding, beginning with a background development historically, then a summary of clinical coding in New Zealand and the training opportunities that are currently available. The formal bodies charged with ensuring clinical coding standards are also discussed. Finally, the chapter presents research from an extensive Australian survey on clinical coders. These results have been included as the labour market for clinical coders is very similar between the two countries and allows for some comparative analysis.

**Employment legislation reforms**

New Zealand introduced a state arbitration model in 1894 to deliver fairness in employment matters with the *Industrial Conciliation and Arbitration Act (IC&A Act)*. The legislation privileged unions as the collective representative of workers. Specific conflict resolution institutions such as the Conciliation Boards, Arbitration Boards and the Employment Court were established as the employment relationship was seen as special and requiring interventionist approaches to resolve conflicts as they arose (Rasmussen, 2009). Although amended frequently the fundamental pluralist principles of the *IC&A Act* were enduring. The arbitration system came under pressure as inflationary demands meant it lost favour with employers and unions alike from the early 1960s as it became apparent that the system could not deliver a mechanism that could maintain industrial stability. Both employers and unions were increasingly dissatisfied with the decisions from the institutions (Wilson, 2010). Then, during the 1980s the Labour government deregulated many areas in society, such as trade barriers and state ownership of assets, but was still reluctant to completely dismantle the regulations underpinning workplace relations. The Government stepped back from direct intervention in employment matters, leaving wages to be determined by bargaining and replacing compulsory arbitration with voluntary arbitration (Geare & Edgar, 2007). Changes in the approach to industrial relations were set out in the 1987 *Labour Relations Act* with the purpose of the Act to encourage collective bargaining.
This encouragement for collective agreements was at both industry and enterprise level (Wilson, 2010).

The incoming National Government of 1990 continued the programme reducing government spending and intervention in the economy. In the area of industrial relations it identified the further removal of regulation as crucial to allowing market forces to prevail. The government introduced the Employment Contracts Act 1991 (ECA) early in the parliamentary term which effectively brought about an end to New Zealand’s pluralist employment relations system. The Act effectively replaced labour legislation with contract legislation, whereby labour relations were treated the same as any other economic relationships. Traditionally, New Zealand's employment legislation supported unions to represent workers within the workplace but this was removed (Deeks & Rasmussen, 2002). The legislation's focus was explicit and set out to promote an efficient labour market. The award system also ended under the ECA. This legislation allowed employees to determine who should represent their interests in employment issues and all decisions regarding the nature of the employment relationship was clearly regarded as a matter for the individuals involved (Rasmussen, 2009). The Act placed the responsibility of contract negotiations at the enterprise level. Individual employment contracts were encouraged so as to allow for greater individual choice and autonomy both for the enterprise and the employee (Burton, 2004). Unions no longer held distinct legal status in having exclusive rights to bargain for workers. The legislation replaced unions with bargaining agents, which allowed for a range of other representatives, such as employment lawyers, to enter the employment contract negotiation process (Geare & Edgar, 2007). However, the impact of the ECA was less in the public sector, mostly due to the ability of the Public Service Association to retain a strong bargaining position (Bryson & Anderson, 2007).

The Employment Contracts Act also ended the requirement for the government to collect data on union membership (May, Walsh, & Otto, 2004). Other sources of data show that between 1991 and 1999 wages for most workers stagnated and union membership dropped from 34 percent of the employed workforce in May 1991 to just 16.7 percent in December 1999 (Morrison, 1996; Rasmussen, 2009). The loss of unionised jobs also contributed to the decline in union membership. Unemployment

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13 In 2001 official collection of union membership data resumed under the requirements of the Employment Relations Act, 2000.

14 Union density is determined as the number of union members, presented as a percentage of the total employed labour force.
was high during this period; in 1990 the rate was 7.1 percent; peaking at 10.1 percent in 1993 and only falling to 7.4 percent in 1999 (Statistics New Zealand, 2000). The lack of national data also made it difficult for a completely accurate assessment of the magnitude of the shift from collective to individual employment contracts during this time. Prior to the ECA being enacted in 1991 approximately 59 percent of workers were on awards or other collective types of contracts. Estimates from several sources suggest that by the mid 1990s not only had union membership nearly halved, but collective coverage of workers in agreements had dropped to approximately 37 percent, indicating a 37 percent drop in collective bargaining across the board in New Zealand (Deeks & Rasmussen, 2002; Harbridge, Honeybone, & Kiely, 1994; Morrison, 1996).

Although this move to individual employment contracts was said to provide "choice and freedom" most research during this time suggests that many workers were seriously disadvantaged by the lack of access to collective processes (see for example Hammond & Harbridge, 1993; Harbridge & Street, 1995; McLaughlin, 2000; Rasmussen & Deeks, 1997). This reduction in collective processes disadvantaged those traditionally more vulnerable in the labour force; i.e. women, youth and non-white workers (Hammond & Harbridge, 1993; McLaughlin, 2000). There was an increase in casualisation of work for many vulnerable workers and with the loss of legislated penalty rates, many experienced a real decrease in take home pay (Deeks & Rasmussen, 2002; Harbridge & Street, 1995). Between 1991 and 1995, a third (33.5 percent) of firms surveyed by the New Zealand Institute of Economic Research indicated they had increased their part-time work and a further third (33.5 percent) had also increased casual employment (Morrison, 1996).

As clinical coders are predominantly women and categorised as clerical workers these changes to the legislation potentially left them vulnerable to disadvantageous outcomes for their wages and conditions. Clinical coders' bargaining power was reduced at this time for a number of reasons. Firstly, the move to individual employment contracts highlighted a common problem for women with effective bargaining power due to gender bias, and issues of skill recognition, as discussed in Chapter Three. Secondly, unions struggled to maintain representation in work sites where there were few members and this created a financial burden for unions that were at the same time losing large numbers of members and their subscriptions. Finally, the parallel reforms that occurred in the health sector were driven by a profit motive and employers were encouraged to use individual employment contracts as a means of controlling workers'
wages and conditions. The number of clinical coders employed in some Crown Health Enterprises during this period was as low as one or two full-time equivalent positions.

The Labour-led coalition, which came to power in 1999, was committed to a recollectivisation of employment relations processes. The return to collectivism under the Employment Relations Act maintained individuals' rights to choice in employment matters and introduced systems and structures which specifically encouraged a return to collective bargaining ("Employment Relations Act ", 2000). The ERA proposed a fundamental change to the expectations of workers and employers in the employment relationship, with the objects of the Act clearly signalling a desire to build productive relationships in the workplace through the promotion of “good faith” ("Employment Relations Act ", 2000). This legislation proposed that the workplace relationship required trust and confidence between the parties and an understanding of the implicit power inequality between them. Unions regained legitimacy, being re-established as the exclusive representatives of workers in collective bargaining and, along with employers, they were required to act in good faith in all dealings within the employment relationship (May, et al., 2004).

For employees to be covered by a collective employment agreement the ERA requires them to be members of the union that is party to that agreement. As the ERA was enacted it was expected that workers would join unions to gain the collective benefit. The expected outcome of an increase in union membership from the introduction of the ERA would ultimately lead to more workers being covered by collective employment agreements (Blackwood, Feinberg-Danieli, & Lafferty, 2005). However, figures show that union membership has not significantly increased since enactment of the ERA in 2000. Since its introduction there have been subsequent amendments to the ERA in 2002 and 2004, which mainly seek to strengthen areas relating to collective organising, and further clarification of how good faith impacts upon bargaining, particularly "passing on" conditions and the obligation to negotiate to a concluded agreement.

Department of Labour figures for 2008 show the level of union membership has persistently remained at around 17 percent (Department of Labour, 2009). The majority of these union members are found in the public sector (54 percent density), which has traditionally been a more highly unionised sector.

15 Passing on is the practice of giving non-union workers, or workers not party to a collective employment agreement, the conditions that have been struck through the collective bargaining process. If this happens it creates a disincentive to join the union as they already are accessing the benefits membership would afford them in relation to wages and conditions.
Since the 2000 enactment of the _ERA_ not only has union membership failed to increase but also collective bargaining has actually decreased by half in the private sector (Caisley, 2010). The likely reason for this decrease is the requirement that all workers covered by a collective employment agreement are also union members. Under the _Employment Contracts Act_ there was no requirement for union membership in a collective contract, merely the agreement of a group of workers to be part of a collective process. This allowed many firms in the private sector to have the benefit of collective bargaining without the involvement of unions, reducing transaction costs of the contract setting process (Department of Labour, 2009). When looking across both public and private sectors the number of collective agreements settled dropped from 3,260 (covering 21 percent of people employed) in 2001, to 2,684 (15 percent of people employed) in 2008 (Department of Labour, 2009). Over this same period the density of collective bargaining in the public sector dropped slightly from 69 to 59 percent while in the private sector a significant drop from 21 percent to 10 percent occurred in collective bargaining density (Department of Labour, 2009). Comparing this national trend of a decline in individual bargaining after the introduction of the _ERA_ with the experience of clinical coders, the research shows that rather than following the trend, clinical coders have experienced an increase in the number of workplaces where workers are only on individual contracts (Douglas, 2004).

Since 2008 when a National-led coalition government took office, a raft of amendments to the _ERA_ has incrementally changed the tenor of workers' rights. This policy change indicates a shift back to the “right” of the political spectrum and a belief that employers need greater control and influence over working conditions to better meet economic and business goals. These changes include the introduction of a trial period in employment agreements, which remove basic employment rights from employees in the first 90 days of their employment. Employees under this provision are not able to file a personal grievance on the grounds of unjustifiable dismissal. Changes to union's access to worksites now require the permission of employers for unions to enter and may impact on the ability of unions to effectively organise on sites where a collective is not already in place. Changes to annual leave entitlements, medical certificate requirements for sick leave and work breaks have also been introduced, indicating a shift back to a situation where the greatest power and influence in the employment relationship sits with the employer (Department of Labour, 2010).
Health reforms

During the period of employment law changes from the 1980s to the present day there have been parallel changes in the public health sector. There have been five distinctive periods in New Zealand’s public health sector since 1938. These periods are shown in Table 3 below, together with the political party responsible for the establishment of each restructuring process. Since the 1980s there have been four fundamentally different health care delivery structures in New Zealand. Ironically, by the early 2000s a full circle had been completed and the current system of District Health Boards delivering health services in the public sector reflects similar principles to those of the structures in the early 1980s. Each of these phases will be discussed in turn.

Table 3 Timeline of Health Reform in New Zealand

<table>
<thead>
<tr>
<th>Time frame</th>
<th>Main characteristics</th>
<th>Party initiator</th>
</tr>
</thead>
<tbody>
<tr>
<td>1983 - 1993</td>
<td>14 Area Health Boards (AHBs) established to deliver services. Elected Board members. Still free for users. Cooperative approach.</td>
<td>Labour</td>
</tr>
<tr>
<td>1993 - 1998</td>
<td>Regional Health Authorities (RHAs) and Crown Health Enterprises (CHEs) replace AHBs. CEO and appointed Board. Profit focus and some part charges for users introduced. Competitive approach.</td>
<td>National</td>
</tr>
<tr>
<td>1998 - 2000</td>
<td>RHAs become Health Funding Authority - centralised funding and planning. CHEs become Hospital and Health Services (HHS) with shift to public service ahead of profit. Still competitive approach.</td>
<td>National/NZ First</td>
</tr>
<tr>
<td>2000 - present</td>
<td>District Health Boards (DHBs) replace HHS, and Ministry central to contracts for service. Elected Boards reintroduced. Cooperative focus.</td>
<td>Labour</td>
</tr>
</tbody>
</table>

(developed by the author)
Pre 1983

New Zealand established a publicly and centrally-funded health system in 1938. This was the first universally accessible public health system in the world. Free public health formed part of a range of social welfare initiatives designed by the government to support New Zealanders irrespective of personal wealth and circumstances. The public health system remained in place substantially unchanged until the early 1980s (Gauld, 2000). Throughout this period greater demands on the resources available within the health system challenged the ability to maintain services. As the delivery of services became more complex and the population grew, government agreed a bipartisan approach to health reform. Starting from a government review in the mid 1970s, a transition process allowed for the public health sector to reorganise into geographical areas.

1983 - 1993

As a result of the transition arrangements agreed in the 1970s, Area Health Boards were established to deliver health services to the population within their catchments. This process took place over a number of years and it was not until 1989 that all fourteen regional Boards were established (Gauld, 2003a). A population-based funding approach with annual increments was used to fund hospitals up until the early 1990s. This reform process, which was completed by 1989, allowed for a centrally-funded but locally delivered and managed system. The decision-making at the local level was via a publicly elected board. Gauld (2003a) argues that although information at this time was not particularly reliable there is some evidence that this system was working efficiently, as shown by a decline in length of hospital stays and the Area Health Boards staying within budgets.

During this period the Labour government's repositioning as a proponent of free market policies in the mid 1980s was a response to the worsening financial situation of the nation's accounts. Increasing costs across the public sector led to the adoption of a market driven model to deliver the best outcomes in efficiencies and profit generation, and this was also applied to the public health sector. Private medical establishments gained a greater share of the public health funding and job losses followed in the public sector. These changes followed the trends across government to reduce government
social spending and deregulating the economy generally (Gauld, 2001). This inevitably led to a lack of stability and certainty on which to build, plan and consolidate. While change is an element of health care practices and innovation, the politically motivated upheavals of institutions risk being counterproductive to fundamental health care delivery (Gauld, 2001).

1993 - 1998

In 1990 the newly elected National Government was keen to further reduce the role of government in the delivery of public services and introduced policies to develop public service markets. This construction of markets in the area of public services and their delivery fundamentally altered the rationale of the service itself, from a public good to a competitive site of income generation. The reviews undertaken did not include consultation with interest groups and there was little resistance due to the overall weakening of the public sector unions under the Employment Contracts Act (Ashton, 2002). This second major overhaul of the public health system in 1993 resulted in the disestablishment of the Area Health Boards and the creation of four Regional Health Authorities (Northern, Midlands, Central and Southern). Central health funding was distributed via the four Regional Health Authorities, which were responsible for establishing the health requirements of each of the areas and purchasing appropriate services to meet the demand.

Area Health Boards were transformed into Crown Health Enterprises (CHEs), reflecting their new purpose and focus as commercial enterprises. The shift to thinking informed by "new public management" thinking required the new 23 CHEs to generate an acceptable market rate of return on capital investment (Boston, et al., 1996; Hood, 1991). Therefore management adopted a business model to achieve this. The general manager model that was introduced replaced the more traditional collaborative model which involved doctors, nurses and administrators (Gauld, 2000). The CHEs were also subject to ordinary company law. This was the first time publicly funded health institutions were treated legally in the same way as private companies (Devlin, Maynard, & Mays, 2001). The health system in the early 1990s was reformed along what the OECD called a "public contract model" (Ashton, 1998, p. 357). The reforms
required a purchaser/provider split. This change was to encourage the competition required to improve profitability.

Competition between the providers was meant to drive down costs and to create efficiencies within the Crown Health Enterprises. These changes saw the introduction of user part-charges and a reduction in services deemed not financially viable. Public opinion finally condemned this approach as the media increasingly ran stories of human tragedy at the hands of the bureaucrats and businessmen (Gauld, 2003b). Opposition to a managerialist approach to health services was heightened when the newly appointed Chief Executive of the Central Auckland Crown Health Enterprise was announced by the government in 1993. Denis Pickup was previously the CEO of Lion Breweries before moving into managing the largest health institution in the country (NZPA, 1993). The morality of the appointment and the connection between producing alcohol, then running a business too often populated by those affected negatively by alcohol was publicly debated. This managerialist approach appears to have failed at this CHE as Pickup left the position after two years, leaving the CHE in serious debt. In less than three years after CEOs had been appointed to CHEs thirteen of the twenty executives had left, frustrated with the reforms and the required profit focus (NZPA, 1996).

Soon after the introduction of this model it became apparent that a profit focus driving decision-making in health would lead to publicly unacceptable cuts in services deemed non-profitable. As this happened the government reviewed its position due to the political backlash this created, and accepted that the losses incurred by the CHEs would need to be funded by the tax-payer (Ashton, 2002). This new environment was characterised by a high turnover of management staff, protracted negotiations in both the employment area and for services, and the unrest flowed into a reduction in service delivery. Waiting lists rose dramatically and the continued clash of values between managers and their need for profit generation and the motivations of health professionals, led to claims of unsafe practices and avoidable patient deaths (Gauld, 2003a).

There was, however, evidence of efficiency gains made in this period between 1993 and 1996. This improvement was partly due to the demand for better, more comprehensive collection and collation of health data (Gauld, 2003a). Prior to this time many financial and operational areas were poorly documented and very little information was collected by central government agencies or departments. While there were some efficiency
gains over this time the political reality for the government was such that further reforms were deemed necessary to placate the public’s concern over public health service cut backs. Many smaller communities experienced the closure or downgrading of their local hospitals and health services, and resistance to further reductions of services was mounting (Gauld, 2001).

1998 - 2000

After the election in 1996 the newly formed National-led coalition began the third reform of the public health system since the late 1980s. The impetus for the reform came from the minor coalition party, New Zealand First. “This [reform] subsequently evolved into a funder/provider arrangement after the 1996 elections, with partial corporatisation of publicly owned health enterprises” (Bloom, 2000, p.xvii). The four Regional Health Authorities were disestablished and one body, the Health Funding Authority, was created. Crown Health Enterprises became Hospital and Health Services. The language change was important so as to help create the impression that health services were about people and support rather than a purely transactional approach to health. With these changes came a shift from a solely financial concern to a “public service” objective, although they were still expected to follow a business model approach. The Health Funding Authority took control over developing a centralised approach to equity of service delivery and strategy (Gauld, 2003b).

2000 to present

The Labour-led coalition government of 1999 aimed to "eliminate the quasi market ideologies underpinning the previous system and to facilitate cooperation" (Ashton, 2009, p. 325). The Ministry of Health took over many of the functions of the Health Funding Authority, which was disestablished. Under the New Zealand Public Health and Disability Act 2000, 21 District Health Boards were created.

The District Health Board structures represented the government’s desire to:
Recentralise\(^{16}\) control over the health care system, through handing many of the Health Funding Authority’s funding functions to the Ministry of Health;

- Focus the health sector on population-based public health strategies and health-status improvement;

- Strengthen primary care;

- Increase coordination between different parts of the health-care system; and,

- Facilitate local control and community participation in decisions over health-care needs assessment, planning, funding and management.

(Gauld, 2003b, p.19)

A mixed governance model now exists, with responsibilities across both the Ministry of Health, and the District Health Boards. The District Health Boards are Crown Entities and are responsible for the planning, purchasing and delivery of primary, secondary and tertiary health services. The requirement to meet contractual goals has been displaced with a focus on health and wellbeing within a fiscally responsible approach. The geographical approach with District Health Boards is to allow for a better response to local needs with the Ministry of Health responsible for central strategy areas such as disability and public health (Gauld, 2003b). The greater connection with health service delivery and the community is enhanced by the reintroduction of publicly elected Boards. This last occurred in the 1983 to 1993 period of Area Health Boards.

As with the previous restructurings, the disruption undermined staff morale and resulted in the loss and redeployment of experienced personnel, diminishing institutional knowledge (Gauld, 2003a). The change in government in 2008 to a National-led coalition has not resulted in a change to the District Health Board structure but there has been ongoing restructuring within the Ministry of Health itself. There is still a strong focus on fiscal accountability and performance in the government’s expectations as evidenced in the Minister of Health’s recent letter to District Health Boards,

All DHBs must budget and operate within their allocations and establish specific action plans to improve financial performance. This means your Board should be able to clearly demonstrate how it effectively takes ownership of financial performance and will develop and implement specific actions to live within its means year on year. This means

\(^{16}\) This recentralisation brought the decision making back into the Ministry of Health whereas previously the Health Funding Authority was in effect outside of the direct control of the Ministry of Health.
purchasing, productivity and quality improvements (including removing duplication and eliminating waste) and further reducing administrative overheads (Ryall, 2011).

General changes that are occurring within the Ministry of Health are the effect of an ongoing political desire to reduce government spending in the sector. This has resulted in job losses both within the Ministry and at District Health Board level. Functions such as payroll and some purchasing has been centralised away from District Health Boards and brought back within the Ministry of Health. The Council of Trade Unions argues that actual health funding is failing to keep up with the increasing population levels (Rosenberg, 2011). Rosenberg (2011) argues that downward pressure on funding levels results in the degradation of some services and limits healthcare workers' wage rises below the level of the general population. This stagnation of salaries and wages may well contribute further to the ongoing problem of qualified health-care workers seeking better remunerated positions overseas.

By 2011 the difficulties that smaller District Health Boards experienced in efficiently sustaining staff and services have resulted in the Otago and Southland District Health Boards merging (now Southern District Health Board), and Capital and Coast District Health Board and Hutt Valley District Health Board are now investigating similar moves, with others likely to follow. The problems being experienced in the health sector predominantly relate to a lack of skilled staff and the duplication of services across District Health Boards being too resource intensive.

The reforms of the late 1980s and the 1990s were attempting to ensure a more fiscally responsible approach to spending public money. There were problems with the duplication of services, under-utilisation of resources in some areas and unreasonable waiting times for treatment in other areas. There also appeared to be a general lack of business acumen in the existing establishments. All of these factors helped precipitate the reforms. A difficulty faced by the Ministry of Health and other government officials in making decisions has been the lack of sound information and data that they receive from Boards/CHEs and health managers. The Gibbs report (1988), a study conducted by Arthur Anderson, suggested that hospitals had no idea of the costs or volumes of services being produced by them (Ashton, 1992; Gauld, 2000). This problem was again identified in 1993 in the government's Green and White papers, which stated that management information was inadequate in the public health sector (Gauld, 2001). The 1993 reforms were “reliant upon explicit information for the purposes of controlling and
accounting, and were designed in part to focus the attention of the health sector on collecting and making information available” (Gauld, 2001, p.86). As already stated, some positive outcomes were gained from the 1993 reforms as "the contracting process elicited information, previously unavailable or collected in varying ways, about types, volumes, and costs of services that were purchased and provided in the public sphere" (Gauld, 2000, p. 825). Irrespective of the disagreement around the reforms in the public health sector, this identification of problems with capturing good data and information is important to the whole sector.

**Private/Public Health Sectors in New Zealand**

New Zealand has had a robust and dominant tax-payer funded universally accessible public health system since 1938. The public health sector represents the major healthcare institutions and services in New Zealand. The private health sector in New Zealand consists of numerous private hospitals, clinics and laboratories. At times public health patients are treated in the private health facilities when demand exceeds the capabilities in the public sector. Medical staff are also able to work across the two sectors.
Figure 2 The structure of the New Zealand Health and Disability Sector 2011

Source: (Ministry of Health, 2011)
shows the structure of the New Zealand Health and Disability Sector as of August 2011. At this time there were 20 District Health Boards due to the merger of two District Health Boards in 2010. At the time that data was collected for this project there were still 21 District Health Boards. The Ministry of Health is responsible for all health and disability needs of the population. This responsibility includes the overall monitoring of health statistics, the strategic planning of the health workforce and areas such as information technology in the sector, which are centralised. The Ministry is accountable to the Minister of Health for annual reporting and purchasing agreements with providers. The Ministry of Health is also responsible for the negotiation and monitoring of service agreements with the District Health Boards. However, the District Health Boards are formally accountable to the Minister of Health. The National Health Board business units identified in Figure 2 are responsible for departmental roles including Planning and Analysis, Purchasing, Emergency Management, and Information Delivery and Operations.

The location of clinical coders within the Ministry has shifted since the minor internal restructuring of the Ministry in 2008. Prior to this, coding responsibilities resided solely in the New Zealand Health Information Service (NZHIS). The NZHIS was effectively disestablished in 2008 and now only provides the technical documentation support and information via a Ministry of Health website. This new role for the NZHIS is narrow and the information support relates only to the actual codes used in the classification system for clinical coding. Periodically updates occur as clinical situations give rise to different interpretations of medical diagnoses and treatments, or reporting requirements demand changes in the codes used. The responsibility for the clinical coding workforce and coding outputs themselves are spread across three areas of the Ministry of Health:

- the National Collections and Reporting Unit of the Information Delivery and Operations of the National Health Board business units;
- National Health IT Board (a subcommittee of the National Health Board);
- Data and Statistics section of the Ministry of Health (Ministry of Health, 2011).

The role and function of clinical coding in recording diseases, treatments and morbidities has always been important in developing resources for a responsive health
system. Collection and collation of this health data has been undertaken in some form for at least 260 years.

**Background to clinical coding**

The history of classifying disease and morbidity began with a French General Practitioner, Francois Bossier de Lacroix, who developed a coding system around 1750 (World Health Organization, 2010a). At that time just eight codes were used to identify diseases and cause of death. Over the next 150 years many different systems were developed to catalogue causes of death, but it was not until 1905 that an agreed international system was developed. The World Health Organisation (WHO) now requires its members to use the International Classification of Diseases (ICD) structure; "[T]he ICD is the international standard diagnostic classification for all general epidemiological, many health management purposes and clinical use" (World Health Organization, 2010b). Today there are around 120,000 codes in the ICD – 10 version. There are also subsidiary banks of codes used in specialities such as mental health and oncology. The ICD system is used to classify diseases and other health problems recorded on many types of records including death certificates and patient records. While there is a very real technical or data entry aspect to clinical coding there is also a requirement for a high level of medical knowledge and expertise in an autonomous work environment. While this system is mandatory across the 193 WHO members, who actually applies the codes to categorise patient information varies across nations and institutions. The work of clinical coding may be undertaken by designated clinical coders, nurses, doctors or medical records staff, although some countries, for example Canada and the USA, are trialling direct input computer systems at the bedside (World Health Organization, 2010a).

Although the ICD system is standardised ongoing concerns exist with regards to accurate reporting outputs using the coding system. In particular this issue has been raised and debated in several countries where clinical coding is undertaken, including Canada, the United Kingdom, Australia, the United States and New Zealand (Meyers, 2004; Northcott & Llewellyn, 2002; Wetherspoon, 2006). Research shows that internationally there are persistent issues with recruitment and retention of coding staff and the quality of outputs (Campbell, et al., 2001; Friedman & Gatehouse, 2007; Khwaaja, et al., 2002; Lorence, 2003; Meyers, 2004; Northcott & Llewellyn, 2002; O'Malley, et al., 2005).
As in New Zealand, the United Kingdom has been undertaking reforms to improve the costing of health-care services since the 1980s. Research undertaken in 2000 asked finance directors and cost accountants to identify costing difficulties that their National Health Service (NHS) Trusts experienced (Northcott & Llewellyn, 2002). Of the 228 Trusts surveyed, 105 (46 percent) responded and of these 90 per cent indicated that problems in obtaining good quality data were in part a result of inconsistent clinical coding practices. This was in keeping with earlier research on coding of clinical activities in the United Kingdom (see Benster, 1994; Lowe & Doolin, 1999). Northcott and Llewellyn (2005) also found that clinical coders generally felt undervalued, their work was not understood nor did they believe that the organisation had a good understanding of how coding work contributed to the functioning of NHS Trusts. Concurrently the outcome of an examination introduced to ensure minimum coding performance standards was published in the United Kingdom. The results showed a low pass rate, even amongst more experienced clinical coders (Northcott & Llewellyn, 2005).

These British results are not dissimilar to informal auditing of clinical coders by the Ministry of Health in New Zealand (Wetherspoon, 2006). For some time those within the Ministry of Health responsible for clinical coding standards have felt that there is a lack of consistency with the accuracy of coding reporting across the District Health Boards. An improvement programme, 'Improving the Quality of Data Provided to the National Collection Systems', has been in place for some and the Ministry reports this has been successful in raising the quality of outputs. The audit exercise, Performance Indicators for Coding Quality (PICQ), was conducted in 2009 and 2010 and the results show a marked improvement in coding accuracy.

Quality of coding outputs is constantly monitored as there is still no clearly consistent standard across the District Health Boards (National Health Board, 2010). In 2009 there were 823,190 hospital discharges and surgical services in the public health sector (Ministry of Health, 2011). The information about patients' diagnosis, treatment and care is collected at multiple points throughout the hospital system, from ward settings, accident and emergency departments, through to operating theatres. Currently the recording of relevant data is usually a hand-written process by clinicians directly into a paper patient file or chart. The complex matrix of departments and sections of a hospital and the possibility of multiple interactions per patient means the centralisation and aggregation of any one patient’s notes can be challenging. Although electronic
records are beginning to be trialled in some District Health Boards in New Zealand, issues of funding these projects and agreement on standardised software platforms are yet to be resolved nationally.

In the absence of electronic records the current process to compile data on disease classification is initiated on the discharge of a patient and their paper records being transferred to the clinical coding department. The clinical coders then read, interpret and translate the data into the ICD system via a computerised system. While clinical coders are generally seen as clerical workers, they use technical medical knowledge skills to identify the relevant entries in the patient records to carry out their tasks. To illustrate the accuracy, expertise and attention to detail required by clinical coders in dealing with patient records and the flow-on effect this can have on District Health Boards consider the case of a patient with a primary diagnosis of Acute Myeloid Leukaemia (AML). This patient without remission has an average stay in hospital of 2.35 days. Clinical coders are required to read the whole file to identify whether other disease processes or conditions are present as this will change the code allocation and in effect the funding received by the District Health Board from the Ministry of Health. If the patient mentioned above happens to also have cirrhosis of the liver and a urinary tract infection, then the average stay is 6.89 days. The current stay may not be related primarily to the liver disease and therefore not prominent in the recent notes. Failure by the clinical coder to pick up the secondary conditions would result in a negative variation in funding for the stay of $4,322.\textsuperscript{17} As this highlights, issues of training and experience are a critical aspect to developing competent clinical coders.

Another factor in evaluating the role of clinical coders’ work is that it is carried out away from the gaze of the public and most other health sector workers. Physically they are usually located in the periphery of the hospital setting and often in the basement of buildings. Their often overlooked and usually undervalued position in the District Health Boards is responsible for important information on patient outputs. This measure of service provision is then used by the Ministry of Health, in part, to determine funding levels. The clinical coding function is often unrecognised yet it is a critical aspect to maintaining sound fiscal management for the organisations. Generally the data collected on patient discharge is used for a range of purposes. These include:

- "regional morbidity and mortality analysis

\textsuperscript{17} These are 2009 costing figures (Guthrie, 2009).
contract monitoring and payments
research into diseases, injuries and patient outcomes
benchmarking of clinical practice between hospitals,

improving patient care, and

improving hospital practices and resource allocation"

(New Zealand Health Information Services, 2009).

The work that clinical coders carry out is crucial for good management, and accuracy in clinical coders' work is important as it is the only point at which centralised data is sourced for the hospitals in the public health sector. The resulting funding that flows from their work is obviously essential to the ability of District Health Boards to provide and fund health services in their regions. As Vote Health is the second largest expenditure area by government at NZ$14.13 billion (20012/2013 fiscal year) there is an understandable demand for good decision-making based on excellent data and information. Of the health spending allocation approximately 76 percent (NZ$10.8 billion) goes directly to District Health Boards (Treasury Department, 2012). The size and enormity of the health industry in New Zealand and the cost to the tax-payer makes the issue of fiscal responsibility of great concern to politicians and voters alike. This significance of the work undertaken by clinical coders and the quality of their output identifies them as pivotal to health-care and funding, adding weight to the importance of this study.

**Clinical coders in New Zealand**

As an occupational group clinical coders are geographically dispersed across New Zealand. They are employed predominantly in the 21 District Health Boards, but also in some of the larger private health providers, and by several government areas such as the Ministry of Health and the Accident Compensation Corporation. In the District Health Boards clinical coders total approximately 180 individuals. While larger District Health Boards may employ up to 30 FTE (full-time equivalent) clinical coders some of the smaller District Health Boards only employ one or two FTE clinical coders.
Within the context of District Health Boards, which employ a large and varied workforce, clinical coders have limited industrial clout. The clinical coding workforce is predominantly made up of women, there are no nationally agreed standards of training and development and there has been no New Zealand based qualification available since 2002.\footnote{Auckland District Health Board introduced an in-house entry coding course in 2008.} Prior to the Employment Contracts Act 1991 (ECA) most clinical coders were employed under the General Clerical National Award ensuring standardised conditions across the country. The loss of award coverage has resulted in a substantial variation between District Health Board in conditions for clinical coders (Douglas, 2004). The effect of the ECA was the decentralisation of contract negotiations to the District Health Board level and this is what enabled the variations between District Health Boards to occur.

The introduction of the ERA in 2000 has allowed for an extension of collective bargaining from the enterprise level to also include multi-employer collective agreements (MECAs) and multi-union, multi-employer collective agreements (MUMECAs). As a result, now in 2012, there are four MECAs (Northern Region District Health Boards - Northland, Waitemata, Auckland, Counties Manukau; Midland District Health Boards - Tairawhiti, Waikato, Lakes and Bay of Plenty; Lower North Island District Health Boards - Capital and Coast, Hawkes Bay, Hutt Valley, MidCentral, Taranaki, Whanganui, Wairarapa; South Island District Health Boards - Canterbury, Nelson Marlborough, Southern, West Coast) have been negotiated across the District Health Boards that include coverage of clinical coders' work (Public Service Association, 2011c). The MECAs' coverage includes clinical coders, telephonists, personal assistants, general typing and filing clerks, car park attendants, receptionists, librarians and menu clerks (Public Service Association, 2011b).

As Table 4 below indicates that under the ECA, in 1998 the contractual conditions clinical coders were employed under was against the trend seen across New Zealand. Although the ECA encouraged employees to work under individual contracts all District Health Boards/Crown Health Enterprises in the 1998 survey employed clinical coders either on a single collective contract or a mixture of both collective and individual contracts. In the 2004 survey taken after the introduction of the ERA, which requires employees in a collective employment to be union members, only eight of the eighteen participating District Health Boards employed coders only under a collective agreement
and a further eight used a mixture of collective and individual agreements, while two District Health Boards employed coders only under individual agreements. The clinical coders employed at District Health Boards are only under individual employment agreements, therefore are not union members.

**Table 4 Types of contracts/agreements covering clinical coders in 1998 and 2004**

<table>
<thead>
<tr>
<th></th>
<th>Number of CHEs/DHBs</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Collective</td>
<td>15</td>
<td>8</td>
<td>71</td>
</tr>
<tr>
<td>Individual</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Both individual and collective</td>
<td>6</td>
<td>8</td>
<td>29</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>18</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: (Douglas, 2004)

Complementing the collective employment agreements in the sector is the Health Sector Relationship Agreement, which was struck in 2007 (District Health Boards New Zealand, 2011). This agreement binds the District Health Boards, the Council of Trade Unions (and their affiliated health sector unions) and the Ministry of Health to a tripartite process in working towards a range of goals, including the provision of good jobs and working environments and also the promotion of collective bargaining and union representation (District Health Boards New Zealand, 2011).

In spite of the reforms to improve productivity and decrease collectivism, then to increase collectivism and improve data quality, the current labour market position of clinical coders has not reflected the expected consequence of the changes (Douglas, 2004). The result of the changes over the past 25 years has been a stagnation or reduction of clinical coders’ wages and conditions along with an increase in work intensification in District Health Boards. An important result of the many health sector reforms of the past 25 years has been the greater importance placed on the need for accurate and consistent reporting of data. It could have been expected that the people
responsible for the task of data collection would be seen in a more positive light and experience an improvement in their status due to their increased value to the organisations. Reviewing the results of the 1998 and 2004 surveys on the clinical coding workforce in public hospitals in New Zealand, this does not appear to be the case.

Clinical coders still have low status in the health sector, partly as a result of the general lack of understanding by organisations of the nature of their work and the level of expertise required. The earlier example of the coding of the patient with Acute Myeloid Leukaemia shows that the clinical coder's task requires more than a simple allocation of an alphanumeric code to predetermined conditions described by a clinician. The process is complex because there is a need for the clinical coder to be able to synthesise information from throughout the patient record to capture information such as pre-existing conditions and co-morbidities, which determine the correct code to be applied. At this point inconsistencies and variations in costing implications can be generated for the District Health Boards. Specialised initial training and support is required and ongoing training and development of coders is needed to ensure accurate and consistent data collection and ongoing currency with changes and developments in the coding protocols. Currently in New Zealand there is no pre-employment qualification required for those who wish to work as a coder. In some District Health Boards in-house training is provided to beginning coders or they are expected to study once they begin employment. To advance further in their career as coders a minimum of the Health Information Management Association of Australia (HIMAA) intermediate course is required (Douglas, 2004).

**Training and education**

In New Zealand after 1984 attention in the health sector rapidly turned away from the development of the workforce and towards financial issues. Post 1991 generally, training and development became primarily the responsibility of the individual and not the employer. With the lack of resources and commitment to training and development, employees' access to opportunities diminished across the whole health sector (Gauld, 2001). In response to this the Health Workforce Advisory Committee in 2001 developed a snapshot of the health workforce and the strategies to improve training and support (Health Workforce Advisory Committee, 2002). “Educating and training the
workforce is about improving the quality of the services delivered. It includes pre-entry, entry and post-entry education and training, and continuing professional development” (Health Workforce Advisory Committee, 2002, p.6). This advisory group did not include clerical work in its review; however, these strategies apply equally to clinical coders. The future labour market projections for all health-care workers in New Zealand to 2021 suggest a deficit of between 18,000 and 28,000 in the size of the workforce required (Ministry of Health, 2006). As a consequence, ongoing attention to the recruitment and development of new workers across the whole health sector is essential.

As previously noted many clinical coders undertake distance education courses via HIMAA in Australia. Prior to 2002, Auckland University of Technology (AUT) offered the only clinical coding qualification in New Zealand. This was a certificate level course and delivered in distance mode. However, it was closed after it was not considered financially viable because of low student numbers. The course that was offered by AUT was developed and monitored by a clinical coder employed at Auckland District Health Board (ADHB), who had been involved in training clinical coders. This training approach enabled a confidence in the certificate course on the part of organisations as the development of the curriculum was embedded in practice and based on the experience of practitioners. Earlier research undertaken shows that many clinical coding departments would prefer a New Zealand based coding education course (Douglas, 2004). The respondents in this survey preferred a local qualification because this would better reflect the demands of local conditions and also provide better student access to lecturers and materials.

Since the demise of the locally offered course clinical coders can still complete a basic medical terminology certificate through New Zealand institutions, but to gain qualifications specifically in clinical coding they need to undertake the Australian courses. What has resulted is a lack of profile of clinical coding, which makes it difficult to attract new entrants. An ADHB informant remarked that while the AUT course was running they would receive up to six enquiries a year from holders of the AUT certificate looking for entry-level positions in coding. This pipeline has stopped and now it is extremely difficult to find new coders keen to enter the job. There is a chronic shortage of clinical coders at all levels. As the workforce continues to age and more retire, this problem will worsen (Guthrie, personal communication, 2008).
In response to the problem of few entry-level coders ADHB set up an in-house training programme to meet its needs. The programme is fundamentally derived from the old AUT course but delivered intensively over seven weeks. ADHB initially sought candidates from within their own internal labour market. These people were given leave from their departments to undertake the course. If they successfully completed the course they were offered an entry-level position in clinical coding. The first time ADHB ran the course several new clinical coders from other District Health Boards attended, as it was a good opportunity for District Health Boards to accelerate learning. At short notice ADHB ran another intake for just ADHB employees and again successfully recruited new staff, although it still had a shortage. While this initiative has reaped benefits for ADHB, others around the country are less in favour of the approach. Ministry of Health staff views the course as an attempt by ADHB to control coding education, and consider that it weakens demand for the more professional Australian HIMAA courses. As the course is not formally recognised, the Ministry is concerned it will reduce the status of coding education and continue the difficulties faced to bring about any possible standardisation in clinical coding education (Guthrie, personal communication, 2008). Part of the Ministry of Health’s strategy for public health delivery is for the planning and development of the workforce. This strategy includes moves to establish standards across District Health Boards. No explicit strategies are yet in place involving clinical coding education but the concerns expressed regarding the quality of coding outputs suggest that standardisation in this area may be a future option for consideration (Ministry of Health, 2006).

ADHB on the other hand views the course as meeting its need to attract new people into the job and an efficient way to recruit candidates with sound entry knowledge. In many District Health Boards recruitment comes from shifting medical records workers into clinical coding. This produces short-term problems, that is, workers with only a basic understanding of terminology and pathology, who then need to utilise other more experienced workers' time to learn on the job. The experience of one coding manager is that these in-house courses run by ADHB provide the employer with a better starting point with new staff (Guthrie, personal communication, 2009).

Building on from this training course in 2010, the Auckland and Waikato District Health Boards created an online course in clinical coding. This Accelerated Coding Education course complements the IT Health Board's goals in the IT Health Board
Plan\textsuperscript{19} of increasing smart use of technologies in the health sector (IT Health Board, 2010). The course is not designed to replace the HIMAA programmes but to provide a comprehensive introduction to the basic skills required.

\textit{Clinical coder representation}

The interests of clinical coders are represented across a variety of bodies. For employment relations purposes, the Public Service Association (PSA) is the main union providing coverage of clerical workers in the public health sector and has over 15,000 members in the sector (Public Service Association, 2011b). For most clinical coders this would be the main choice of union for representation, although some coders from nursing backgrounds are with the New Zealand Nurses' Organisation (NZNO). At the Southland District Health Board (as it was known prior to 2010) clinical coders and many other clerical workers are covered by the NZNO for historical reasons.

Aside from the unions that cover the work of clinical coding, coders are also eligible to join, (either as an individual or as part of a corporate membership) the Health Information Association of New Zealand, HIANZ. HIANZ was formed in 1989, and includes workers from clinical coding and health information, consumer health information, drug information, health information systems, health and medical libraries, health management, health promotion, mental health sector, patient information, records management and the voluntary health sector. The membership is dominated by occupations other than clinical coding, although the annual conference timetable specific content programmes for clinical coders and recent presidents of the organisation have been clinical coders. There is no requirement for clinical coders to belong to this organisation individually. While this is not a professional body in the strict sense that it is linked to a form of registration, education, regulation and standard setting (Freidson, 2001), it does provide an organisation for occupations involved in health information generally to have a forum for collegiality, information, education and at times, lobbying. Clinical coders are only approximately 30 percent of HIANZ's membership. Comments from clinical coders who do not belong suggest that high fees and a management focus rather than a specific focus on coding are reasons for not

\textsuperscript{19} The IT Health Board is a subcommittee of the National Health Board.
belonging (Douglas, 2004). The annual fee for joining HIANZ was $60 in 2011 (Health Information Association of New Zealand, 2012).

Apart from HIANZ, the other body concerned with the work of clinical coding is the Health Information Management Association of Australia, HIMAA. While there is no formal relationship between the two bodies New Zealand workers are able to join this body. HIMAA does not provide representative or advocacy roles but is instead, concerned with education and information. Many New Zealand clinical coders have undertaken the distance education courses provided by this organisation, particularly since the New Zealand course in clinical coding ceased. These courses have become the accepted standard courses for clinical coding education in New Zealand. Introductory, intermediate and advanced/auditing courses are offered through HIMAA. Membership of HIMAA costs Australian $250 per year (Health Information Management Association Australia, 2012).

The New Zealand Coding Authority, NZCA, was also involved in the work and standards of clinical coding. The NZCA was an advisory body under the auspices of the New Zealand Health Information Services (Ministry of Health). It met regularly and ruled on queries and interpretations of the technical and practical aspects of coding data. Membership consisted of the two staff members from the Ministry of Health responsible for clinical coding issues, and self-nominated clinical coders from the District Health Boards and private establishments. Members required a reasonable amount of experience in clinical coding and possess at least intermediate qualifications. It was also preferable that they were members of HIANZ (New Zealand Health Information Service, 1993). This criterion is interesting as there was no functional relationship between the two bodies and it does not make sense that this requirement was in place, particularly as so many clinical coders do not appear to recognise the legitimacy of HIANZ and choose not to belong.

There are general links between New Zealand and Australia and for clinical coding training there is a dependence on the Australian coding qualifications. Although there are differences between the nations, particularly in the federal/state system of Australia there are many similarities, such as social institutions and practices. A recent extensive survey on the Australian clinical coding workforce provides some insights into their

20 The New Zealand Health Information Service was disestablished in 2008 and Clinical Coding Services is now part of the Ministry of Health's Information Directorate.
workplaces and issues that have relevance for this study on the New Zealand coding workforce (McKenzie & Walker, 2003).

**The Australian coder workforce survey**

The close relationship between Australia and New Zealand allows for a single labour market as there are significant similarities between the two countries' institutions, processes and legislation. The wages and conditions of clinical coders in Australia are an important context as coders in New Zealand are able to cross the Tasman and seek coding work in Australia with ease. The role and function of clinical coders is similar in both countries and the coding system is the same. Currently the formal training for New Zealand clinical coders is provided by distance through the Australian Health Information Management Association.

The results of a major survey conducted in Australia of the clinical coder workforce create a context for investigating comparisons around the position and prospects of their New Zealand counterparts. It must be noted though, that the Australian survey did not collect information on the gender of respondents. In 2002 the National Centre for Classification in Health - Australia conducted an extensive survey of clinical coders. This survey followed on from an initial survey conducted in 1994-1995. Both surveys provided data on the coder workforce size, qualifications and education, and conditions of employment including ongoing education and training (McKenzie & Walker, 2003). The 2002 survey was extensive and included clinical coders employed in both the private and public health sectors, and across urban, rural and remote institutions. In all, these totalled 1,357 organisations. The report introduction refers to clinical coders as professionals (McKenzie & Walker, 2003). The questions in the survey focused on two areas. The first aimed to determine strategic issues facing coders and managers' understandings of coders' work environment and future changes. The second focus of the survey was to collate data on coder qualifications, backgrounds, salary ranges and institutional support mechanisms. Responses were received from 424 managers representing 33.2 percent of the whole coding sector, and 1,031 responses from individual clinical coders.

The Australian survey captures data from a much more complex range of health organisation settings. While New Zealand does have variety across regional and urban
settings the Australian coding workforce across the 1,357 organisations has a much greater range of organisational differences. In addition, they are influenced by federal and different state legislative requirements. In New Zealand the substantial majority of clinical coders work in the publicly funded health system. Some clinical coders not working within the District Health Boards are employed in small numbers in the Ministry of Health and the Accident Compensation Commission (ACC). There are no clinical coders of significant numbers employed by private health providers. Here it is likely that clinical coding is done by other staff, with different designations, as part of a larger workload.

The first part of the survey captures managers’ views on clinical coding and provides much of the background to clinical coding in Australian institutions. The Australian Coder Workforce survey results, which included both public and private institutions, indicated that the majority of coders in Australia (88.2 percent) were employed either in health information services or a medical records department. The results show that in Australian health institutions approximately one-third of organisations hosted in-house learning opportunities for clinical coders. These commonly were area coding meetings, departmental meetings and clinician meetings. Access to external learning opportunities, such as updates and workshops, was reasonably low, with less than 10 percent of respondents indicating this as an opportunity.

With regard to the future of clinical coders, the managers that did respond reported an increased role for coders, particularly in financial and quality issues. Additionally, managers foresaw an increased role of information technology (IT) in the work tasks and an increased specialisation of coders resulting in greater interaction with clinicians. "These managers stated that clinical coders would be vitally important in revenue allocation and increasingly involved in the finance and/or management sections of the hospital" (McKenzie & Walker, 2003, p. 35). This increased demand for the skills of clinical coders and the recognition of their contribution to finance and quality could allow coders to become data managers and auditors. Future changes for clinical coders most likely would involve the greater introduction of electronic patient records and managers saw this as requiring more extensive training in information technology skills. Ultimately it would "change the role of clinical coders from a coding function to a data managing/auditing responsibility" (McKenzie & Walker, 2003, p. 35).
The general comments by managers highlighted serious concerns for the professionalism and quality of clinical coding work. Issues raised by a third of the managers related to education. The managers felt there needed to be specialist training for clinical coders in particular clinical areas such as diabetes and oncology. Another expressed concern was the standard of university graduates, as it was reported that these graduates were generally inadequate in terms of clinical knowledge or practical experience. Thirteen percent of the respondents felt coders were undervalued by the organisation and that the lack of understanding by other staff meant coders did not receive adequate recognition. Comments were also received from managers, who cited salary levels as critical to recognising coders' importance and also the need to promote clinical coding as a career.

Clinical coder responses

While the Australian report breaks the data down to state level, the reporting that follows collapses the state data together to gain a single picture of the Australian environment. The majority of clinical coders, 56 percent, reported their job title as "Clinical Coder" and a significant number (31 percent) worked under the title "Health Information Manager" (HIM). Only 34 percent of respondents indicated they were coding in a full-time position, 28 percent were employed part-time to code and 29 percent were employed full-time but coding was only one part of their duties. These other duties included quality assurance activities, data entry, general medical records work, indexing and general liaison work particularly with IT personnel.

A solid majority of coders, 84 percent, reported they were covered by an award, either state or federal. The average wage per annum in Australia in November 2002 was AUS$46,202, (NZ$52,540\textsuperscript{21}) (Australian Bureau of Statistics, 2002). This is significantly higher than New Zealand's average wage at that time which was just NZ$31,980 (Statistics New Zealand, 2010).

The Australian report indicates that the average wage band for clinical coders in 2002 was between AU$35,000 - 39,999, (NZ$39,795 - 45,479) with 27 percent of coders in this range. The salary range started at AU$20,000 and ended in excess of $65,000, (NZ$22,740 - 73,905). Clinical coders holding the title HIM, on average, received

\textsuperscript{21} Exchange rates as at 1 November 2002.
AU$5,000 - 10,000, (NZ$5,685 - 11,370), more than coders identified as Clinical Coders. Further, coders who reported holding degrees in health information management had annual salaries in the AU$40,000 - 44,999, (NZ$45,480 - 52,301) range. The survey shows that the coding workforce was reasonably stable, with over 65 percent of coders reporting having more than five years' experience and a little over 32 percent of coders reporting more than ten years' experience. The turnover of coding positions was also reasonably stable with around half (50.5 percent) stating length of time in their current position as more than five years.

Organisationally, 76 percent of the clinical coders were in Health Information Services or Clinical Coding departments with the remainder in a range of locations such as administration, nursing and finance/business units. Just over a quarter, 26 percent, reported being unsatisfied with their work location due to cramped conditions, poor lighting and poor ventilation and unacceptable levels of interruptions. Generally (i.e. 75 percent), clinical coders in the survey had access to clinical staff in their work. This access varied from regular meetings, attendance at ward rounds, through to ad hoc contacts for queries.

As a group the clinical coders in the survey indicated a high level of job satisfaction with over 90 percent responding positively. The reasons given for the satisfaction were that the job was interesting, challenging and rewarding. Those respondents that did not find the job satisfying reported being bored or finding the job too complicated. Disappointingly, gender was not reported on in the survey, and so a comparison could not be drawn with the New Zealand clinical coding workforce.

With regard to the training of clinical coders in Australia, the survey shows that 36 percent of coders had learnt to code through an undergraduate degree, 34 percent had learnt through only on-the-job training and 29 percent via the HIMAA distance education course. The remaining one percent of respondents learnt through small informal courses or through a postgraduate degree. Of the group that have learnt to code through the undergraduate Health Information Management degree, 50 percent felt they were inadequately prepared for the job. This proportion compared with 75 percent of HIMAA qualified coders who felt adequately prepared. In Australia there has been an increasing trend for clinical coders to gain higher qualifications, i.e. an undergraduate degree, and this is probably in line with a general population trend of increased participation in tertiary education. Nevertheless, the effectiveness of this
upskilling needs to be considered given the feelings expressed regarding preparedness for employment.

Comparing these education statistics with an earlier 1994-95 survey, the report shows there has been an increase in the percentage of clinical coders holding formalised qualifications from either universities or HIMAA, up from 9 percent to 30 percent. Correspondingly, the percentage of coders only having on-the-job training has also increased over this period from 5 percent to 20 percent. The authors, McKenzie and Walker (2003) suggest that the on-the-job training has substantially changed over that time and in-house educators are employed to specifically prepare and support coders for their employing environment.

Clinical coders' continuing education, other than any in-house provision, was generally confined to National Centre for Classification in Health up-date workshops which are offered nationally in multiple locations to allow greatest access for workers. Absence from workplaces for more than one day is generally viewed as problematic for maintaining work throughput. Consequently, less than 15 percent of clinical coders in the survey reported attending HIMAA or other related organisation's conferences. The spectre of throughput quotas appears to impact significantly on coders' abilities to participate in ongoing education with coders reporting that they spend less than five percent of their time on this activity.

The participants were asked whether they held other non-coding related tertiary qualifications and only a small number confirmed they did hold other qualifications. Less than 4 percent held business degrees and 3.6 percent held nursing degrees. Other degrees held included science (2.2 percent), arts (1.6 percent), education (1.3 percent) and nosology 22 (0.5 percent). One question sought to identify any professional background the respondents may have had other than clinical coding. Just over a third (35 percent) claimed a health information or medical records background, 31.2 percent identified clerical, 11.9 percent as registered nurses, 10.5 percent as non-registered nurses, 1.6 per cent stated a background as an overseas qualified medical practitioner and 0.5 percent as an Australian qualified medical practitioner. Immigrants to Australia

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22 A nosologist is a highly qualified clinical coder who understands how the classification is underpinned. Nosologists consult nationally and internationally to resolve issues in the classification and are viewed as experts who can not only code, but design and deliver education, assist in the development of classification and the rules for using it.
holding overseas medical qualifications do not always have their qualifications automatically recognised by Australian medical registration boards and clinical coding allows them to work in a medical setting and to utilise their extensive medical knowledge.

Both managers and clinical coders were asked to identify what they thought impacted on coding quality. Both groups responded similarly, identifying the actual medical records as problematic. This was because of issues with incomplete records received, poor documentation of patient information and also problems of illegible hand-written patient notes. The impact of electronic health records in the future was seen as positive to improve the above noted current problems but also acknowledged they would introduce a new set of difficulties, such as potential redundancies, a need for upskilling in IT and the possibility for increased workload expectations.

Although the response rate was low in this national survey the concluding comments restate the importance of the exercise as the collected evidence suggest that there is considerable movement in the makeup of the clinical coder workforce. McKenzie and Walker (2003) suggest that an easier and more efficient approach to data collection could be found through a registration process being mandatory for clinical coders. This would be in keeping with other medical and allied professions and would assist in workforce planning. The desire to use registration as a means to enhance data collection is rather different from the usual motivations behind formal registration of professional bodies, which is to create accountability, enable gate-keeping, maintain discipline and facilitate ongoing education. Although the McKenzie and Walker report contains the managerial labelling of clinical coders being professionals, there is little evidence of a professional approach either to the education or the maintenance of clinical coders as a professional body.

**Conclusion**

Clinical coders are located in a complex space in the health services organisation. They deal with critical information vital for both the District Health Board and central government yet they fail to attract the recognition, power and status that might be associated with this central position. The earlier chapters have discussed the impact and linkages that gender, skill, power and historical factors bring to bear in making sense of
the labour market position of clinical coders and their work. By contrast this chapter has developed the legal and health contexts that constitute the current environment in which clinical coders work. This diverse array of factors all interact to aid in understanding the location of clinical coders' position within the labour market.

Drawing on the surveys completed in 1998 and 2004 (Douglas, 2004) it is possible to identify some of the trends in clinical coders' wages and conditions. It is clear from this earlier work that the changes in employment legislation have not bought about an increase in union density or collective bargaining for clinical coders, both objectives of the 2000 *Employment Relations Act*. While legislation may change behaviours it cannot be assumed that it will also change attitudes. There is a legislative framework in place that clinical coders can operate within to argue for greater employee voice through collectively organising, but any resistance to join a union by individuals will exclude them from this process due to the exclusiveness of collective employment agreements’ coverage of union members. Possibly because clinical coders are such a small group numerically, they do not feel large industrial unions best reflect, understand or assist them. Nevertheless, the work that clinical coders undertake is essential to the financial well-being of the District Health Boards, and regardless of the policy position and direction of the government of the day, timely and accurate data is demanded.

In the five years 2006-2011, other groups in the health sector have been able to gain substantial increases in wages and conditions and status. The example of nursing in New Zealand, as discussed in Chapter Four, is an interesting case. Faced with poor retention figures due to relatively low pay, status and career possibilities, the nurses union (NZNO) has worked effectively to gain substantial wage increases, and create a multi-employer collective agreement (in effect similar to the pre 1991 national award) with career progression aspects. In addition they have lobbied for statutory changes which have increased the amount of autonomy and clinical decision-making of nurses to include functions previously in the exclusive domain of doctors, for example the prescribing of intravenous drugs. Through this greater professionalisation has come greater autonomy and accountability for nurses. As a consequence, this can lead to increased job satisfaction and contribution by employees as they have greater job discretion, autonomy and satisfaction (Grint, 2005).

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23 A fuller discussion of the professionalising project undertaken by nurses in New Zealand is found in Chapter Four.
The following two chapters introduce the findings from the focus groups and surveys. In combination the qualitative and quantitative data create a rich picture of the clinical coders’ work environment and also insight into these workers’ experiences of their work and workplaces.
Chapter Seven: Focus Group Findings

The purpose of this research was to

1. explore the factors of gender, skill and power that determine the labour market position of clinical coders,
2. identify the impact of legislative change and health sector reform on this occupational group,
3. examine the result these influences have had on perceived and actual occupational status.

The focus groups were to enable a representative group of clinical coders to speak freely about work experiences around issues including training, representation, career prospects, organisational valuing and status. From this first contact with clinical coders, areas not initially considered were able to be explored further through inclusion in the subsequent survey.

Three District Health Boards were selected in which to conduct focus group meetings with clinical coders. Selection was based on both access to the clinical coders and ease of access by the researcher. One District Health Board was located in a provincial location and the other two District Health Boards were located in larger urban settings. Prior to the meetings taking place an outline of possible lines of questioning was sent to all participants. All three District Health Boards generously arranged for the meetings to take place at their hospitals and during work time.

The three groups were very different in many ways, but a strong consistent position was taken across all three on the occupational status of clinical coding. Every participant, when asked, expressed support for clinical coding to be seen as a profession. First, the factors contributing to the labour market position of coders will be considered from the focus group discussion.

Focus group #1

The first focus group was held in a provincial centre. All five group members were women and had considerable experience in clinical coding. They appeared to be a close group. Of the five clinical coders, three had in excess of five years’ experience and the
remaining two had at least two years’ experience coding. Several had come into clinical coding via medical records where they were previously employed. No one in the group had moved between District Health Boards to pursue clinical coding jobs. This lack of mobility can probably be partially explained by the reasonably remote geographic location of the town.

All of the clinical coders employed by the District Health Board were able to be present for the meeting, including the team leader. Although the team leader was present her contribution was suggestive of a clinical coder’s perspective rather than a person in a role with leadership responsibilities. There appeared to be solidarity from her with the coders with regards to the situation and issues they face within the hospital. The meeting was held in the clinical coding office and all the participants appeared relaxed and enthusiastic to participate.

**Political context and influences**

The physical environment of organisations is usually driven by political and functional agendas. The location of departments and personnel help to create the layers of a hierarchical organisation and denotes organisational value of those in the specific locations. This District Health Board located the clinical coding unit in a cramped office with shared desk space within the Medical Records Department. In contrast to the inadequate physical environment, they had their qualifications hanging on the wall above their desks and spoke of their achievements with pride. The political decisions that resulted in the current location of clinical coding within the District Health Board are also indicative of how the organisation values this function. The department is at the end of a long corridor at the periphery of the hospital complex with inadequate space for the employees to comfortably work. The physical and operational distance from the core business functions of finance and decision-making appeared to indicate a lower level of valuing by the organisation.

The location seemed to reflect both the physical and functional relationship within the organisation. A thread of not being valued underpinned much of the discussion, and began with a response to the reporting structure coders had within the Medical Records Department. The coding unit reported to a manager who had no experience in clinical coding and had responsibility for a wide range of general staff including all health
record workers. The participants argued that the lack of experience by this manager meant there was little facilitation or encouragement to foster appropriate relationships outside of the Department.

The clinical coders identified the financial department and the Medical Information Unit as important partners. The nature of coding work and coding output had a natural synergy with the work of these other departments. The clinical coders felt very strongly that they should be in a separate unit from the Medical Records Department as this would also allow for closer ties with clinicians. The clinical coders did not want to be associated with medical records staff, as these workers were perceived as clerical workers whose skills were much lower than that of the coders. The coders were concerned that clinicians and other parties in the District Health Board would view them in the same way as medical records clerks were viewed. The women who had previously been clerical workers in the Medical Records Department expressed feelings of “escaping” to clinical coding, and that there was very little commonality between the two areas and associated tasks.

Apart from the internal relationships between themselves and other stakeholders such as clinicians and those in financial decision-making roles that clinical coders want strengthened, they also have functional relationships outside of the District Health Board. Their attitudes on this topic were markedly different from the earlier discussion on internal links, which was quite negative. The focus group members displayed a very positive attitude towards and connection with the Ministry of Health. In particular, this applied to the New Zealand Health Information Service, the part of the Ministry of Health responsible for the collation of clinical coding data, among other functions. The clinical coders have a strong functional relationship with the Ministry of Health, as it is through the Ministry mechanisms that information regarding clinical coding changes and interpretations are distributed. The Ministry staff travel to all District Health Boards regularly to meet with clinical coders and provide advice and support. Several members of the focus group made reference to having been the clinical coder representative on the New Zealand Coding Authority which takes a leadership role in clinical coding matters. This body makes decisions and rulings on coding matters. In part, this good relationship can be understood because of the small number of clinical coders and District Health Boards in New Zealand, and where personal relationships

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24 New Zealand Coding Authority (NZCA). This body falls under the auspices of the New Zealand Health Information Services branch of the Ministry of Health.
easily develop and exist alongside professional ones. These personal friendships that exist may contribute to the overall positive connection this District Health Board’s clinical coders have with the Ministry of Health.

*Power*

An area of discussion centred on the clinical coders’ work fulfilment and their control over the job. Their workplace power and ability to influence their environment was perceived as low. The group was very positive regarding their job satisfaction and they were keen to talk at length about this. Although in an environment that challenged them on many levels, their passion for the actual tasks seemed enough to justify their length of service in the position. Yet threaded through the session there was an underlying feeling of not being valued by the organisation. When asked directly about their feelings about the District Health Board they spoke out and expressed anger, frustration and disillusionment over:

- a perceived lack of support for training;
- lack of support and knowledge of their job by their manager, (although they acknowledge that this was quite different under a previous manager and so is situation specific);
- their location and consequent pigeonholing as part of a clerical group in medical records;
- no organisational recognition of how important their work is to the hospital, the District Health Board, the Ministry of Health, and to the wider New Zealand society;
- their exclusion from decision-making and projects which utilise the data they extract and create, indicating a lack of value;
- concern over the actual decline of some of their working conditions, for example the removal of "glide time" (flexibility of start and finish times to accommodate personal preference).

The level of anger and frustration over these issues was palpable. This response by the group was then pursued to ascertain the level of activity or purpose to attempt to
challenge or change the situation. Only one of the clinical coders in the focus group was not a member of a union. There did not appear to be any animosity about this and all the clinical coders spoke freely about the fact that the only difference it appeared to make was that the non-union member experienced a delay in the pass on of wage rises. Substantially there was no difference between the employment conditions of the unionised and non-unionised clinical coders. While four of the clinical coders were union members there did not appear to be a strong sense of affiliation with the union that represented them. They did not report any attempt to use the union to help them specifically address their issues.

All but one of the clinical coders belonged to the Health Information Association of New Zealand (HIANZ). Cost of membership was given as the reason by the one clinical coder not belonging to the body. The other clinical coders did not appear to strongly identify with the HIANZ body as a vehicle to help them with issues. HIANZ was seen as a body whose role was only to organise annual conferences and study opportunities. Some members of the focus group had never attended these conferences.

Although there was very good membership of the two bodies best placed to assist this group in exerting some influence and gaining more strength in their voice about issues, they do not appear to have utilised the resources. The clinical coders at this District Health Board could not be described as empowered workers, nor did they seem likely to pursue this further.

**Skill/profession**

The group members described themselves as being part of a technical profession and were quick to emphasise their belief that they were not clerical workers. They felt their job had changed significantly over time and was now more complex and challenging. Compared to even 10 years ago, they felt the expectation of clinical coders by the Ministry of Health had increased significantly, and that their job was now much more technical with a requirement of ongoing knowledge updates.

Contrasting this description of job complexity, recruitment is commonly made through redeploying Medical Records clerks and then providing on-the-job training. This approach was not seen as ideal by the clinical coders. The pre-training given was considered inadequate for what is required to undertake the job tasks. “Having the
qualifications does not make a good coder; it is all about extracting the information and understanding what you are coding”. The members of the focus group suggested that it takes about two years to become a confident coder. One clinical coder referred to the situation in another District Health Board where some “drop out” medical students have become clinical coders. Difficulty apparently arose as these clinical coders wanted to diagnose off the patient records, rather than code what the clinician had written. The members of the focus group appeared very protective of their knowledge and territory.

These clinical coders attended the study days organised by the Ministry of Health for training. This time away from their work was described as quite burdensome for them due to the travel outside of the region and overnight stays. Nevertheless, they did not see alternatives to the current delivery method of updating and training due to the “hands on” approach they favoured. The 2008 upgrade of the ICD (International Classification of Diseases) system required all the coders to participate in a three-day training course that was held a considerable distance away outside of their region. This period of time away from the workplace also created pressures with workload requirements that needed to be managed. Even though this was a demanding transition they were positive as the upgrade would result in both New Zealand and Australia using the same version of the ICD. Currently New Zealand is one version behind that used in Australia, and the courses conducted though the Health Information Management Association of Australia (HIMAA) are not supporting the older version being used in New Zealand. This created problems for clinical coders undertaking HIMAA courses and working in the New Zealand environment.

The clinical coders also responded to a question about their perception of the quality of their work output. The coders expressed agreement that within New Zealand there were serious issues about accuracy and consistency of coding outputs. However, they wereadamant it was not an issue at their District Health Board.

**Status gap**

Although this group of clinical coders articulated very clearly that they were members of a profession, there were also some contradictory comments. Most literature on occupational categorisation defines professions in terms of autonomy, higher levels of education and independence. This then would require clinical coders to take more
individual responsibility for their qualifications and career development. However, one of the significant issues for clinical coders was the need for the District Health Board to employ managers who have a more “hands on” approach and who understand their job. This desire for greater management control and supervision did appear somewhat contradictory with their earlier statement that they should be seen as professionals.

Job satisfaction

The clinical coders interviewed in the first focus group articulated a passion and extreme interest in their job tasks. They appeared to have very high job satisfaction about the task, although considerably less about the employing organisation.

All clinical coders in this District Health Board are women. The discussion in the focus group depicted a group of employees who experienced a level of disadvantage as a result of the feminisation of that workforce. This disadvantage was highlighted by their inability to gain an effective voice over issues affecting them. They felt undervalued by the organisation, were marginalised physically within the organisation and had limited career prospects. They are located within the internal labour market of the organisation and job security seems to be unquestioned as there was an ongoing need to recruit experienced staff. The strength in their claim to an occupational status of a professional was less convincing. This group of clinical coders expressed a reluctance to pursue higher level tertiary qualifications that might be required to claim this higher status as most were closer to retirement age than the beginning of their careers and could not see the positive return study could bring.

Focus group #2

The first of the two urban District Health Board focus group also had five participants from the clinical coding department. The manager responsible for clinical coding had been enthusiastic to arrange the meeting for the focus group and had allowed for this to occur on their premises and during work time. Before the meeting was held, the manager explained to the researcher that it had been extremely difficult to recruit volunteers for the focus group. The discussion that followed in the focus group highlighted their general dissatisfaction with their employment and that this was at the
core of their reluctance to participate initially. At the beginning of the focus group one coder expressed a fear of speaking openly in the forum. A reiteration of the anonymity of the data to be collected and purpose of the research appeared to go some way to allay these fears.

Even though this group had been reluctant to participate in the focus group the members of it seemed to enjoy the opportunity to talk about themselves. The meeting was relaxed and the participants did not mind running over into their own lunch break. Several in the group had prepared for the meeting and had brought written notes about issues they wished to discuss. It would appear that their initial disinterest in participating may have had more to do with how they felt at work rather than any disinterest in the research project. One participant brought with them to the meeting earlier research results concerning them that the researcher had undertaken in 2004.

The group consisted of three women and two men, and their level of experience was diverse. One clinical coder had been coding for three years, while the other coders had between 6 and 17 years' clinical coding experience. These coders had also worked in a number of other District Health Boards across the country, and one coder also had experience of coding in Australia. All of these participants had come from either a clerical background or a non-qualified nursing background.

**Political context and influences**

As with the first focus group these participants commented on the physical location of their department. Although it had recently been separated from the Medical Records Department and was established as a standalone unit, they were still physically located in the same part of the support services building. As a result of this they expressed feeling quite alone and isolated within the organisation.

The group saw a need for a champion to encourage clinical coders and also to forge connections across the hospital. They felt that the type of manager in charge of the unit would have a huge influence in this network building and the area of training. The clinical coding department had not had a team leader for approximately 18 months at the time of the focus group, and applicants for the job were not from a specific clinical coding background. This managerial lack of expertise had raised some concerns for the
coders as they expressed a preference for a team leader experienced in their work, and someone who understood the issues.

The clinical coders expressed a desire to have a much closer relationship with clinicians at the District Health Board on a regular basis. For this relationship to be credible they perceived that it would need to be driven by senior management. The clinical coders wanted clinicians to know that it mattered that the outcome statistics, generated by the clinical coding outputs, were accurate otherwise it would become a pointless exercise. Apparently there was no sign of the development of closer contact with clinicians and the clinical coders found this very frustrating. One participant relayed their experience at another District Health Board where the clinical coders asked a clinician to include certain data on the patient charts and the clinician replied “I don’t have to tell you anything. You are a representative of the Ministry of Health”! The clinical coders agreed this highlighted the conflict between roles as District Health Board employees and their functional role with the Ministry of Health. This animosity between clinicians and the Ministry of Health hinders the development of a constructive relationship. This clinician’s outburst also draws attention to the misunderstood role and position of clinical coders employed in District Health Boards.

In contrast, several of the coders had different experiences with clinicians in other District Health Boards, where there was work done to create a connection between coding departments and clinicians. This collaboration resulted in substantial improvements in the patient records received by coders and the communication between the groups of health workers. One reason offered to explain the slow improvement in this area was a lack of perceived benefit by clinicians to make an effort and do things differently. If coders could argue a positive benefit for the clinicians then the medical staff would be more likely to engage with clinical coders. The coders in the focus group did acknowledge that this relationship was also the responsibility of the coders. They identified the need to work on improving their profile within the District Health Board so that clinicians were aware of the coding role and function. Raising their profiles would require a similarly minded and supportive manager.
Power/skill

The members of the group spoke boldly about their impressions and concerns regarding their workplace. One member was active in recent discussions between their union and the District Health Board regarding the working condition of the clinical coders.

In the introductory discussion the group quickly identified a problem for them at their District Health Board. It was about career progression and training. They felt in a quandary with regards to training and qualifications, because for them to access ongoing training and support from the District Health Board they needed to meet criteria of accuracy and throughput in their work. If they met the output criteria they could then apply for wage increases and financial support for further training. In spite of this the coders felt there was a mixed message being sent by management. While there was a formal statement of an organisational commitment to professional development, for clinical coders the reality was that there was a chronic shortage of coders at the District Health Board. Consequently, often the focus was more on work rather than on training and development opportunities. As one participant stated “the emphasis is on numbers not quality”. This situation then presents the problem: the clinical coders need the training to increase their productivity but cannot get the training until they increase their productivity.

The coders in the focus group felt a lack of support and understanding by management. They did not feel that their manager was willing to acknowledge the complexities and difficulties in coding work and as a result, the workload definition was reduced to the blunt instrument of quantity of throughput. The organisation took a position that the responsibility for professional development rested primarily on the individual. This position was confirmed to the researcher by the coding manager before the focus group discussion. Clinical coders needed to approach their manager when they thought they were ready for progression with training and roles, and this was seen by the coders as problematic. The clinical coders wanted management to be responsible for reasonable workloads so they were also able to participate in training opportunities.

A new collective employment agreement had caused concern for some clinical coders with respect to training opportunities and career progression. The new employment agreement had resulted in coders losing study time for qualifications as part of their employment conditions. The agreement also linked throughput expectations, rather than qualifications, with merit progression. The District Health Board however, still
paid for tuition fees. It did not appear that this new employment agreement was well understood by all clinical coders. Within the focus group this was particularly problematic for non-union members who had had no input into the process. Two of the five participants did not belong to the Public Service Association or any other union. One concern raised about the new agreement was the rigid connection between productivity and salary progression. The clinical coders felt this could unfairly disadvantage those coders who work with extreme precision and accuracy, but for whatever reason, were not at the speed required. These coders could well be excellent on-the-job trainers but under this regime, would potentially be penalised financially through lack of progression through the scale.

New clinical coders appear to get good support in the form of mentoring and time for study from the organisation to achieve initial qualifications, but after this the requirement to meet throughput quotas seems to take priority. A compounding problem at this District Health Board was vacant positions remaining unfilled for some time. Two of the positions that were vacant had directly impacted on the training opportunities. One of these positions was an auditing position. If the auditing role was filled it would allow for regular in-house training and learning events. At the time of the focus group meeting there was no one available at the District Health Board with the responsibility to organise or run the in-house training.

The issue of feeling undervalued was again significant with this group, as it was with the first focus group. While the clinical coders felt reasonably well remunerated they did not feel valued in other ways. When asked how the District Health Board could show it did value clinical coders the group emphasised areas already raised: greater interaction with clinicians, encouragement to undertake training and greater management understanding of the task of clinical coding. The coders believed that their skills and abilities were under-utilised and misunderstood and as a result, were kept at a lower level within the organisation. In short, they wanted more control over their work processes and outputs so a balance between training and work tasks could be found and a better relationship with other stakeholders, such as clinicians, could be developed.

One participant had come to this District Health Board partly because, for the same job, they were paid $12,000 per annum more than their last position. This clinical coder had tried to negotiate a better deal in their previous workplace but felt unsupported by the union in this. They had told their last employer “you are not paying me adequately and
you are stealing my skills”! This was a clear indication of the level of feeling of undervaluing that some clinical coders experienced.

As already mentioned, one member had been active in union negotiations and it appeared the union was fairly active in this District Health Board. However, the other group members did not strongly identified with the union, although several were union members. The union members did not express a strong positive position on the effectiveness of the union in representing their matters. In recent collective negotiations there had not been a high level of goodwill by the union to acknowledge the difficulties experienced by clinical coders, and those union members present in the focus group felt let down by the union’s perceived inability to change management’s position. Concern was expressed that one factor contributing to this inability to influence management was a lack of good understanding by union officials of the circumstances around the clinical coders' employment conditions. Clinical coders were few in number when compared to the total number of workers covered by the collective employment agreement.

None of the participants in the focus group belonged to HIANZ. They expressed a belief that this body was more focused on supporting managers working in health information areas. However, the coders did think the study days provided by HIANZ were very good. Membership fees to the organisation seemed out of the reach of the average clinicalcoder (in 2012 the annual fee was $60) and at this District Health Board individuals needed to fund their own attendance at HIANZ conferences (around $500 depending on location). Participating at conferences did not seem to be viable for those present in the focus group.

**Profession/status gap**

The participants in this focus group felt very strongly that they were not clerical workers and were professionals. They argued this based on the fact they have specialist skills and people cannot come in off the street and do their work. Although they were no longer located in the Medical Records Department, they were still physically located in that area of the hospital buildings and were still employed under the general clerical employment agreement. The clinical coders were not as concerned about the implications of being included in this collective employment agreement as they had a
separate salary scale. Generally clinical coding pay scales were better than most other clerical work in the District Health Boards.

**Job satisfaction**

As with the first focus group, all the participants at this District Health Board thoroughly enjoyed their work. They expressed a passion and commitment to public health services. When asked about their work experiences the mood in the room appreciably lifted and they became more animated, with laughter peppering the discussion. The mental engagement in the tasks meant the day passed quickly and every day provided new challenges, which appealed to the group as they were always learning. Compared to other jobs some of the participants had held, clinical coding offered much more variety combined with a sense of doing useful work. One participant offered that she was quite ‘nosey’ and liked looking into other people’s lives. Although the management they worked under was frustrating, they displayed a high level of commitment to their jobs.

**Future**

When looking at the future prospects of clinical coding, the group members were generally quite positive and keen to not just explore constructive ideas, but also to reflect on their own processes. They could see that building greater value into their job tasks could gain them a greater part in the hospital’s services. Stronger links with areas such as decision support could provide better opportunities to utilise clinical coders’ skills and outputs. The coders believed this may be possible if they had a supportive manager who would encourage this job expansion. The group members saw the education of other groups within the hospital as a two-way process, with both clinical coders and other stakeholders benefiting from a better understanding of each other's role and knowledge. The participant who had experience of working as a clinical coder in Australia, painted a picture of the situation there as better than in New Zealand. There, clinical coders are considered a valuable part of the team delivering health care services efficiently and as a result, Australian coders have a wider range of opportunities to develop when compared to New Zealand, such as in auditing, and working with planning and funding units.
Through this discussion of possibilities of clinical coding work, the members of the focus group envisaged a positive future. They felt that if the managers in New Zealand would “loosen the reins” coders would have the opportunity to develop their profession. The transition in 2008 to version 6 of the ICD was viewed very positively as it could mean employment and training opportunities in Australia for New Zealand clinical coders.

Another picture of the future of clinical coding in New Zealand the group suggested had been hinted at by the Ministry of Health was that the coding role would become more one of auditing rather than detail inputting. Other staff would do the inputting work and clinical coders could become authenticators of accuracy of data. This did not appeal so much to the members of this focus group, as they liked the “hands on” approach their work offered. Currently the Ministry is promoting the responsibility for quality of coding outputs to the District Health Boards. Previously this was controlled centrally through the Ministry. A separate audit unit at the Ministry used to monitor all the work from the District Health Boards but that unit no longer exists.

The clinical coders in the focus group were unsure whether they would be prepared to undertake further education in the form of an undergraduate degree. They had been in the coding workforce for some time and were reluctant to consider training that might require a heavy financial investment and possibly student loans. However, they could see merit in higher qualifications for future coders, and could see that in the future this could be a way to attract school leavers into the job. They also felt that having a New Zealand qualification would be useful in raising the profile of coding in New Zealand.

The comments these clinical coders gave regarding the future prospects of their occupation in many ways form the basis for a professionalization project. The coders did not articulate it in this way and took the position that they were already professionals. The group appeared quite engaged with the issues facing them and their workplace in an active way, in that they were thoughtful of possible future actions. Interestingly, they did not use collective bodies, such as a union or HIANZ, to help facilitate their ideas.

From this focus group discussion it is apparent that clinical coders are still in a disadvantaged position within the organisation in regard to their perceived value. They struggle to actively participate in training and development activities and have poor career prospects. As with the first focus group, they have difficulties in developing
networks and alliances with other parts of the organisation and as a result, are marginalised. While some of their working conditions may be better than other District Health Boards there have also been a recent degradation of some working conditions.

**Focus group #3**

The third focus group was also from an urban District Health Board. Six clinical coders were present as well as their coding manager. This was the only focus group that included a manager. The manager had indicated that this was a condition of the focus group going ahead. The manager also indicated a high level of interest in the project and a desire to contribute to the discussion. Five of the six coders who participated in the focus group were adult immigrants to New Zealand. Several had qualifications in other areas of medicine but were unable to gain registration in New Zealand. Half of the group had five years or less coding experience and the other half ranged up to 10 years’ clinical coding experience.

The presence of the manager resulted in two outcomes. The first was that this person provided a large amount of detailed information about the department and “big picture” perspectives. The second impact of the manager’s presence was that in several questions there was a noticeable level of friction over an issue where a managerial decision had been less favourably received by the clinical coders. As the manager was present for the whole discussion it was not possible to determine whether there had been a general suppressing influence due to the manager attending.

**Political context and influences**

The staffing situation at this District Health Board was not optimal; there were unfilled vacancies at the time of interview. There was a shortfall of nearly four Full Time Equivalent (FTE) positions. The clinical coders suggested that it was extremely difficult to recruit at any level of the job. The previous Auckland University of Technology course in clinical coding (discontinued in 2002), used to result in several enquiries from job seekers per year but this had stopped. It was felt that the general public knew little of what clinical coders do and with such a low profile, little interest
was generated. They suggested that a locally offered course would raise their profile and could make clinical coding seen as a career choice for young job seekers/graduates.

Unlike the other focus groups, this group expressed satisfaction with the career progression opportunities. Coders could move through from Level 1 (introductory) to Level 6 (auditor). As long as the performance criteria were fulfilled, progression was guaranteed. Progression was purely based on merit, not the availability of positions. The coders reported they were supported by the employer with time release for study, as well as having their fees paid.

The group identified the team leader/manager as the person who looked after and championed their interests. The New Zealand Coding Authority was also thought to be important to represent them in coding issues. With regard to connection or allegiance to other clinical coders in New Zealand the group felt their main connection was with their employing District Health Board. There was little connection with other clinical coders, as this group saw their type of work content being significantly more complex and difficult than in other District Health Boards, due to working in a high tertiary hospital. A tertiary hospital has higher levels of complex services than secondary hospitals and they tend to be larger sites in the larger metropolitan centres. Tertiary hospitals may offer nationwide services/specializations, for example transplant units, burns units or spinal units. Due to higher level of complexity in the coders' work they perceived their peer group as more likely to be Australian clinical coders where there are numerous tertiary health institutions. While the focus group participants acknowledged the role the Ministry of Health had in providing email newsletters and study days, they did not strongly identify with the Ministry.

**Power**

The coders appeared to display a high level of individual confidence in their positions and indicated they were able to influence some aspects of their workplace. Although some of the group did not belong to a union the group were adamant that even if they were not in a union, they were covered by the collective agreement. The non-union members did identify that they did not receive salary increments at the same time that union members did. Overall though, the group members appeared to have very little awareness or understanding of the difference between individual and collective
processes and its significance. None of the participants belong to HIANZ and cited cost as the reason, although they were not able to say what the cost was. They accepted that if the organisation was to pay they would not mind belonging to HIANZ. Several members of the group were members of HIMAA, and there was also an organisational connection between the District Health Board and several Australian coding authorities.

The clinical coders in the group appeared generally satisfied in their work and did not raise issues that may have been pursued by any industrial action. They did, however, raise some issues that related more to an operational focus in their work. These clinical coders still faced the problem of the patient notes provided by clinicians; there were often discrepancies between the doctors’ medical terminology and jargon, and coding language. While the coders at this District Health Board were able to contact clinicians for clarification, this was difficult and time consuming. The clinical coders’ work was linked to outputs because of the merit levels in their employment agreement, but they could at times spend up to half an hour on one record deciphering the patient notes and assigning the code. The coders in the focus group expressed frustration with their lack of control over the material they worked with, i.e. poorly written and indecipherable patient notes, when their work performance was measured via a broad quantity focused instrument.

The impending upgrade to the ICD version was seen positively by the group members, as the new version simplified many of the technical complexities of coding that currently slowed down their coding speed and efficiency. The upgrade would also facilitate comparison with Australia, both will be using the same ICD version.

Access to up-to-date reference material was identified by the group members as their top issues that required attention at this District Health Board. These clinical coders liked the idea of all coders having access to the internet at their work stations. This point generated some discussion as others in the group could see such an initiative introducing its own problems, such as inappropriate sources being relied upon, i.e. North American situations or rules that are not the same in New Zealand. This issue did seem to raise some friction between the coders and the coding manager. The coders saw access to the internet as being part of an important aspect of being acknowledged as professionals. It was surprising to learn that coders were perceived by the coding manager as not able to identify or understand the difference between appropriate and inappropriate information sources.
**Skill**

The clinical coders at this District Health Board received support for training. Tuition fees were paid for the HIMAA courses and all present at this focus group were actively engaged with training. In addition to formal coding education, all the coders at the District Health Board attended forums each month which also included clinicians as participants. Discussion at the coder/clinician interface was seen as important to ensure good communication and quality work.

When asked about formal education pathways into clinical coding no one in the group saw benefit for coders to undertake an undergraduate degree in health information, as coding was currently a very small part of the degree structure. Some interest was shown in having a postgraduate advanced coding programme that was more focused on coding needs.

**Profession/status gap**

The clinical coders in this session expressed a clear position with regard to their occupational status, and like the previous focus groups they identified themselves as professionals and clinical coding as a profession. The participants did not consider themselves as clerical workers, as they needed to utilise their clinical knowledge to do the work, whereas clerical workers did not. They unanimously agreed they worked in a profession because of the specialised nature of the task. They were on the general clerical employment agreement but they appeared not mind this, as they had a separate salary scale and had no problem with the other conditions in the agreement. Aside from the salary focus, most of the participants showed little concern for the actual employment agreement they were under. The clinical coders also felt there was considerable benefit in having a high density of medical practitioners in the coding department, as they brought medical knowledge and confidence into the clinical coding-medical environment interface.

Although the coders described their pay as “not bad”, they did see it as an ongoing issue of concern, particularly as many of the overseas qualified medical practitioners would be able to command a higher salary if their qualifications were recognised in New
Zealand. One participant identified an inequality with clerical workers at the District Health Board, as clerical workers received annual increments irrespective of qualifications and clinical coders needed to meet demanding criteria to progress on their salary scale. Meeting these criteria could be difficult to achieve on an annual basis and so salary progression could be slow. Concern was raised that this aspect of their working conditions could be seen as a disincentive for the appeal of clinical coding as a job at this District Health Board.

In spite of these issues the clinical coders presented a positive attitude towards their employer as far as their status in the District Health Board was concerned. They saw this as a result of key people in management being knowledgeable about clinical coding and the important role it played within the organisation. This positive slant may also have been a result of the coding manager being present. One participant suggested that their good work environment had been improving and developing over the past seven years. The group reported having good relationships with other work groups across the hospital and that this made their job easier.

**Job satisfaction**

Participants expressed satisfaction in the job because of the knowledge application required. This fulfilment was particularly apparent for those who had medical backgrounds. The interest in the job was maintained as everyday something different happened, for no two records were the same and therefore there was little danger of the job becoming routine. The participants expressed the positive aspect of the clinical coding environment that allowed for opportunities to keep abreast of new technologies, treatments and health developments. The job also allowed for a reasonable degree of flexible working hours. As one coder stated, “You never really become a coding authority, there is no day you can say ’I am a complete coder’”.

**Future**

There was anticipation of future developments at this District Health Board as the coders had been assured that if the current vacancies could be filled there was the possibility of working on other issues, such as education, documentation and an
expansion of the range of job tasks. These changes to the makeup of coding work could include more auditing processes to maintain and ensure learning and quality.

**Conclusion**

These three focus groups involved 16 clinical coders in total, out of approximately 190 coders in the New Zealand public health sector. They represented a small regional District Health Board and two larger urban District Health Boards. All the clinical coders in the focus groups expressed high levels of job satisfaction. Irrespective of the District Health Board, the clinical coders were undertaking the same tasks in their job, accessed the same training courses and were required to produce equal data output quality for the Ministry of Health. The results from the focus groups indicated a variety of settings that clinical coders worked in and differing expectations in their jobs. The striking similarity across the three focus groups was their self definition in their work, which was that they see themselves as members of a profession carrying out professional work.

**Political**

The political context that the three focus groups were influenced by contributed to diverse descriptions of the setting for clinical coders. In Focus Group 1, the coders appeared to feel much more dissatisfied with their environment than the other two groups interviewed. Their lack of connection with other parts of the organisation and having a manager who was not knowledgeable about their work were cited as the reasons. This group did not provide any positive suggestions for improvement of either their environment or on a more personal reflective level. Although Focus Group 2 expressed dissatisfaction with their organisational location and connections, they did appear to perceive their profile within the organisation as something they were partly responsible for creating and maintaining. Similar to the first focus group they felt that a knowledgeable manager/team leader would assist in facilitating a better profile for them. In contrast, Focus Group 3 expressed a noted distance from other clinical coders in New Zealand and allied themselves more with clinical coders in Australia. They expressed much higher levels of satisfaction with their manager/team leader and their career prospects than the other groups. This satisfaction with their team leader, who
also coded, may have been a result of the small clinical coding group, most of whom had been working together for many years. However, they also saw the need for an improvement in the profile of coding as their organisation found difficulty in filling vacancies.

The confidence and orientation towards their employer and job appeared more positive in the two larger District Health Boards and may reflect that in the larger organisations the clinical coding departments are larger and more likely to be separate from the Medical Records department and the stigma of a clerical occupation. Where clinical coding is seen and valued as an integral and important part of the organisation, the clinical coders were able to reflect on improvements to their jobs. Where more fundamental issues, such as the physical and functional location of the clinical coders in the hospital, are not resolved then the focus is on rectification of these issues rather than job enhancement or enrichment.

**Power/skill**

Differences appeared across the focus groups in their perceived ability to exert influence over their jobs. The first group, all women, were very passive about their ability to influence their work environment and even though they were predominantly union members, they did not appear to actively seek the assistance of collective actions to address their concerns. Most of these coders had come through the clerical ranks into clinical coding and their lack of educational qualifications other than clinical coding may account for their position. Their lack of action to improve their position may have come from a perception of already being relatively better off than other clerical workers in the District Health Board.

The women and men of the second group comprised clinical coders with a wider range of educational backgrounds and work experiences and while they saw their level of influence over the work process as able to be improved, unlike the first group, they accepted their role and responsibility to achieve a change. This group seemed more reflective than the first and had actively been utilising the union to seek improvements. However, they had experienced frustration as they did not feel their work was well understood by the union officials. In contrast, the members of the third focus group appeared to be satisfied with many of their working conditions and level of influence.
This group of women and men included many recent immigrants to New Zealand, who may well have had lower expectations about their potential to influence their workplace.

**Profession**

The striking similarity across the three focus groups was their self definition in their work. All members of the focus groups expressed a strong opinion that they were not clerical workers. All the clinical coders described themselves as professionals or technical professionals. The reasoning given for this was the ongoing specialist knowledge and training required to undertake the work. However, there was considerable variation across the three sites in regard to how the clinical coders described the clinical coding “profession”.

Although the clinical coders in the provincial District Health Board identified as professionals they could not articulate a positive picture about what it meant for clinical coding. They did not express a picture of clinical coding other than what it is currently in the District Health Board. It seems their rationale for wanting to be seen as a profession was more to do with their location within the structure of the hospital and a desire to be seen as separate from clerical workers. These coders did not have any significant experience of coding in other District Health Boards and this may partly explain their limited view. This group of clinical coders expressed a hopeless powerlessness within their current location and could not see a strategy to change their circumstance.

In the larger urban District Health Boards the clinical coders were more likely to have backgrounds in other medical fields that did carry professional status, or to have worked in a number of District Health Boards. This background appeared to result in a positive sense of entitlement to respect from the organisation as a professional.

In the medium sized District Health Board, clinical coders in the focus group had substantial experience in coding and had coded across many District Health Boards and overseas. Two participants also had experience in nursing, although they held no formal qualification in nursing. This group was able to articulate a picture of coding as a profession that was different from their current situation. They saw coding as having a greater place in decision-making in the hospital bureaucracy and possibilities of job expansion as a result of understanding the Australian situation. They were still
reasonably tentative about this, and not overly hopeful of a move in this direction, because of feeling undervalued and poorly understood by the organisation. The lack of management support in their department meant they did not feel they had a champion to lead change. This group also felt strongly that management should encourage and foster their professional development, whereas the management felt this should be driven by the individual. If they wished to be seen as professionals it seems reasonable to expect they would take this responsibility over their own personal development. This reticence did seem indicative that they did not feel particularly empowered or ready to drive a change in their status. This group also had a poor experience of support and understanding from their union and as such, did not view the union as a possible champion for change.

The focus group members in the third and largest of the District Health Boards exhibited a greater sense of entitlement to professional status. This attitude probably can be explained by the backgrounds of those coders present in the focus group. Three of the group had professional qualifications in other medical fields (for example medical and physiotherapy) and the others had substantial experience in coding. These individuals felt comfortable engaging with clinicians to discuss patient records and issues. Because of their backgrounds they described being able to communicate more as equals, although it is not known how the clinicians received the clinical coders. The coders also had clear ideas about the future of clinical coding and how the job contained potential for expansion and more integration within the organisational network. Although this reflection is similar to both of the larger District Health Boards involved in the focus groups the articulation was more developed in the larger of the two organisations.

The third focus group did not express an affinity with other coders in New Zealand, as they felt well supported by their District Health Board and were more aligned with Australia due to the size and nature of the complexity of their District Health Board. No member of this group belonged to HIANZ, yet all were members of the Australian coding body as this was seen as more relevant to their situation.

In conclusion, it appears that all the coders saw themselves as professionals in the work that they do, but depending on other internal factors relating to their District Health Boards, this was expressed differently. Where clinical coding was seen and valued as an integral and important part of the organisation the coders were able to reflect on
improvements to their jobs. Where more fundamental issues, such as the functional location of the clinical coders in the hospital, were not resolved the focus was on rectification of these issues. Unfortunately this focus on the location of coding within the District Health Board may negatively impact on any argument that they should be afforded greater status, because the coders were not articulating why they should be treated differently and how they could bring greater benefit to the organisation. Undoubtedly where there is a critical mass of coders working with medical and paramedical degrees and backgrounds the coding department will be seen in a different light. These departments may be more likely to be innovative in the scope of the job and career advancement because of the higher expectations of the employees.

**Future**

Change in the expectations and working environment of clinical coders appears inevitable. All the participants in the focus groups expressed a position that the demands of the job would continue to increase and that coders may well be expected to include a significant auditing aspect to their role in the future. This shift is expected to improve the quality of coding outputs. Ministry of Health demands for pre-employment qualifications and increasing complexity in the job were given as reasons for an increasing profile for the occupation and eventually, an improved status within the District Health Boards. Several groups mentioned the need for a New Zealand based qualification for clinical coding to be reintroduced to increase the visibility of the coding career and to create a qualified labour pool that could help ease the current shortage of qualified and experienced clinical coders.

The clinical coders in the three focus groups described very different employment and organisation settings. The physical location within the organisation and types of connections and contact they have with other parts of the organisations appear to be a result of how their work value is viewed by the organisations. In turn this reinforces how they and their work are viewed by the organisation. Coding work is core to the economic functioning of the District Health Boards yet the coders, particularly in the smaller District Health Board, exhibit some characteristics of marginalised workers. These include the lack of career pathways and low status within the organisation.
Although all three groups perceived that their occupation was a profession, the reasons given varied across the groups and lacked any academic or intellectual basis. Comparing the clinical coders’ claims with many existing theoretical models of professions, there appears to be a lack of evidence to support the clinical coders’ claims regarding their occupational status.

The issues raised from the focus groups and the survey instrument in the 2002 Australian survey (McKenzie & Walker, 2003) were then used to assist in the development of the surveys used in this research. The following chapter presents the results of survey data from both clinical coders and managers of clinical coders.
Chapter Eight: Questionnaire Findings

The research method for this study utilised a mixed method approach and this chapter presents the next stage in the research, which involved two surveys. Quantitative results from two surveys are presented to support the rich data obtained in the focus groups. The surveys were sent to the managers or team leaders of the clinical coders in each of the 21 District Health Boards. The other survey was sent to every clinical coder employed in the District Health Boards via the clinical coding managers, who then distributed surveys to each coder. This chapter presents the findings from each of these surveys. The data was then used to explore the research aims which sought to understand the impact of gender, skill and power on occupational status and labour market position of the occupational group.

District Health Board findings

Responses were received from sixteen of the 21 clinical coding managers or team leaders located in the 21 District Health Boards. For the purposes of this chapter, the title "clinical coding manager" will be used and will include the position "team leader". The findings from the completed and returned questionnaires are presented under the major thematic areas of the preceding literature review.

Labour market position of clinical coders

In an attempt to locate clinical coders within District Health Boards, and the labour market generally, the first part of the questionnaire sought responses on general staffing issues regarding employment levels, union/advocate affiliations and gender information.

In order to provide a context for the survey information on clinical coders in New Zealand, some background information on the sector is helpful. The public health sector is large when compared to the private health sector and is divided into 21 District Health Boards, which administer the funding and provision for most of the primary, secondary and tertiary health services across the country. At the time data collection was undertaken there were 60,226 employees in the District Health Boards. Of these 47,902 (79.5 percent) were women. Of the total number of employees, 8,302 (13.8
percent) were classified as clerical or administrative workers. The average age of employees in the District Health Boards was 44.2 years (40.7 years was the New Zealand average), and the average length of service was seven years (Future Workforce, 2008).

The work that clinical coders undertake creates data that is used by the District Health Boards to demonstrate to the Ministry of Health one aspect of the outputs generated by the District Health Boards. Although the clinical coders are employed by the District Health Board they maintain a very close and direct relationship with the Ministry of Health for the standards and process of their work. The pace of coding work is dictated by the deadlines set by the Ministry and the coding reference standard, ICD-10AM is set by the Ministry.

Within the health sector clinical coders constitute a small occupational group. The initial telephone contact with clinical coding managers or team leaders in the District Health Boards was in part to ascertain the numbers of clinical coders employed. This population constituted the labour market and provided potential participants for the individual survey. At the time of this contact in June 2008, there were 192 workers employed as clinical coders.

The raw data received from the respondents showed that nine of the sixteen, (56 percent) District Health Boards employed between one and five clinical coders. Eighty-eight percent (fourteen of the sixteen) of the District Health Boards employed between just one and fifteen clinical coders. Within the context of large health organisations, this group of employees is very much a minority group. Figure 3 below presents information on the numbers of clinical coders employed in the District Health Boards that responded to this questionnaire, and also the information collected from the clinical coding managers at each District Health Board when they were telephoned prior to the distribution of the questionnaires. This comparison indicates that a good representative sample of District Health Boards' coding departments was captured in the sample.
In total these sixteen District Health Boards provided employment for 130 clinical coders. The total number of clinical coders employed in the public health sector is 192. Therefore 68 percent of all clinical coders are employed in this sample of 76 percent of District Health Boards. The sample size of some District Health Boards is very small and as a result only aggregated data of the individual surveys provides useful generalisable data. While 56 percent of District Health Boards employ between one and five clinical coders, they represent only 31 clinical coders in the total sample.

Information on the gender make up of coding staff was received from fifteen of the sixteen clinical coding managers. Of the 121 coders whose gender was identified by their clinical coding managers 84 percent, (101) were female and just 16 percent, (20) male, as shown in Table 5 below. Clearly this is a female-dominated occupation. Of the fifteen respondents that gave information on the gender of clinical coders there were seven District Health Boards that only employed women at the time of survey.

Table 5 Gender composition of clinical coders in District Health Boards

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>101</td>
<td>84</td>
</tr>
<tr>
<td>Male</td>
<td>20</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>121</td>
<td>100</td>
</tr>
</tbody>
</table>

Women are often over-represented in secondary or peripheral labour markets. While clinical coders are employed locally within District Health Boards, the small
number of the workforce and the required adherence to deadlines and standards set by the Ministry of Health results in the occupational group operating as an occupational internal labour market across all District Health Boards. The specific skills required are highly transferable across the whole sector, and the movement between District Health Boards is reasonably fluid, especially in large urban areas where District Health Boards are geographically close.

The occupational group of clinical coders exhibit some of the characteristics of an internal labour market. They have high job security and indeed, District Health Boards struggle to recruit experienced staff to fill positions. Yet coders also appear to be undervalued by the employing District Health Boards and hold low status within the organisations, even though their function is fundamental to the sound financial running of the organisation. These characteristics are usually indicative of location within the secondary labour market and commonly associated with women and occupations dominated by women.

Several questions in the questionnaire related to the stability of the coding workforce and organisational responses to planning and recruiting their coding staff. Just over a third (six, 38 percent) of the clinical coding managers that responded indicated they had vacancies at that time. Two clinical coding managers also indicated they were creating new clinical coding positions within the next twelve months. Approximately a third (five, 31 percent), of the District Health Boards reported no turnover of staff in the previous year. Two (12.5 percent) District Health Boards had experienced a 50 percent turnover of their staff, two District Health Boards reported a 33 percent turnover and three District Health Boards reported a 20 percent turnover of staff. The other four District Health Boards had less than a 17 percent turnover of coding staff. Considering the small number of coders in many of these District Health Boards a turnover rate above 20 percent could be destabilising for that workplace. In addition, it needs to be appreciated that due to the small number of clinical coders in some workplaces, the use of percentages can be misleading as to the size of problem of the turnover statistic. For example, one staff person leaving from a unit with only three in total, while certainly disruptive, cannot be seen as systemically problematic as one third of the staff of 21 leaving.

When recruitment of new clinical coders was undertaken by the District Health Boards a range of approaches were used. Most District Health Boards used several methods of
targeting potential applicants. These measures included general newspaper advertisements, intranets and the internet sites such as Seek. Internal redeployment was an avenue used in many locations and most District Health Boards advertised in specific publications such as Code L, a Ministry of Health publication. Recruitment of clinical coders appeared to present many District Health Boards with difficulties. A substantial majority (eleven, 87 percent); of the thirteen clinical coding managers that responded to the question regarding recruitment difficulties indicated they had problems attracting suitable applicants. The main problem indicated by seven of these clinical coding managers was the lack of experienced and/or qualified coders seeking positions. Other reasons cited for the recruitment difficulties were: no recognised career path; location of District Health Board giving rise to the risk of poaching; and the cost of training for individuals.

**Occupational status**

Several questions were asked that investigated the physical and functional position of clinical coders within the District Health Boards. Two-thirds (ten, 63 percent) of the District Health Boards had a separate department specifically for clinical coding. The remaining six District Health Boards embedded the clinical coding work within the Medical Records Department. The functional relationship between the clinical coding unit and District Health Board’s Decision Support Function/Unit was also explored. The Decision Support Unit is a department within the DHBs that generate reports and statistics on the operations of the organisation generally for planning and strategy decisions. Formal or informal relationships were established with the decision support function within 81 percent (thirteen) of the District Health Boards. Informal relationships were the most common, with nine of thirteen clinical coding managers indicating they existed. The remaining two clinical coding managers, who responded to this question indicating no relationship, were also District Health Boards where the clinical coding unit was located within the Medical Records Department. These findings contribute to understanding the undervalued position of clinical coders as they are generally physically, and often functionally, separate or marginalised from the business functions of the District Health Boards, as their work directly relates to the

25 Seek - www.seek.co.nz. Describes themselves as New Zealand's number one employment site.
work that decision support units undertake. Yet there is rarely a formal relationship established to allow direct input from clinical coders collating the data used.

The status of clinical coders as viewed by the District Health Boards was investigated. The last question regarding staffing issues asked the clinical coding managers to identify how they viewed the occupational status of clinical coders, and this is presented in Table 6 below. The survey offered a variety of options as listed in the table. Of the sixteen responses received, 69 percent (eleven) regard clinical coding as being a profession, 19 percent (three) as semi-professional, 6 percent (one) technical and 6 percent (one) as a clerical occupation. The tertiary District Health Board clinical coding managers that responded all regarded clinical coding as a profession. When exploring the occupational status and physical location of coding within the District Health Board structure, the only respondent that classified coding as a clerical pursuit came from a District Health Board where that function was embedded within Medical Records, a clerical-dominated area of the organisation. The other coding units located within Medical Records Departments gave classification as semi-professional in one case and as a profession in four cases.

Table 6 Cross tabulation of clinical coding perceived status and District Health Board type

<table>
<thead>
<tr>
<th>Status</th>
<th>Level of District Health Boards' Service Complexity</th>
<th>Total</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Secondary27</td>
<td>Tertiary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clerical</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>Technical</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>Semi-professional</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>18.8</td>
</tr>
<tr>
<td>Professional</td>
<td>6</td>
<td>5</td>
<td>11</td>
<td>68.6</td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td>5</td>
<td>16</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Not all District Health Board clinical coding managers responded to the question to justify why they saw coding as a profession. These comments are represented in Table 7 below. Grouping by themes, the reasons that were given cited the need for an extensive medical knowledge and specialist skills/qualifications. Other reasons given

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26 A tertiary DHB/hospital has higher levels of complex services than secondary DHBs and they tend to be larger sites in the larger centres. They may offer nationwide services/specializations, for example transplant units, burns units or spinal units.

27 A secondary DHB/hospital generally provides lower levels of complexity of services to its catchment area.
were: the experience needed to code well; and the requirement for constant upskilling. There was also one comment on the importance of the impact that coding outputs has on funding and one on patient treatment.

Table 7 Justification for professional status

<table>
<thead>
<tr>
<th>Justification</th>
<th>Number of comments</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialised skills and knowledge</td>
<td>5</td>
<td>38.5</td>
</tr>
<tr>
<td>Ongoing education</td>
<td>3</td>
<td>23.0</td>
</tr>
<tr>
<td>Takes at least six months to train</td>
<td>2</td>
<td>15.4</td>
</tr>
<tr>
<td>Impact on stakeholders</td>
<td>1</td>
<td>7.7</td>
</tr>
<tr>
<td>Not everyone can do it</td>
<td>1</td>
<td>7.7</td>
</tr>
<tr>
<td>Complex task involved</td>
<td>1</td>
<td>7.7</td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
<td>100.0</td>
</tr>
</tbody>
</table>

No justification was given by the two clinical coding managers that classified clinical coding as a clerical or technical occupation. The justifications for coding being seen as semi-professional were that it required ongoing education and training, and also that as an allied health type job it required more training than would be expected in a clerical job.

In spite of there being a significant categorisation of clinical coding as a profession or semi-profession by the clinical coding managers from the District Health Boards, the other issues already raised with regard to coders’ position in the organisation suggest they are valued as clerical workers. The work tasks of clinical coders are characterised by interpreting, categorising, extrapolating and synthesising data. These are high level skilled tasks and are carried out in fairly autonomous conditions.

**Training, development, support and unions**

The next section of the questionnaire focused on training, support and union issues. The main strategy used by District Health Boards to provide training to new staff in clinical coding was one-on-one and in-house training. This indicates very little shift from the situation in a 2004 survey when 67 percent of District Health Boards indicated they provided in-house training (Douglas, 2004). As in 2004, there is still no systematic or comprehensive approach to training and ongoing development across the sector.
Other approaches used are still to encourage the individual to undertake courses in medical terminology and clinical coding.

Questions relating to the level of training and qualifications held by clinical coders showed that 38 percent (six) of the sixteen District Health Boards currently employed no fully qualified clinical coders. This must be of some concern for quality control and in-house training. A further 19 percent (24) of the clinical coders employed by the sixteen District Health Boards were currently studying introductory qualifications.

The support offered to clinical coders for their ongoing development and achievement of formal qualifications was predominantly offered as a time allowance and paid tuition fees. Thirteen of the sixteen (81 percent) District Health Boards took this approach. The remaining three District Health Boards only reimbursed fees upon the successful completion of courses.

Support for clinical coders was available within District Health Boards through their relationship with clinicians. Eighty-one percent of District Health Board participants (thirteen) had direct contact occurring between coders and clinical staff for learning opportunities and/or clarification of record queries. Most commonly this contact was for query clarification, but there were also formal sessions consisting of consultations for information dissemination. Almost all District Health Boards (94 percent) used either formal or informal activities to assess the quality of the coding outputs of the department. Internal and peer coding audits were most commonly used for this assessment. Only two clinical coding managers recorded the use of external processes in their quality control approach.

Feedback was sought on whether the District Health Boards experienced adequate support for their clinical coders and the training of them. Of the sixteen clinical coding managers, nine (56 percent) felt that they did receive adequate support from external bodies such as the Ministry of Health, HIANZ (Health Information Association of New Zealand) and education institutions. Six clinical coding managers felt the external support they received was inadequate and one District Health Board clinical coding manager did not respond to the question. Statements that indicated support for the external provision of assistance related mainly to that received through relationships with HIMAA, (Health Information Association of Australia), HIS, (Health Information Services) and HIANZ. The availability of study days offered through the Ministry of
Health was also cited as very useful. The dissatisfaction with external support revolved around: no specific education in clinical coding offered within New Zealand; no specific support for new trainees; no central control, and no ability to specialise.

Employment issues

Employment issues and the contractual context of the employment of clinical coders were also explored through a number of questions. As shown in Figure 4 below, the distribution of types of formal employment agreements was mixed. Seven (44 percent) employed clinical coders exclusively under Collective Employment Agreements, a further seven (44 percent) had a mix of Collective and Individual Employment Agreements on site and two (12 percent) employed their clinical coders exclusively on Individual Employment Agreements. Therefore, clinical coders employed under Collective Employment Agreements were in 88 percent of the District Health Boards that participated in this questionnaire. At the two sites where only Individual Employment Agreements were used, both clinical coding managers indicated they would prefer the clinical coders to be part of a collective employment agreement and for a union to be involved.

Figure 4 Types of employment agreements used in District Health Boards to employ clinical coders: Collective Employment Agreements (CEA) and Individual Employment Agreements (IEA)
A general question was put to District Health Boards on their attitudes towards union involvement in the clinical coding workplace. Half of the sixteen respondents indicated a positive benefit as a result of union involvement, four indicated a negative benefit and four did not respond to the question. Positive comments from clinical coding managers about the inclusion of unions in the employment issues of clinical coders included: the possibility of developing nationwide standards through a union strategy; contribution to the stability of the work environment for staff; and, developing a strategy for career development and progress. These clinical coding managers indicated a collaborative approach to these issues as likely to create positive outcomes for both clinical coders and District Health Boards. The only negative attitude to union involvement from one clinical coding manager was a perception that there was a lack of union knowledge regarding the clinical coders’ role and this was seen as an obstacle to productive negotiations.

**Future issues for clinical coding**

The survey finished with several open-ended questions exploring the clinical coding managers’ attitudes to future initiatives and directions for clinical coding. Most of the clinical coding managers saw significant change to the future role of clinical coders and clinical coding. This change was in the area of clinical coders moving into an “expert advisor” and auditing role. Three respondents thought there would be no change and one respondent anticipated a general diminution of the coding role within the District Health Boards.

When asked how prepared they felt their workforces were for future changes, half thought they were not prepared. Forty-four percent (seven) felt they were prepared for any changes and one respondent did not comment. The larger, tertiary District Health Board clinical coding managers who did participate in the survey were “not prepared for the future”. Respondents suggested a greater need for education, and at more advanced levels, if they were to prepare the workforce for future changes. Flowing on from this was a perceived need for a change in the recognition of clinical coding by District Health Boards and externally. This could include recognition of the occupation as a profession and also the introduction of a national registration requirement. Greater flexibility of the coding workforce was also seen as desirable in the future. This would allow clinical coding managers greater ability to manage workload demands. Currently,
competition for clinical coders resulted in poaching of experienced staff, rather than a coordinated response to the sector’s needs.

The clinical coding managers’ comments regarding the impact of electronic health records on clinical coding practice was seen as mainly positive by six clinical coding managers since it could result in greater productivity, with records easier to read and the ability to accommodate remote coding, allowing clinical coders to work from their homes. The introduction of new technologies was seen as providing opportunities for advancement and individual benefit rather than any notion of deskilling of clinical coders. A further six clinical coding managers identified the negative possibilities of redundancies as a result of increased technologies and electronic health records, along with an increase in occupational health issues, in particular eye strain. No response to question was given by three clinical coding managers.

A final open question allowed other comments to be given by the clinical coding managers. Two clinical coding managers mentioned the undervaluing of clinical coders and their qualifications. One clinical coding manager commented that her/his District Health Board did have a structured career pathway for clinical coders.

**Summary**

In summary, the labour market position and status of clinical coders within the District Health Boards is complex to identify and influenced by many factors. The findings from the District Health Boards’ survey suggest that the clinical coding managers who responded to the survey overwhelmingly hold clinical coders in high esteem and categorise them as professionals or semi-professionals. Nevertheless, they acknowledge that operationally, clinical coding is not highly regarded within the organisation and describe employment conditions that locate clinical coding firmly within the clerical function of the organisation.

The absence of robust training and qualifications, and the tendency for many District Health Boards to redeploy employees from other clerical areas to learn the complex task of clinical coding “on-the-job”, really reinforces the idea that clinical coders are generally undervalued by the organisations. There is no requirement placed on clinical coders to gain formal qualifications, although this is desirable. In most clinical coding
departments the responsibility for professional development is left to the staff member, although most departments gave a time allowance and/or contribution towards fees.

The future prospects for clinical coding were characterised by change and, interestingly, an accompanying belief by many respondents that the clinical coding workforce was ill-prepared. As part of this impending change, some Clinical Coding Managers/Team Leaders saw a need to elevate the perceived status of clinical coders within the District Health Boards.

**Individual clinical coder findings**

This questionnaire was distributed to every clinical coder employed in the 21 District Health Boards in the country. A total of 193 questionnaires were sent out to the District Health Boards clinical coding departments for distribution to clinical coders. This had been previously agreed to by the clinical coding managers in the initial phone call made to each of them. This included one questionnaire sent to a clinical coder who works as a contractor in several District Health Boards and had expressed an interest to be involved in the research project. The contractor's completed survey was included with the other clinical coders' responses in the District Health Board where they worked most often. By the close off date, over half (106, 55 percent) were returned. These returned questionnaires were from 20 of the 21 District Health Boards, and only one of those District Health Boards' Clinical Coding Departments returned just one response. These survey results, therefore, are from an excellent representative sample.

**General demographics**

The questionnaire sought general information from respondents on age, sex and ethnic/cultural background. Of the 106 questionnaires returned 105 answered this question and 80.9 percent (85) identified as female and 19.1 percent (20) were male. This reflects the overall ratio as indicated by the District Health Boards’ questionnaire of all clinical coders employed.

The ages of clinical coders in the sample that responded to the question (104 out of 106) indicated an aging workforce in this occupation. Figure 5 below clearly shows that
three-quarters (79, 76 percent) were aged 40 or above. Clinical coding may be an occupation that lends itself to later age entry. This also may be due to the low occupational profile it currently holds. In the general population, knowledge of clinical coding as an occupation and the function coders fulfil is not widely understood and therefore, clinical coding is not often an early career choice for job seekers.

**Figure 5 Ages of clinical coders**

![Bar chart showing the distribution of ages of clinical coders](image)

In the demographics section, the final question asked for respondents’ ethnicity or cultural identity. While it was not the intention to necessarily link analysis to ethnic identity, this information was seen as useful to create a fuller profile of the New Zealand clinical coding workforce. Table 8 below presents the data on respondents’ ethnicity/cultural background. The most common ethnic background was Pakeha/European with 61.3 percent (65).
<table>
<thead>
<tr>
<th>Ethnicity/Cultural Group</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pakeha/European</td>
<td>65</td>
<td>61.3</td>
</tr>
<tr>
<td>Maori</td>
<td>8</td>
<td>7.6</td>
</tr>
<tr>
<td>Pacifica</td>
<td>3</td>
<td>2.8</td>
</tr>
<tr>
<td>Asian</td>
<td>9</td>
<td>8.5</td>
</tr>
<tr>
<td>Indian</td>
<td>9</td>
<td>8.5</td>
</tr>
<tr>
<td>Filipino</td>
<td>3</td>
<td>2.8</td>
</tr>
<tr>
<td>Sri Lankan</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>Chinese</td>
<td>2</td>
<td>1.9</td>
</tr>
<tr>
<td>other Asian</td>
<td>6</td>
<td>5.7</td>
</tr>
<tr>
<td>MELAA*</td>
<td>6</td>
<td>5.7</td>
</tr>
<tr>
<td>no response (nr)</td>
<td>3</td>
<td>2.8</td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
<td>100.0</td>
</tr>
</tbody>
</table>

* Middle East, Latin America and Africa

Table 9, which follows presents a comparison of the ethnicity of clinical coders and general population from the 2006 Census. In the general population the proportion of Pakeha/Europeans is slightly more than that of clinical coders at 75.5 percent. There are significantly greater variations between clinical coders and the general population for all the other ethnic groups (with Census figure in brackets); Maori 7.5 (14.0) percent; Pacifica 2.8 (6.6) percent; Asian 19.8 (8.8) percent; and Middle East, Latin America and Africa (MELAA) 5.7 (0.9) percent respectively (Statistics New Zealand, 2007c). Maori and Pacifica groups are under-represented in the clinical coding workforce while Asian and MELAA groups in clinical coding significantly overrepresented when compared to the general population.
Table 9 Ethnicity comparison between clinical coders and the New Zealand 2006 Census

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Clinical Coders (percent)</th>
<th>2006 Census (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pakeha/European</td>
<td>61.3</td>
<td>75.5</td>
</tr>
<tr>
<td>Maori</td>
<td>7.6</td>
<td>14.0</td>
</tr>
<tr>
<td>Pacifica</td>
<td>2.8</td>
<td>6.6</td>
</tr>
<tr>
<td>Asian</td>
<td>19.8</td>
<td>8.8</td>
</tr>
<tr>
<td>MELAA</td>
<td>5.7</td>
<td>0.9</td>
</tr>
<tr>
<td>Other</td>
<td>0.0</td>
<td>10.7</td>
</tr>
<tr>
<td>no response (nr)</td>
<td>2.8</td>
<td>4.2</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>120.7*</td>
</tr>
</tbody>
</table>

* The Census allows for multiple identification of ethnicity and therefore exceeds 100.

Source: (Statistics New Zealand, 2007c)

**Work environment**

The first section of the questionnaire sought responses on the clinical coders’ work environment. Over two-thirds (73, 69 percent) were employed full-time, 23 (22 percent) were part-time and the remaining eight were employed full-time, but their time was not exclusively occupied with clinical coding. Just over half (twelve, 52 percent) of the 23 part-time clinical coders worked between 21–30 hours per week. Six coders worked between six and 20 hours per week and three worked between 31 and 35 hours per week. Two respondents indicated they had flexible working hour arrangements.

The majority (91, 86 percent) of clinical coders worked in stand-alone clinical coding departments. Other physical locations were Medical Records (10 percent) and financial or planning departments accounting for two respondents. There were three non-responses.

Eighty-eight percent (93) of the clinical coders were employed under a collective employment agreement, three clinical coders reported being employed under an individual employment agreement, a further 7 percent (eight) did not know what type of arrangement they were employed under and two did not respond.

Regarding clinical coders’ attitudes to their physical work location, over two-thirds (73, 69 percent) were satisfied, while the remaining third expressing dissatisfaction with their environment. The main issues were overwhelmingly: lack of space; lack of windows and natural light; and, inadequate temperature control. Other comments
indicating dissatisfaction relating to work location were: distance from functional contacts; noisy distractions; and, needing to be located away from Medical Records. Many clinical coders felt the functions of Medical Records and clinical coding were quite separate and therefore, they should not be housed together.

Information was sought regarding the salary levels clinical coders received, their experience in coding and the length of time they had held their current position. The average wage in New Zealand for all wage and salary earners at the time of the survey was $35,828. However, the average wage for women was $30,576, and for men $40,404 (Statistics New Zealand, 2008).

Table 10 Clinical coders' annual salaries

<table>
<thead>
<tr>
<th>Salary, $ p.a.</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>30,001 – 35,000</td>
<td>4</td>
<td>3.8</td>
</tr>
<tr>
<td>35,001 – 40,000</td>
<td>30</td>
<td>28.3</td>
</tr>
<tr>
<td>40,001 – 45,000</td>
<td>23</td>
<td>21.7</td>
</tr>
<tr>
<td>45,001 – 50,000</td>
<td>37</td>
<td>35.0</td>
</tr>
<tr>
<td>50,001 – 55,000</td>
<td>10</td>
<td>9.4</td>
</tr>
<tr>
<td>55,001 – 60,000</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>no response</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
<td>100.0</td>
</tr>
</tbody>
</table>

As Table 10 shows above, 85 percent received an annual salary between $35,001 and $50,000. Their median salary was between $45,000 and $50,000. Clinical coders received remuneration generally above the country’s average wage.
Table 11 Cross tabulation of salary and years of clinical coding experience

<table>
<thead>
<tr>
<th>Salary $ p.a.</th>
<th>Less than 1</th>
<th>1 – 4</th>
<th>5 - 9</th>
<th>more than 10</th>
<th>n/r</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>30001-35000</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>35001-40000</td>
<td>10</td>
<td>8</td>
<td>5</td>
<td>7</td>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td>40001-45000</td>
<td>0</td>
<td>5</td>
<td>8</td>
<td>10</td>
<td>0</td>
<td>23</td>
</tr>
<tr>
<td>45001-50000</td>
<td>0</td>
<td>8</td>
<td>15</td>
<td>14</td>
<td>0</td>
<td>37</td>
</tr>
<tr>
<td>50001-55000</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>6</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>55001-60000</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>no response</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>24</td>
<td>32</td>
<td>39</td>
<td>1</td>
<td>106</td>
</tr>
</tbody>
</table>

The cross tabulation of salaries and experience show interesting results, however, the sample size is such that it would be reckless to generalise too widely from them. Nevertheless, as Table 11 shows, the clinical coders in the sample have significant experience in the field of clinical coding. Over a third, 37 percent (39) had more than ten years' coding experience, 30 percent (32) had between five and nine years' experience, 23 percent (24) had between one and four years' experience and the remaining 9 percent (ten) had less than one years’ experience. It is difficult to ascertain whether the smaller number of clinical coders in the less than one year coding group is indicative of a diminishing number of coders entering the occupation or whether more experienced coders were more motivated to participate in the research.

Clinical coders generally started clinical coding on at least the national average wage, with only three clinical coders earning less than the average with less than four years experience. Of these three, two were women, so this level of salary was at the national average salary for women, unlike the male in this salary band, whose salary was well below the national male average of $40,404.

From the results collected and presented in Table 10 and Table 11 clinical coders appeared to reach their peak salary potential with between five and nine years' experience. With regard to the salary levels paid to clinical coders and their level of experience, there appears to be a bulge or plateau of the remuneration in the $45,001 to $50,000 band. In all but the “less than one year experience” band, this is the median remuneration level. Of the 106 coders in the sample 35 percent (37) were paid in this
bracket of $45,001 to $50,000. This is most likely linked to salary scale ceilings for clinical coders in District Health Board employment agreements. Moving into positions with management responsibilities may explain some of the higher remuneration levels.

Table 12 Cross tabulation of salary and years of coding for males

<table>
<thead>
<tr>
<th>Years coding</th>
<th>Salary $ p.a.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>30001 - 35000</td>
<td></td>
</tr>
<tr>
<td>&lt; 1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>1 - 4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>5 - 9</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>&gt; 10</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>35001 - 40000</td>
<td></td>
</tr>
<tr>
<td>&lt; 1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>1 - 4</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>5 - 9</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>&gt; 10</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>40001 - 45000</td>
<td></td>
</tr>
<tr>
<td>&lt; 1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1 - 4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5 - 9</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>&gt; 10</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>45001 - 50000</td>
<td></td>
</tr>
<tr>
<td>&lt; 1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1 - 4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5 - 9</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>&gt; 10</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>50001 - 55000</td>
<td></td>
</tr>
<tr>
<td>&lt; 1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1 - 4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5 - 9</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>&gt; 10</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>55001 - 60000</td>
<td></td>
</tr>
<tr>
<td>&lt; 1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1 - 4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5 - 9</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>&gt; 10</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>n/r</td>
<td></td>
</tr>
<tr>
<td>&lt; 1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1 - 4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5 - 9</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
| > 10         | 0             | 1     | 6

Table 13 Cross tabulation of salary and years of coding for females

<table>
<thead>
<tr>
<th>Years coding</th>
<th>Salary $ p.a.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>30001 - 35000</td>
<td></td>
</tr>
<tr>
<td>&lt; 1</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>1 - 4</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>5 - 9</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>&gt; 10</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>35001 - 40000</td>
<td></td>
</tr>
<tr>
<td>&lt; 1</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>1 - 4</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>5 - 9</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>&gt; 10</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>40001 - 45000</td>
<td></td>
</tr>
<tr>
<td>&lt; 1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1 - 4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5 - 9</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>&gt; 10</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>45001 - 50000</td>
<td></td>
</tr>
<tr>
<td>&lt; 1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1 - 4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5 - 9</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>&gt; 10</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>50001 - 55000</td>
<td></td>
</tr>
<tr>
<td>&lt; 1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1 - 4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5 - 9</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>&gt; 10</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>55001 - 60000</td>
<td></td>
</tr>
<tr>
<td>&lt; 1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1 - 4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5 - 9</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>&gt; 10</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>n/r</td>
<td></td>
</tr>
<tr>
<td>&lt; 1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1 - 4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5 - 9</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
| > 10         | 0             | 1     | 33

The data above in Table 12 and Table 13 shows the cross tabulation of gender, years of coding experience and salary band. There were two instances of incomplete data. The following two histograms describe this information enabling a visual comparison between male and female clinical coders. The stacked bars in Figure 6 and Figure 7 indicate 100 percent of the clinical coders, male and female, in each of the salary bands.
Figure 6 Male clinical coders' salaries and years of coding experience

Figure 7 Female clinical coders' salaries and years of coding experience

The uneven gender proportions in the sample may limit the usefulness of the comparison between men and women, as there were only 20 male respondents and 85
females. Nevertheless, the general trend captured by these figures is interesting. The higher salary bands does suggest that for women, as they gain more years of experience they are more likely to command a higher salary. The only woman in the top salary band had over ten years experience, in the $50,001 - $55,000 salary band next down 70 percent of the women had over ten years’ experience and the remaining women had between five and nine years’ experience. In contrast, the male clinical coders in the $50,001 - $55,000 salary band all had only had between five and nine years’ experience as coders.

Several explanations for these contrasts may be offered. The first argument may be in respect to the small sample size. Secondly, continuity of service may explain the salary variations. Women commonly have broken service due to family responsibilities and so, may progress at a slower rate through the grades linked to salary increments. A third possible explanation for the differences in salary trends may be related to qualifications. The higher salary levels for some men may be a result of higher qualifications in either clinical coding specifically or in other medical fields. The results showed that more men, sixteen (80 percent), than women, 51 (60 percent), held qualifications other than clinical coding qualifications. Finally, another possible explanation for the differences might well be gender discrimination against women, as far as they are viewed in the workplace and their value to the organisation. This could also stem from gender differences and perceptions in contract negotiation and men having stronger negotiation positions.

**Figure 8 Years in current clinical coding position**
The results indicated in Figure 8 above indicate that the clinical coding workforce, as represented by the respondents, is reasonably stable. Twenty-one of the 39 clinical coders (54 percent) with more than ten years' experience in coding have been in their current position for more than ten years. Eighty-eight percent of clinical coders (28 of the 32) with five to nine years' coding experience have been in their current position between five and nine years. With many District Health Boards located in regional centres, and some of these being fairly remote from other centres, job stability in such specialised jobs would be expected. In addition, the predominantly women workforce may have less opportunity for relocation due to family or other responsibilities.

**Affiliations**

The second section of the individual questionnaire focused on advocacy/representative group membership by clinical coders, and reasons why they may or may not choose to belong to the range of relevant bodies. More than half (55 percent) of the respondents belonged to a union. Breaking this down on a gender basis, women were slightly more likely to belong to a union than men. Women’s membership was at 56 percent (47) and for men this figure was 45 percent (nine), accepting that the sample was small. The majority (71 percent) of clinical coders who were union members belonged to the Public Service Association (PSA). A further 12 percent (seven) were members of the nurses’ union (NZNO), two coders (3 percent) were clerical union members and eight coders did not identify the union to which they belonged.

Those respondents (48) that indicated they did not belong to a union were asked to indicate the main reason why they chose not to belong. Multiple responses were not allowed although, on reflection, this may have been more useful for analysis. Of the 48 non-union members, fourteen had belonged to a union in the past but had resigned, therefore they were excluded from further analysis. As shown in Table 14 below, of the remaining 34 clinical coders who did not belong to a union, the most frequent reason given for not joining was the high cost of membership (nine, 26.5 percent). Seven (20.6 percent) clinical coders indicated a lack of belief in unions generally as the reason for not joining, five (14.7 percent) had just not gotten around to joining and a further four (11.8 percent) coders expressed a lack of faith in the specific union that was eligible to cover them. A single coder saw no benefit in belonging to a union. Finally, eight (23.5
percent) coders indicated that they had reasons other than those listed for non-membership of unions. These respondents did not detail these reasons.

**Table 14 Reasons for not belonging to a union**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Membership too expensive</td>
<td>9</td>
<td>26.5</td>
</tr>
<tr>
<td>Don’t believe in unions</td>
<td>7</td>
<td>20.6</td>
</tr>
<tr>
<td>Have not got round to joining</td>
<td>5</td>
<td>14.7</td>
</tr>
<tr>
<td>Have no faith/confidence in the union</td>
<td>4</td>
<td>11.8</td>
</tr>
<tr>
<td>Can see no benefit to membership</td>
<td>1</td>
<td>2.9</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
<td>23.5</td>
</tr>
<tr>
<td>Total</td>
<td>34</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The question was then asked whether they belonged to the Health Information Association of New Zealand (HIANZ). Nearly two-thirds (67, 63 percent) indicated they did not belong and the remaining 38 (36 percent) stated they did belong, with one non-response. For some their membership was part of a corporate membership, which covered clinical coders in that District Health Board.

Finally, respondents were asked about their membership of the Health Information Management Association of Australia (HIMAA). An overwhelming 86 percent (91) of respondents do not belong.

In summary, over half of the clinical coders belonged to a union, whereas membership of HIANZ and HIMAA was 36 and 14 percent respectively. The higher membership in the unions amongst clinical coders may be explained by the ability of unions to affect wages and conditions for workers. Although HIANZ and HIMAA are concerned with the training and education of clinical coders, they do not impact on the working lives of clinical coders in the way unions potentially can. Furthermore, many District Health Boards hold corporate membership of HIANZ and HIMAA, reducing the need for individual memberships.

**Training, development, and support**

The third part of the questionnaire explored training and qualifications of clinical coders and the level of support they received from their workplaces to further their
qualifications. The first question sought information regarding clinical coder’s previous career areas. Just under half (48, 45 percent) of the respondents came from a clerical background, as shown in Table 15 below.

**Table 15 Career backgrounds of clinical coders**

<table>
<thead>
<tr>
<th>Career background</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clerical/administration</td>
<td>48</td>
<td>45.2</td>
</tr>
<tr>
<td>Medical practitioner with overseas qualification</td>
<td>20</td>
<td>18.9</td>
</tr>
<tr>
<td>Registered nurse</td>
<td>13</td>
<td>12.3</td>
</tr>
<tr>
<td>Other nurse</td>
<td>7</td>
<td>6.6</td>
</tr>
<tr>
<td>Health information management</td>
<td>6</td>
<td>5.7</td>
</tr>
<tr>
<td>Other - not specified</td>
<td>6</td>
<td>5.7</td>
</tr>
<tr>
<td>Other medical</td>
<td>4</td>
<td>3.8</td>
</tr>
<tr>
<td>Midwife</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>No response</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>106</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Significantly, 19 percent (20) came from a medical background. These clinical coders held medical degrees from overseas, particularly countries whose qualifications are not recognised in New Zealand. Clinical coding was undertaken by a number of individuals, 27 (26 percent), who came from varied nursing backgrounds. The nursing background respondents held registered nurse qualifications (thirteen, 12 percent), another thirteen (12 percent) other nursing backgrounds, namely enrolled nursing training, and one respondent came from a midwifery background. Six of the respondents, 6 percent, came from health information management careers.

Participants were then asked about the qualification they held in clinical coding. Two-thirds (72, 68 percent) indicated that they held specific coding qualifications. Most of these responses (70) identified specific qualifications: 27 percent (nineteen) coders held the Auckland University of Technology Clinical Coding Certificate; 24 percent (seventeen) had completed an introductory course in clinical coding; and, another 24 percent (seventeen) held intermediate level qualifications. A further 10 percent (seven) held qualifications from HIMAA and four held advanced level qualifications. Two respondents (3 percent) had completed a Certificate in Health Information management and 6 percent (four) of other coders reported undertaking training or papers which in
themselves do not constitute a qualification in clinical coding. These were papers in anatomy and physiology, in-house training and the Auckland District Health Board training, which is not a recognised formal course.

The questions then shifted to focus on the clinical coders’ workplace support for participation in ongoing education. Most (98, 93 percent) of the respondents indicated that their workplace provided support for ongoing education and qualification attainment. The most common type of support offered by workplaces was the opportunity to attend study days; this practice was identified by 51 respondents. This supports the findings from the District Health Boards’ survey. Thirty-three respondents indicated there was support to undertake HIMAA courses and 19 respondents listed seminars and in-house training offered by the District Health Boards. Seven respondents identified conferences as an opportunity offered by their employer and three identified the availability of reference material by their employers as their support.

For 62 (59 percent) of the respondents their employer offered support in the form of time off and the payment of tuition fees. In more than a fifth of clinical coders’ situations (23, 22 percent), employers only paid fees, with the individual required to study in their own time. A further eleven respondents (10 percent) received time off work but they had to pay their own tuition fees. Ten respondents did not respond to this question.

As already stated most respondents identified a range of activities to keep current in their work, however, none of the respondents identified any active pursuit of information.

**Job attitudes**

This section of questions sought responses on clinical coders’ attitude to their job, their role in it and how they thought the organisation viewed them, all using a five point Likert Scale. A single question was asked as to whether the participant generally liked their job and most (99, 93 percent) responded positively to the question. Participants were asked to indicate their level of job satisfaction, and the results in Table 16 show that 78 percent of respondents indicated a level of job satisfaction that was either “enjoyable” or “enjoy a lot”. Only two respondents indicated a definite lack of enjoyment in their work.
Participants were asked to list things that they liked about their work. The comments fell into three areas; *people, things* and *learning*. Comments relating to *learning* were most numerous, with a total of 79 responses. Specific comments were: enjoying learning new things (31); the intellectual demand of the job (28); the autonomy and independence in the job (thirteen); and, using their knowledge (seven). The next most frequent area commented on was to do with *people* (46 comments), colleagues (36), and good team leaders (ten). The last area of comments, *things*, attracted 37 comments covering flexible working arrangements (31) and working environment (six). These results show that much of the enjoyment derived from clinical coders’ work is from the learning and challenging nature of the job.

Participants were asked a series of questions about their perceived degree of influence in the workplace. Table 17 below collates their responses for influence on how their work is done.

**Table 16 Job satisfaction for clinical coders**

<table>
<thead>
<tr>
<th>Enjoy a lot (5)</th>
<th>Enjoyable (4)</th>
<th>Neither enjoy nor not enjoy (3)</th>
<th>Not enjoyable (2)</th>
<th>Don’t enjoy at all (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>33</td>
<td>50</td>
<td>21</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>31.1%</td>
<td>47.2%</td>
<td>19.8%</td>
<td>1.9%</td>
<td>0</td>
</tr>
</tbody>
</table>

These results indicate that most (95, 89.6 percent) respondents felt they had some say over how their work was done. This varies greatly, from the 21.7 percent who felt that they always had a say in the process, through to the 26.4 percent who had influence now and again. Clinical coders perceived that they had a reasonable level of workplace participation with their team leaders and managers.

The next question sought a response as to whether the participants felt they had significant influence in the decisions that affected their working speed. This question
was asked because of concerns raised in some of the focus groups of an emphasis on throughput rather than accuracy. Results are presented in Table 18 below.

**Table 18 Clinical coders’ influence over decisions affecting working speed**

<table>
<thead>
<tr>
<th>Always (5)</th>
<th>Often (4)</th>
<th>Now and again (3)</th>
<th>Rarely (2)</th>
<th>Never/almost never (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>30</td>
<td>39</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>19.8%</td>
<td>28.3%</td>
<td>36.8%</td>
<td>10.4%</td>
<td>4.7%</td>
</tr>
</tbody>
</table>

In response to this question, 84.9 percent of respondents indicated they felt they had a say or some influence over the decisions that affected their working speed, although a third of this group (36.8 percent) indicated this was only now and again. Just under a fifth (19.8 percent) felt they always had influence in this area of their work. Compared to the previous question, there was a decrease in their sense of influence in this area of their work.

A further question was asked regarding clinical coders’ influence on the organisation of the workplace. The results are displayed in Table 19 below.

**Table 19 Clinical coders’ influence on workplace organisation**

<table>
<thead>
<tr>
<th>Always (5)</th>
<th>Often (4)</th>
<th>Now and again (3)</th>
<th>Rarely (2)</th>
<th>Never/almost never (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>16</td>
<td>35</td>
<td>26</td>
<td>20</td>
</tr>
<tr>
<td>8.5%</td>
<td>15.1%</td>
<td>33.0%</td>
<td>24.5%</td>
<td>18.9%</td>
</tr>
</tbody>
</table>

In a marked contrast with the previous two questions on workplace influence with regard to clinical coders’ work practices, when asked if they had influence over the management of their workplace and how it is organised 46 (43.4 percent) indicated they rarely had influence or no influence at all. Only nine (8.5 percent) felt they always had an opportunity to influence the workplace and a third (35, 33 percent) indicated they had some influence now and again.

These three questions relating to the influence clinical coders have in their workplace indicate that while on an individual level clinical coders have influence over how they carry out their work (89.6 percent), they have slightly less influence (84.9 percent) over the factors that determine the speed they can complete their work. When looking at a
wider influence over their workplace and how it is organised and managed clinical coders have perceived a reduced level of influence with only half (56.5 percent) indicating they have any input.

The participants were then questioned on the degree to which they felt valued by their employing organisation. The results are presented in Table 20 below.

**Table 20 Clinical coders' feeling of value and acknowledgement by organisation**

<table>
<thead>
<tr>
<th>To a very high degree (5)</th>
<th>To a high degree (4)</th>
<th>Partly (3)</th>
<th>To a lesser degree (2)</th>
<th>To a very little degree (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>28</td>
<td>43</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td>6.6%</td>
<td>26.4%</td>
<td>40.6%</td>
<td>9.4%</td>
<td>17.0%</td>
</tr>
</tbody>
</table>

A third of respondents expressed feeling valued to a “very high degree” or to a “high degree”, 6.6 percent and 26.4 percent respectively. The majority (43, 40.6 percent) of the respondents felt only “partly” valued. A further quarter felt valued to a “lesser degree” or to a “very little degree”. Honneth (1995) argues that there is a moral centrality to recognition and valuing, such that the notion of being partly valued lacks any real authenticity as an expression of being valued at all. In light of this perspective, the data has been interpreted to mean that only one third (35, 33 percent) of the respondents felt valued; these respondents reported a "high" or "very high" feeling of value by the District Health Boards. However, this appears to be offset by the high levels of job satisfaction (93 percent like their job). This job satisfaction comes from the autonomy and independence that clinical coders derive from their positions and the satisfaction from the intellectual challenges in the job.

The last question in the area of job attitude asked participants to describe the occupation of clinical coding in a parallel way to the District Health Board questionnaire. They were asked to identify whether they saw clinical coding as clerical, technical, semi-professional or professional, and to justify their choice. Table 21 below presents these findings.
Table 21 Identification of occupational status of clinical coding

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>55</td>
<td>51.9</td>
</tr>
<tr>
<td>Semi-professional</td>
<td>38</td>
<td>35.9</td>
</tr>
<tr>
<td>Technical</td>
<td>10</td>
<td>9.4</td>
</tr>
<tr>
<td>Clerical</td>
<td>3</td>
<td>2.8</td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
<td>100.0</td>
</tr>
</tbody>
</table>

More than half of the respondents (55, 51.9 percent) perceived their occupation as a profession, with a further 38 (35.9 percent) classifying clinical coding as a semi-profession. In total 87.8 percent of clinical coders identified their occupation as a profession or semi-profession. This finding is virtually identical to the District Health Board responses of 87.6 percent for the same question.

Only three of the 106 participants classified coding as a clerical occupation. This is an interesting finding considering the responses given to questions regarding their clinical coding qualifications, which indicated that 68 percent of the respondents held specific clinical coding qualifications and of these 72 individuals the majority (51 percent) only held introductory qualifications in clinical coding. While some of these coders may well go on to obtain higher qualifications, many of them had already been in their jobs for between five and nine years and may be less likely to see a need to progress their education further.

The justifications for this categorising of coding as a profession can be categorised into common themes and are presented in Table 22 below. This was an open response question.


Table 22 Justification for clinical coding as a profession

<table>
<thead>
<tr>
<th>Justification</th>
<th>Number of comments</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialised skills and knowledge</td>
<td>26</td>
<td>38.2</td>
</tr>
<tr>
<td>Ongoing education</td>
<td>10</td>
<td>14.7</td>
</tr>
<tr>
<td>Impact on stakeholders</td>
<td>9</td>
<td>13.3</td>
</tr>
<tr>
<td>Not everyone can do it</td>
<td>9</td>
<td>13.3</td>
</tr>
<tr>
<td>Takes at least one year to train</td>
<td>6</td>
<td>8.8</td>
</tr>
<tr>
<td>Similar to other professions</td>
<td>6</td>
<td>8.8</td>
</tr>
<tr>
<td>Complex task involved</td>
<td>2</td>
<td>2.9</td>
</tr>
</tbody>
</table>


The main reason given for clinical coding being a profession was that it required a high level of specialised skills and knowledge. Considering the relatively low levels of formal qualifications that the respondents held it would be reasonable to assume that many of the skills and knowledge referred to are seen as learnt on-the-job and come from experience in the role. Table 23 below presents the justifications given for the classification of clinical coding as semi-professional. Again, multiple answers were allowed to be given.

Table 23 Justification for clinical coding as a semi-profession

<table>
<thead>
<tr>
<th>Justification</th>
<th>Number of comments</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Need medical knowledge</td>
<td>15</td>
<td>51.7</td>
</tr>
<tr>
<td>Need qualification but not medical degree</td>
<td>5</td>
<td>17.1</td>
</tr>
<tr>
<td>Need qualifications but not clerical ability</td>
<td>3</td>
<td>10.4</td>
</tr>
<tr>
<td>Qualification not required</td>
<td>3</td>
<td>10.4</td>
</tr>
<tr>
<td>Not problem solving so not technical</td>
<td>3</td>
<td>10.4</td>
</tr>
</tbody>
</table>

The two main comments here (68.8 percent) suggest the coding occupation is semi-professional as the specialised knowledge of medical terminology and procedures is required, but not to the extent of a medical degree. Another 10.4 percent of comments indicated a belief by respondents that no clerical ability is required and therefore, this
sets clinical coding apart from other clerical type work in the District Health Boards. Interestingly, a further 10.4 percent of comments stated that no qualification was required, which meant that it was a semi-profession. The final three (10.4 percent) comments defined coding as semi-professional rather than technical on the basis that no problem solving was required.

With respect to the justification of the occupation being seen as a technical task, the requirement for medical knowledge was given by three respondents. So the justification of a medical knowledge requirement was given to support clinical coding as a profession, a semi-profession and a technical occupation. Two other comments were received supporting coding as a technical pursuit. One suggestion was that coding was more than clerical and the other suggested that coding has no autonomy or creativity but rather it was technical.

Finally, three comments were received supporting classification into the clerical category. These comments were that coders had to meet deadlines, the work was important and that it was a computer based task.

When gender is cross tabulated with the categorisation of clinical coding as an occupation, there was no evidence that gender impacts on the decision. Table 24 below presents this data.

**Table 24 Cross tabulation of gender and occupational status**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Clerical</th>
<th>Technical</th>
<th>Semi-professional</th>
<th>Professional</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>0 0.0%</td>
<td>2 10.0%</td>
<td>7 35.0%</td>
<td>11 55.0%</td>
<td>20 100%</td>
</tr>
<tr>
<td>Female</td>
<td>3 3.5%</td>
<td>8 9.4%</td>
<td>30 35.3%</td>
<td>44 51.8%</td>
<td>85 100%</td>
</tr>
<tr>
<td>n/r</td>
<td>0 0.0%</td>
<td>0 0%</td>
<td>1 100%</td>
<td>0 0.0%</td>
<td>1 100%</td>
</tr>
<tr>
<td>Total</td>
<td>3 2.8%</td>
<td>10 9.4%</td>
<td>38 35.9%</td>
<td>55 51.9%</td>
<td>106 100%</td>
</tr>
</tbody>
</table>

There was little difference in how females and males judged the status of their occupation, although it was only women (three) who classified coding as a clerical occupation. Quite similar proportions, 55 percent of males and 52 percent of females classified coding as a profession and 35 percent of both female and male clinical coders thought coding had semi-professional status.
**Future of clinical coding**

The final questions asked respondents how they saw the future direction of clinical coding in New Zealand. The first open-ended question asked what the role of clinical coders would look like in the future and whether they felt prepared for any changes envisaged. The responses were grouped into similar themes for presentation. While not all participants responded to the question, the comments that were received were various but with a generally positive attitude to future changes. The specific comments are presented in Table 25 below.

**Table 25 The future role and direction of clinical coding**

<table>
<thead>
<tr>
<th>Comment</th>
<th>Number of comments</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>An expansion of coding job tasks</td>
<td>18</td>
<td>22.5</td>
</tr>
<tr>
<td>More computer based</td>
<td>15</td>
<td>18.7</td>
</tr>
<tr>
<td>Increased integration with clinicians</td>
<td>13</td>
<td>16.3</td>
</tr>
<tr>
<td>Increased qualifications required</td>
<td>4</td>
<td>5.0</td>
</tr>
<tr>
<td>Positive outlook generally to any change</td>
<td>3</td>
<td>3.7</td>
</tr>
<tr>
<td>Loss of jobs due to technology</td>
<td>8</td>
<td>10.0</td>
</tr>
<tr>
<td>No position as near retirement</td>
<td>5</td>
<td>6.3</td>
</tr>
<tr>
<td>No change</td>
<td>14</td>
<td>17.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>80</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Nearly two-thirds (62.5 percent) of comments indicated that the role of the clinical coder would change. The most likely expected change was an expanded role for clinical coders that would probably involve electronic data sources and more involvement with clinicians. This expansion would also require higher qualifications for coders at both the pre-employment level and during their careers. A small number of respondents’ comments (10 percent) saw the future and technological developments leading to job losses for clinical coders. A number of coders’ comments (17.5 percent) stated there would be no change due to a belief that change was very slow and that investment or interest in the area of clinical coding by the organisation was of a low priority.

In some District Health Boards electronic health records are being introduced and a specific question was asked to ascertain the importance these records would have on
coding practice. This prompted more comments than the previous question, which suggests this is a contentious issue for clinical coders. While many respondents saw the advent of electronic health records in a positive light, there were also definite fears about potential health and safety issues and the possibility of job losses. The results are presented below in Table 26.

**Table 26 Impact of electronic health records on coding practices**

<table>
<thead>
<tr>
<th>Impact of Electronic Health Records</th>
<th>Number of Comments</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create efficiencies/more timely</td>
<td>28</td>
<td>27.0</td>
</tr>
<tr>
<td>OOS/eye strain</td>
<td>19</td>
<td>18.3</td>
</tr>
<tr>
<td>Working from home option</td>
<td>19</td>
<td>18.3</td>
</tr>
<tr>
<td>Generally positive</td>
<td>10</td>
<td>9.6</td>
</tr>
<tr>
<td>Patient records easier to read</td>
<td>8</td>
<td>7.6</td>
</tr>
<tr>
<td>Less detail/poor documentation</td>
<td>5</td>
<td>4.8</td>
</tr>
<tr>
<td>Concerns round network stability</td>
<td>4</td>
<td>3.8</td>
</tr>
<tr>
<td>Loss of jobs</td>
<td>3</td>
<td>2.9</td>
</tr>
<tr>
<td>No change</td>
<td>3</td>
<td>2.9</td>
</tr>
<tr>
<td>Higher work load demands</td>
<td>3</td>
<td>2.9</td>
</tr>
<tr>
<td>Coding becoming audit role</td>
<td>2</td>
<td>1.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>104</td>
</tr>
</tbody>
</table>

Overall almost two-thirds (62.5 percent) of comments were positive about the introduction of electronic health records. A third (34.6 percent) was negative and the remaining three responses were neutral on the introduction of electronic patient records. The main positive impact of electronic records, represented by 27 percent of comments, was that the coding process would become more efficient and turnaround times improved due to more timely access to the patient records. A further 7.6 percent of responses indicated that the records would be easier to read due to the digital nature of the records. On the negative side, 32.7 percent of responses saw: risks due to eye strain and OOS (occupational overuse syndrome) as a result of the job becoming more computer based; a loss of jobs; doubts as to the ability of the computer network to be reliable enough to guarantee integrity of the data; and, a concern that this new technology may increase the workload expectations on clinical coders. There appeared to be a positive impression that electronic records would allow flexibility in the
workplace by facilitating clinical coding from home; 18.3 percent of comments rated this as an impact.

Finally, participant coders were asked for any further comments they would like noted. Eighty comments were received indicating a high level of involvement in the survey. Almost three-quarters, 73, of the responses could be categorised as negative statements about their workplaces, or workplace demands. The results are presented below in Table 27. Overall, these comments indicate that while clinical codes appear to have a high level of job satisfaction, they do harbour strong negative feelings about their workplace and work environment.

**Table 27 Further comments**

<table>
<thead>
<tr>
<th>Comment</th>
<th>Number of comments</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feel undervalued by organisation. Role misunderstood as clerical</td>
<td>29</td>
<td>36.2</td>
</tr>
<tr>
<td>Underpaid</td>
<td>17</td>
<td>21.1</td>
</tr>
<tr>
<td>Need career development path</td>
<td>7</td>
<td>8.8</td>
</tr>
<tr>
<td>Rewarding and enjoyable</td>
<td>7</td>
<td>8.8</td>
</tr>
<tr>
<td>Need greater organisational commitment to training and development</td>
<td>6</td>
<td>7.5</td>
</tr>
<tr>
<td>Want a shift to clinical area</td>
<td>4</td>
<td>5.0</td>
</tr>
<tr>
<td>Want national award coverage</td>
<td>3</td>
<td>3.7</td>
</tr>
<tr>
<td>Want flexible hours</td>
<td>3</td>
<td>3.7</td>
</tr>
<tr>
<td>Under resourced</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>Want separate clinical coders’ union</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>Lack of trained workers doing bad jobs</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>Want better clinical leadership</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td></td>
<td><strong>80</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

These mainly negative comments relate essentially to personal issues affecting work life, feeling undervalued by the organisation, being underpaid and poorly resourced and for several, wanting a flexible workplace. Other comments were more organisationally focused. These included comments desiring a career pathway in the job, a change of the functional and physical location of the coding department and greater opportunities for training by the organisation, with several comments relating to a specific coders’ union
and the reintroduction of a national award for coders. Seven comments were received restating the respondents’ positive feelings of job satisfaction.

**Summary**

A good response was received from individual clinical coders in the survey, providing a good representative of early to late career clinical coders from across the public health sector. The survey indicated that clinical coders are an aging female-dominated workforce. Generally speaking, clinical coders are more likely to be of Pakeha/European descent, work full-time and be covered by a collective employment agreement. Their pay is on, or above, the average wage for both men and women and there is a good level of job stability. Overall, the responses indicated a positive orientation to their work with high levels of satisfaction although they perceived lower levels of influence in their workplaces. The individual clinical coder responses showed they overwhelmingly identified as professional or semi-professional, and at the same time, felt undervalued by their organisations. This reflected the findings from the District Health Board questionnaires.

The following discussion chapter contextualises the findings from this research within the context of the literature discussed in Chapters Two, Three, Four and Six. The status of the clinical coding occupation is considered in view of the gendered nature of clerical work, perception of the skills involved and the more fundamental structures of patriarchy and capitalist labour processes. The purpose of the thesis was to identify whether persistent gender discrimination exists, which unfairly skews societies’ views of women’s occupations and work. Of concern is the impact this disadvantage then places on social values of occupational status, and the real effect this has on women’s career and remuneration prospects.
Chapter Nine: Discussion

The aim of this research was to explore how the complex relationships within the concepts of gender, skill, power and occupational status ultimately define labour market position. This process is located within the milieu of patriarchy and capitalist labour processes, and explains how women’s skills and occupations are often subordinated to those of men’s skills and occupations. Women’s work is generally constructed and viewed as of less value to society, and women’s jobs and occupations are more likely to be seen as low or semi-skilled rather than skilled. However, research shows that often the skill and occupational status is determined more by the gender of the workers, than the work demands themselves (Healy & Kirton, 2002; Phillips & Taylor, 1980; Witz, 1992).

The occupational group of clinical coders was used to explore these issues as they represent a female-dominated occupation, with women accounting for 84 percent of all coders. Clinical coding is a specialised and skilled job. Clinical coding is a skilled occupation due to the training required to competently undertake the work. Although there is no national mandatory requirement for pre employment qualifications, trainee clinical coders undergo considerable on the job training and are usually encouraged to enrol in specific clinical coding courses. Clinical coding work is specialised and clinical coders are the key actors in the collection of operational data. The aggregated data generated by clinical coders forms an essential part of the information required by the Ministry of Health to determine future funding for the Boards. Part of clinical coders’ earlier claims has been that they are a profession and not a clerical occupation, as they are formally identified by Statistics New Zealand.

To discuss these social mechanisms that impact on labour market position the research focuses on New Zealand society from the mid 1980s onwards, as during this time significant changes to employment legislation and public health reform occurred. These changes also had the potential to impact on the labour market position of clinical coders.

The research built on earlier investigations into clinical coders in New Zealand. Clinical coders had, in 1998, expressed concern at increasing inequality of wages and conditions between different District Health Boards. In the decade prior to this, the award system of industry-wide agreements on wages and conditions had been abolished and, at the same time, the clinical coding function had become more important as a
result of the changes to public health management. Clinical coders also harboured deeply-held feelings that the organisation undervalued them (Douglas, 2004). This chapter discusses the findings of the research within the context of the research questions and the literature previously presented.

Skill

Skill, and how it is acquired and ultimately perceived, is a social process, and as Bennet (cited in, West, 1990) argues "skill is an ideological construction in that there is no a priori reason for valuing certain characteristics .... rather than others, and that socially recognised skill reflects the greater bargaining power of those who claim its title" (p. 251). As stated, at the heart of the research questions is the role that gender and skill play in ultimately determining labour market position. Both gender and skill are subjective constructs and the interpretation of these ideas, and by whom, determines real outcomes for workers (England, 2010; Reskin & Maroto, 2011; Whitfield & Ross, 1996). As Phillips and Taylor bluntly state, the idea of skill is "saturated with sexual bias", and little has changed since their comment (Phillips & Taylor, 1980, p. 79).

In this research the skill level clinical coders acquire and how this is valued as low, semi-skilled or skilled is demonstrably a function of gender. The skill that clinical coders develop and use in their work is highly technical and requires a comprehensive knowledge of medical terminology and medical conditions. Coders in the focus groups reported that it takes many years to develop into an efficient and accurate coder, as every patient file is unique in its demands on the coder's knowledge. However, clinical coders are designated as clerical workers and clerical work is generally seen, particularly in the traditionally hierarchal environment of medicine, as an occupation subordinate to men's work and therefore, of lower skill level. Clinical coders' skills and how these are perceived are influenced by underlying patriarchal notions of gender roles and worth. Reflecting on Bennet's position women traditionally have not experienced substantial and sustained bargaining power when compared to men, and this contributes to the perceived worth and contribution of clerical occupations, and ultimately labour market position, reward and status (cited in, West, 1990).

Clinical coders argue they are a highly skilled occupation deserving the designation of profession and therefore, should be able to command greater organisational acknowledgement. However, they do not exhibit some of the generally expected
characteristics of a profession, such as higher level tertiary qualifications and a professional body charged with monitoring and controlling entry to and standards within the occupation. To become a trainee coder there is no mandatory requirement for a pre-employment qualification or experience. This research revealed that the greatest emphasis on skill acquisition in the District Health Boards is through on-the-job training. Over a third (38 percent) of the District Health Boards that responded at the time of the survey did not employ any fully qualified clinical coders. Nevertheless, of the clinical coder respondents in the survey over two-thirds (68 percent) did hold some level of specific clinical coding qualification, and a number of District Health Boards employed coders with higher qualifications in medicine, physiotherapy and other medical areas. The manner in which clinical coders acquire their skills and the emphasis placed on acquisition by District Health Boards is indicative of an occupation other than a profession, which usually requires higher level tertiary qualifications.

The situation of District Health Boards with no fully qualified clinical coders has several implications for District Health Boards and clinical coding. There is a requirement from the Ministry of Health for timely and accurate data from District Health Boards. The lack of qualified clinical coders may impact on the quality of outputs and also the ability of in-house auditing to occur where there are no fully qualified clinical coders. Quality in clinical coding outputs has been an issue for the Ministry of Health for some time and recent Ministry driven auditing exercises have resulted in improved standards (Ministry of Health, 2009). In light of the increased demand for quality in clinical coding work as a consequence of the health reforms since the late 1980s, and the difficulty in attracting new coding workers, it is paradoxical that a greater emphasis on qualifications and career paths has not also emerged. However, the lack of national mandatory clinical coding qualifications certainly diminishes the perception of the skill level required to work as a clinical coder.

The quality concerns also highlight the complicated relationship the Ministry of Health has with clinical coders. The Ministry does not employ the clinical coders in the District Health Boards and has never used the powers of central government to regulate the clinical coding workforce. In the absence of any professional body able to regulate entry and qualifications of clinical coders, the current approach to the skills acquisition for clinical coders is unlikely to change in the short-term.
While many District Health Boards reward upskilling and achieving coding qualifications, the decision and responsibility for many clinical coders to pursue qualifications falls on the individual. With three quarters of clinical coders aged 40 or above the decision to continue formal education may not be an appealing or rational choice. For many clinical coders they either already hold non-clinical coding qualifications or have many years experience in clerical and coding work. These factors may work against individuals opting to invest further in their human capital, due to the perceived lack of return on such an investment. This lack of a systematic and comprehensive approach to coding qualifications across the District Health Boards also contributes to the perceived lower skill required to undertake the job.

Clinical coding is clerical work and therefore, women's work, which results in a perception of it being not highly skilled. Although a comparison with nineteenth century British male clerks may indicate some modern clerical work is less skilled, there are many clerical designated jobs that are very skilled. Increased complexity of jobs and the introduction of new technologies have, in many instances, required an upskilling of workers. Braverman's (1974) assertion of the deskilling thesis does not hold for clinical coders, particularly as a significant level of autonomy and skill is required. The increasing complexity of medicine, in both diagnosis and treatment, requires clinical coders to constantly update their knowledge in relation to the ICD system they use. As Thompson and Newsome (2004) argue, the introduction of new technologies to replace some of the more mundane parts of a job allows for workers to enhance the tasks they carry out. In the case of clinical coders there has been an increase in quality assurance work that has been required by changes introduced in the health reforms, which demanded greater accuracy and integrity in the final outputs used by the Ministry of Health.

The influence of patriarchy has a crucial role in explaining the determination of skill status for female-dominated occupations like clinical coding. Patriarchy results in social processes positioning men as a group, being able to control and dominate, women as a group. Work structures and hierarchies reflect this process, with men traditionally more likely to hold positions of power and decision-making. Men's work is seen as more skilled because they are also the dominant group; that is, it is men who decide which skills attract higher status. As men moved out of clerical work, the status of the skill required to undertake the work was downgraded and reflected the place that women held in society at that time (West, 1990). bell hooks’ (2000) claim that through
socialisation processes women have come to believe they are inferior to men, and this encourages women to hold lower expectations of value and worth. Responses given in the initial focus groups did reflect differences based on gender. The focus group that comprised only women were less confident in the articulation of disadvantage they experienced. This was in stark contrast with the participants from the largest District Health Board represented in the focus groups. This group were a mix of men and women, but the men confidently conveyed an expectation of entitlement to respect and equality within the organisation due to their higher qualifications and skill.

West (1990) criticises Braverman for failing to include gender in his analysis of the capitalist labour process. She observes that male-dominated capital-intensive jobs were deemed skilled, whereas women filled the more labour-intensive jobs and were seen as unskilled. Although clinical coders do use computerised systems in their work, the task of determining the code is still a manual skill. Their work cannot be characterised as capital-intensive and, as a female-dominated occupation combined with the non-regulated process of coding skill acquisition, it is consistent with West's observations that clinical coders are seen, at best, as semi-skilled clerical workers. The capital labour process also describes capital's desire for greater control over workers. In the case of clerical work, and indeed clinical coding, an effective method to achieve this control is through the utilisation of the patriarchal mechanisms of pragmatically categorising women's work as less skilled and therefore, subordinate to the control of management.

**Occupational status and professions**

This research reinforces the proposition that gender influences the ways in which skill is acquired and subsequently, how that skill is perceived and valued. As a clerical occupation clinical coding attracts the generally held view that it is not a highly skilled job. The socially constructed gendered bias in skill determination inevitably leads to a gendered impact on how occupational status is perceived. In spite of the classification of clinical coding as a clerical occupation, the clinical coders and their managers in the survey categorised the work differently. The research indicated that most clinical coders (52 percent) and clinical coding managers (69 percent) believed that clinical coding was a profession, and over a third (36 percent) of clinical coders and a fifth (19 percent) of clinical coding managers categorised the work as semi-professional. When
these figures are aggregated, 88 percent of both clinical coders and clinical coding managers categorised clinical coding work as a profession or semi-profession. The reasons for this categorisation were similar for both the clinical coders and the clinical coding managers; the specialist skills and knowledge required to undertake the work. The responses were very similar for men and women, with men slightly more likely to identify coding as a profession than women, 55 and 51 percent respectively. This difference could be attributed to male clinical coders projecting more confidence and desire for the recognition the status would bring, although the small sample size does preclude such a generalisation being drawn. For the women, the lower claim to professional status may be the result of the persistence of stereotyping of women's work as lesser skilled than men's work, and this may reflect bell hooks' point that "they [women] are taught via sexist ideology to devalue their contribution to the labor force" (hooks, 2000, p. 103). This self reflection may account for the 35 percent of women coders who identified their work as a semi-profession; they see themselves as more skilled than a clerical worker but were reluctant to claim the highest status of a profession, yet the reasons given for the occupation being a profession or a semi-profession were the same.

Professional status is quite clearly desirable for reasons such as: public esteem; ability to argue for better wages and conditions; feelings of individual worth; and, organisational value. However, as Freidson postulates professions are just elitist occupations and do not necessarily have any intrinsically superior contribution to make to society (Freidson, 2001). There is always a danger in believing that higher qualifications are unquestioningly better and desirable. The lack of consensus on the composition of professions leaves them justly open to criticism of being merely institutions of protection and privilege. Nevertheless, clinical coders claim this occupational status, particularly as they have expressed feelings of very low organisational value and worth.

The need for specialised knowledge, ongoing education, a registration body, a disciplinary process and pre-employment tertiary qualifications are characteristics of traditional professions, but clinical coding does not exhibit many of these attributes. The claim by clinical coders to be part of a profession is not supported when analysed using the traditional models of professions. Trait theory (Leicht & Fennell, 2001) provides characteristics of what most professions look like, but rather than create a critical view on the concept of a profession it shores up the status quo of current
professions, which excludes the type of work that clinical coders undertake. While many current professions from a lay or non-professional person's perspective meet the requirements to be seen as a profession, using the trait model the same criteria could view several contemporary trade occupations as professions as well. With increasing regulatory and disciplinary boards across the trades (for example, Electrical Workers Board, Master Builders' Association), and training and education for these occupations located in tertiary institutions (and qualifications at higher levels than previously), it could be argued that there are increasing similarities between professions and other trade occupations.

Critics of trait theory suggest the model is little more than a check list of arbitrary requirements (Abbott, 1988). While the list reinforces current professions, it does not easily allow entry to other occupations. The development of trait theory and the characteristics used, is more indicative of the underlying class and gender bias that exists rather than the merit of occupations. Trait theory was developed at a time when access to tertiary education was still elitist, with the effect of denying entrance to women and working class people. It is this deficit in the theory that reduces it to merely a tool to reinforce the status quo by narrowly defining the acceptable characteristics of a profession.

The grid model developed by Forsyth and Danisiewicz (1985) uses the autonomy of the professional from both the client and the employer to ascertain whether a profession is “true”, "semi" or merely a "mimic" profession. Clinical coders do not have a relationship with clients like other occupations that are professions. Coders work with data and information rather than people or clients. The responses from clinical coders indicated that they do not have a significant level of autonomy from their employer either. The other requirement of Forsyth and Danisiewicz's (1985) model is the public acceptance of an occupation to command the status of a profession. Given the invisibility of clinical coders, even within the health sector itself it is unlikely that coding would be seen in a professional light by the general public. Neither of these two approaches to determining professions provides a sound rationale for clinical coding to be accepted as a profession.

The academic research on professions tends to stay within a narrow and rigid acceptance of professions. The traditional occupations of medical practitioner, lawyer and architect are seen as professions and come about through a university education.
a method of job protection, professions, being male-dominated, are not just able to reject lesser educated men but also to subordinate the main occupational groups that women populated (Healy & Kirton, 2002). This assertion supports the literature on biases in the definitions of skill. As Abbott (1998) observes, the decision into which group an occupation is placed (professional or semi-professional) has more to do with whether it is men or women who undertake that work. Similarly Witz (1992), expressed it rather more boldly, "gender primarily dictates the status of occupations" (p. 112). As Healy and Kirton (2002) also note gender plays a significant role in the categorisation of occupations. They argue that the use of semi-profession is a deliberate and socially constructed mechanism to subordinate women's work. This casts doubt over the broad applicability of the profession theories, as the underlying gender bias is persistently overlooked.

Historically, the members of professions typically came from a privileged class of men able to access university education. Today's society is now characterised by more women entering university and gaining higher qualifications, and then entering professions. However, in New Zealand the indications are that women are still under-represented as partners in legal firms, consultants in medicine and professorial positions in universities (McGregor, 2012). Mechanisms of discrimination and patriarchy still hinder the progression of women in the workplace. Therefore, it is also unlikely that women-dominated occupations would be successful in a professionalisation project when the increased numbers of women in existing professions still experience difficulty in reaching their full potential and participation at the higher levels. Clinical coding, although exhibiting some but not all of the characteristics of a profession, falls short of gaining recognition as a profession when applying both trait theory and grid theory.

**Occupational status and the impact on remuneration**

A consequence of occupational status and skill determination is the impact this has on remuneration levels. Women's skills are constructed as inferior to those of men's, women's jobs are viewed as less important than men's jobs and this, coupled with the persistent patriarchal view of male workers as deserving of a superior income over women, contributes to the unresolved issues of the gender wage gap.
The gender wage gap exists for a number of reasons, such as women’s uptake of domestic responsibilities, women's exclusion from men's jobs and ongoing prejudice against women in wage setting. At the time of the survey in 2008, the average wage in New Zealand was $35,828. Breaking this figure down, women's average wage was $30,576 and men's $40,404 (Statistics New Zealand, 2008). The survey asked for salary information within bands and 85 percent received salaries over $35,001, and the median salary was between $45,000 and $50,000. The above average wages that clinical coders receive is likely for several reasons: many of the clinical coders surveyed had considerable experience in their work; nearly three-quarters had at least five years' experience and nearly 40 percent had more than ten years' experience; and, within the salary grades for all clerical workers in the District Health Boards medical typists and clinical coders are in the highest salary scales. The above average wages are also indicative of the strategic role clinical coders have in the labour process.

The research shows that women are in the lower salary bands for years of experience when compared to the male clinical coders. There are several reasons why this may occur and may be due to men holding more coding and non-coding qualifications, different outcomes due to bargaining power in the case of individual agreements, or discrimination based on perceived women's value. The issue of discontinuous service for family reasons may be less relevant to this group as generally they are older workers, with over three-quarters aged 40 and above. Male coders were also more likely to be employed in the larger city-based District Health Boards, which generally paid higher salaries. While these explanations may have influenced the salary levels of clinical coders, it is also reasonable to assume that where a clinical coding department was staffed only by women there may be a difference in the organisational valuing of the coders and their work, and a conscious or subconscious undervaluing of what is seen as women's clerical work. The clerical status of coding places the work within the clerical pay scales, and this may have little bearing on the level of skill or expertise of clinical coders. Irrespective of whether they are receiving a fair level of wage for their work, the gender domination does impact on wages. If this was a male-dominated occupation the work may well be designated an administration or business function, with concomitant higher wages.

This persistence of sexist beliefs about the value and worth of women in the workplace was highlighted in 2011 by Alasdair Thompson, CEO of Employers and Manufacturers’
The Employers and Manufacturers’ Association provides consultancy, advocacy, legal and training opportunities to members in New Zealand. Their membership covers all businesses in the top half of the North Island, from Taupo northwards.

28 The Employers and Manufacturers’ Association provides consultancy, advocacy, legal and training opportunities to members in New Zealand. Their membership covers all businesses in the top half of the North Island, from Taupo northwards.
on work processes. In contrast, one focus group, which was in a separate coding unit, led by an experienced clinical coder, spoke of a high level of autonomy and involvement in decisions affecting work speed. Enhancing this second group's attitude may be the high number of clinical coders who had a range of higher medical qualifications, which reasonably could lead to a higher expectation of control over work processes. Clinical coders' feelings of influence dropped markedly when asked about influence on workplace organisation, with only a third reporting they had influence now and again and 43 percent answering that they had influence rarely or never. This is probably indicative of the relatively small size of the clinical coding departments relative to the organisations.

In spite of the levels of influence that clinical coders may feel they have over their work and organisation, they do enjoy their work. A single question asking if they liked their job had a 93 percent affirmative response. When this was asked again using a Likert scale over three-quarters indicated they "enjoyed" or "enjoyed a lot". Clinical coders enjoy the job they do mainly due to intrinsic factors such as the intellectual challenge and the autonomy and diversity of the work. This may compensate for not having direct influence in their workplaces. The satisfaction that some clinical coders experience may be explained by Goldthorpe, Lockwood, Bechhofer, and Platt's (1968) research, which argues that the promotion of workers from a lesser skilled to a higher skilled position creates relative high job satisfaction, and that this intrinsic reward of promotion or improvement adequately addresses their feelings of worth and esteem. The apparent lack of motivation by clinical coders to actively seek greater influence and development of their roles is predictable given the most common career background for clinical coders was clerical work. The move from clerking positions in medical records to clinical coding is seen as a promotion to better work and wages. The clinical coders in the survey and focus groups expressed dissatisfaction at their workloads, their perceived value within the organisation and occupation status but resistance to managerial control over their work on an individual level was not evident.

From a collective perspective, clinical coders have a relatively high level of union membership. The level of union membership amongst the respondents, at 55 percent, was considerably higher than the national density figure of 22 percent and exceeded the levels found in the general population: clerical/secretarial workers (20 percent) and professional/technical workers (34 - 37 percent) (Boxall, et al., 2005). In line with general union membership trends, female clinical coders were more likely to be union
members than the male coders, at 56 and 45 percent respectively. This level of unionisation suggests the potential to influence the workplace environment and practices through collective bargaining processes.

The research revealed that fourteen of the sixteen participating District Health Boards had at least some of their clinical coders employed under a collective employment agreement. Not all clinical coders in these District Health Boards though were employed on the collective agreement, as non-union members would be employed under individual employment agreements as required under the Employment Relations Act 2000. Seven of the District Health Boards exclusively employed their clinical coders under a collective employment agreement. These figures have remained unchanged from the survey undertaken in 2004 (Douglas, 2004). Interestingly, the clinical coding managers at District Health Boards that employed clinical coders only on individual employment agreements commented that they would prefer to deal with the union in employment matters.

It is difficult to determine from the research results how effective this good level of unionisation has been in influencing clinical coders' immediate workplace environment. Although over half the clinical coders reported belonging to a union nearly a third (30 percent) of coders who did not belong to a union had, in the past, belonged and resigned. Unfortunately their reasons for this were not identified. An area not specifically explored was the level of activity or engagement clinical coders have within the union branches to which they belong. This would have been useful to gauge the motivation level of clinical coders in influencing their work environments.

In spite of the good unionisation density, there does not appear to be a cohesive collective approach to their workplace issues. Most unionised clinical coders belong to the Public Service Association and, as a group, make up a very small section within all the health sector occupations covered by this union. Approximately half of the clinical coders in the smaller District Health Boards were union members, whereas higher membership rates were identified in all but one of the larger tertiary District Health Boards. The District Health Boards where union membership was high may reflect the organising ability of the union to be more effective (or have more access) and therefore, educate and recruit clinical coders.
Non-union clinical coders were asked to identify why they were not union members and the results showed that nearly a third (30 percent) had been union members in the past but had resigned. A significant number (43 percent) of non-union clinical coders held negative views of the unions; either rejecting the concept of collectivity, its utility, or concern over the financial cost of membership. These two groups (lapsed members and anti-union individuals) represent approximately two-thirds of the clinical coders who did not belong to a union. Their reasons for not belonging aligns with research by Boxall, Haynes and Macky (2005), who found that the main predictor of joining a union was the perceived utility of the union itself.

Given the level of job satisfaction and secure work environment, coupled with above average wages, it may be that clinical coders would not feel compelled to join a union for "dissatisfaction or threat motives" alone (Boxall, et al., 2005). Participants in one of the focus groups stated the only difference between union and non-union membership was a delay in the passing on of wage increases. There did not appear to be any animosity between union and non-union clinical coders within the focus groups. Not all union members were happy with the union that represented them though, as illustrated by comments that were critical of their union, citing a lack of understanding of coding work and this leading to less satisfactory representation.

It is interesting that as a group clinical coders do not believe they have been able to greatly influence their work environment. They have power collectively through: union advocacy; membership of the Health Information Association of New Zealand (HIANZ); direct functional contact with the Ministry of Health; the power that derives from the expert knowledge they hold in their work; and, through the shortage of competent qualified coders to fill positions. The short supply of experienced clinical coders should, from a market perspective, advantage them by giving them greater bargaining power. The financial certainty that clinical coders' work contributes to within the District Health Boards may have been expected to create a power base for clinical coders (Hardy & Clegg, 2003).

The apparent lack of power exercised by clinical coders may be related to their physical location within the District Health Boards away from clinicians and other allied health workers, which constructs a clear message of decreased organisational worth (Mann, 1986 cited in Hardy & Clegg, 2003). This structural disadvantage compounded with the dominance of women in the job potentially consenting to, and accepting, the social
stereotypes regarding the worth of clerical work, makes it unlikely that as a group clinical coders would feel powerful in influencing their environment. As Mann (1986 cited in Hardy & Clegg, 2003) argues if the possibility of a backlash to an action taken is perceived as greater than the benefit gained, then action is unlikely. Clinical coders like their job so this becomes a disincentive to create trouble.

Clinical coders appeared to have many possible avenues and bases to affect influence or power within their workplace, from membership of the largest public sector union in the country and other bodies such as HIANZ through to the power base created through the chronic labour shortage of clinical coders. The influence of gender on bargaining strength and propensity to act though should not to be under-estimated. The apparent satisfaction of most clinical coders and lack of organised resistance may be a consequence of personal circumstance and life stage, or a result of hook's (2000) argument of women's own internalised inferior self image.

**Labour market position**

Traditional industrial relations theory has been criticised for being gender blind and providing an inadequate approach to understanding the place of women and women-dominated occupations within the labour market (Hansen, 2002; Pocock, 2000; Pocock, et al., 2011). This research study also found it difficult to identify the labour market position of clinical coders within the mainstream labour market models. As the dual labour market literature shows, women are often found in the secondary or peripheral labour markets and this sector is characterised by disadvantage, such as lower remuneration, poor career prospects and job security and undervaluing by the employing organisations (Doeringer & Piore, 1971; Mylett, 2003; Piore, 1983; Whitfield & Ross, 1996). While clinical coders did not have well-defined career paths, mainly due to poor workforce development, they did have good job security and generally, above average wages. From both the surveys and focus groups the general response to feeling valued or having their work understood by the District Health Boards was very low, more characteristic of the stereotypical secondary labour market. The job security and wages that clinical coders received are more suggestive of the primary sector within the organisation (Doeringer & Piore, 1971). The requirement for specialised knowledge of medical terminology, the ICD coding system and experience
to become proficient coders also indicates an occupation able to command a higher level of organisational status and value. The nature of clinical coding work is more than what a clerical position generally demands. The work on each medical file is unique and every file requires the coder to identify relevant information from often complex files and then classify appropriate content. As several clinical coders commented in the focus groups; "having the qualifications does not make a good coder, it is all about......understanding what you are coding", and another, "you never really become a coding authority, there is no day you can say "I am a complete coder". Clinical coding's clerical designation is certainly a result of the domination of women in the occupation and the impact this has on the perceived value and level of skill displayed in the tasks.

The District Health Boards have the benefit of a reasonably stable workforce of clinical coders. In the provincial cities and towns where the region is served by a single District Health Board the specialist skills employed by coders are not easily transferred to other local workplaces. The older demographic of the clinical coders may also contribute to employment stability, as this life stage may demand a more settled work pattern due to family or dependent responsibilities, home ownership and relational ties to the area. In the urban areas, where more than one District Health Board is within commuting distance, there have been some movement between employers to seek better positions, wages and conditions. As Shennan (2008, personal communication), an organiser with the Public Service Association, explained it was this competitive phenomenon that prompted the Auckland region's three District Health Boards to agree to standard wages and conditions for clinical coders to halt the upward pressure on wages caused by coders shifting between District Health Boards. Subsequently, a multi-employer collective agreement was struck that incorporated all four District Health Boards in Auckland and Northland.

There are now four multi-employer collective agreements which cover all the District Health Boards. These multi-employer collective employment agreements have introduced standards across groups of District Health Boards, with regard to wages and conditions and progression within salary scales. These developments are beneficial to clinical coders' wages and conditions in that it recreates, to some extent, the earlier award system that ensured some consistency across all District Health Boards. However, it does also limit the opportunities for experienced clinical coders to exploit the labour shortage and bargain for higher wages. The multi-employer collective agreements have not specifically addressed clinical coders’ concerns of institutional
undervaluing of their status. There have not been any moves by the union to facilitate any sort of professional project, which may improve their occupational status and labour market position. Currently the Public Service Association structure requires the formation of a District Health Board Sector Committee. This group provides advice and information to the Public Service Association Executive Board and are involved in developing claims for bargaining. This group provide a connection between the rank and file members and the union. The District Health Board Sector Committee is also able to establish "Occupational Panels" from time to time when specific issues regarding an occupational group arise. An Occupational Panel could, if established for clinical coders, provide focused attention on their particular grievances and concerns (Public Service Association, 2011a).

Although the quality of clinical coders’ work contributes to the financial stability and certainty of the organisation, the work itself could easily be out-sourced to clinical coding contractors. This practice of contracting out coding work is finding some favour in the United States currently, and would certainly shift clinical coders outside of the primary sector and into the secondary sector or precarious workforce (Benavidez & Friedman, 2003; Friedman & Gatehouse, 2007; Lorence, 2003). There have been few moves to establish this contracting approach in New Zealand. The critical barrier to outsourcing is the need for a nationally agreed and developed secure electronic platform to ensure the integrity of the transfer and classification of electronic patient records. The Ministry of Health have established an Information Technology unit to work on the implementation of in-house standardised electronic patient records in the District Health Boards, but security issues remain. Off-site access to patient records for the purposes of coding runs the risk of unauthorised access to information, unless robust security protocols are embedded in any system.

The close economic and social relationship with Australia and the ease with which workers can move between countries for employment and the common coding system does not appear to have contributed to a loss of clinical coders overseas. The apparent lack of trans-Tasman movement by coders could be due, in part, to the life stage of the majority of clinical coders. In addition, the wage prospects for clinical coders may not be sufficient to entice emigration to Australia. The extensive survey of clinical coders and clinical coding conducted in Australia in 2002 found that the majority of clinical coders earned salaries close to the Australian average wage, with nearly one-third earning approximately NZ$10,000 less than the average wage (McKenzie & Walker,
The survey on clinical coders undertaken in New Zealand in 2004 revealed that clinical coders earned generally above the New Zealand average wage (Douglas, 2004). However, wage comparisons show that New Zealand clinical coders are not necessarily financially better off when compared to Australian clinical coders' wages, given that the average wage in 2002 in Australia was NZ$20,500 more than the average wage in New Zealand (Australian Bureau of Statistics, 2002; Statistics New Zealand, 2010). Although wages are not the only driver of emigration, the different composition of clinical coding work in Australia may also impact on decisions to move to Australia. While 69 percent of New Zealand clinical coders in the survey were coding full-time, only 34 percent of coders in the Australian survey coded full-time (McKenzie & Walker, 2003). In many Australian workplaces clinical coders are expected to be able to undertake other duties as well. The lower and narrower qualifications New Zealand clinical coders attain may leave them unqualified to undertake the wider range of tasks needed in Australian positions.

Gender and its manifestation through traditional societal roles appears to impact on the position and status of clinical coders in the workplace. Many of the District Health Boards employed only women as clinical coders. Although at one level, clinical coders saw themselves as professionals and the occupation of clinical coding as a profession; this may have been relative to their previous work and position. For this group of clinical coders Goldthorpe, Lockwood, Bechhofer, & Plat's (1968) research may provide the rationale for the apparent lack of motivation for actively seeking greater influence and development of their clinical coding roles. Goldthorpe, Lockwood et al (1968) argue that the promotion of workers from a lesser skilled to a higher skilled position creates relatively high job satisfaction and that this intrinsic reward of promotion or improvement adequately addresses their feelings of worth and esteem. The high level of job satisfaction reported, and the inability of two focus groups to articulate a clear picture of a higher professional status for their work, indicates a lack of a concerted drive to improve the status of their work within the organisation.

The structure of the District Health Boards and the health sector must not be underestimated in its traditional ability to influence the labour market position of workers. The health sector and hospitals particularly, have been built on a military-type hierarchical model of power relations (Gauld, 2000). Men traditionally have dominated through their leading positions within medicine, with nurses (predominantly women) subservient to them (Papps & Kilpatrick, 2002). As often is the case in power
hierarchies, each level looks to rise above others deemed below, so as to retain some sense of relative power. Clerical workers are often seen as peripheral to the business of health and healing and as a result, within the hierarchy of the hospital, clerical work, and the women who traditionally undertake it, rank considerably lower down the power structure, beneath both men and women in occupations such as medicine, nursing and allied health roles.

Impact of health reforms and employment legislation on clinical coders' labour market position

External factors, such as the reforms in the health sector and successive changes in employment legislation, have also contributed to the labour market outcome for clinical coders. The changes to the health sector funding since the first major sector overhaul in the late 1980s have fundamentally revolved around fiscal accountability and profitability. This shift to a business approach precipitated a need for better information and data collection of organisational activities.

The reforms in the funding and structure of the public health system have significantly affected the administration and focus of District Health Boards. The Ministry of Health contracts the District Health Boards to deliver services and expects the Boards to operate in a financially prudent manner. The reforms in the late 1980s and 1990s required a profit to be returned by the District Health Boards, but since 2000 this objective is no longer primary. However, strict monitoring of District Health Boards finances continues. Functionally the Ministry of Health has no control over the operational side of District Health Boards’ business, except indirectly through service agreement objectives. In the case of clinical coding work, the Ministry requires District Health Boards to meet specified deadlines for information and the Ministry undertakes the main updating education for clinical coders. The Ministry of Health though, does not have the ability to impose standards, such as minimum levels of qualifications for clinical coders (Ministry of Health, 2011).

Over this period of significant health reforms the work of the clinical coders became more important for District Health Boards, as they required information that allowed for decision-making in a more timely fashion. However, aside from the increased
dependency on the accuracy of the output of clinical coding work by both the Ministry of Health and the individual District Health Boards, and the issue of the unmet demand for experienced qualified staff, there has not been an appreciable change in the status of clinical coders that might have been expected.

The changes in employment law over the same period particularly affected the bargaining conditions for workers in New Zealand. However, the impacts of the employment statutes, in 1991 and 2000, on the wages and conditions of clinical coders have not been as significant as in other employment sectors of society. Through the *Employment Contract Act 1991*, the previous collective approach to employment relations was replaced by the promotion of individualistic contractual relations (Rasmussen & Deeks, 1997). The loss of the award system in 1991 affected clinical coders around the country and by 1998, a study of all clinical coders in New Zealand showed a substantial variation in wages and conditions amongst District Health Boards had occurred (Douglas, 2004). It was the perceived drifting of equivalence of wages and conditions, which prompted the initial study into clinical coders. At that time the legislation's impact had been to remove the effectiveness of unions to represent workers, and the previous award system, of industry-wide standardised wages and conditions, which ceased to exist (Blumenfeld, 2010). As each District Health Board (or Hospital and Health Services, as they were known at the time) negotiated enterprise-based agreements, the impact of factors, such as the geographical distance between District Health Boards, influenced these bargaining outcomes. Where there was little competition between District Health Boards clinical coders' wages and conditions stagnated and did not keep pace with other District Health Boards. During the 1990s clinical coders did not experience any contraction in their numbers through job losses, although they were unable to effectively advance their wages and conditions. During this period of high unemployment maintaining wages and conditions was, for many, a sign of a successful bargaining round.

The introduction of the *Employment Relations Act 2000* by the Labour-led coalition was expected to significantly change workers' ability to negotiate for improvements in wages and conditions. The Act sought to reintroduce and encourage collectivity into workplaces and to provide a more equal basis for parties to bargain. The results from a 2004 survey and the current research indicates there has not been any significant increase in union membership, collective processes or bargaining for clinical coders (Douglas, 2004). However, as commented earlier, by the end of 2011 the Public
Service Association had negotiated with all District Health Boards to create four geographically defined multi-employer collective agreements that included coverage for clinical coding work.

**Professionalising project for clinical coders**

A professionalising project is a systematic process of lifting the status of an occupation to that of a profession. Nursing in New Zealand has successfully engaged in this process and currently archivists are working to achieve profession status as well. The potential for clinical coders to make an active decision to engage in a professionalising project would require a collaborative effort from individual clinical coders, District Health Boards, the Ministry of Health and a tertiary institution in New Zealand prepared to offer higher qualification programmes in clinical coding. The experience of the archivists' professionalisation project could offer clinical coders some guidance and insight into the process. Archivists are currently undertaking a project to lift their occupational status and this has been ongoing since the early 1980s. The Archivists and Records Association of New Zealand (ARANZ) has driven the project after concerns, similar to those of clinical coders, were raised. These included a lack of higher qualifications, no pre-employment qualification requirements and inconsistencies in quality of work across the occupation. The ARANZ commissioned a report, which outlined evidence of these concerns and a plan to develop education (both pre-employment and ongoing) and a career pathway.

Nevertheless, there are significant differences between the archivists and clinical coders. While the archivists had their association acting as champions for the project, the clinical coders' association, the Health Information Association of New Zealand (HIANZ), has not taken up the issue of the status of clinical coders. With only a third (36 percent) of clinical coders belonging to this body, it is not surprising that their views may not be seen as representative of the occupation. HIANZ operates as an informational and educative body for clinical coders rather than an advocacy group or watch dog. Although the union representing most unionised clinical coders (Public Service Association) could support any moves by members to improve their occupational status, and therefore wages and conditions, they are not well placed to lead such an initiative, as the initiative must come from the clinical coders themselves.
Although the research reveals that the majority of clinical coders identified their work as being that of a profession, there was no apparent aspiration to further this claim.

There are many factors influencing the inactivity of clinical coders to formalise their claim to professional status. Although over half of the clinical coders in the survey were union members there was no indication of how involved they were in the activities of the union. The survey showed that only a quarter of clinical coders felt they had a reasonable level of influence over their workplace. This lack of influence, combined with very low levels of involvement in the Health Information Association of New Zealand suggest they may be ignorant of the possible methods and pathways to challenging their current position (Hardy & Clegg, 2003). These strategies might include a greater involvement by the Public Service Association to further their interests, or organising through HIANZ and the Ministry of Health to impose mandatory pre-employment qualifications as a beginning. Clinical coders do not appear to have an effective collective cohesion to present a united position on their issues. As Mann (1986 cited in Hardy & Clegg, 2003) suggests, a tension which reduces the likelihood of resistance by a group in an undervalued position is the perception of failure of such action. Clinical coders generally receive wages well above the average wage and the industrial setting of the health sector is persistently beset with staff shortages of specialist medical personnel and intense competition within the salary budget. This environment of crisis in the health sector realistically diminishes the likelihood of such a project being successful unless explicit benefits to the District Health Boards and the wider public health sector could be demonstrated.

From the focus group discussions there also did not appear to be an awareness of any need to actively engage in any process. The focus groups members all expressed their belief in their status and felt aggrieved that it was simply not recognised. In effect, they were abdicating any responsibility of ensuring they were seen in a more positive light. When this was teased out further in the focus groups, members of one focus group expressed a reluctance to embark on further training in the form of higher tertiary qualifications. This was due to their age and the fact they could not justify the time and money to undertake further study given their career stage. There was also some debate as to whether a health information degree with a minor in clinical coding would actually meet the needs of the workplace anyway. This concern was supported by the findings of the Australian survey, which indicated that only a third of clinical coders with an undergraduate Health Management degree felt adequately prepared for the workplace,
while three-quarters of coders with certificate qualifications felt adequately prepared (McKenzie & Walker, 2003).

The absence of career pathways also reduces the likelihood of higher qualifications being seen as desirable. The idea of upskilling and the introduction of barriers, such as pre-employment qualifications and higher level qualifications would need to be accompanied by a career pathway that offers employees a clear progression and reward for performance. This would need to be planned nationally and therefore, District Health Boards New Zealand would need to be involved in this. Currently there are no national plans to assist in the clerical workforce development within the health sector. The priority remains with the chronic shortage of medical and allied health workers (District Health Boards New Zealand, 2011).

The history of nursing in New Zealand clearly illustrates how the social construction of occupational value has impacted on the development on that occupation. Nurses are still constructed as subordinate to doctors, and this also reflects a gendered bias. Nevertheless, nursing is a highly skilled and important occupation in its own right. Although nursing is quite different to clinical coding, nurses are employed in the same industry and are female-dominated. Nursing, however, has been able to significantly change the status of the occupation through education initiatives and collective action. Although nursing as an occupation still would not meet the criteria under some profession theories, such as the grid theory, they have effectively created a niche where they have built on solid public acceptance of their work and cemented their expertise through higher educational qualifications. Nursing has the mechanisms of discipline and registration through statute and the Nursing Council, which fulfil part of the prescription for a traditional profession.

Clinical coders are again unlikely to gain support externally for any type of professionalising project, due in part to their invisibility from the public and indeed much of the health sector itself. This lack of a public profile places clinical coders in a similar position to the archivists, if they were to develop a plan to improve their occupational status. Embarking on a professionalisation project is unlikely to be

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29 District Health Boards New Zealand (DHBNZ) is an incorporated society under the Incorporated Societies Act 1908. DHBNZ’s members are District Health Boards (DHBs) represented by DHB Chairs and DHB Chief Executives. The overall purpose of DHBNZ is to assist the DHBs to meet their objectives and accountabilities to the Crown. DHBNZ facilitates and co-ordinates strategic activity across DHBs and links with other sector agencies as appropriate, and includes a task force on future workforce planning and development.
successful given the low level of interest, both by the Health Information Association of New Zealand and the clinical coders themselves. The clinical coders' feelings of being a profession are likely to be connected to their strong feelings of undervaluing by the District Health Boards. If that is the case, then that is what needs to be addressed. Two of the focus groups expressed a desire to engage more with clinicians, be located in closer proximity to other decision-making units and for their expertise to be more utilised by other departments. These kinds of initiatives may improve their visibility and ultimately their valuing by the District Health Boards. Accessing the skills and processes of the unions representing them to further collective talks with the District Health Boards on these initiatives may also enhance these improvements. The strength of the coverage of multi-employer collective employment agreements in the public health sector may allow for clinical coders' interests to be nationally promoted in collective bargaining.

**Conclusion**

The mechanisms of patriarchy and capitalist labour processes continue to shape the work experiences of women negatively. In spite of the significant increase in participation and achievement by women in tertiary education, the introduction of legislation which protects women from discrimination, for example the *Human Rights Act 1993* and *Equal Pay Act 1972*, and legislation which promotes women's participation in the workforce, for example the *Flexible Working Arrangements Amendment Act 2007* and the *Parental Leave and Employment Protection Act 1987*, women are still clustered in a narrow range of occupations and industries, and are financially disadvantaged as indicated by the persistent gender pay gap. The enduring disadvantage that women experience impacts on all aspects of social life.

As this study into clinical coders reveals, gender significantly impacts on the way skills are perceived, the occupational choices people make and the status those occupations then command. Clerical work is dominated by women, and clerical work is characterised in general by lower wages, relative to many male low or semi-skilled jobs, is often located in the secondary or peripheral labour sectors, and does not usually offer substantial career opportunities or pathways.
The desire for capital to minimise labour costs and to also control labour processes inevitably results in the exploitation of those groups in the labour market that are vulnerable, by virtue of not belonging to the dominant group in society. These groups typically include youth, ethnic minorities, recent immigrants and women. Although women are not a minority group the entrenched view of women, as a group, having less bargaining power and occupying less skilled occupations does leave them at risk. Women who are also members of these other groups often experience a double disadvantage in the workforce.

Clinical coders are predominantly Pakeha/European women and receive salaries in the top bracket of clerical scales in the District Health Boards. They have good job security, although restricted career prospects, and still complain of a lack of recognition from the District Health Boards. Clinical coders appear to be less disadvantaged than in many other women-dominated occupations and indeed, many other clerical jobs, but the question remains. Are the skills required for the job of clinical coding designated as clerical and undervalued because that is the nature of the work, or is it because of gender of the majority of workers in this occupation? This research demonstrates that it was the underlying powerful influence of socially constructed gendered roles and patriarchy which subordinated the women in the study and continues to prevail. It is the predominance of women in clinical coding that consequently created the perception of the skill used, which in turn has led to the occupational status of clerical work.
Chapter Ten: Conclusion

The aim of this research was to analyse the determinants of the labour market position of women. The complex interactions of gender, skill, power and occupational status were studied within the social structures of patriarchy and the capitalist labour process to examine the labour market position of clinical coders.

Clinical coders are in a highly skilled, female-dominated occupation. However, despite the level of training required of clinical coders to competently undertake their work there is no national standard of training or qualification required, and over a third of District Health Boards did not employ any fully qualified clinical coders. Many of the clinical coding departments offered little in the way of career development or progression, although clinical coders received levels of remuneration at the top of the clerical bands in the collective employment agreements. The clinical coders surveyed in the study reported a reasonably high rate of union membership, 55 percent, and nearly 90 percent reported having some say over how their work is organised. However, clinical coders reported much lower levels of influence over other aspects of workplace organisation. Interestingly, 93 percent of clinical coder survey respondents reported satisfaction with their work, yet over two-thirds (67 percent) of the participants reported relatively low levels of recognition and valuing by the District Health Boards. This figure includes responses indicating feelings of being partly valued by the organisation. As Honneth (1995) argues there is a moral centrality to recognition and valuing, and the notion of being partly valued lacks any real authenticity or integrity of that valuing. Overwhelmingly the clinical coders and the coding managers in the study felt that they deserved much higher recognition and occupational status than they currently received.

Traditional labour market models usually locate women in vulnerable, poorly recognised and lower paid work with little prospects of improvement. These models are clearly inadequate to understand all women's, and particularly clinical coders', place in the labour market. The neo-classical approach fails because it is based on an assumption of a single competitive labour market, which does not exist. Institutional approaches place women in less advantageous positions without any critique of the assumptions that underpin women's subordination. These models also fail to introduce the complexity that class, ethnicity and other identities bring to worker's experiences. Not all women experience the same labour market outcomes, due to different levels of
privilege, but still the underlying social structures of patriarchy and the capitalist labour process influence the labour market at a fundamental level; shown by the enduring gender pay gap, the persistence of occupational segregation and the effects of the glass ceiling. All these factors contribute to exclude women from senior management and partnership positions. When women enter the workforce they are entering a labour market with structured disadvantage (England, 2010; Firestone, 1970; T. Rees, 1992; Walby, 1989).

Increasingly, workers are choosing work that provides greater flexibility and less security, even though these jobs are often part of the core tasks of the firm. Consequently, the polarising classification of workers into primary/core and secondary/peripheral, which denote "good" employment or vulnerable employment, cannot be universally applied to workers. Nevertheless, aside from those workers choosing non-standard arrangements, women are still over-represented in vulnerable types of work.

Mylett’s (2003) perspective on the internal labour market as merely the employment practices that relate to the firm implies it is discriminatory judgments of employers that will determine the labour market outcomes for workers. This enterprise level view risks overlooking the social mechanisms of patriarchy and capitalist labour processes. A critique of these structures is required while the labour market is characterised by occupational segregation. Additionally, many of the occupations where large numbers of women are found (for example cleaning, retail and service, and clerical) are located in the more vulnerable and disadvantaged labour market segments.

Clinical coders undertake core work for the District Health Boards and enjoy job security and better wages than most other clerical work in the sector, and are not vulnerable workers. Nevertheless, the position they find themselves in is a direct result of factors such as gender and skill, and how this is recognised. This subjective and contested nature of skill directly contributes to considerable different outcomes in employment, social status and benefits (More, 1983). Many factors influence the perception of skill such as gender, ethnicity and class, but also simply who undertakes the job and where the job is located can be a powerful determinant of how skill is viewed (Acker, 2004; Horrell, et al., 1990; Phillips & Taylor, 1980). Clinical coding is a clerical job and this conveys a view of women's work and consequently, lesser skill value. The gendered basis for segregation described by Phillips and Taylor also means
it is not just a matter for women to gain more skills to be able to enter an occupation with enhanced benefits (Phillips & Taylor, 1980). England (1982) shows that many women, as they gained more skills, chose to stay in their initial occupation and move vertically as the obstacles to move into men's work, that may offer better benefits, was seen as too difficult. Women would only move to men's occupations if they had no other choice (England, 1982).

As women entered clerical work in the late nineteenth century, the clerical occupation underwent a change in the skill involved and in how the occupation was valued. As a result of these changes to the nature of clerical work, as women became the majority of workers, the work became perceived as women's work and not highly skilled (Beechey, 1983; Crompton & Jones, 1984). The skill clinical coding requires carries an implicitly lower value due to the social structure of patriarchy, which systematically works to subordinate women. This is also reinforced in the way that skill is acquired for this work. In spite of the concerns from the Ministry of Health over the quality of work produced by clinical coders, there have been no attempts to standardise qualifications or enforce requirements around pre-employment training or established minimum workforce qualifications. The feedback from members of the focus groups suggested that experience is the critical component of becoming a competent coder. Consequently, this informal skill acquisition diminishes the perception of the level of the skill involved in their job (Beechey, 1983).

The status level of skill influences remuneration for workers and occupations. The gender pay gap continues in New Zealand and several pay equity initiatives have been thwarted at government level, particularly with the closure of the Pay and Employment Equity Unit in the Department of Labour in 2009 (McGregor, 2012). This research study did not identify a significant gendered difference in wages for clinical coders. The small sample size and spread across the 21 District Health Boards made any substantial inequities difficult to ascertain. However, in respect of remuneration clinical coders are relatively better rewarded than other clerical groups in the District Health Boards. In the four multi-employer collective employment agreements that currently cover clerical work in all District Health Boards there is a hierarchy within clerical work. Clinical coders' pay, at the top of the clerical scales, is above the average wage. The study did not investigate wages and salaries of non-clerical staff in the District Health Boards to identify the relative position of clinical coders' wages and in retrospect this may have been useful to the project.
Status of skill not only influences remuneration, but also the status conferred on occupations. This status is socially constructed and results in different levels of benefits for different occupations. Professions hold the highest occupational status and attract many privileges. In the focus groups and the surveys the respondents overwhelmingly argued that the occupation of clinical coding was a profession, or at least a semi-profession. The rationale given was that the work was a highly skilled and demanding job which deserved better recognition. Both clinical coding managers and clinical coders cited a need for specialist knowledge and ongoing education as reasons for justification of increased occupational status. However, the contest for professional status is also gendered, and the occupational segregation patterns extend to elite occupations as well. As Healy and Kirton (2002), Witz (1992) and Abbott (1998) all argue, the use of semi-profession as a category operates to undermine and subordinate women. This is a further example of the impact of gendered notions of skill on occupational status.

Professions are viewed as prestigious occupations, reaping both high status and usually superior benefits and therefore, the status of a profession is highly desirable. It is a vigorously defended and protected title. Professions are typified by a strong link to tertiary credentials, pre-employment qualification, ongoing education and a professional body, which controls entry to the profession and disciplines members when required. Most traditional women-dominated occupations are not regarded as professions, with the exception of nursing. Although many more women are entering the existing professions, such as medicine and law, as participation in tertiary education increases, women still struggle to achieve at the highest levels within these professions.

Occupational groups can undertake a professionalising project to lift an occupation to the elite status of a profession but this is a difficult process. The nurses have had success in elevating the profile and status of their occupation, but as the case study showed, this was a very slow process and they encountered many barriers both from politicians and hospital employers, who preferred to keep nursing as a less skilled job in the interests of control and wages minimisation. Nursing's high profile and positive image with the public supported the success of the project. Clinical coders may feel their work is highly skilled and deserving of professional recognition but they fail to attract similar popular levels of support.
Clinical coders have reported both job satisfaction and being undervalued by the District Health Boards. Common reasons given for the satisfaction were the uniqueness of, and autonomy in, their work tasks. Nearly half the clinical coders in the study had clerical work as their background before becoming coders, many of whom had moved through other clerical work up to coding. This promotion from lower to higher skilled work also contributes to job satisfaction and esteem (Goldthorpe, et al., 1968). Clinical coders had a strong identification with their task, but not the organisation. Their claim to an enhanced occupational status is likely to be a response to their feelings regarding the perceived lack of recognition by the District Health Boards. This in itself does not justify an improved occupational status, but is indicative of the disadvantage they experience in the labour market as a woman-dominated occupation.

The concepts of gender, skill and occupational status are socially determined within the structures of the capitalist labour process and patriarchy. These structures work together to shape the labour market, and women's experience of it. The benefit to capital of undervaluing women's skill is the ability to then remunerate these positions at a lower rate to men's work. Capitalism is a social system, which is opportunistic and uses patriarchy to create competition between groups of workers on the basis of gender. Ultimately this mechanism cheapens wages. The creation of the clerical hierarchy within the District Health Boards has allowed stratification of jobs and remuneration.

The capitalist labour process is the means by which management controls workers in order to maximise the accumulation of wealth through the extraction of the surplus value from workers (Braverman, 1974). Although the District Health Boards provide health services funded by public money and the employees cannot be viewed as productive workers in the Marxist sense, producing surplus value, the Boards are required to operate within a strict business model of accountability and financial acumen, which creates pressure from management to control expenses such as the wages of workers.

Workers commonly resist managerial control exerted in the capitalist labour process. The indirect employee participation that clinical coders enjoy is predominantly through the good level of union membership within the group (J. Hyman & Mason, 1995). Over half the coders in the study belonged to a union and for the majority this was the Public Service Association. This is the largest union in New Zealand, working across a number of sectors and covering many occupations. Despite membership in a large and
influential union a number of clinical coders, particularly in the focus groups, expressed concern that some union organisers did not fully understand the issues clinical coders faced and therefore did not represent their interests.

This study also enquired about direct processes that allowed for worker participation. Nearly 90 percent of clinical coders felt they had influence over their work organisation, which also supports the reported high level of job satisfaction. They had less influence over the speed they worked at and this was supported in some of their concerns of accessing training when throughput became a priority. Clinical coders reported the lowest levels of influence for workplace organisation and this appeared to follow on to feeling less valued by the District Health Boards. Although clinical coders have both direct and indirect avenues for resistance, they have not been able to use these to improve their position within the organisations. Neither the focus groups nor the surveys identified any organised or individual activities by clinical coders to resist management control. This inaction or inability to exercise power in the workplace may be explained by a number of factors. Firstly, many clinical coding departments employ very few clinical coders and these individuals may not feel sufficiently empowered because of this. Secondly, there does not appear to be a feeling of cohesion across all clinical coders in the sector to allow a united front. Thirdly, if there is doubt over the success of action this will reduce the likelihood of action being taken and again, the fragmented distribution of clinical coders may limit the perceived success of action (Hardy & Clegg, 2003). Fourthly, within the clerical workers in the sector coders already experience better wages and hold a superior position and this may satisfy them enough to not contemplate taking action. Lastly, as bell hooks (2000) describes, women are "taught via sexist ideology to devalue their contributions to the labor force" and this may result in women not actively resisting the control of management (hooks, 2000, p.103).

**Contribution and implications of this thesis**

This thesis explored the relationship between the social constructions of gender, skill, occupational status and labour market outcomes. The central factor was gender, and as the argument has been raised in the literature, too often labour market models and theories are assumed to be gender blind or neutral (Dickens, 1989; Hansen, 2002;
Holgate et al., 2012; Holgate, et al., 2006; Pocock, 1997). These same theories generally tend to characterise women, as a group, as having less advantaged outcomes when compared to men. Significantly, these approaches did not adequately explain the position in the labour market that clinical coders experience. Consequently, the findings lend support for the acknowledged need for industrial relations research and labour market theory to develop more appropriate models and approaches to better capture the experience of all workers, reflecting factors such as gender, and also class and ethnicity.

The insidious persistence of patriarchy, which is embedded in all social relationships, cannot be overlooked in the analysis of women's location in the labour market. This impact is irrespective of whether the focus is on women as a group or as individuals (Calás & Smircich, 2003; Walby, 1989). A temptation may exist to develop theory which simplistically views women as a homogenous group and universally disadvantaged. The disadvantage women experience is more complex and combines with other factors such as ethnicity and class, which lead to different levels and types of disadvantage.

The findings in this thesis also found the traditional models of professions lacked any flexibility to adequately acknowledge different occupations that may provide highly skilled, specialised and expert work. The argument that the language of classifying occupations as professional or semi-professional is indirectly determined by gender, leading to further discrimination on the basis of occupational status (Abbott, 1998; Healy & Kirton, 2002; Witz, 1992). The continual subordination of women's work denies some women's occupations the privileges that professions attract. Traditional models of professions assume a level of male privilege and this also needs to be challenged to allow a more meaningful and objective understanding of the value of occupations. These models depend largely on class privilege and access to higher education while completely ignoring the impact of gender. A more meaningful model of professions is needed, which engages with the fundamental value the work contributes to an organisation or society as a whole. This would challenge the idea of "women's work" and its often uncontested lower value status. New models need to be developed to allow recognition of the value of occupations based on the task, rather than the gender of those undertaking the work.
The health sector reforms demanded higher quality business information to support the shift to a profit model and the work of clinical coders could have been expected to increase in organisational value as a result, but it did not eventuate. The changes in the health sector and employment legislation from the mid 1980s onwards have not had the anticipated impact on clinical coders’ employment conditions and occupational status. The enactment of the *Employment Contracts Act 1991* led to the decrease in collective bargaining and union membership and the end of the award system. These changes resulted in the wages and conditions of clinical coders beginning to vary across the sector (Douglas, 2004). Surprisingly, the introduction of the *Employment Relations Act 2000* has not had an appreciable impact on collective bargaining patterns, as evidenced in the 2004 and current study. Since 2008 when the data for this study was collected, there has been considerable work undertaken by the District Health Boards and unions to successfully bargain for multi-employer collective employment agreements. There are now four multi-employer collective employment agreements covering clerical workers in the District Health Boards and they have introduced a mechanism to standardised conditions.

In summary, this thesis has examined the relationship between gender, skill, power and occupational status. The female-dominated clerical occupation of clinical coding in the public health sector was the focus of the study. The research questions called for an analysis of the existing social structures and a critical approach was used in an attempt to confront the entrenched inequalities and disadvantage in society, and to challenge the place that perpetuates the disadvantage (Kincheloe & McLaren, 2005). The analysis indicated an incremental process; from an initial gendered position, which determines first how skill is perceived and valued, and this then determines the occupational status of the work. The most significant influence in the determination of women's labour market position is their gender, and this affects the labour market before an individual enters the workforce. Expectations of worth in the labour market are predetermined, and the strength of this influence combined with the capitalist labour process colludes to disadvantage women and trap many in low value occupations with concomitant low remuneration. The study showed that, for this group of workers, public policy and legislative changes have had less affect on their labour market position than the gender of the workers.

Industrial relations scholarship needs to include meaningful gender analysis if there is to be a better understanding of the persistent disadvantage that women experience in the
labour market. This study has shown that the traditional labour market models view women as a homogeneous group and constructs them universally as disadvantaged. Although women may succeed in achieving better labour market outcomes, as a group, women struggle to achieve significant changes to their entrenched place in society. This is an issue far larger than just the workplace, and the benefits to the dominant groups in society and workplaces to not change currently far outweigh the measures needed to bring about change.

In the case of clinical coding, it is a highly skilled woman-dominated occupation, and the study revealed a workforce that was relatively well paid, secure and generally satisfied in their work. However, traditional models do not address the complex factors that locate clinical coders in the labour market. Clinical coders, as an occupational group, fail to gain the recognition they feel they deserve for their essential contribution to their organisations. The complex analysis and conclusions presented in this study indicate action is required to address these issues. At an applied level, there is still a need to create a means to value work, free from gender disadvantage. At a theoretical level, this thesis argues that gender analysis needs to be included as a standard in industrial relations scholarship.
References


Armstrong, P. (1982). "If it's only women then it doesn't matter so much". In J. West (Ed.), Work, women and the labour market (pp. 33-49). London: Routledge and Paul Kegan.


Married Women (Lecturers and Teachers) Act (1932). New South Wales, Australia


Pollert, A. (1996). Gender and class revisited; or, the poverty of 'patriarchy'. *Sociology, 30*(4), 639-659.


Appendices

Appendix 1
Individual participant information sheet
Individual clinical coders' questionnaire

Appendix 2
District Health Board participant information sheet
District Health Board questionnaires
Appendix 1

Participant
Information Sheet

Individual questionnaire

Date Information Sheet Produced: 20 April 2008

Project Title

Social Construction of Clinical Coders – the moulding of an occupation

An Invitation

I am Julie Douglas and would like to invite you to take part in the above research project. This phase of the research involves a questionnaire regarding your experiences and attitudes about your work and work environment. Your participation is voluntary and the information contributed will be used to create a better picture of the current coding workforce in New Zealand and assist in identifying future needs for coders and their profession. Your contribution will also be part of my studies and research towards a doctoral qualification.

I have conducted previous research in the area of clinical coders in New Zealand and am now conducting more in depth research into clinical coders and clinical coding. I appreciate your participation if you choose to contribute.

What is the purpose of this research?

This research will initially conduct a skills audit of clinical coders in New Zealand. This will be used to identify if areas of inconsistencies exist across the District Health Boards in regard to wages, conditions, qualifications, training opportunities and career progressions.

Part I is to be completed by the Clinical Coding Manager in each District Health Board. The aim is to determine strategic information about the clinical coding workforce and workplace practices from a managerial perspective.

Part II of the survey is to be completed by each clinical coder employed in District Health Boards. The aim is to gain an understanding of clinical coders’ educational and professional backgrounds and circumstances relating to their employment as coders.

The second phase of the research is a series of interviews with stakeholders eg in the health information area as well as unions representing clinical coders. From all these sources a better understanding of the role of clinical coders will be developed and how coders and District Health Boards might best be prepared for developments and demands in the area.

As well as contributing to my PhD thesis information from the research may be used for reports, presentations and publications.
Appendix 1

How was I chosen for this invitation?

All clinical coders employed in District Health Boards have been approached to take part in this research.

What will happen in this research?

This questionnaire is part of a survey sent to all clinical coders and on receipt of it the information contained in it will be collated in a way that your identity will not be known. No third parties will receive identifiable information regarding your participation.

What are the benefits?

Your participation in this project will assist in the development of a complete snapshot of who clinical coders are in New Zealand currently. This information will enable clinical coders, government and District Health Boards to better understand the needs of the coding workforce with regard to training, career development, qualifications and status.

How will my privacy be protected?

Your identity will not form part of the final research output. Findings from the questionnaires will be aggregated and individual contributions will not be identifiable.

What are the costs of participating in this research?

The only cost to you as a participant is your time. I anticipate that the survey will take approximately 45 minutes to complete.

Opportunity to consider invitation

Your decision to participate in this research project is completely voluntary. If you have any questions regarding the questionnaire you have been invited to complete please contact me. My details are included at the bottom of this sheet.

How do I agree to participate in this research?

By completing this questionnaire and returning the form to me you have indicated your consent to participate in this research.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Professor Ray Markey, ray.markey@aut.ac.nz, (09) 921 9999 ext 5441.

Concerns regarding the conduct of the research should be notified to the Executive Secretary, AUTEC, Madeline Banda, madeline.banda@aut.ac.nz, 921 9999 ext 8044.
Appendix 1

**Whom do I contact for further information about this research?**

**Researcher Contact Details:**

Julie Douglas, julie.douglas@aut.ac.nz, (09) 921 9999 ext 5141.

**What do I do once I have completed the questionnaire?**

Please return the completed questionnaire in the attached prepaid and addressed envelope to me by **15 June 2008**.

Approved by the Auckland University of Technology Ethics Committee on **2 March 2007**, AUTEC Reference number 06/234.
Appendix 1

Clinical Coders
and Clinical Coding
in New Zealand.

A chance to have your say

Thank you for agreeing to participate in this research project. By completing and returning this survey you have indicated your consent.

Instructions

- Complete the questionnaire.
- Your response is confidential and you will not be identified in the final results, so please be frank and honest in your responses.
- Please keep the Participant Information Sheet.
- Return the survey in the addressed and stamped envelope included by 15/06/2008

Thanks again, your response is important and appreciated, and your contribution will allow for greater understanding of the work environment and pressures experienced by you and your colleagues.
Appendix 1

A. **Work Environment**

1. Are you employed full time in this department as a clinical coder?
   - □ Yes
   - □ No. Employed part time. Hours per week ______
   - □ No. I have other work to do besides coding in this position.

2. What is the title of the department you work in?
   ______________________________
   ____________
   ______________________________

3. What is your current position title?
   ______________________________
   __________________________________

4. What is the position title of the person you report to?
   ______________________________
   __________________________________

5. Is there a collective employment agreement that covers your work and workplace?
   - □ No
   - □ Yes
   - □ I don’t know

6. Is your physical work location within the organisation satisfactory from your point of view? If not why not?
   - □ Yes
Appendix 1

☐ No

Please comment on your answer

-------------------------------------

7. What normal annual salary range best applies to you? If you are employed part time please convert to full time equivalent salary.

☐ 20,000 – 25,000

☐ 25,001 – 30,000

☐ 30,001 – 35,000

☐ 35,001 – 40,000

☐ 40,001 – 45,000

☐ 45,001 – 50,000

☐ 50,001 – 55,000

☐ 55,001 – 60,000

☐ 60,001 – 65,000

☐ 65,001 – 70,000

☐ 70,001 – 75,000

☐ 75,001 – 80,000

☐ 80,001 – 90,000

☐ over 90,000
Appendix 1

B. Affiliations

8. Do you belong to a union? If yes which one?
   □ No (please go to Q9)
   □ Yes _________________________________(please go to Q 10)

9. Why don’t you belong to a union? Is this because
   □ □ You do not believe in unions
   □ □ There is no union on site to join
   □ □ You used to belong but resigned
   □ □ You would but have not got around to it
   □ □ You don’t have faith or confidence in the union on site
   □ □ The union has not contacted you to join or give you information
   □ □ It is too expensive
   □ □ Other
       __________________________________________________________

10. Do you belong to HIANZ (Health Information Association of New Zealand)?
    □ □ Yes (please go to Q12)
    □ □ No (please go to Q11)
11. Why don’t you belong to HIANZ? Is this because
□□ You are included in an organisation membership of HIANZ
□□ You don’t think HIANZ provides benefit to you
□□ It is too expensive
□□ You use to but resigned
□□ You have no faith or confidence in this body
□□ It does not have relevance to you in your work
□□ Other

12. Do you belong to HIMAA (Health Information Management Association of Australia)?
□□ Yes
□□ No
Appendix 1

C. **Training and Development**

13. What is your professional background? ie previous work other than clinical coding. (Please tick those that apply)

   □ Health information management

   □ Clerical/administration officer

   □ Medical practitioner – NZ qualification

   □ Medical practitioner – overseas qualification

   □ Registered nurse

   □ Other nurse

   □ Other – please specify

   ____________________________________________________________

   ____________________________________________________________

14. Do you have any other qualifications? If yes what are they?

   □□ No

   □□ Yes

   ____________________________________________________________

   ____________________________________________________________

   ____________________________________________________________

   ____________________________________________________________
Appendix 1

15. Do you have clinical coding qualifications? If yes what are they?

☐ □ No

☐ □ Yes

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

16. How many years since you first learnt to code?

☐ □ < 1 yr        ☐ □ 1 - 4 yrs

☐ □ 5 - 9 yrs      ☐ □ >10 yrs

17. How many years have you held your current position?

☐ □ < 1 yr        ☐ □ 1 - 4 yrs

☐ □ 5 - 9 yrs      ☐ □ >10 yrs

18. Does your workplace support your participation in ongoing education? If yes what sort of activities do they support?

☐ □ No

☐ □ Yes

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
19. If you receive this support what form does it take?

☐ ☐ Payment of registration/enrolment fees

☐ ☐ Time off work without need to make time up

☐ ☐ Time off work but required to make time up later

☐ ☐ Time off work AND registration/enrolment fees

20. What do you do to keep current with coding practices?

______________________________________________________________________

______________________________________________________________________

______________________________________________________________________

______________________________________________________________________

21. Approximately what percentage of your coding time is spent on coder education/updates?

D. Job orientation

22. Generally do you like your job?

☐ ☐ Yes

☐ ☐ No
Appendix 1

23. How would you rate your job satisfaction?

5 □  4 □  3 □  2 □  1 □

Enjoy □□□□□

Neither □□□□□

Don't □□□□□

a lot □□□□□

enjoy nor □□□□□

enjoy □□□□□

not enjoy □□□□□

at all □□□□□

24. What are the good things about your job?

______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________

25. Do you have significant influence on how your work is done?

5 □  4 □  3 □  2 □  1 □

Always □□□□□

Often □□□□□

Now □□□□□

Rarely □□□□□

Never/almost and again □□□□□

never □□□□□

26. Do you have significant influence in decisions affecting your working speed?

5 □  4 □  3 □  2 □  1 □

Always □□□□□

Often □□□□□

Now □□□□□

Rarely □□□□□

Never/almost and again □□□□□

never □□□□□
27. Do you have influence over how the workplace is managed or organised?

5 □  4 □  3 □  2 □  1 □
Always   Often   Now   Rarely   Never/almost and again
never

28. Do you feel valued and acknowledged by your organisation?

5 □  4 □  3 □  2 □  1 □
To a      To a     Partly    To a      To a
very high  high    lesser    very little
degree    degree   degree    degree

29. What would you describe the occupation of clinical coder as?

□ Clerical

□ Technical

□ Semi professional

□ Professional

Please explain why
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
Appendix 1

30. What do you see as the role of a clinical coder in the future? Do you feel prepared for any changes you envisage?
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________

31. What do you see as the impact of electronic health records on coding practice in the future?
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________

32. Do you have any other comments you would like to make about coding or the clinical coding profession?
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
E. Finally a couple of general questions

33. How old are you?

______________

34. Gender (Please circle) M F

35. What is your ethnic/cultural group that you identify with

__________________________

Thank you for your time and thoughtful participation in this project. Please return this questionnaire in the attached prepaid/addressed envelope to me by 15 June 2008.
Participant Information Sheet

District Health Board Questionnaire

Date Information Sheet Produced:

20 April 2008

Project Title

Social Construction of Clinical Coders – the moulding of an occupation

An Invitation

I am Julie Douglas and would like to invite your organisation to participate in the above research project. This phase of the research involves a questionnaire regarding the clinical coders in your District Health Board. Your participation is voluntary and the information contributed will be used to create a better picture of the current coding workforce in New Zealand and assist in identifying future needs in the area for clinical coders and their occupation. Your contribution will also be part of my studies and research towards a doctoral qualification.

I have done previous research on clinical coders in New Zealand and am now conducting more in depth research into clinical coders and clinical coding. I appreciate your participation if you choose to contribute.

What is the purpose of this research?

This research will initially conduct a skills audit of clinical coders in New Zealand. This will be used to identify if areas of inconsistencies exist across the District Health Boards in regard to wages, conditions, qualifications, training opportunities and career progressions. The survey is in two parts:

Part I is to be completed by the Clinical Coding Manager in each District Health Board in New Zealand. The aim is to determine strategic information about the clinical coding workforce and workplace practices from a managerial perspective.

Part II of the survey is to be completed by each clinical coder employed in New Zealand District Health Boards. The aim of this is to gain an understanding of clinical coders’ educational and professional backgrounds and circumstances relating to their employment as coders.

The second phase of the research is a series of interviews with stakeholders eg in the health information area as well as unions representing clinical coders. From all these sources a better understanding of the role of clinical coders will be developed and how coders and District Health Boards might best be prepared for developments and demands in the area.
As well as contributing to my PhD thesis information from the research may be used for reports, presentations and publications.

How was I chosen for this invitation?

Clinical coding managers in all District Health Boards have been approached to take part in this research.

What will happen in this research?

In your position of responsibility for clinical coders you are invited to complete the attached questionnaire. All information collected will be reported anonymously and no third parties will receive identifiable information regarding your District Health Board. The questionnaire is estimated to take approximately 45 minutes to complete.

What are the benefits?

Your organisation’s participation in this project will assist in the development of a complete snapshot of who clinical coders are in New Zealand currently. This information will enable government and District Health Boards to better manage the coding workforce in view of future requirements for the occupation.

How will my privacy be protected?

The identity of your District Health Board will not form part of the final research output. Findings from the questionnaires will be aggregated and individual District Health Boards contributions will not be identifiable.

What are the costs of participating in this research?

The cost to you as a participant is your time. I anticipate that the session will take approximately 45 min.

How do I agree to participate in this research?

By completing this questionnaire and returning the form to me you have indicated your consent to participate in this research.

Opportunity to consider invitation

Your decision to participate in this research project is completely voluntary. If you have any questions regarding the questionnaire you have been invited to complete please contact me. My details are included at the bottom of this sheet.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Professor Ray Markey, ray.markey@aut.ac.nz, (09) 921 9999 ext 5441.

Concerns regarding the conduct of the research should be notified to the Executive Secretary, AUTEC, Madeline Banda, madeline.banda@aut.ac.nz, 921 9999 ext 8044.

Whom do I contact for further information about this research?
Researcher Contact Details:

Julie Douglas, julie.douglas@aut.ac.nz, (09) 921 9999 ext 5141.

What do I do with the completed questionnaire?

Please return the completed questionnaire to me in the prepaid and addressed envelope provided by

15 June 2008

Approved by the Auckland University of Technology Ethics Committee on 2 March 2007, AUTEC Reference number 06/234.
Clinical Coders and Clinical Coding in New Zealand.

A chance to have your say

Thank you for agreeing to participate in this research project. By completing and returning this survey you have indicated your consent.

Instructions

- Complete the organisation questionnaire.
- If you undertake clinical coding yourself please also complete an individual questionnaire as well.
- Your response is confidential and you will not be identified in the final results, so please be frank and honest in your responses.
- Please keep the Participant Information Sheet.
- Return the survey in the addressed and stamped envelope included by 15/06/2008.

Thanks again, your response is important and appreciated.
Appendix 2

A. Staffing Issues

1. How many Clinical Coders are employed at your District Health Board?
   ______ Actural ________ Full Time Equivalents

2. Of those Clinical Coders you employ how many are;
   • Undertaking introductory training/qualifications ________
   • Undertaking intermediate training/qualification ________
   • Undertaking advanced training/qualifications ________
   • Fully qualified ________

3. Please indicate how many men and women are employed to code at your District Health Board.
   • Women ____________
   • Men ____________

4. Are there currently unfilled vacancies for Clinical Coders?
   □ No
   □ Yes – how many FTE positions? ______

5. Do you plan to create any new positions for coders in the next 12 months? If yes how many?
   □ No
   □ Yes ________________
Appendix 2

6. What proportion of your coding staff have you had to replace in the last 12 months?
   __________

7. How do you currently recruit for new coding staff?
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

8. Do you experience difficulty in recruiting the right or appropriately qualified and experienced staff for positions?
   □ No
   □ Yes (comments)
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

9. Where are the clinical coders physically located
   □ In a separate coding department/unit
   □ As part of Medical Records
   □ Other (please state)
   ________________________________________________________________
10. Does your Clinical Coding Unit have a functional relationship with a Decision Support Function/Unit within the District Health Board?

☐ No

☐ Yes this is on a formal basis

☐ Yes this is on an informal basis

11. How do you view the status of clinical coding work?

☐ Clerical

☐ Technical

☐ Semi profession

☐ Profession

Why?________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

B. Training and Support Issues

12. What training do you provide for staff new to clinical coding?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
13. How do you support the ongoing development and achievement of formal qualifications by your coding workforce?

□ Give time allowance for study

□ Pay tuition fees for qualifications

□ Give a time allowance and pay tuition fees

□ Don’t provide assistance for staff to undertake formal qualifications

14. Do your coders have direct contact with clinical staff for either learning opportunities or for clarification of record queries?

□ Yes

□ No

Comments

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

15. Are there any activities formal or informal, used to assess the quality of coding in your department.

□ No

□ Yes – please give details
16. Do you feel there is adequate support outside of the DHB for the education and development of clinical coding and clinical coders in New Zealand eg. Ministry of Health, HIANZ, education institutions etc. Please explain

C. Employment Issues

17. What type of employment agreement are your coders employed on?
   □ Individual employment agreements (go to Q18)
   □ A collective employment agreement, (go to Q19)
   □ A mix of both? (go to Q17)

18. Would you prefer to have a union involved to negotiate a collective agreement that covers clinical coders? If not why not?
   □ Yes
   □ No
19. Do you see any benefit union involvement would/does bring to your DHB/department?

___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________

D. **Future Issues**

20. What do you see as the role of a clinical coder in the future?

___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________

21. Do you feel the occupation is prepared for any future changes you envisage?

☐ Yes

☐ No

22. What needs to happen to be prepared if anything?

___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
Appendix 2

23. What do you see as the impact of electronic health records on coding practice in the future?

___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________

24. Any other comments

___________________________________________________________________
___________________________________________________________________
___________________________________________________________________

Thank you for your time and thoughtful participation.

Please return this completed questionnaire to me in the attached prepaid and addressed envelope by 15 June 20