The governance schema of regional and rural public hospital nurses: how relevant are the dimensions of stewardship governance and trust in management?

Kim Clark

Edith Cowan University

Follow this and additional works at: https://ro.ecu.edu.au/theses

Part of the Business Administration, Management, and Operations Commons, and the Health and Medical Administration Commons

Recommended Citation
Clark, K. (2013). The governance schema of regional and rural public hospital nurses: how relevant are the dimensions of stewardship governance and trust in management?. https://ro.ecu.edu.au/theses/613

This Thesis is posted at Research Online.
https://ro.ecu.edu.au/theses/613
Edith Cowan University

Copyright Warning

You may print or download ONE copy of this document for the purpose of your own research or study.

The University does not authorize you to copy, communicate or otherwise make available electronically to any other person any copyright material contained on this site.

You are reminded of the following:

- Copyright owners are entitled to take legal action against persons who infringe their copyright.

- A reproduction of material that is protected by copyright may be a copyright infringement. Where the reproduction of such material is done without attribution of authorship, with false attribution of authorship or the authorship is treated in a derogatory manner, this may be a breach of the author’s moral rights contained in Part IX of the Copyright Act 1968 (Cth).

- Courts have the power to impose a wide range of civil and criminal sanctions for infringement of copyright, infringement of moral rights and other offences under the Copyright Act 1968 (Cth). Higher penalties may apply, and higher damages may be awarded, for offences and infringements involving the conversion of material into digital or electronic form.
THE GOVERNANCE SCHEMA OF REGIONAL AND RURAL PUBLIC HOSPITAL NURSES: HOW RELEVANT ARE THE DIMENSIONS OF STEWARDSHIP GOVERNANCE AND TRUST IN MANAGEMENT?

Kim Clark
Bachelor of Science, Graduate Diploma in Business

Faculty of Business and Law, Edith Cowan University

August, 2013
USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.
ACKNOWLEDGEMENTS

Thanks to my supervisors Alan Brown and Peter Standen for their guidance and support over the course of this project. I also note my appreciation of the encouragement offered by Chris Skinner and Michael Moodie and of the assistance of those in the Western Australia public health system who contributed to the research.
ABSTRACT

This study broadly pertained to the issue of public health sector governance. The field of healthcare governance had been characterised as having challenges of greater intricacy and sensitivity than those found in any other sector (Philippon & Braithwaite, 2008). While increasingly regarded as important to health system performance, governance had, however, been evaluated as poorly understood in conceptual and practical terms and subject to competing ideas regarding its role and challenges (Brinkerhoff & Bossert, 2013).

Specifically, the thesis elucidated frontline regional and rural hospital nurses’ cognitive schema of strategic aspects of governance practice of managers in the Western Australian Country Health Service (WACHS). It also explored the question of whether compatibility between nurses’ schema and their perceptions of governance practice increased their propensity to form the intention to leave their jobs in WACHS hospitals.

Because of its heavy reliance on its nursing workforce, the Australian regional and rural health system had been described as an essentially ‘nurse-led’ healthcare context dominated by public hospitals (Bish et al., 2012). Regional and rural health reforms had also deeply affected the practice and work environments of many nurses in these areas over a long period and more change was proposed by State and Commonwealth levels of government (Department of Health and Ageing, 2010; Mahnken, 2001; WACHS, 2007, 2009). The Department of Health and Ageing had suggested an outcome of this had been that many clinicians in regional and rural areas were unhappy with strategic aspects of healthcare governance, which had led to less
responsive services and the loss of opportunities to improve clinical safety and quality. Given this context, the strategic governance perspectives of frontline hospital nurses’ employed by WACHS appeared an important area of study.

A core purpose of the study was to anchor the assessment of regional and rural nurses’ perspectives of strategic aspects of governance within the theoretical frames of Stewardship Governance (Travis et al., 2003) and Trust in Management (Clark & Payne, 1997, 2003, 2006). These frames had been postulated as consistent with the underpinning motives of caring professions such as nursing (Brown & Calnan, 2010, 2011; Calnan, Rowe, & Entwistle, 2006; Saltman & Ferroussier-Davis, 2000) suggesting they were likely to be apparent within the profession’s broader architecture of ‘shared mental models’ or schema of appropriate governance practice (Epitropaki & Martin, 2004; Mohammed et al., 2010).

Methods suited to elucidating schema were employed in the study (Floyd & Widaman, 1995). The validity of the schema measures identified was subsequently tested with respect to their relevance and importance to the study population. This validation process was theoretically grounded in the empirically-supported cognitive process of schema ‘compatibility testing’ (Beach, 1993; Miner, 2007) and entailed the use of a turnover intention scale developed by Roodt (Jacobs & Roodt, 2007) as an outcome measure. The design features of this scale suggested it was suited to the assessment of nurse ‘compatibility testing’ of governance schema (Morrell et al., 2008). The issue of nursing turnover had also been established as a widespread and important problem for healthcare systems (Coomber & Barriball, 2007; Holtom et al., 2008; Hwang & Chang, 2008; McCarthy, Tyrrell, & Lehane, 2007; West, 2005) and had been linked with
issues of management style and governance (Attree, 2005; Hayes et al., 2006; Kleinman, 2004).

The stages of the research undertaken included initial interviews with 16 highly experienced clinician-managers, in which the boundaries, principles and practices of managerial governance were explored with a view to ascertaining the preferences of hospital nurses. Data from these interviews was used along with information derived from literature on the elements of Stewardship Governance (Travis et al., 2003) and Trust in Management (Clark & Payne, 1997, 2003, 2006) to construct an inventory of strategic governance practices. This inventory was then used to develop a governance questionnaire, which was further developed and evaluated in two subsequent mail surveys. Data from an initial small-scale mail survey (n=199, response rate 44%) were analysed using Exploratory Factor Analysis to check item reliability and validity, thereby guiding item deletion. The subsequent main-study survey of 1682 nurses working in WACHS regional and rural hospitals resulted in the return of 697 completed questionnaires, representing a response rate of 45%.

Main-study data were interpreted using Principal Components Analysis to elucidate governance scales reflecting WACHS frontline hospital nurses’ underlying schema of strategic aspects of governance in their organisation. Scale validation was undertaken using multiple regression analyses with scores on Roodt’s Turnover Intention Scale as the dependent variable. The results supported the study hypothesis that compatibility between the governance schema of frontline regional and rural public hospital nurses employed by WACHS and their perceptions of WACHS managers’ governance practices would predict their turnover intentions.
Overall, the thesis lent weight to the World Health Organization’s (WHO, 2000) claim that the concept of Stewardship Governance had relevance to health systems. Further, it supported the contentions of those like Brown, Calnan, Rowe and colleagues in relation to the relevance of trust to manager-clinician governance relationships (Brown & Calnan, 2010, 2011; Calnan & Rowe, 2008a; Calnan, Rowe, 2008b; Calnan et al., 2006). The research findings have relevance to issues of effective healthcare reform; models of nurse management and the development and support of nurse managers; and the prevention of nurse turnover in regional and rural public hospitals. The scales developed in the study may be useful in similar investigations in other regional and rural jurisdictions and to nursing research in other contexts. The scales might also have value in evaluating the impact of changes to governance in regional and rural public hospitals on frontline nurses.
DECLARATION

I certify that this thesis does not, to the best of my knowledge and belief:

i. incorporate without acknowledgment any material previously submitted for a degree or diploma in any institution of higher education;

ii. contain any material previously published or written by another person except where due reference is made in the text of this thesis; or

iii. contain any defamatory material.

Signed:

Name:

Date: 7 October, 2013.
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgements</td>
<td>IV</td>
</tr>
<tr>
<td>Abstract</td>
<td>V</td>
</tr>
<tr>
<td>Declaration</td>
<td>IX</td>
</tr>
<tr>
<td>1. Introduction</td>
<td></td>
</tr>
<tr>
<td>1.1 Background to the research</td>
<td>1</td>
</tr>
<tr>
<td>1.2 Organisational and theoretical context of the study</td>
<td>3</td>
</tr>
<tr>
<td>1.3 Justification for the study</td>
<td>7</td>
</tr>
<tr>
<td>1.4 Research issue, research objective and research questions</td>
<td>12</td>
</tr>
<tr>
<td>1.5 Methodology</td>
<td>13</td>
</tr>
<tr>
<td>1.6 Definition of Terms</td>
<td>16</td>
</tr>
<tr>
<td>1.7 Looking Ahead</td>
<td>17</td>
</tr>
<tr>
<td>2. Literature Review</td>
<td></td>
</tr>
<tr>
<td>2.1 Introduction</td>
<td>18</td>
</tr>
<tr>
<td>2.2 Governance</td>
<td>20</td>
</tr>
<tr>
<td>2.2.1 Interpreting public-sector governance</td>
<td>20</td>
</tr>
<tr>
<td>2.2.2 Three dimensions of governance: An overview</td>
<td>23</td>
</tr>
<tr>
<td>2.2.3 The ‘what’ of governance: Strategy and the stewardship function</td>
<td>25</td>
</tr>
<tr>
<td>2.2.4 The ‘who’ of governance: Evolving views of involvement in the strategic domain</td>
<td>30</td>
</tr>
<tr>
<td>2.2.4.1 Locating governance responsibilities and the logic of governance</td>
<td>30</td>
</tr>
<tr>
<td>2.2.4.2 Recent history</td>
<td>33</td>
</tr>
<tr>
<td>2.2.4.3 The emergence of clinical governance</td>
<td>40</td>
</tr>
<tr>
<td>2.2.4.4 Research into the governance perspectives of those at the frontline</td>
<td>47</td>
</tr>
<tr>
<td>2.2.5 The ‘how’ of governance: Principal-agent relationships</td>
<td>51</td>
</tr>
<tr>
<td>2.2.5.1 Governance and the issue of agents’ self-interest</td>
<td>52</td>
</tr>
<tr>
<td>2.2.5.2 Dominant theory on principal-agent relationships</td>
<td>56</td>
</tr>
<tr>
<td>2.2.5.3 Signs of changing emphasis in principal-agent governance relationships</td>
<td>62</td>
</tr>
<tr>
<td>2.2.5.4 Trust</td>
<td>67</td>
</tr>
<tr>
<td>2.3 The cognitive dimension: Conceptualising the process of nurse judgements of their managers’ governance practice</td>
<td>72</td>
</tr>
<tr>
<td>2.4 The outcome measure: An important organisational variable</td>
<td>77</td>
</tr>
<tr>
<td>2.4.1 Justifying the choice</td>
<td>77</td>
</tr>
<tr>
<td>2.4.2 Measuring turnover intention</td>
<td>82</td>
</tr>
<tr>
<td>2.5 The study context</td>
<td>86</td>
</tr>
<tr>
<td>2.5.1 Hospitals in the public system: A brief overview</td>
<td>86</td>
</tr>
<tr>
<td>2.5.2 Western Australian Country Health Service (WACHS)</td>
<td>87</td>
</tr>
<tr>
<td>2.6 Summary and synthesis of main variables from the literature review for the study</td>
<td>93</td>
</tr>
</tbody>
</table>
3. METHODOLOGY

3.1 Introduction

3.2 The General Perspective

3.3 Overview of Issues that Influenced the Choice of Methods

3.4 Organisational and Professional Focus of the Study

3.4 Ethics

3.5 Expert Interviews and Questionnaire Development

3.6 Instrument Development Study: Sample, Procedure, Methods and Analysis

3.7 Main Study Sample, Procedure, Methods and Analysis

3.8 Summary

4. RESULTS

4.1 Introduction

4.1.1 Research question

4.1.2 Research hypotheses

4.1.3 Summary of methods used

4.2 Preliminary Studies

4.2.1 ‘Expert opinion’

4.2.2 Instrument development survey

4.2.3 Analysis of the instrument development survey data

4.3 The Main Study

4.3.1 Survey response

4.3.2 Database preparation and preliminary analysis

4.3.3 Scale checking prior to multiple regression

4.3.4 Multiple regression analysis

4.3.5 Frontline Hospital Nurses’ Perceptions of Governance in WACHS

4.3.6 Hypothesis Testing

4.3.7 Summary

5. DISCUSSION AND CONCLUSIONS

5.1 Introduction

5.2 WACHS nurses’ governance schema- ‘What’, ‘How’ and ‘Who’

5.3 The ‘Compatibility Test’- Schema consistency and turnover intention

5.4 Nurses’ perceptions of governance in WACHS

5.5 Implications for Western Australia’s Regional and Rural Health System

5.3 Broader Significance

5.4 Limitations

5.5 Future Research
Table 13 Correlation Between WACHS Scales and Turnover Intention Scale 164
Table 14 Main Study Response Fractions by WACHS Region 166
Table 15 Age Profile of Respondents versus Total Sample 167
Table 16 Nursing-Level Profile of Respondents versus Total Sample 168
Table 17 Formal Nursing Education: Profile of Respondents 168
Table 18 Eigenvalues and Rotated Loadings for Two Component Solution 169
Table 19 Principal Component Analysis Rotated Component Matrix: Local Managers 170
Table 20 Eigenvalues and Rotated Loadings for One Component Solution 171
Table 21 Principal Component Analysis Rotated Component Matrix: WACHS Managers 172
Table 22 Hierarchical Multiple Regression 175
Table 23 Turnover Intention Means by Age Group 177
Table 24 Turnover Intention Mean Scores by Years of Hospital Nursing 177
Table 25 Turnover Intention Mean Scores by Formal Nursing Education 178
Table 26 Turnover Intention Mean Scores by Nursing Level 178
Table 27 Hierarchical Multiple Regression 179
Table 28 Local Manager Governance Scale 189
Table 29 WACHS Manager Governance Scale 189
1. **INTRODUCTION**

1.1 **Background to the research**

This thesis pertained to public-sector governance, which was studied in the context of the public hospitals within the Western Australian Country Health Service (WACHS). The definition of hospitals used in the study was consistent with the Western Australian *Hospitals and Health Services Act 1927* (s.2) so that it included hospitals and nursing posts.

In particular, the study explored aspects of the mental templates or models (i.e. cognitive schema) frontline registered nurses working in WACHS regional and rural hospitals used to interpret the governance practices of their immediate and broader WACHS management. In doing so, it drew on the notion that groups of employees can have shared schema that shapes their interpretations and responses to management practice (Epitropaki & Martin, 1983; Rentsch & Klimoski, 2001). With respect to professions like nursing, their work-related schema had been said to be substantially influenced by the values, training and experience associated with the discipline (Miner, 2007).

The nature of the study meant it had links to aspects of the broader domain of what had come to be referred to as ‘*clinical governance*’. This term first appeared in the literature in the late 1990’s and emerged in relation to the UK NHS modernisation agenda (Travaglia, Debono, Spigelman, & Braithwaite, 2011). According to Travaglia et al. (2011) the boundaries of clinical governance span issues of safety and quality, use of data and evidence, patient centred care, and strengthening links between clinical and corporate areas. While a broad and emerging concept, its shift in concern to
accountability, end results, resource use and ways of working and behaving (Braithwaite & Travaglia, 2008; Travaglia et al., 2011) suggested linkages between clinical governance and the area addressed in this study. Its close association with issues at ward, unit or department levels (Braithwaite & Travaglia) reinforced this conclusion.

WACHS was a single, large, geographically-diverse organisation, responsible for the management of all of the State’s public hospitals beyond the Perth metropolitan area. Given its scope, it provided a study context offering a cross-section of the diverse public hospital environments to be found in regional and rural areas of Australia. WACHS was also an organisation in the midst of substantial change, particularly insofar as its hospitals and the roles of frontline nurses were concerned.

While governance was a difficult concept to pin down, the study took as a point of departure that: (1) it pertained to what Roberts (1997) referred to as establishing policy and setting direction in government agencies, or what Rhodes (1996) described as creating order in a policy domain, and that these efforts include the design, direction, and implementation of publicly-funded services (Hupe, 2011). Lane and Wallis (2009) had likened core aspects of this to strategic management. Thus, the broad focus of the study was on registered nurses in WACHS public hospitals and their schema of strategic dimensions of the governance practice of their managers. In examining this issue, the study was rooted in Feldman and Khademian’s (2002) contention that public-sector managers are, or should be: (a) involved in deciding how policy goals are achieved, including the configuration of key elements of the governance relationships they have with their staff; and (b) that they should be accountable for their decisions in this area.
1.2 Organisational and theoretical context of the study

As noted previously, the current study was undertaken in WACHS, an arm of the WA public health system established in 2002 through the consolidation of more than 40 separate (predominantly community-based) health services (WACHS, 2012). WACHS was Australia’s largest rural and remote health system and delivered healthcare to approximately 500,000 people (WACHS, 2010). Across its 71 regional and rural hospitals and 47 nursing posts (i.e. the collective of WACHS ‘hospitals’), WACHS dealt with as many emergencies as those handled by all the State’s metropolitan hospitals and almost as many births as the major maternity hospital (WACHS, 2010).

Numerically, WACHS hospitals accounted for almost 10 percent of the national total (Productivity Commission, 2005) and the communities it served spanned those in the urbanised South West of the State through to remote areas to the north and east of the capital. WACHS nursing staff comprised approximately 40% of the organisation’s almost 6000 full time equivalent (FTE) employees (WACHSa, n.d.). Of these nurses, four in five were estimated to be registered nurses (AIHW, 2012).

WACHS organisational structure incorporated seven administrative regions, each with its own budget allocation and regional bureau, headed by a Regional Director who was supported by a team that included Regional Directors of both Nursing and Medicine. According to Denis (2002) an underpinning goal in the regionalisation of healthcare was to build strategic capacity away from the centre of healthcare via delegation of power for decision-making and implementation. He noted this derived from a view of regionalisation as something that facilitated more effective resource allocation and planning. This seemed consistent with the authority delegated to WACHS regions, which included substantial responsibility for planning, resource use, and the
development and management of local services (WACHS, 2008, 2009, 2011). Regions were, however, also complemented by a central office staff based in Perth, headed by a Chief Executive Officer, who was supported by a range of generalist and specialist policy and administrative personnel, including Area-wide Directors of Nursing and Medicine. While detail on the specific governance expectations WACHS had of local hospital-level managers was not fully elaborated in any of its formal policy documentation, WACHS had suggested that the community level was an area in which flexible service delivery, innovation, and the establishment of close ties with other agencies within the community were supported (WACHSb, n.d.). WACHS also pointed to the delegation of some strategic responsibility to local-level management (WACHS, 2011). WACHS standard job description forms (JDF’s) for nursing management positions also specified a range of strategic governance roles.

The study’s organisational points of reference for WACHS frontline hospital nurses’ governance schema were: (a) local hospital managers; and (b) the broader collective of WACHS Central and Regional bureaux structure of ‘management’. With respect to the former, in WACHS more abundant, smaller facilities these positions carried the title of Director of Nursing/Health Service Manager. In WACHS larger hospitals, with more substantial management hierarchies, these positions included Clinical Nurse Managers (unit-level nurse management) and Nursing Coordinators (i.e. hospital-level nurse management).

As noted, WACHS was an organisation in the midst of substantial strategic change, particularly insofar as its network of hospitals was concerned. For most of these facilities, the change was a reorientation away from acute care to give more emphasis to community-based care and preventive services (WACHS, 2007). This accorded with
Mahnken’s (2001) assessment of the reform directions for most of Australia’s small rural hospitals. Given frontline registered nurses were the mainstay of health professional staff in these facilities, the impacts of change and responsibility for its implementation were expected to substantially fall to them. Consequently, it seemed successful management of change would be highly dependent on nurses’ reactions to both its general direction and the ways in which strategic aspects of governance were managed. Although Mahnken recognised this, she suggested that it had not been well-understood by decision makers in State health systems.

An underpinning impetus for undertaking the study was an interest in the contested area of governance relationships between clinicians and managers and whether these should alternatively be oriented to controlling propensity to self-interest or whether the ethical norms of the profession might encourage a different view. By attending to this issue, the study linked itself to competing conceptualisations of employees offered in the governance literature. These have their respective roots in: (a) organisational economics and (b) the propositions of key figures in the human relations school of organisational theory. The economic perspective, reflected in Agency Theory, interpreted employees as self-serving and opportunistic rather than trustworthy and committed to the same goals as the business owner or principal (Sundaramurthy & Lewis, 2003). This perspective discourages organisational investment of interest or concern with the views of staff about things like direction-setting or the management of strategic change. The competing human relations perspective, reflected in Donaldson’s (1990) Stewardship Theory, afforded staff the potential to be motivated by higher-order concerns than self-interest, to be pro-organisational and trustworthy (Armstrong, 1997; Davis, Schoorman, & Donaldson, 1997; Saltman & Ferroussier-Davis,
2000). Thus, this perspective encourages interest and concern about the views of staff about things like direction-setting and change management.

In taking the human relations perspective, the study was founded on a specific ‘moral’ perspective of frontline regional and rural hospital nurses and sought to give emphasis to the implications the research might have for the governance practice of their managers. This reflected what Neuman (2006) had referred to as an attempt to create reflexive knowledge.

The research was undertaken within a theoretical architecture of governance derived from two frames. The first of these was the World Health Organization’s (2000) notion of Stewardship Governance and the related conceptual work of Travis, Egger, Davies, and Mechball (2003) populating the scope of its functions. This provided an initial structural view of a potential ‘what’ of core strategic aspects of governance practice. The components of Stewardship Governance responsibility comprised the following functions: (1) generating intelligence; (2) formulating a strategic policy framework; (3) ensuring tools for implementation: powers, incentives, and sanctions; (4) building coalitions/building partnerships; (5) ensuring a fit between policy objectives and organizational structure and culture; and (6) ensuring accountability. Within each of these functional areas, Travis et al. (2003) had also described a range of concrete components or tasks.

The second theoretical frame used to guide this research was empirically-determined (Clark & Payne, 1997, 2003, 2006) and specified the dimensions that formed the basis for employee trust judgements of managers. These were: (1) ability; (2) loyalty and fairness; (3) integrity; and (4) openness. In contrast to the ‘what’, this frame provided a window to a potential ‘how’ of strategic aspects of governance practice. The two
theoretical frames of Stewardship Governance and Trust in Management were used to guide this study, ultimately informing the development of an instrument that was used to investigate frontline WACHS hospital nurse perspectives of the structure and process aspects of the strategic governance practices of both their immediate and broader organisational managers (i.e. the ‘who’ of strategic governance in this study).

1.3 Justification for the study
Frontline regional and rural hospital nurse cognitive schema of strategic aspects of managers’ governance practices were investigated in this study and their association with turnover intention was investigated as an indicator of their potential professional and organisational importance. This study was justified because: (a) understanding of nurse perspectives of, and preferences for, strategic aspects of governance practice appeared to be a gap in the literature; (b) there was applied value in understanding nurse perspectives on appropriate managerial governance practice, especially in regional and rural organisational environments in which substantial changes were expected regarding the nature of their work; (c) clarifying Stewardship Governance responsibilities and relational styles of governance appropriate to different healthcare management contexts represented a useful contribution to theory; and (d) the inclusion of turnover intention as a study outcome measure offered potential insights into specific elements of governance practice that might be associated with higher levels of nurse satisfaction and retention.

The broader themes of nursing, rural health and public hospitals, and strategic aspects of governance addressed in the thesis were particularly relevant issues in the Australian healthcare context. Among the reasons for this were that registered nurses comprised a very large component of Nation’s health workforce (i.e. 38.7%) and
regional and rural areas were more reliant on them for healthcare than were their metropolitan counterparts (Productivity Commission, 2005). The nursing workforce was also showing signs of substantial immediate and emerging problems. These included shortages in supply, growing demand pressures, a rapidly increasing average age, and retention problems (AIHW, 2012; Duffield, Roche, Blay, & Stasa, 2011; Graham & Duffield, 2010; Productivity Commission, 2005). In regional and rural areas, a high rate of nurse turnover was also a problem that went beyond the efficient functioning of hospitals. For example, it was said to further compromise the already poor health of Aboriginal people living in remote areas who suffered whenever there was a lack of nursing continuity (Minore et al., 2005). Nursing turnover was also costly (Jones, 2008; O’Brien-Pallas et al., 2006) and smaller hospitals felt the impact of this more acutely than their larger counterparts (Alexander, Bloom, & Nuchols, 1994).

The themes of regional and rural health and hospitals were likewise important. Not least, this was because people in regional and rural areas had poorer health, experienced higher rates of most major diseases, and had a lower life expectancy than their metropolitan counterparts (AIHW, 2008). Further, because alternatives were often absent, there was a heavier reliance among regional and rural residents on local public hospitals for both primary and acute care than was the case for their metropolitan counterparts (Productivity Commission, 2005).

With respect to strategic aspects of governance, regional and rural hospitals had also been characterised as requiring substantial further reform yet as also having already been ‘incubators’ of much innovation in models of care (Productivity Commission, 2005). Thus they appeared to have both a history of locally-driven strategic change and a future that required more of the same. WACHS (2007) reflected this broad
assessment and more particularly, had highlighted a need to further respond to a range of emerging challenges via the assignment of strategic governance responsibilities across central, regional and local levels of the organisation.

Further to WACHS strategic context was the Commonwealth Government’s announcement that national health reforms would see more governance and managerial responsibility for Australian public hospitals devolved to the local level, with local managers and clinicians expected to work together to “drive innovation, efficiency and improvements for patients” (Department of Health & Ageing, 2010, p. 5). The Commonwealth had also highlighted that engagement with clinicians’ perspectives and incorporating these “into day to day operations” (Department of Health & Ageing, p. 5) would be a core strategy for hospital reform. This was consistent with Philippon and Braithwaite’s (2008) argument that health reform needed to more profoundly consider the perspectives of clinicians.

Given this broader context, specific guidance for Australia’s regional and local health services in conceptualising and implementing effective strategic governance appeared lacking. This picture was consistent with Cummings et al.’s (2010) characterisation of the world-wide situation with respect to nursing leadership, which was on the one-hand being asked to “advance an agenda for change” (p. 364) while on the other, getting little guidance about how to enact it. Moreover, little empirical attention seemed to have been given to establishing the perspectives of frontline staff in public healthcare settings regarding the approaches managers should take in areas related to strategic aspects of governance (Forbes, Hill, & Lynn, 2007). This seemed an especially important gap in Australia’s regional and rural areas where hospital nurses were the backbone of regular healthcare provision (Productivity Commission, 2005) and their
roles had been, and seemed likely to continue to be, most affected by any reforms (Mahnken, 2001). Consequently, their perspectives on strategic change were likely to be particularly pertinent to what Pettigrew, Ferlie and McKee (1992) referred to as the ‘receptiveness’ of healthcare contexts to change.

The relevance of coal-face nursing perspectives of strategic aspects of governance was also supported by the long-standing acknowledgement of the frontline as an important determinant of organisational functioning (Currie & Proctor, 2005; Floyd & Wooldridge, 1997; Floyd & Wooldridge, 2000; Kouzes & Posner, 2002; Mantere, 2008; Yang, Zhang, & Tsui, 2010). It also drew support from the increasingly strategic emphasis being ascribed to the area of clinical governance, which had brought calls for research into the design of governance frameworks that took more account of frontline clinical perspectives (Braithwaite & Westbrook, 2004; Braithwaite, Westbrook, & Iedema, 2005; Braithwaite, Runciman, & Merry, 2009; Braithwaite et al., 2011). It also sat against a backdrop of more general calls for greater frontline participation and more accommodation of clinical values in healthcare governance (Ashmos, Duchon, & McDaniel, 2000; Cranstoun & Yuvarajan, 1999; Edmonstone, 2009; Eeckloo et al., 2004; George et al., 2002; McHugh, Johnston, & McClelland, 2007; Stafrace & Lilly, 2008).

As noted, empirical work clarifying Stewardship Governance responsibilities and relational styles of governance appropriate to different healthcare management contexts also represented a potentially useful contribution to theory. With respect to the WHO notion of Stewardship Governance, there appeared to have been no studies that specifically examined roles and responsibilities at the level of subordinate jurisdictions like the WACHS (Brinkerhoff & Bossert, 2013). Moreover, little work
appeared to have been done to elaborate strategic aspects of governance nurses expect and want at the frontline of healthcare (Birken, Lee, & Weiner, 2012; Kowalik & Yoder, 2010). Theoretically-grounded research into the specific characteristics of nurses ‘face-to-face’ governance interactions with their managers most suited to building trust or assessing its value or impact from their perspective also appeared to be a gap in the literature (Brown & Calnan, 2011; Calnan & Rowe, 2008).

Along with the above-mentioned justifications, the study was undertaken in a context of little emphasis in the management literature to the perspectives of frontline staff. Reflecting this, both Sullivan (1986) and Bean (2008) had noted widespread acknowledgement of the led being critical to the notion of leading, yet the relative dearth of research placing employees at the forefront in questions of leader effectiveness. Bean (2008) also called for research to extend understanding in this area and more particularly, for attention to be given to investigating employee expectations of staff-manager relationships.

Finally, the study findings had potential relevance to other parts of the Australian public healthcare system and those of other countries, which in most cases, seemed to be confronting similar combinations of reform challenges (Denis, 2002) and challenges with nurse turnover (Coomber & Barriball, 2007; Holtom et al., 2008; Hwang & Chang, 2008; McCarthy, Tyrrell, & Lehane, 2007; West, 2005). Consequently, identifying governance practices that might be more effective in securing strategic change in public hospitals and also offered an opportunity to respond to the issue of nurse dissatisfaction seemed a useful contribution.
1.4 Research issue, research objective and research questions

The research issue was the schematic perspectives frontline regional and rural hospital nurses had of strategic aspects of the governance practice of their managers and the degree to which these were matters of professional and organisational significance.

The research objective was to examine WACHS frontline nurse cognitive schema of strategic aspects of the governance practice of their managers within a reflexive frame based on the tenets of the human relations school of organisational theory.

The proposition was that the Human Relations perspective offered a better account of the composition of the cognitive schema frontline hospital nurses had of strategic governance practices than that inferred by Economic Theory.

To investigate the issue and respond to the research objective, the following research question was identified:

*Are management practices that accord with theoretical frames of Stewardship Governance and Trust in Management apparent in the governance schema of WACHS frontline regional and rural public hospital nurses’?*

The related study hypotheses were:

1. *Frontline regional and rural public hospital nurses employed by WACHS will show evidence of having governance schema consistent with aspects of the theoretical frames of Stewardship Governance and Trust in Management.*

2. *Compatibility between the governance schema of frontline regional and rural public hospital nurses employed by WACHS and their perceptions of their managers’ governance practices will predict their turnover intentions where the comparisons*
pertain to aspects within the theoretical frames of Stewardship Governance and Trust in Management.

1.5 Methodology

The study was undertaken in a sequence that included survey questionnaire development supported by ‘expert opinion’, an instrument development survey, and a main study sample survey of WACHS frontline hospital nurses. The research purpose was a combination of elements of exploration, description and explanation (Neuman, 2006).

With respect to exploration, the study aimed to shed light on the degree to which frontline nurses working in WACHS hospitals had schema vis-à-vis their immediate and organisation-wide managers that accorded with Travis et al.’s (2003) characterisation of the Stewardship functions of health-sector governance and Clark and Payne’s (1997, 2003, 2006) dimensions of Trust in Management. This exploratory assessment was guided by initial individual ‘expert’ interviews with senior WACHS staff that had extensive experience in both clinical (predominantly nursing) and management areas of the organisation. Their exposure to both areas was anticipated to have provided them with substantial opportunity to reflect on the managerial governance perspectives and preferences of frontline regional and rural hospital nurses and to enable them to identify corresponding governance practices.

On the basis of ‘expert opinion’ affirming the relevance of aspects of both Travis et al.’s (2003) Stewardship Governance functions and Clark and Payne’s (1997, 2003, 2006) dimensions of Trust in Management to nurses’ governance schema, the exploratory aspect of the research progressed to a stage of questionnaire construction. This began with a compilation of an inventory of practices mentioned by ‘experts’ that were
consistent with aspects of Stewardship Governance and Trust in Management. Subsequently, a questionnaire based on the inventory was tested, refined and used via a process that entailed two sample surveys of frontline Level 1 and 2 WACHS hospital registered nurses. The first of the surveys was small scale and focussed on item testing and elimination with a view to establishing measures of governance schema (i.e. scales). The subsequent main study involved a larger sample and facilitated scale refinement and hypothesis testing (i.e. the explanatory dimension). Both the pilot and main studies were undertaken with samples drawn from databases of all registered nurses working in WACHS hospitals. Full details about sampling are provided in the Chapter Three.

Along with the exploratory and explanatory purposes of the research, the main study served descriptive purposes in that it provided a picture of strategic aspects of the governance practice of local area and broader WACHS managers from the perspective of frontline nurses (Neuman, 2006).

As noted, a key influence on the choice of methodology was the concept of cognitive schema and the proposition that frontline hospital nurses would have similar or ‘shared’ schema of appropriate governance practice. Schema are mental models individuals use to filter, organise and interpret information and they had been suggested to be relevant to understanding organisational aspects of professional practice (Scott, 1990). They had been postulated at individual (Goodhew, Cammock, & Hamilton, 2005; Morrison & Robinson, 1997) and group levels in organisations (Labianca, Gray, & Brass, 2000; Mohammed, Ferzandi, & Hamilton, 2010; Mohammed, Klimoski, & Rentsch, 2000). One particular type of group mental model related to what its’ members believed to be effective or appropriate organisational processes
(Mohammed et al., 2000). Among nurses, a substantial influence on Group Mental Models had been suggested to be the values, training and experience associated with the discipline (Miner, 2007). In accordance with the current study’s schema perspective of nurse governance beliefs, the methodology followed that used by others who had investigated these structures among employees (Rentsch & Klimoski, 2001; Van Rekom, Van Riel, & Wierenga, 2006). The study methods also adhered to general guidance on the development of survey instruments to establish valid measures of underlying psychological constructs like schema (Clark & Watson, 1995; Goodwin & Leech, 2003; Hinkin, 1998). Subsequent data analysis also proceeded in accordance with guidance in the literature on developing measures of schema (DeVellis, 1991; Floyd & Widaman, 1995).

A further methodological influence was Beach’s (1990) contention that schema are used by employees to evaluate their organisational experiences via a process of ‘compatibility testing’. Compatibility testing studies undertaken by Beach and his colleagues had included research exploring the consequences of differing levels of compatibility between staff schema of appropriate management practice and their perceptions of actual events (Dunegan, 2003; Richmond, Bissell, & Beach, 1998). Beach’s (2007) contention that high-level compatibility led to staff being more satisfied with both their managers and employer organisations was accommodated in the current study as a means of examining the construct validity of measures of WACHS frontline hospital nurse strategic governance schema (DeVellis, 1991). In this case, the results of the compatibility testing process were interpreted using a measure of turnover intention. This choice accorded with that used by Dunegan (2003) in his research on the compatibility testing process. The use of turnover intention was also
encouraged because of its currency in light of a global nursing shortage (Buchan & Aiken, 2008; Cai & Zhou, 2009; Jacobs & Roodt, 2007; Ma, Lee, Yang, & Chang, 2009) and because it had been linked to issues of management style and governance (Hayes et al., 2006). Previous governance-related research with nurses suggested the design features of the turnover intention scale used in the study made it an appropriate choice with respect to schema compatibility testing (Morrell, Loan-Claire, Arnold & Wilkinson, 2008).

Data analysis methods included factor analysis and multiple regression and these were undertaken using SPSS version 15.0 for Windows.

1.6 Definition of Terms

The framework of strategic governance practices was derived from Travis et al.’s (2003) description of Stewardship Governance in the health sector and from Clark and Payne’s (1997, 2006) outline of the dimensions or facets within which employees make trust judgments of their managers.

Turnover intentions refer to nurse propensity to leave their jobs. The interpretation of turnover intention was that it was a stage-related process associated with the compatibility-testing rubric discussed earlier. This accorded with findings from empirical research undertaken by Morrell et al. (2008) that examined compatibility-testing pathways and nurse turnover in the United Kingdom’s National Health Service. Turnover intention was operationalised in the study by using a composite measure with items that pertained to affective dimensions (e.g. job satisfaction), quitting cognitions, job search behaviours (e.g. scanning newspapers or the internet for job opportunities), perceived costs of departure, and fit (e.g. values consistency).
1.7 Looking Ahead

This chapter broadly mapped and justified the conceptualisation and logic of this research. The next chapter attempts to demonstrate how the research linked to and built on the work of others by offering a critical review of literature pertaining to the key themes associated with this study.

Following the literature review (Chapter 2), the research methods and the approach to data analyses are described in Chapter 3. Subsequently, the results of data analyses undertaken in both preliminary stages and the main study are described and discussed (Chapter 4). The final chapter of the thesis presents conclusions, discusses the significance of the results, and identifies potentially useful areas for further research.
2. Literature Review

2.1 Introduction

This review of literature outlines the merits of studying an area of public-sector governance. Lynn, Heinrich and Hill (2002) categorised this as relating to discretionary aspects of organisation, management, and administration and the core technologies, primary work and service transactions overseen by public service agencies. More specifically, the review delineates strategic aspects of the governance practice of managers pertaining to frontline areas of public hospitals, highlighting them as a potentially valuable area for empirical study. This is a domain where governance problems have been suggested to be “more intricate and sensitive than you will find in any other sector or human undertaking” (Philippon & Braithwaite, 2008, p. e184).

In discussing strategic aspects of governance practice as they relate to frontline areas of hospitals, this review points to the relevance of nurse perspectives on the issue. Arguments supporting this are outlined, including the mainstay of the hospital workforce, to be potential allies for managers in the design and implementation of healthcare reform if the structure and process of strategic governance practice takes appropriate account of their expectations.

The early parts of the review give emphasis to locating the study in a theoretical sense, describing frameworks within which governance practice in healthcare settings were interpreted. Latter parts of this review include discussion of cognitive theories that provide explanations as to how nurses might make judgements about the governance practices of managers. Consistent with these theories, nurse turnover intention is identified as an
important indicator of an outcome of nurse evaluations of their managers’ governance practices.

This review then provides an overview of the organisational context of the study, the Western Australian Country Health Service (WACHS). This large regional health service is described as an organisation in the midst of significant transition, especially in relation to its network of hospitals and the roles of frontline nursing staff. With regard to interpreting locally-appropriate strategies and plans for these services, the review points to dispersed responsibilities across WACHS management layers, including substantial regional and local hospital-level managerial roles for identifying and implementing appropriate change. Given this, the review highlights the relevance of considering how frontline nursing interpret the ways in which these different management tiers approach the governance of strategic change. This review concludes with a summary and schematic synthesis of key variables examined in the study. Figure 1 summarises the sequence and coverage of the review.

Figure 1. Sequence and coverage of this review.
2.2 Governance

2.2.1: Interpreting public-sector governance

While governance is a term that had been commonly used in both public and private sectors (Lynn et al., 2000) its meaning has been interpreted in various ways (Flinders, 2002; Morrell, 2006a; Peters & Pierre, 1998). Stoker (1998) considered the academic literature on the issue to be diverse and disjointed, while van Kersbergen and van Waarden (2004) identified nine versions of the term. Because of its conceptual breadth and flexibility, Pollitt and Hupe (2011) had labelled public governance a ‘magic concept’.

According to Masella and Piraino (n.d.) the problem with unambiguously defining public-sector governance had arisen because reforms in the sector were driven by a variety of disciplines, each bringing its own meanings, perspectives and uses of the term. The broad scope associated with its use is reflected in Lynn et al.’s (2001) definition of public-sector governance as encompassing “regimes of laws, rules, judicial decisions, and administrative practices that constrain, prescribe, and enable” (p. 7) public service provision. Equally broadly, Forbes et al. (2007) described the concept as referring to “the means for achieving direction, control, and coordination of individuals and organizations” (p. 455). Looking at the concept from a stakeholder stance, Denis (2004) interpreted it equally broadly as relating to the systems and practices that allow agents to develop a plausible perception of their future, to design and implement effective change strategies, and to rely on values that create trust and solidarity.

Diverse perspectives of public-sector governance like those outlined above were also apparent in its constituent, health sector governance, which was the focus of this study. This narrower area had been characterised as having had “problems with operationalisation and
Despite these issues, it seemed well accepted that notions of public-sector governance related to efforts to shape action at the frontline of public policy implementation (Fairholm, 2010; May & Winter, 2007) and that these efforts included actions in the areas of design, direction, and implementation of publicly-funded services (Hupe, 2011). This interpretation was reflected in this study, although it is appropriate to note the focus was governance within organisations (i.e. ‘internal governance’) rather than governance arrangements between government agencies and externally-contracted service providers (e.g. a not-for-profit domiciliary nursing service operating under contract to a public-health department).

Another complication with public-sector governance is that it had been interpreted in purely neutral descriptive terms and in ‘directional’ terms. Reflecting the latter, the media routinely referred to ‘good’ and ‘bad’ governance in a range of areas. Australia’s Public Service Commission (APSC, 2007) also offered a directional interpretation, arguing that governance should normatively entail efforts to achieve higher levels of service effectiveness and efficiency, and not merely be something directed to ensuring delivery in accordance with an agency’s formal legal and policy obligations.

The meaning of directional interpretations such as ‘good governance’ were clouded by the challenge of readily defining optimal policy outcomes in the public-sector (Sendt, 2003; Solomon, 1986) and by the many parts often associated with these domains (Dwyer & Eagar, 2008; Flinders, 2002; Gallagher, 2001; Lynn et al., 2001). However, this study accepted this interpretation (i.e. public-sector governance can be better or worse). Thus, one of the premises of this research was that it should contribute to revealing how
governance might be designed to maximise its contribution to outcomes at the frontline of service provision.

Other core assumptions in this study reflected Bovaird and Loffler’s (2003) propositions about ‘good governance’. These included that it was context specific, so that what was appropriate in one policy setting might differ from that suited to others and that ‘good governance’ entailed an effort to consider the perspectives of all stakeholders.

Moving beyond the general notions and considerations outlined above, discussing public-sector governance to offer an adequate rationale for the study presented challenges. In part, this was because governance literature often seems to have treated the concept like the apocryphal ‘blind man describing an elephant’, that is, characterising parts as if they were the whole. More broadly, trends or movements in public policy had impinged on, or perhaps even been regarded new models of governance, when once again, they seemed to pertain to, or emphasise, only parts of the topic. It was unsurprising, therefore, that Bovaird and Loffler (2003) had dismissed attempts at developing conceptual frames for the measurement of governance, likening it to nailing “a pudding on the wall” (p. 316)

In part, these challenges seemed a consequence of the influence of organisational contexts on interpretations of governance (Hill & Lynn, 2004) and more particularly because “the dimensions on which the contexts of policy implementation vary seems endless” (Hupe, 2011, p. 70). This had been recognised by the APSC (2007) that pointed to the influence of factors like agency size, complexity, governing legislation, and policy trends on the meaning of ‘good’ governance in an agency. Such assessments supported investigations of public-sector governance like those pursued in this study, focussing on single public policy and organisational domains.
Another challenge in interpreting public-sector governance related to something Pollitt (2011) touched on in his paper overviewing ‘30 years of public management reform’. In this he described the area as dogged by exaggerated claims and a lack of precision about interpretations of the scope and measurement of governance. More specifically, he criticised this area of literature as prone to “headlines of talk and decision” (Pollitt, p. 9) rather than the actual details of practice and outcome. Thus, interpreting actual trends, their relevance and their effects presented challenges, particularly in the context of single policy and agency contexts like those investigated in this study.

2.2.2: Three dimensions of governance: An overview

While taking account of these constraints and the caveats they encourage, the following discussion elaborates on three broad dimensions of governance in public-sector organisations and these are subsequently addressed in more detail in following sections of this chapter. It is noted the three dimensions identified reflect but one choice of scheme for interpreting the elements of public-sector governance (e.g. Hill & Hupe, 2006 offer another) albeit the approach taken seemed better suited to clarifying this study’s underpinning logic.

To begin, the first and least ambiguous of the three dimensions of governance can be conceptualised as the ‘what’. This centres on tasks related to setting directions and designing systems and structures that enable them to be pursued and monitored. Lane and Wallis (2009) likened core aspects of this to strategic management although they did acknowledge that even this concept needed translation to establish it’s specific meaning in public-sector agencies like health and social care. Notions of ‘good’ governance are also relevant to considerations of the ‘what’ dimension in that they limit the scope of the field, implying certain metrics or characteristics that need to be satisfied (Travis et al., 2003).
Thus, for example, the mere act of setting directions itself is not sufficient because the adequacy of the process used to do this must also be taken into account. In this study, a framework initiated by the World Health Organization (2000) that identified aspects of ‘good’ governance in healthcare systems was used to guide interpretations of key elements of this dimension.

The second dimension of governance appears appropriately labelled as it’s ‘who’. This embodies perspectives of the location of responsibility for governance in public-sector organisations. An example of the different perspectives in this domain is the argument that only those at the top of organisations have a role in governing. This study, however, was informed by another perspective that suggested that those in the middle or even the frontline ‘should’ or ‘do’ participate in the process (e.g. Feldman, Khademian, & Quick, 2009). Thus, the ‘who’ dimension refers to the location of governance responsibilities independent of the characteristics of ‘what’ these might entail.

The third dimension of governance is relational and represents ‘how’ it is enacted. A key aspect of this pertains to the character of governance relationships between principals and their agents in ‘principal-agent relationships’. These involve holders of formal authority or power within an organisation (i.e. principals) and those whose actions they are empowered to direct and control (i.e. agents). The most parsimonious perspective of principal-agent relationships is possible when governance is construed as a function located at the apex of organisations. This limits the scope of these relationships to those between a Board or Government Minister and a departmental Chief Executive or its equivalent. In contrast, the assumption taken in this study was that governance (i.e. the ‘who’ dimension) is widely distributed, so that principal-agent governance relationships may occur at a broad range of
organisational levels. In this study, a focus was on elements of the principal-agent governance relationship involving frontline nursing staff in public hospital settings (i.e. agents) and both their immediate and their broader organisational management (i.e. principals). This is summarised in Figure 2 below, which encompasses the previously-described domains of governance.

![Figure 2. Three dimensions of public-sector governance.](image)

The following sections explore the what, who and how dimensions of governance in more detail, giving emphasis to aspects deemed most relevant to this study.

2.2.3: The ‘what’ of governance: Strategy and the stewardship function

Within the ‘what’ dimension of governance is structure (e.g. institutional design) and process (e.g. control and accountability) (Flinders, 2002) and these have tended to be presented as schedules or inventories of appropriate areas of practice. For example, the Australian National Audit Office (2003) indicated that well-governed public-sector
organisations have the following aspects among their governance structures and processes: (1) corporate and business planning; (2) a budgeting and financial planning system; (3) a performance monitoring system; (4) a means of considering broader government and inter-agency issues in policy development and program delivery; and (5) risk management processes.

Leggat, Harris and Legge’s (2006) suite of direction-setting and control tasks for healthcare organisations reflected a similar frame, incorporating aspects such as: establishing the organisation’s mission and vision and undertaking planning processes (e.g. strategic and operational planning, capital planning etc.); designing the organisational structure; establishing codes of conduct; schedules of delegation; documentation of policy and procedure; and the implementation of audit functions. Notably, these elements spanned the components of organisational strategy (Carney, 2009) and were consistent with Lane and Wallis’s (2009) argument that this forms part of the concept of public-sector governance. Thus, governance pertaining to strategy, a core area of interest in this study, was interpreted as incorporating issues like establishing a vision of the future, setting objectives, and planning actions that will be the basis for a transition from a current to a desired state (Carney, 2009).

As Lane and Wallis (2009) had suggested, however, while the notion of strategy might accord in a general conceptual sense with core aspects of the ‘what’ of ‘good’ governance, the specifics needed to be elaborated for public-sector services because the discipline imposed by transparent financial metrics like profit and loss were absent. Recognition of this need to clarify the meaning of ‘good’ governance in different public policy contexts was reflected in the World Health Organization’s (2000) *World Health Report 2000*, which
signalled its’ intention to develop an architecture for this aspect. Unlike this study’s sub-national focus (i.e. regional and rural health services), however, their concern was aspects of strategic governance national governments should enact to guide their health systems so as to optimise the health and well-being of populations (Travis et al., 2003). This steering or ‘stewardship’ role was referred to by the WHO (2000) as a State’s normative responsibility to provide good governance that they characterised as the “careful and responsible management of the well-being of the population” (p. xiv).

While assigning responsibility for stewardship of the health of populations to national governments, the WHO did interpret this role as a “steward of stewards” (Travis et al., 2003, p. 1). Thus, while they expected the stewardship ‘buck’ to rest with peak bodies like national ministries of health, responsibility for this area of governance was expected to be dispersed within national health systems. Travis et al. suggested the extent of this dispersion would vary according to the organisation of healthcare systems within countries, arguing that responsibilities might span central health authorities, local governments, professional associations and even service providers. Unfortunately, studies of the distribution of stewardship roles and responsibilities across subordinate jurisdictions in specific countries remain a gap in the literature (Brinkerhoff & Bossert, 2013). Nonetheless, by elaborating components of health sector stewardship responsibilities (Travis et al.) the WHO provided direction for empirical investigations in these areas. Their components of Stewardship Governance responsibility comprised the following functions: (1) generating intelligence; (2) formulating a strategic policy framework; (3) ensuring tools for implementation: powers, incentives, and sanctions; (4) building coalitions/building partnerships; (5) ensuring a fit
between policy objectives and organizational structure and culture; and (6) ensuring accountability.

Within each of these functional areas, Travis et al. (2003) had also described a range of concrete components or tasks. For example, under the *generating intelligence* sub-function, they indicated the following types of information should be gathered: (1) trends on health and health system performance; (2) key contextual factors and actors; and (3) policy options, based on evidence and experience. Each of these components was then further complemented with descriptive information to clarify in some detail the intent and scope of action expected. As a consequence, the WHO Stewardship Framework provided a relatively detailed architecture for ‘good’ overall systems of direction-setting and control for healthcare. As Brinkerhoff and Bossert (2013) had argued, however, in order for it to be of value, this conceptualisation needed to be complemented with clarification in a range of areas, including role and responsibility distribution across organisational levels and assessments of the degree of capacity and willingness to assume specific governance tasks. Thus, in complex, multi-layered organisational contexts like the regional health service that was the focus of this study, the *stewardship* or strategic aspects of governance needed elaboration so that those in different parts of the organisation could clearly interpret the elements they might be expected to enact.

By investigating the perspectives one group of stakeholders (i.e. frontline hospital nurses) had of the relevance of the different sub-functions of the WHO Stewardship Framework to their managers in a regional area of Australia’s public-health system [i.e. the Western Australia Country Health Service or (WACHS)] this study attempted to contribute to the need for elaboration of its relevance in different contexts and at different levels. In doing so,
the study also considered the veracity of Saltman and Ferrousier-Davis’s (2000) claim that the WHO framework would accord well “with the sense of mission that has been the central motivation of health-care providers” (p. 735).

In examining nurses’ perceptions of the relevance of sub-functions of the WHO Stewardship Framework, this study reflected Brewer and Lok’s (1995) contention that the effectiveness of strategy within public healthcare organisations like hospitals was significantly influenced by the nature of frontline nurses’ responses. It also responded to the assessment that such studies were an important gap to address because they provided a means of elaborating nurse reactions to the specific aspects of managers’ roles and might offer more capacity to address the reasons for nurse dissatisfaction and turnover (Duffield et al., 2011).

Some work characterising the roles performed by clinical and public health managers had suggested their involvement in strategic or stewardship-type activities like: developing long-term goals and objectives; managing external relations; coordinating information; adapting the structure of the organisation; and making decisions and resolving problems (Braithwaite, 2004; Braithwaite et al., 2007). Boak’s (n.d.) research into ‘change agents’ in healthcare organisations which entailed interviews with people considered effective in leading major change in both the UK (n=30) and Australia (n=10) also identified competencies that were consistent with the core dimensions of the WHO Stewardship Framework. Yet despite this, detailed studies across different healthcare contexts remained a particular gap (Meier, 2012).

Specifically, the level and nature of appropriate strategic activities for different levels of management in different public healthcare contexts remained unclear. This appeared particularly true of nursing management, about which there had been little research
examining the skills and competencies pertinent to their roles in supporting change to public healthcare services (Pillay, 2011). Information of this type seemed especially relevant to Australia’s rural and regional public hospitals because they delivered the majority of care to these communities and were essentially nurse-led (Bish, Kenny, & Nay, 2012). More particularly, Bish et al. had argued that the challenges of managing these services in what are often isolated and highly politicised environments, with limited peer support, meant there was a distinct need for contributions that might help build the strategic capacity of people in these roles to improve healthcare.

2.2.4: The ‘who’ of governance: Evolving views of involvement in the strategic domain

2.2.4.1: Locating governance responsibilities and the logic of governance
One of the issues apparent in the public-sector governance literature related to the location of governance responsibilities, most particularly those within the strategic domain like Stewardship. A centralist view had dominated private-sector governance (Morrell, 2009; Saravanamuthu, 2005) and was also reflected in Peters and Pierre’s (1998) characterisation of the Whitehall tradition of public-sector governance entailing strong direction-setting power at the top with monitoring at lower levels to ensure decisions are implemented. This assumed that government ministers or agency boards carried the primary strategic roles and that employees acted on their guidance (Francis, 2000).

Feldman and Khademian (2002) however, criticised this “one way street” (p. 548) as being contrary to the evidence. Similarly, Hupe (2011) contended “most public policies can hardly be explained as rational decisions of single policy designers” (p. 71) and Lynn et al. (2000) argued that dispersed power was consistent with real life in most public-sector organisations and that it was more realistic to expect the centre to have limited capacity for
direction. A key reason for this proposition was that public-sector goals often lacked clarity (Lynn et al., 2001; McLellan, 2009; Morrell, 2006b; Sendt, 2003) necessitating dispersed interpretation and adaptation at the periphery. This accorded with Hogwood and Gunn’s (1984) description of public policy and was also consistent with Moullin’s (2002) characterisation of public policy deployment. Dispersed direction-setting in public-sector governance had also been normatively proposed on the basis that sharing governance responsibilities across the workforce led to more effective and sustainable solutions to policy challenges (Totterdill, Exton, Savage, & O’Regan, 2010). Moreover, the regionalisation of healthcare as applied in the case of this study was said to be explicitly about delegating strategic capacity away from the centre (Denis, 2002; Regmi, 2012).

While the proposition that strategic responsibilities were dispersed was persuasive, it brought with it complexities and was relatively less well researched than the role of the centre (Bache, 2003; Blaauw et al., 2003; Organisation for Economic Cooperation and Development, 2002; Pablo, Reay, Dewald, & Casebeer, 2007). A contribution that has helped conceptual developments in this area has been the work of Lynn and his colleagues (Lynn et al., 2000, 2001). Their ‘logic of governance’ interprets the dispersed flavour of public-sector governance, assessing it as the collective outcome of policy-shaping processes that influence the reality of what happens at the coal-face of public service delivery. It suggests that these processes occur within distinct layers of interaction, which Lynn et al. (2001) refer to as being between:

1. Citizen preferences expressed via the political process and how this was expressed in executive policy and legislation;

2. Executive policy and legislation and the formal structures of public agencies;
3. Formal structures of agencies and the discretionary aspects of organisation, management, and administration;

4. Discretionary aspects of organisation, management, and administration and the core technologies, primary work and service transactions overseen by public service agencies;

5. Technologies, work and transactions of agencies and their consequences or results;

6. Consequences or results and stakeholder assessments of agency or program performance; and

7. Stakeholder assessments of performance and public interests or preferences.

Hill, Lynn, Proeller and Schedler (2005) argued that because addressing this entire logic in single studies was “daunting if not impossible” (p. 206) empirical emphasis would naturally focus on single areas and proximal relationships, but that it was nevertheless important to keep the whole in mind to appropriately situate findings in their broader context. Similarly, they added that using their logic in explanations would help readers of governance research to locate studies and aid their consideration of limitations and competing explanations for findings. With this in mind, this study focussed on the layer described in point four, which pertains to discretionary aspects of organisation, management, and administration and the core technologies, primary work and service transactions overseen by public service agencies. Forbes et al. (2007) parsimoniously referred to this area as being concerned with relationships between management and service delivery. This situates this study in an internal or within-agency area of governance, in contrast to other examples in Hill et al.’s hierarchy that relate to external governance.
As noted previously, the focus of this study was frontline hospital nurses’ views about strategic aspects of their managers’ governance practices in regional and rural settings. While this appeared to have been given little empirical attention in public healthcare (Forbes et al., 2007) its relevance was suggested by long-standing acknowledgement of the frontline as an important determinant of organisational functioning (Currie & Proctor, 2005; Floyd & Wooldridge, 1997; Floyd & Wooldridge, 2000; Kouzes & Posner, 2002; Mantere, 2008; Yang et al., 2010). Forbes et al. (2007) supported this assessment, noting the limited evidence available from healthcare studies consistently suggested that what happened at this level significantly affected service delivery. The focus on frontline perspectives also seemed justified by the recent unfolding history of developments in public-sector- and public-healthcare-governance. A summary of this history is offered in the following paragraphs, giving emphasis to what it suggested for the ‘who’ of the development of organisational strategy.

2.2.4.2: Recent history
By way of introduction, while the recent history of the strategic dimension of public-sector governance was not altogether easy to interpret, major points of evolutionary focus seemed apparent in the literature. Broadly speaking, this suggested a general picture of more strategic involvement by those within Lynn et al.’s (2001) management and service delivery level. This trend commenced with the assignment of greater responsibility to top managers alone, but there were signs of subsequent evolution to incorporate the strategic perspectives of lower levels of management (i.e. middle and frontline management) and even frontline staff. A more recent shift in thinking to accommodate concepts reflecting the notion of ‘shared direction-setting responsibility’ also seemed to have emerged. This went beyond the idea of individual managers and staff having distinct governance roles and
located processes like strategy in less fixed, shared spaces like those that are created when temporary groups were formed and collectively conceptualised their tasks and formed plans. Thus, while the picture was cloudy insofar as strategic aspects of governance were concerned, signs suggested there was growing concern about both including a broader range of perspectives within management- and service-delivery levels and establishing effective processes for conceptualising strategic issues and planning responses.

As noted previously, a first phase of growth in accommodating strategic perspectives within the management-service delivery area focussed on top management alone. This was a period of the primacy of what subsequently came to be referred to as the New Public Management (NPM) movement (Bowman, 2011). Within this period of NPM primacy, a driving belief was that top management could transform public-sector organisations (Lapsley, 2009). NPM was said to entail a loosening of political involvement in strategy with a commensurate downward shift in responsibility for this aspect (Farrell, 2005) albeit that it stopped at upper levels of management. Under NPM philosophy, it was at these levels that the goals of public-sector organisations and interpretations of public-servant responsibilities were to be decided (O’Donnell, Allan, & Peetz, 1999).

Notwithstanding the above-mentioned characterisation of NPM, it is pertinent to note at this juncture that some literature suggested it over-simplifies actual events and, as a consequence, some cautionary points on interpretation are appropriate. While the NPM label inferred a coherent philosophy and a fixed set of concepts, there was evidence of diverse NPM models, incorporating a range of underpinning ideas and diverse approaches to implementation (Cheung, 1997; Ferlie et al., 1997; Homburg, Pollitt, & van Theil, 2007; O’Flynn, 2006; Thomas & Davies, 2005; Try & Radnor, 2007; Viitanen & Konu, 2009). NPM
reforms were also said to have resulted in different adaptations by managers and staff across different parts of the public-sector. The capacity to interpret NPM was not helped by the lack of evaluation of these reforms (Boyne, Martin, & Walker, 2004; Lægreid, Opedal, & Stigen, 2005).

Notwithstanding the caveats encouraged by the ‘cloudiness’ of the implications of NPM in ‘real-world’ settings, a general reform philosophy did appear to have been embraced by the public healthcare sectors of most developed and some developing countries during the early 1980s through the mid-to-late 1990’s (Bovaird & Loffler, 2003; Khaleghian & Das Gupta, 2004). During this period, the primary strategic focus subsequently ascribed to NPM was increased efficiency (Boyce, 2001; Greener & Powell, 2008; Harris, 1999; Hurst, 2003; Newman & Lawler, 2009; Perkins, Barnett, & Powell, 2000). Despite there being little evidence of its effectiveness in public healthcare contexts (Duffield et al., 2007; Gorsky, 2008; Greener, 2003; Lægreid et al., 2005) Australia’s public-health system seemed to have been a front-runner in NPM policy implementation (Mickan & Boyce, 2006).

Notably, given that the issue remains current in the Australian context, the rationale for and urgency in implementing NPM reforms in public healthcare systems derived from widespread political fears about uncontrolled acceleration of healthcare costs (Dickson, 2009). This was evident in Denis’s (2002) assessment of OECD countries more generally becoming more interventionist in health systems governance, while at the same time continuing to worry that they would not meet the challenge of growing demand for healthcare. In the Australian health sector, this focus of concern was also apparent in the increasing priority being given to health reform (Mickan & Boyce, 2006) with 10 major
reviews of State and Territory health systems being undertaken during the 1994-2004 period alone (Dwyer, 2004).

As noted, the style of healthcare governance associated with NPM placed the strategic levers predominantly in the hands of managers at the top, overlooking the perspectives of those at lower levels of the organisation who were expected to interpret and implement reforms at the frontline (Lægreid et al., 2005; Ackroyd et al., 2007). This approach seemed to have reflected what has been referred to as a ‘heroic’ view of senior management capacity (Collinson & Collinson, 2005). This appeared to have held significant sway in public healthcare organisations, which fostered concentration on “leadership as the bridge between the intention to reform and its effective implementation” (Degeling & Maxwell, 2002, p. 289). Accordingly, Degeling and Carr (2004) referred to the pre-2000 period of health reforms as one of “little examination of the attitudes, values and beliefs of those subject to the reform process” (p. 403) in which the primary governance orientation vis-à-vis staff was on measuring their output and attempting to more closely control their performance (Newman & Lawler, 2009). Australian data from 1994 and 1996 from approximately 30,000 Australian employees working in approximately 3,000 public and private sector workplaces (O’Donnell et al., 1999) seemed to lend some support for aspects of this characterisation that related to reduced concern with the perspectives of those at lower levels in public-sector organisations.

Following the late 1990’s an increasing literature suggested a post-NPM phase of public-sector reform had arrived (Jun, 2009; O’Flynn, 2007; Pollitt, 2011; Robichau, 2011; Spano, 2009; Williams, Rayner, & Allinson, 2012). O’Flynn (2007) and Jun (2009) referred to this being a response to weaknesses and unintended consequences of the NPM paradigm, that
had paradoxically led to increased costs and decreased accountability of government services. Barry, Berg, and Chandler (2006) argued this was not surprising given the techniques associated with NPM had not worked all that well in the private sector, from where they had been imported. A further apparent weakness with NPM was that it seemed to have been incapable of dealing with complex policy issues (termed ‘wicked problems’) and that this spawned growing recognition that broader stakeholder involvement in governance might need to be accommodated to achieve better outcomes (Bovaird & Loffler, 2003). A meta-analysis undertaken by Pollitt and Dan (2011) supported claims of problems with NPM, indicating that reforms within this rubric that had been evaluated with respect to outputs or outcomes had often found no improvement or that performance had actually deteriorated following their introduction. The public healthcare sector seemed to have shared in this NPM reform failure (Lægreid et al., 2005).

The post-NPM period was associated with increasing interest in more inclusive public-sector strategy development and implementation (Feldman et al., 2009) or, put more simply, greater concern to move some strategic responsibility ‘down the line’. Regmi (2012) referred to this trend as a “diffusion of authority” (p. 1) something reflected in Hartley’s (2005) characterisation of post-NPM governance as accommodating innovation at both central and local levels, and emphasising transformation and continuous improvement in frontline services. This concern to make a downward shift was also suggested by the emergence of the concept of governance networks (Robichau, 2011) reflecting the idea that policy issues might be better resolved with broad stakeholder involvement.

In healthcare too, a downward shift in governance was also increasingly encouraged, premised on the argument that much of the capacity for health-system governance lay or
needed to be shifted closer to the frontline (Flannigan & Power, 2008). For example, this was apparent in Burau, Wilsford and France’s (2009) assessment of directions in health policy in Europe and in Storey and Buchanan’s (2008) contention that organisational units like hospital wards were the “building blocks” (p. 646) of health-care organisations and the appropriate focus for reform effort. Consistent with this theme, Morrell (2006b) identified one of the major post-NPM policy narratives in the UK NHS as being the ‘emancipation’ of frontline staff, with devolution of power and decision-making to this level to offer more scope to develop innovative service delivery approaches and to allow this group to have more say in resource allocation and service-delivery arrangements. Thus, an increasing underpinning proposition was that locating more strategic influence at the frontline would improve the performance of healthcare organisations (Angermeier, Dunford, Boss, & Boss, 2009; Bate, Robert, & Bevan, 2004; Miller, 2002; Schneller, 1997).

To summarise, the pattern regarding strategic aspects of governance associated with public-sector organisations, including those delivering public healthcare, seemed to have been one of adopting highly-centralised NPM-style governance with little subsequent change, followed by encouragement of a repositioning of more strategic emphasis closer to the coal-face of service delivery. This was the picture Ackroyd et al. (2007) painted in describing trends in the NHS. Consistent with this, Regmi (2012) referred to a move in the NHS to more decentralised governance, with the expectation that it would facilitate greater opportunity for consensus about policy directions throughout the system. Robinson, Williams, Dickinson, Freeman, and Rumbold (2012) pointed to similar concerns with more decentralised governance as common among health systems and Carney (2007) more specifically suggested increased strategic involvement of managers and clinicians working within clinical
units. In the Australian public healthcare context, Fulop (2010) pointed to a consistent thread of thinking, highlighting increased recognition of the need to engage those at frontline because of the acknowledgement that they retained significant capacity for control over resource allocation and use “despite the steady stream of reform measures and changes that have occurred...to counter these very same things” (p. 5).

Interest in locating more strategic capacity closer to the frontline of public-sector organisations was also reflected in theoretical literature, which offered some useful insights given the nature of this study. One area of this literature referred to what Denis, Langley, and Sergi (2012) described as plural notions of leadership, that encompassed concepts like ‘shared’, ‘distributed’, and ‘collaborative’ leadership. Denis et al. (2012) pointed to four streams within this area, associating the shift of greater strategic responsibility to the frontline as more closely linked to the notion of distributed leadership. This had reportedly been most developed in the education sector (Collinson & Collinson, 2009; Gronn, 2008; Harris, Leithwood, Day, Sammons, & Hopkins, 2007) although its relevance to healthcare had been asserted by both The King’s Fund (2011, 2012) and Buchanan, Addicott, Fitzgerald, Ferlie and Baeza (2007).

Harris et al. (2007) characterised distributed leadership as the idea that direction-setting and influence in organisations was most effective when it occurred across all levels rather than being restricted to those at the top. Thus, this notion reflected a distinct theoretical move away from the NPM idea of ‘heroic’ leadership to accommodate the proposition that public-sector organisational strategy in pluralistic public service contexts should actually be a collective undertaking, with top management contributions being quite constrained (Collinson & Collinson, 2005; Currie, Grubnic, & Hodges, 2011).
Notwithstanding the growing theoretical interest in distributed leadership, empirical support for its effects on outcomes was reportedly weak (Harris et al., 2007; Leithwood & Jantzi, 2000). More importantly, the concept itself was yet to be adequately defined in practice (Collinson & Collinson, 2009; Currie et al., 2011). This had not, however, appeared to stop some policy makers promoting the concept on the basis of the expectation that it would lead to greater organisation-wide commitment to strategic directions and that these would be better contextualised by the involvement of those at the frontline who were expected to implement any change (Currie et al.). Fulop (2010) suggested this had been especially apparent in public healthcare, where it was increasingly being promoted as something of a ‘magic bullet’ for successful reform.

The previously-mentioned theoretical and practical moves to ascribe more capacity for healthcare reform closer to the frontline of service delivery were followed by calls for greater clarification of the priorities and roles in the change process of those actually working there (Degeling, Kennedy, & Hill, 2001; Degeling & Carr, 2004). The need for work in this area was also implied in Morrell’s (2006a) call for explorations of how governance in public-health organisations might avert the potential for conflict with the embedded cognitive frameworks of norms for decision-making and behaviour held by health professionals.

2.2.4.3: The emergence of clinical governance
The importance of clarifying the character of strategic governance and the respective roles of managers and clinicians at the frontline of healthcare seemed to have been particularly reinforced by the emergence and growth of the concept of clinical governance in the period
following its introduction in the UK NHS in late 1990s (Braithwaite & Travaglia, 2008; Goodman, 2002; Halligan & Donaldson, 2001; Palmer, 2002; Rosen, 2000). Although a concept associated with substantial ambiguity (Freeman, 2003; Morrell, 2006b; Smith & Harris, 1999; Som, 2004) clinical governance had evolved into something incorporating greater interest in engaging with the perspectives frontline clinicians have on a broad range of strategic and operational issues. This was suggested in O’Connor and Paton’s (2008) reference to the concept as a “marriage of clinicians and managers” (p. 70) and in Balding’s (2005) characterisation of clinical governance as a move to establish greater openness between managers and clinicians. It was also something that seemed evident in Healy and Braithwaite’s (2006) model of regulatory governance and also in Colin-Thome’s (2013) assessment that successful clinical governance required a broad focus, including an emphasis on system-level issues and population-level outcomes.

Reflecting an apparently increasing strategic emphasis accommodated within the conceptual realm of clinical governance, Braithwaite and his colleagues had also called for more investment in ‘bottom-up’ approaches to health reform, suggesting it would be more effective if managers and staff had shared perspectives on improvements (Braithwaite & Westbrook, 2004; Braithwaite et al., 2005; Braithwaite et al., 2009; Braithwaite et al., 2011). Reinforcing this, Braithwaite and his colleagues encouraged research into the design of governance frameworks that offered the capacity to more fully respond to the views of both managers and staff. Notably, such calls also sat alongside an array of more general calls for greater frontline participation in healthcare governance and an increased accommodation of clinical values in this area (Ashmos et al., 2000; Cranstoun & Yuvarajan, 1999;
Edmonstone, 2009; Eeckloo, Van Herck, Van Hulle, & Vleugels, 2004; George et al., 2002; McHugh et al., 2007; Stafrace & Lilly, 2008).

Despite there being interest in establishing governance frameworks in the manager-staff organisational space that responded to the views of both, pessimism had also been expressed about finding much room for agreement (Greener, Harrington, Hunter, Mannion, & Powell, 2011). This position was broadly based on the argument that the respective worlds of management and clinical work were simply incompatible. Yet research by Degeling and his colleagues encouraged a more cautious stance (Degeling & Carr, 2004; Degeling et al., 2006; Degeling et al., 2001; Degeling & Maxwell, 2002). More particularly, their research suggested that while hospital-based doctors in Australia, New Zealand and England opposed most aspects of health reform being pursued by policy authorities, this was much less likely to be true of nurses and their immediate managers (Degeling et al., 2006). Key aspects of this research pointed to nurses and nursing-unit managers in these countries being positively inclined to moves to systematise clinical work and to support team-centred approaches to performing and managing clinical work. Further, nurses in their sample did accommodate Storey and Buchanan’s (2008) perspective that clinical units, like hospital wards, were key areas of strategic concern and they also seemed positive about their Unit Manager’s role in this process. Yet while Degeling and Maxwell saw prospects for frontline nurses supporting aspects of healthcare reform, they also indicated impetus for change would require a model of governance that responded to their professional culture and concerns. Reflecting this, they went on to suggest that each leader’s capacity to be change agents was likely to be “limited to what followers regard as ‘rightful’” (Degeling & Maxwell, p. 291).
With respect to whether and how much managers closer to the frontline of healthcare actually contributed to organisational strategy and influence strategic change, Currie and Procter’s (2005) research in operational areas of the NHS suggested that while some did substantially, many were poorly prepared for this role. Success, they argued, required managers in frontline organisational spaces to be supported to develop strategic frameworks that integrated understanding of establishing broader organisational strategic perspectives that could translate to changes to frontline clinical practice. Of particular relevance to this study, Currie (2006) also contended that nurses in operational-management roles were ideally positioned to “translate policy intention into context-sensitive practices, which solve local problems” (p. 10). This argument was consistent with the broader organisational perspective offered of middle-management by Wooldridge, Schmid, and Floyd (2008) who had posited these roles had the capacity to: (1) link the perspectives of the different parts of organisations and facilitate change; (2) inform the strategic choices of those at higher levels, particularly in geographically-dispersed organisations; and (3) interpret frontline organisational capabilities and address needs for development and renewal.

This characterisation of the potential strategic relevance of management closer to the frontline of public healthcare organisations was consistent with long-standing acknowledgement of the substantial influence this level had on organisational functioning (Floyd & Wooldridge, 1997; Floyd & Wooldridge, 2000; Mantere, 2008; Yang et al., 2010). Further, it was consistent with descriptions of the frontline of organisations as the location providing the most complete strategic picture (Floyd & Wooldridge, 2000; Wooldridge et al., 2008) and as critical to assessing how organisational performance could be maximised
Complementing these assessments and of relevance to this study was Currie’s (2006) argument that information technologies had created more mid-level management capacity for strategic involvement in healthcare organisations by giving broader access to more reliable information and facilitating more proactive behaviour in areas like planning. This claim had some empirical support from Currie and Proctor’s (2002) case study research in three NHS hospitals.

As noted, however, Currie and Proctor (2005) had contended those in operational management positions in public healthcare were often poorly prepared for strategic roles. They had also pointed to them getting ‘contradictory messages’ about enacting more strategic behaviours from different stakeholders (e.g. doctors, central governments, executive government). The ambiguity of the strategic role closer to the frontline of healthcare seemed to fit with a recent history of a broadly negative view of middle-management involvement in strategy suggested in some organisational literature (Checkland, Snow, McDermott, Harrison, & Coleman, 2011). For example, these roles had been dismissed by some as mere implementers of the strategic choices of those at more senior levels, and worse, that they had caused implementation problems more than they had facilitated organisational improvement (Currie, 2006). Such pessimistic assessments were suggested to have underpinned middle-management downsizing calls of the 1980’s (Checkland et al., 2011) and this sentiment seemed to have retained a level of political sympathy in some quarters (Currie, 2006; The King’s Fund, 2011).

Alongside the negative view of mid-level management involvement in strategy, Currie and Procter (2005) also pointed to the issues like incomplete specifications in the role statements of nurses in mid-level management and the tendency for them to have little
management training or development. Recent Australian research by Townsend, Wilkinson, Bamber and Allan (2012) reinforced the latter point about training, suggesting that nursing managers of wards often found themselves in their roles ‘*accidentally*’ and tended to be unprepared for them. Research in rural areas of Australia by Paliadelis (2005) found the same, adding these managers had few opportunities for further management education or peer support given they were often in quite isolated locations. Of relevance, given the focus of this study, was that Paliadelis also pointed to the utility of more information about different stakeholder expectations of the roles of first-line rural hospital managers in terms of helping them cope with the demands faced.

Taken together, these various aspects suggested that as one moved closer to the frontline of healthcare, managers’ interpretations of their potential strategic contribution became increasingly clouded by doubts about capacity and authority. Reinforcing this, Duffield and Franks (2001) pointed to the lack of a broad consensus about what these roles should entail, arguing research was needed to help to resolve the issue. Consequently, moves like those of the current study to clarify one group of stakeholder perspectives of appropriate strategic governance roles closer to the frontline seemed a useful contribution. This appeared especially true given the characterisation of hospital nurse managers as an “untapped resource in terms of mobilizing organizational change” (Hewison, 2012, p. 858).

Support for this study’s concern with nurse-perspectives of strategic aspects of governance practice emerged from Degeling et al.’s (2006) research that suggested frontline nurses were potentially important allies for managers in identifying and implementing appropriate change or ‘*reform*’. Degeling and Carr (2004) also noted that such an alliance was, however, likely to require healthcare managers developing and enacting their strategic roles by taking
account of the professional culture of nursing and the associated notions of how this should translate into governance practice. The pertinence of this goal appeared to have been reinforced by the findings of review of clinician-managerial relationships in the NHS which indicated that between 1991 and 2010, a widespread perception persisted among nurses that hospital reforms had entailed imposed systems that had nothing to do with their everyday clinical work (Greener et al., 2011). Australia’s Commonwealth Government seemed to have recognised a similar problem, indicating their intention to give greater weight to clinicians’ perspectives on strategic aspects of governance in Australian public hospitals (Department of Health and Ageing, 2010). Notably, given the context of this study, the Commonwealth Government saw this as particularly important in rural areas, where they asserted inadequate local clinician involvement in decision-making about healthcare had compromised the quality and responsiveness of community-based services like hospitals.

Reinforcing the relevance of research into the area of strategic aspects of governance at the frontline of healthcare was that despite increasing importance being ascribed to the issue, few studies had been conducted in the area (Currie & Proctor, 2005; Currie, 2006; Wooldridge et al., 2008). In fact, Pablo et al. (2007) asserted little was known about the characteristics of the development of strategy in public-sector organisations altogether. More particularly given the context of this study, Robinson et al. (2012) pointed to a need to address the gap in research about strategic decision-making at the ‘local’ level of health systems as a matter of “crucial importance” (p. 2387). In a similar vein, Birken et al. (2012) specifically referred to the limited understanding of the role played by frontline managers in the area of innovation and also called for research to address the issue.
2.2.4.4: Research into the governance perspectives of those at the frontline
The discussion to this point has highlighted a paradox in the field of public-sector governance. That is, that while downward emphasis encouraged a greater strategic role for those at the frontline of public-sector organisations, research into the perspectives of those working in these settings appeared scant (Collinson & Collinson, 2009). An exception was Collinson and Collinson’s work in the UK Further Education (FE) sector. This entailed interviews with all levels of management and lecturing staff. Notably, given the current study’s focus, this suggested frontline FE staff had clear, shared expectancies of the components of effective governance, spanning views about both their own roles and those of their leaders. Moreover, these expectancies reflected a nuanced or context-specific model of governance, sympathetic to the FE setting and its associated issues and challenges.

Given the similarly professional nature of both FE and healthcare, frontline nurses were considered potential candidates for equivalent ‘context-specific’ expectancies of strategic aspects of governance. Yet work of the type Collinson and Collinson (2009) had undertaken appeared to have been largely absent from public healthcare contexts. Australian research by Braithwaite and Westbrook (2005) in two large hospitals explored clinicians’ attitudes to the implementation of Clinical Directorates and seemed to offer some clues as to why this gap might have persisted. They suggested structural changes to governance had been privileged without giving much attention to the more challenging issue of ascertaining and implementing appropriate process and cultural arrangements at ward, unit and department levels. Accordingly, most clinicians in Braithwaite and Westbrook’s (2005) study did not believe structural reforms alone had improved decision-making, patient care, services, or efficiency in their hospital. Alongside Collinson and Collinson’s (2009) findings, this seemed to reinforce the relevance of Braithwaite et al.’s (2005) call for governance research to
provide fresh perspectives or new insights by taking more account of the views held by clinicians.

Taken together, the literature appeared to suggest guidance of the type Collinson and Collinson (2009) had offered the UK Further Education sector regarding frontline staff perceptions of strategic governance might be a similarly useful contribution in the context of Australia’s public healthcare system. Certainly, its relevance to the frontline of hospitals had been encouraged by Bolton’s (2004, 2005) assessment of the area as an increasingly critical nexus in the translation of broader healthcare strategy into practice. While limited in scope (n=170) Bolton’s longitudinal research in an NHS trust hospital had also pointed to most (81%) middle managers with nursing backgrounds being confronted with the feeling that the roles of nurse and manager were in conflict and that many (65%) felt uncomfortable with the frameworks of values healthcare managers were expected to adopt. Moreover, her assessment that some of their role difficulties would be resolved by having strategic governance frameworks that allowed them to steer courses consistent with the underlying values of the nursing profession appeared especially pertinent (Bolton, 2004, 2005).

If Attree’s (2005) UK research could be taken as a guide, the importance of work in this area also seemed quite substantial given she found most frontline nurses in her public hospital sample (n=142) felt “a sense of professional impotence and frustration arising from their inability to influence key decisions” (p. 392). While Attree’s grounded-theory study was small in scale and was conducted in the UK health system, her work seemed relevant to the Australian context given she had ascribed much nurse dissatisfaction with governance to the persistence of the NPM-type aspects that had been a feature of the Australian healthcare
system. Like Bolton (2004), Attree also highlighted the contrast of professional ideology of nursing care being in conflict with the dominant modes and foci of strategic governance, indicating this was an issue causing both “disquiet and dissatisfaction” (p. 394).

The potential for frontline nurse frustration with strategic governance (Attree, 2005) suggested that the reasons for addressing this issue might go beyond merely finding more effective means of identifying and implementing healthcare reforms. It seemed they might also encompass workplace characteristics that impinged upon the overall sustainability of the delivery of public healthcare. Certainly, greater accommodation of nursing perspectives in systems of governance had been consistently interpreted as part of the solution to the widespread problem of nurse dissatisfaction, burnout and intention to leave their jobs (Coomber & Barriball, 2007; Duffield & O’Brien-Pallas, 2003; Hayes et al., 2006; Hogan et al., 2007; Naude & McCabe, 2005; Rondeau et al., 2009). Some evidence had also suggested that taking greater account of nursing values and views could lead to performance improvements in hospitals, including better cost control (Barden, Griffin, Donahue, & Fitzpatrick, 2011; Cummings, 2006).

Notably, nursing workforce concerns had been core drivers of ‘shared governance’ models, particularly developed in the context of the US health system (Anderson, 2011; Caramanica, 2004; Kramer & Schmalenberg, 2003; Norrish & Rundall, 2001). Thus, for example, shared governance had been a core element of the well-known ‘magnet hospital’ designation (Overcash & Petty, 2012) that had been suggested to have relevance to nurses working in Australian public hospitals (Hannigan & Patrick, 2009). While the concept of shared governance lent weight to claims of the ‘in-principle’ benefits of taking account of nursing perspectives on governance in hospitals, its conceptual basis lacked clarity (Anderson, 2011).
and it appeared to require more work to translate it into a clearer, theoretically-informed position (Doherty et al., 2010; Read, Ashman, Scott, & Savage, 2004; Smith, 2008). Reflecting an aspect of this, Kowalik and Yoder (2010) suggested the notion of shared governance needed to be bolstered by an elaboration of nursing preferences regarding the optimal organisational frameworks for achieving this outcome. Their concept of decisional involvement as a “complex collaboration” (Kowalik & Yoder, p. 259) between nurses and their managers reinforced the need for research to clarify their respective perspectives and to explore current levels of capacity to perform the governance roles that this may suggest. This proposition was reflected in the orientation of this study and, as noted earlier, accorded with Collinson and Collinson’s (2009) arguments about the need to investigate the views of ‘followers’ in more depth so as to ascertain “the kinds of leadership processes and practices that are valued and defined as effective” (p. 5) by them.

Despite the apparent relevance of the issue, little work appeared to have been done in the area of broader frameworks that might aid consideration of the strategic aspects of governance nurses expect at the frontline of healthcare (Birken et al., 2012). Currie (2006) had posited some possible functions that might be relevant to nurses in middle-management roles in operational areas. These included that they should: gather information from their immediate environment; set goals; and generate alternative courses of action for the areas under their control. He had also suggested these managers should be encouraged to interact with external stakeholders so as to help them better understand the strategic environment. These roles aligned with core aspects of the WHO Stewardship Governance Framework (Travis et al., 2003) suggesting it might be a useful theoretical basis for research in this area. Birken et al.’s (2012) theory of the middle-management role in
healthcare innovation implementation also accorded with elements of the Stewardship Governance Framework, albeit that it gave a somewhat different emphasis to areas than had Currie (2006). Likewise, Pettigrew et al. (1992) eight determinants of ‘receptivity for strategic change’ in local healthcare contexts derived from comparative case study research in the NHS closely reflected core elements and the general thrust of the WHO framework, including the intelligence, coalition and partnership, and fit aspects.

While useful these general perspectives, and the more detailed WHO Stewardship Governance Framework itself, could not, however, be assumed to reflect WACHS frontline nursing perspectives of what comprises appropriate practice in this area. Nor indeed, if they did reflect them, did they clarify the managerial levels to which nurses’ assigned responsibility for the different aspects of strategic governance practice. Consequently, addressing the issues of relevance to and the assignment of responsibility for the different dimensions of the Stewardship Governance Framework formed cornerstones of this study.

2.2.5: The ‘how’ of governance: Principal-agent relationships

In the following discussion, the focus shifts to the ‘relational’ dimension or ‘how’ of governance, giving emphasis to the positions of respective parties in principal-agent relationships in the area of strategy. As noted earlier, in matters of governance, the notion of a principal can be broadly taken to apply to those with formal authority or power within an organisation to direct and control the actions of others. Thus, in the context of this study, healthcare managers across the organisational landscape were Principals and frontline nursing staff their Agents.

A core element of governance centres on Principals’ relational stance with respect to their Agents. This has been articulated by Davis et al. (1997) in its broader theoretical context and
by Armstrong (1997) specifically in relation to the public service. Thus, for example, Armstrong pointed to the influence relational assumptions have on choices about organisational styles of direction-setting and control.

2.2.5.1: Governance and the issue of agents’ self-interest
The governance literature indicated that a key aspect of ‘relational positions’ centred on the extent to which Principals should manage the risk associated with the pursuit of self-interest by Agents (Schoorman, Mayer, & Davis, 2007). The contemporary espoused position for governance in the Australian public-sector seemed to be one affording relatively high levels of willingness to take the risk that employees would not pursue self-interest over those of organisations or the communities they serve. Reflecting this, the Australian Public Service Commission argued in a normative vein that ‘good’ governance entailed understanding and trust of employees (APSC, 2007). Thus, while Davis et al. (1997) contended that principal-agent governance relationships should be framed on the basis of assessments of specific organisational context, the APSC position seemed to accord with Kooiman and Jentoft’s (2009) assessment that they tended to have been determined on the shallower basis of “fundamental assumptions and world views” (p. 824). Given this reliance on assumptions, it is pertinent to briefly consider the recent history of dominant theoretical positions on public-sector governance relationships, focussing particularly on the degree to which evolving views about the motives of frontline staff is evident within governance paradigms so as to highlight the perspectives that informed this study. The historical aspects of the discussion are offered with Pollitt’s (2011) caveat that “the precise empirical domain and technical content of these trends is often left vague while large claims are nevertheless advanced” (p. 8).
A key early source of the relational frame for public-sector governance was said to be corporate governance (Netherlands Ministry of Finance, 2000) where the issue was interpreted within a context of the control, efficiency and accountability of publicly-listed companies with a view to the overall goal of optimising stakeholder benefit (Mead, Sagar, & Bampton, 2009). In relation to corporate governance, the major relational theories drew their perspectives on governance relationships from either organisational economics or organisational psychology (Lynn et al., 2001). The former include Principal-Agent (Agency) Theory, Transaction Cost Analysis and Collective Action Theory, while the latter primarily arise from the work of the Human Relations School of Management Theory (Shortell & Kaluzny, 2006).

The form of relational governance with its roots in economic theory worked from the assumption that “the natural state of man is opportunism rather than trust” (Ferlie et al., 1997). According to Donaldson (1990) this encouraged relationships characterised by “vigilant monitoring...negative sanctions and the like” (p. 372) which he likened to those associated with McGregor’s Theory X perspective of staff. Schoorman et al. (2007) indicated such relationships were characterised by the establishment of strong systems of control and a relative absence of employee empowerment to make decisions. Therefore, with respect to the strategic dimension of governance, the economic assumption suggested the appropriate manager-employee relationship would be highly constrained. Put more simply, it invited little consideration of the issue because it interpreted the organisation’s strategic space as something of a ‘no go’ area for staff.

In contrast, the relational position drawn from organisational psychology was consistent with McGregor’s (1960) Theory Y, which encouraged ‘higher-trust’ of staff based on the
assumption that their tendency is one of motivation for work, desire for responsibility and the capacity to apply creativity, ingenuity and imagination to solve organisational challenges (Blaauw et al., 2003). Under this assumption, the scope for the manager-employee strategic governance relationship was broader, based on the potential for shared collective interests (Davis et al., 1997). Given this potential breath, the high-trust position invited more extensive consideration as to how the strategic-oriented area of the relationship might be most effectively constructed and managed.

These polarised theoretical positions each had their own weaknesses. In terms of the assumptions of economic theory, these included: its poor evidence-base (Frankforter, Davis, Vollrath, & Hill, 2007); the limits it placed on interpreting workplace relationships (Arrow, 1985); its lack of power in predicting or explaining organisational outcomes (Ghoshal, 2005); and its failure to take account of the impact of things such as established norms within organisational settings (Doucouliagos, 1994). Notably, given the context of this study, Arrow (1985) also pointed to codes of professional ethics and the social “rewards and penalties” (p. 50) that arise from them as reasons to expect the relational assumptions of economic theory to be less relevant in public healthcare contexts.

Alongside the weaknesses of the relational assumptions of economic theory, those associated with organisational psychology also had shortcomings. In particular, they included the assertion of the importance of trust without providing a clear interpretation of what this might mean in different organisational contexts (Ruscio, 1996). This ambiguity is important because while it had been suggested that relational trust provided a variety of potential benefits, including reduced duplication of effort, increased commitment and cooperation, more adaptability and greater willingness to implement decisions (Gundlach &
Cannon, 2009) evidence from organisational studies suggested it was often unreliable in securing performance outcomes (Anderson & Jap, 2005). This ambiguity was reflected in Atuahene-Gima and Li’s (2002) research findings that pointed to managerial trust being good, but “only conditionally good” (p. 75). Thus, claims as to the superiority of trust-based governance had been characterised as nothing more than “an article of faith” (Ramesh, Xun, & Howlett, 2013, p. 1).

In response to weaknesses of fixed theoretical perspectives on governance relationships, Donaldson (1990) posited a theory accommodating a broader range of possibilities. A notable feature of his Stewardship Theory was the proposition that when it best suits the organisational context, high-involvement governance relationships minimise monitoring costs and optimise investment returns (Davis et al., 1997). Thus, while not dismissing low-employee involvement in governance as some appropriate choice, Stewardship Theory encouraged higher trust wherever it was consistent with the motivations and values of an organisation’s agents on the grounds that it was more efficient to do so. Some empirical support had been established for the higher trust proposition of Stewardship Theory in areas including contracted social services (e.g. Dicke & Ott, 2002; Lambright, 2009; van Slyke, 2007) and private sector hospitals (Bouillon, Ferrier, Stuebs, & West, 2006). However, this support largely derived from studies of governance relationships with contracted external service providers; was limited to US settings; and offered no guidance specifically with respect to frontline public service employees and the strategic aspects of governance that were the focus in this study.

While the evidence base for their claims remained limited, Davis et al. (1997) suggested that where high-trust was warranted but not reflected in governance practice, lower employee
commitment and job satisfaction might be the result, leading to productivity losses and higher staff turnover. Accordingly, they argued an organisation’s governance relationships should be determined on the basis of close analyses of both agent motivations and their perceptions of the organisational environment. Unfortunately, they were not expansive about how this might be done in most principal-agent governance contexts. This was because their emphasis was on the more limited issue of board-chief executive relationships in private companies. Nevertheless, the general thinking underpinning this study accorded with their assessment that governance relationships should be determined on the basis of context-specific assessments of principal and agent perceptions and preferences rather than on fixed positions. This was reinforced by Ramesh et al. (2013) who argued that ideological positions on public-sector governance should be dispensed in favour of establishing evidence about approaches best suited to addressing sector-specific problems of areas like healthcare.

2.2.5.2: Dominant theory on principal-agent relationships
Moving beyond the issue of the relative merits of different theoretical positions on governance relationships, Economic Theory appeared to have had a more substantial practical influence on public-sector governance relationships in the period following the 1980’s (Benz & Frey, 2007; Davis et al., 1997; Frankforter et al., 2007; Ghoshal, 2005; Lubatkin, Lane, Collin, & Very, 2007; Millar & Abraham, 2006). Bowman (2012) argued this influence commenced with a stark relational shift away from the assumed altruism of public servants, commencing around the time of the early 1980’s. Within a decade of this, Dilulio’s (1994) perspective was that the influence of economic theory was pervasive, with “many adherents” (p. 277). This influence was said to have been most significant at the frontline of public-service delivery (Armstrong, 1997).
This apparent public-sector embrace of Economic Theory formed part of the previously-mentioned NPM (Armstrong, 1997; O’Flynn, 2006) of which Australia was characterised as an exemplar of adoption (O’Flynn, 2007). More particularly with respect to this study, Boyce (2001) argued its exemplar status applied to public hospitals across much of Australia, which had set about adopting a range of NPM-inspired reforms. As noted earlier, among the suite of ideas associated with NPM was the notion that more decision-making responsibility needed to be shifted to public-sector managers (Ackroyd, Kirkpatrick, & Walker, 2007; Brignall & Modell, 2000; O’Donnell et al., 1999). It was also said to accommodate the Agency Theory characterisation of self-interested, self-serving frontline employees, such that governance frameworks and relationships were required to take account of their propensity so as to protect the organisation’s interests (Farrell, 2005; Gilbert, 2005; Reinders, 2008). According to Diefenbach (2009) NPM was an “orthodox strategic management concept” (p. 902) accommodating narrow instrumental views of organisations and strategy. Reflecting this, in the emergent NPM environment, the place of public service employees’ vis-à-vis strategic aspects of governance was characterised as an onlooker, with “the goals which public-sector organisations pursue and the means by which public servants interpret their responsibilities...decided by management” (O’Donnell et al., 1999, p. 5).

This description appeared to have increasingly applied to public-hospital clinicians who were the focus of this study. Under NPM, their position in strategic aspects of governance was said to be increasingly distant from ‘high-level’ decisions about services (Muetzelfeldt, 1994; Storey & Holti, 2009). Alongside this, they were also being subjected to increased levels of scrutiny in the form of explicit performance standards and monitoring (Lapsley, 2009). Diefenbach (2009) described the strategic-management model associated with NPM as a
‘nightmare’ scenario for the broader public-sector, eroding fundamental values and concepts that professionals had of their work and organisations. Reinders’ (2008) assessment was similar, arguing that the NPM-related shift in governance deeply affected the way all public-sector professionals experienced their work; pushed back their role; left them with reduced levels of autonomy; and forced them into “detailed administration and documentation of their activities” (p. 566). This accorded with Bowman’s (2011) reference to NPM leading to diminished recognition of the virtues of vocation in favour of measuring employee value in terms of their productivity and also supported Tuohy’s (2003) assessment that NPM manifested itself in healthcare as a move away from a trust-based relational governance to an emphasis on control.

With regard to the implications of the NPM relational position, Williams et al. (2012) indicated there was an assumption that public-sector employees would passively conform to external demands imposed by structures and regulatory strategies. Contradicting this, NPM-inspired reforms in areas like public health and the governance relationships associated with them seemed to increase levels of conflict between managers and clinicians (Brown & Calnan, 2011; Noodegraaf & van der Meulen, 2008). These impacts were been said to have been common across many health systems, adversely affecting health professionals’ work satisfaction and the quality of care they provided (Boyer, Belzeaux, Maurel, Baumstarck-Barrau, & Samuelian, 2010).

While limited, some previously-noted general empirical support for early NPM reforms leading to reduced employee involvement in strategic aspects of governance was available for the Australian public-sector. This information arose from a meta-study that used 1994 and 1996 data from approximately 30,000 Australian public and private sector staff, which
pointed to NPM reforms both reducing public servants’ decision-making involvement and being associated with a deterioration in employee-manager relationships (O’Donnell et al., 1999). Notwithstanding this, it should also be noted that Australian public-sector research by Korac-Kakabadse and Korac-Kakabadse (1998) looking at the relational styles senior managers used with staff suggested that they still remained more likely to be grounded in values of mutual trust, cooperation and values-based behaviour. Consequently, principal-agent relational interpretations of the impact of NPM seemed elusive.

Despite the above, in the more specific context of public hospitals, that were the focus of this study, some interpretations of the impact of NPM-related approaches to strategic governance on clinicians were stridently negative. Reflecting this, a discussion on the findings of an “exhaustive” 10-month inquiry into public hospitals in New South Wales (NSW) Skinner, Braithwaite, Frankum, Kerridge, and Goulston (2009, p. 78) referred to a breakdown of working relations between clinicians and their managers. Further, they pointed to the inquiry finding NPM reform implementation in NSW had not been open or transparent, nor entailed clinician involvement in the design of changes at the clinical unit level and that there needed to be a greater dispersal of decisional-power to include clinicians more extensively. Morton’s (2005) more general critique of Australian hospitals entailed similar claims, assigning blame for ineffective strategies to the “reforms of the 1980’s: the development of corporate structures and managerialist management systems” (p. 328) that diminished staff ownership of problems and the capacity to identify and implement appropriate solutions.

Some empirical support for these interpretations was also provided by Braithwaite and Westbrook’s (2005) study of 227 nurses, doctors and allied health staff working in two
tertiary hospitals in Brisbane and Sydney. This research identified that only a minority (26%) felt sufficiently involved in management, while a majority (55%) believed clinicians had been subjected to increasing levels of monitoring and control over the previous five years. Braithwaite and Westbrook also reported neutral-or-negative perceptions of clinician-manager working relationships among two-in-three respondents (65%) in their study. Connell, Ferres, and Travaglione (2003) had also referred to the results of an internally-conducted, unpublished annual survey of employees of a large Australian public health-sector organisation that indicated very low levels of trust in managers. While valuable, however, the limited scope of this research and its cross-sectional nature encouraged a cautious interpretation of the implications for Australian public hospitals more generally.

More particularly, in relation to frontline nurses who were the focus of this study, it had been suggested they were the clinicians most affected by, and disaffected with, NPM reforms (Aiken et al., 2001; Duffield et al., 2007; Shannon & French, 2005). A key point at which nurse disaffection seemed to have been experienced was in their relationships with their immediate managers (Heitlinger, 2003). This assessment seemed to accord with data from an Australian study that found Nurse Managers’ roles had been significantly affected by NPM changes, with surveillance and cost-control becoming a more substantial focus of their work (Newman & Lawler, 2009). It was also consistent with Aiken et al.’s (2001) findings from their study of 43,000 nurses from approximately 700 hospitals in North America, the UK and Germany, which suggested NPM reforms had had adverse impacts on frontline hospital nurses and had led to a deterioration of relationships between them and their immediate managers. Qualitative data (n=1564 written responses) taken from a large-
scale Western Australian study of registered nurses reported by Nowak and Bickley (2005) suggests a similar situation had developed in this State.

A link had also been suggested between retention problems and deteriorating manager-nurse relationships during periods of NPM reform implementation in Australian hospitals (Duffield & O’Brien-Pallas, 2003; Hogan et al., 2007; Naude & McCabe, 2005). Duffield et al. (2007) had, however, acknowledged that direct evidence of the impact of governance changes on the Australian nursing workforce was lacking. Dollard, La Montagne, Caulfield, Blewett, and Shaw (2007) affirmed this, pointing to this gap applying to the broader health-and community-services sectors. Notably, they specifically highlighted the lack of evidence pertaining to rural and remote settings.

Given the above, firm and specific conclusions about NPM and its systematic effects on public health governance relationships remained difficult to establish. Added to this was the problem that NPM itself was a catch-all phrase for what have actually been diverse models, incorporating a range of underpinning ideas and approaches to implementation (Bezes et al., 2012; Cheung, 1997; Ferlie et al., 1997; Homburg et al., 2007; O’Flynn, 2006; Thomas & Davies, 2005; Try & Radnor, 2007; Viitanen & Konu, 2009). Nemec and De Vries (2012) also noted that in some cases, NPM reforms even included aspects contrary to the broader paradigm. An apparent example of this was Denmark’s adaptation of NPM, which envisioned high-level employee engagement in governance via “sustained and intensive political dialogue between leadership, employees...about the process and its...results” (Bang, 2004, p. 172).

The ambiguous nature of ‘real world’ directions in relational approaches to governance was reflected in Ferlie et al.’s (1997) assessment that even within the UK, NPM reform concepts
led to an array of adaptations by different managers and staff across different parts of the public-sector. Ackroyd et al. (2007) made a similar point, highlighting the uneven implementation of NPM reforms in the UK health and social services sectors. This variance was supported by Ter Bogt, Budding, Groot, and Van Helden’s (2010) assessment that NPM could not be considered a fully-elaborated theory or set of guidelines. Further complications were suggested by Bolton’s (2005) research conducted in mid-1990 in a large UK hospital, looking at the perspectives nurses in middle-management positions had of NPM reforms. This highlighted the potential pragmatism of healthcare managers when it came to actually implementing reforms at the Ward- or Unit-level by pointing out that most construed aspects of their role “as mediating the excesses of NPM” (Bolton, p. 6).

As a consequence, interpreting the consistency of intentions and directions in the different aspects of principal-agent governance relationships across different national, regional and local public-sector contexts and establishing what was actually implemented over recent history was highly problematic. As noted previously, the characteristic of NPM reforms to have been little evaluated (Boyne et al., 2004; Lægreid et al., 2005; Pollitt, 2011) and the limited attention given to different interpretations across different public-sector organisations and their impact on professionals (Thomas & Davies, 2005) was unhelpful in this regard.

2.2.5.3: Signs of changing emphasis in principal-agent governance relationships
Despite limited clarity as to what NPM had actually entailed in different jurisdictions and organisations and the limited empirical data on the nature of principal-agent governance relationships, the mid-to-late 1990’s saw the emergence of a substantial body of literature challenging NPM notions of the governance relationship with public-sector employees and
calling for greater staff involvement in strategic decision making. Notably, at around this time, some had begun to argue the case for a changed emphasis in decisional and relational areas of private-sector governance, which might have added some impetus to the issue. Pound (1995) for example, suggested the private sector organisational performance problems that had been interpreted as problems of inadequate control were more often a product of decision-making styles. Consequently, he encouraged adoption of things like more pluralistic decision-making and greater organisational transparency rather than increased control over staff. As noted earlier, the emergence of Stewardship Theory (Donaldson, 1990) also saw a challenge to the self-interest assumption of corporate governance and the related imperative for control over staff, making room for greater accommodation of employee perspectives in organisational strategy (Farrell, 2005).

In reference to the broader public-sector, Ostrom (1989) was an early advocate of the notion that it was becoming an increasingly complex organisational environment and that effective governance would be increasingly likely to depend on the relational dimension. For this reason, he had suggested the science and art of the practice of governance relationships would become increasingly critical. Simon (1998) had also argued that the performance of these organisations should be interpreted by taking more account of the influence of higher-order motives on the behaviour of staff. Rainey and Steinbauer (1999) extended this, proposing that higher levels of effectiveness in public-service agencies were associated with distinct forms of staff motivation that were antithetical to self-interest, including a drive “to provide significant service that benefits the community, the public, or society in dutiful, compassionate, and self sacrificing ways” (p. 25) and contribute something of value to the community. Armstrong (1997) also contributed to this area,
arguing that public organisations were better managed via involvement strategies, entailing features like: high trust; respectful relationships with staff; shared goals; and a long-term outlook.

Thus, by the late 1990’s, signs were emerging of an increasing shift away from the NPM account of public service employees, encouraging deeper forms of manager-staff relationships touching on broader strategic concerns to ensure public-sector organisations could achieve higher levels of performance (Bandelj, 2012). Reflecting this apparent shift, Williams et al. (2012) referred to the emergence of an alternative or so-called ‘Third Way’ governance paradigm, entailing a greater focus on securing the support of public servants for change strategies, rejecting the Agency Theory account of the self-interested employee in favour of recognising their capacity to commit effort to solving broader workplace challenges.

According to Jun (2009) evidence of the post-NPM relational trend was apparent across a number of countries, including Australia, the UK, New Zealand, and Canada. As one apparent sign of this, O’Flynn (2006, 2007) suggested positioning public-sector managers as collaborators via processes such as information sharing and trust-building and argued that the practice of management within the public-sector should shift from a focus on results to an emphasis on relationships. Similarly, Harman and Treadgold (2007) emphasised the importance of the manager-professional staff governance roles and relationships in Australian universities, where they advocated for increased prominence to be given to the relational aspect to protect and sustain their core business. In a consistent vein, Edmonstone (2009) contended the effectiveness of governance in professional bureaucracies was correlated with the extent to which managers’ relationships with staff
included listening to and respecting their perspectives and taking account of their “history, culture, education and so on” (p. 294).

While Veronesi and Keasey (2011) pointed to an increasing adoption of the clinician involvement perspective in the NHS in the post 1997 period, they also noted that aspects of NPM had a ‘stickiness’ making them hard to fully replace. In a somewhat more cynical vein, Brown and Calnan (2009) referred to the issue of rhetoric over substance in relation to trust in practitioners in the NHS, pointing to policies that demonstrated a “deficiency of trust” (p. 20) in those at the frontline of healthcare delivery. The more nuanced interpretation of Bezes et al. (2012) was that two facets of a public-sector modernising movement were in deadlock, with one focussing on a strategy of standardisation and control over the work of professionals while the other encouraged strategic renewal via locally-derived solutions involving high levels of professional input. Accordingly, they suggested the public-sector was in the midst of a period of acute uncertainty about how to deal with competing accounts of appropriate forms of governance relationship with professionals.

Notwithstanding uncertainty about the emergent forms of governance relationships being experienced by clinicians’, increasing attention to conceptualising the relational practice of high-level coal-face involvement in strategy was apparent in the more general public-sector literature. Among those who had published most extensively on this were Feldman, Khademian and their colleagues (Feldman and Khademian, 2002, 2005, 2007; Feldman et al., 2009; Weber & Khademian, 2008). Their work, often framed in the context of US case study examples, emphasised the role public managers should play in bringing stakeholders together to create ‘communities of participation’ (Feldman & Khademian, 2007). Their view was that the role of these groups was to analyse strategic issues and identify and implement
solutions based on their contention that collectively-derived solutions were usually better designed and more likely to be implemented by those at the coal-face. This perspective interpreted the strategic process as one that spanned planned and emergent aspects and therefore, that it entailed involvement by many different participants (Paarlberg & Bielefeld, 2009). Accordingly, Weber and Khademian (2008) posited the effectiveness of strategic aspects of governance depended on public-sector managers employing sophisticated relational skills. For instance, they suggested these would be necessary to engage stakeholders like frontline staff in ways that educated them in effective collaboration and create ‘deliberative spaces’ for problem solving (Feldman & Khademian, 2007).

Feldman et al. (2009) also asserted that the relevance of relational aspects to strategic dimensions of governance imposed a high level of responsibility on public managers to establish appropriate levels of “competence for making policy and implementing programs” (p. 126) at the frontline. Given that part of this emerged from reciprocally-constructed rather than imposed ‘communities of participation’, Feldman and Khademian (2002) also argued public-sector managers needed to be responsive to stakeholder preferences and perspectives regarding how the ‘deliberative space’ of strategic governance might best function. Weber and Khademian’s (2008) case study research into areas of emergency management, environmental regulation and community renewal suggested a key relational aspect of collaborative capacity for strategic governance was stakeholder trust. This, they argued, was a primary precursor to deriving workable solutions and subsequent commitment to their implementation.
2.2.5.4: Trust
In the healthcare governance context, the theme of trust had been extensively discussed by Brown, Calnan, Rowe and colleagues, specifically in relation to the NHS and the issue of manager-clinician relationships (Brown & Calnan, 2010, 2011; Calnan & Rowe, 2008a; Calnan & Rowe, 2008b; Calnan et al., 2006). Brown and Calnan (2011) argued that despite trusting relationships between clinicians’ and managers’ being fundamental to safe and efficient healthcare, widespread mistrust had actually been engendered as a consequence of the introduction NPM reforms and their influence on management culture and practice in the NHS. McMurray (2007) made a similar point about the effect of NPM reforms in breaking down trust across health systems like Australia’s and reducing capacity for healthcare reform.

Consistent with the earlier-mentioned position of Feldman, Khademian and colleagues, Calnan and Rowe (2008) contended that resolving the trust issue required elucidation of governance relationships between managers and clinicians “that demonstrate honesty, reliability, competence, accessibility and an indication that colleagues share similar values and have a common agenda” (p. 97). It was this, they argued, that would establish the conditions for a new and more nuanced “risk-aware form of trust” (Brown & Calnan, 2010, p. 20) in healthcare as distinct from the ‘blind faith’ or managerial ambivalence they associated with earlier times.

Of relevance to this study was that Brown and Calnan (2011) contended that the construction of this form of relationship was reliant on the day-to-day character of interactions clinicians have with their managers. As Calnan, Rowe and Calnan (2008) noted, however, there had been limited literature assessing the value or impact of trust from either management or practitioner perspectives in these frontline healthcare contexts. This
applied more particularly to the specific area of nursing management (Mullarkey, Duffy, & Timmins, 2011).

Consistent with aspects of this study, Brown et al. (2011) called for empirical work on the nature of healthcare professionals’ views of the characteristics of ‘face-to-face’ interactions with managers that were most suited to building trust. With respect to the strategic domain of governance, they argued this would offer the potential for healthcare reform to be developed in ways conducive to “a convergence of priorities between managers and clinicians” (Brown et al., p. 49).

Despite the gap in understanding the specifics of ‘trust-optimising’ governance practice in frontline healthcare settings, trust had increasingly emerged in broader organisational research (Tyler, 2003) and was interpreted as being a complex and multi-faceted concept (Connell et al., 2003; Connell & Mannion, 2006; Kim, 2005; Moye, Henkin, & Egley, 2004). Although difficult to define, Costa and Bijlsma-Frankema (2007) pointed to a consensus among most scholars that trust was a psychological state reflected in behaviour towards others. They also pointed to widespread agreement that people trust others on the basis of both positive expectations about the consequences of doing so and a willingness to become vulnerable (Costa & Bijlsma-Frankema, 2007; Bijlsma-Frankema & Costa, 2005). As Gilson, Palmer, and Schneider (2005) noted, the latter aspect entailed a judgement by a trustor of a trustee’s intentions while the former derived from their experience of results. Evaluations of trustworthiness were, therefore, central to the concept of trust (Albrecht, 2002).

In the context of this study, several aspects of the literature on trust were particularly noteworthy. Among these was that as well as having an individual character, trust in organisations was said to arise as a product of social and normative influences (Connell &
Mannion, 2006). Thus, Connell and Mannion pointed to shared norms developing among employees and guiding their trust judgements of managers. Morgan and Zeffane (2003) also referred to this dimension of trust, describing it as ‘systemic’, emerging from and being sustained by the cumulative process of interactions in organisations. More specifically in the context of healthcare, Connell and Mannion suggested this cumulative process led to “unambiguous, normative frameworks to guide actors on either side of the trust relationship” (p. 422). Some empirical support for this had been provided by Payne and Clark’s (2003) UK study of banking (n=182) and public hospital employees (n= 216) that found organisational factors accounted for three times as much variance in trust in line-managers as personal factors (i.e. 12% versus 4%). With respect to this study, this suggested that nurses’ direct experience with, and expectations of, their line managers’ strategic governance practices were likely to more strongly influence trust judgements than their individual-level predispositions.

Another aspect of the trust literature pertinent to this study related to how trust itself was viewed. Although this differed depending on the intent of research (Burke, Sims, Lazzara, & Salas, 2007) one view of trust allowed investigation of it as an active process (Khodyakov, 2007). In the context of governance, this was reflected in Nooteboom’s (1999) description of trust as a choice effected in a variety of ways by those with power, resulting in a cycle of interpretation by both trustee and trustor, leading to their respective subsequent choices about behaviour. Consistent with this, Burke et al. (2007) characterised trust as ‘a process’ that influenced the nature of subsequent behaviours, attitudes and relationships. Khodyakov considered the interpretive cognitive rubric arising from ‘trust as process’ as a form of personal agency, in which individuals ‘imagined’ future situations with partners on
the basis of past experience and, on this basis, made choices about the character of these relationships.

Under a process view, therefore, it seemed the exercise of trust by managers in strategic governance contexts could be measured using behavioural indicators while their effects on employees at a given time could be assessed with reference to their evaluations of future relational scenarios (Nootenboom, 1999). Reflecting this in the context of this study, employee evaluations of managers practice of trust would be apparent in aspects of the level of personal investment employees were willing to make in further exchange behaviours vis-à-vis their managers or the organisations they represented (Khodyakov, 2007). A meta-analysis of data from 106 independent samples and a total of 27,103 subjects from the field of trust in leadership suggested that while these evaluations might be apparent in a variety of outcome measures, the most commonly used and strongest were likely to be those related to job satisfaction (r=.58) intention to quit (r=-.45) and organisational commitment (r=.54) (Dirks & Ferrin, 2002).

While the specific characteristics of healthcare managers’ strategic-governance behaviours that optimise trust among frontline staff seemed were yet to be elucidated, research had resolved broad areas of attributes that employees are likely to use to make trustworthiness judgements about managers. These broad categories have been said to apply regardless of context (Kim, 2005) and reviews by Dietz and Hartog (2006) and Burke et al. (2007) pointed to the most salient aspects being the manager’s ability, benevolence, integrity and predictability. Schoorman et al. (2007) also identify ability, benevolence and integrity as the core contributors and empirical work by Clark and Payne (1997, 2006) and Payne and Clark (2003) supported this, although they added managerial openness to staff as important to
the evaluative process. Notably, Clark and Payne’s findings supporting the broad four-dimensional structure of ability, benevolence (referred to as loyalty and fairness) integrity, and openness were based on samples drawn from a range of organisational settings, including banking, mining and healthcare.

A further feature of employee trust judgements that informed this study was that they distinguished line managers from broader organisational leadership (Dirks & Ferrin, 2002). Specific studies to have demonstrated this include those undertaken by Clark and Payne (1997, 2006) and Payne and Clark (2003) that included UK public-hospital employees among their respondents. More specifically, the sample in the study Payne and Clark reported on in both 2003 and 2006 papers included 216/500 randomly selected hospital employees drawn from a database of staff at four facilities (i.e. they obtained a 43% response fraction). While Payne and Clark did not describe the professional alignment of this sample, responders were assumed to have included a substantial proportion of nurses given they comprised a large proportion of hospital employees. Notably, given the focus of this study, Payne and Clark (2003) found job or ‘situational’ factors to be moderately strong predictors of employee trust judgements of both immediate managers and of senior levels of management. This suggested any investigation of nurse expectations of managers’ governance practices should accommodate the potential for them to have different relational expectations of immediate and more general management.

Taken together, the previous discussion of the ‘relational’ dimension or ‘how’ of governance suggested the character of manager-nurse principal-agent relationships in public hospitals might be important to organisational success in identifying and implementing appropriate strategic change. There were a number of arguments in support of this proposition,
including the potential for frontline nurses to: (a) be ‘allies’ for managers in support of change; (b) contribute to the design of better reform solutions; and (c) be more committed to the implementation of reforms. Each seemed important, particularly in frontline healthcare contexts, where managers may be faced with dissenting views about their strategic contribution and may be unsure about or under-prepared for a strategic role.

In highlighting the potential relevance of the manager-nurse principal-agent relationship in public hospitals, the previous discussion has also pointed to the need for these relationships to take account of nursing perspectives and preferences if they are to be effective. In this context, Clark and Payne’s (2006) four dimensions of trust seemed to offer a useful general framework to guide relational aspects of this study of frontline hospital nurses’ perceptions of the governance practices of their managers.

2.3: The cognitive dimension: Conceptualising the process of nurse judgements of their managers’ governance practice

A body of empirically-supported theoretical literature shed light on the possible cognitive structures and processes involved in nurse evaluations of strategic aspects of governance and this information provided conceptual and practical guidance for this study.

Key aspects of this literature derived from the broader area of Schema Theory, which in the organisational context incorporated the notion that employees construct mental templates or models that they use to interpret workplace events and decide on appropriate actions (Flanagan & Spurgeon, 1996). These cognitive structures serve the purpose of lending economy to the process of interpreting events (Anderson & Pearson, 1984) by providing governing variables (e.g. principles, values to guide action) and notions of what should be done in specific organisational contexts (Argyris & Schön, 1978). Schema Theory suggested
employees form organisation-related schemas on the basis of cycles of professional and organisational experience and perception (Argyris & Schön, 1978; Flanagan & Spurgeon, 1996; Lewis & Boldy, 2006; Morrison & Robinson, 1997). In their 15-year review of the area, Mohammed et al. (2010) also indicated extensive empirical support for shared schema or ‘Team Mental Models’ (TMM’s) in the workplace. They also referred to the conceptualisation of TMM’s as structures that would comprise elements of the ‘what’, ‘how’, and ‘who’ of governance along with evaluative beliefs that would reflect employees ‘preferred or expected’ governance practices.

Several processes pertaining to the notion of schema offered further potential explanations as to how interactional and procedural aspects of managerial governance practice (i.e. the ‘what’ and ‘how’) might link to employee evaluations of managers and their willingness to invest in their future relationship with them and their organisation. One of these was labelled ‘subjective procedural justice’ and related to overall ‘fairness’ judgments employees made of their managers’ decision-making processes (Lind & Tyler, 1988).

Procedural justice judgements had been said to be made by employees on the basis of assessments of the formal and informal procedures their managers’ used in decision-making and their interpersonal style in the process (Rubin, 2009). Consequently, with respect to this study, the notion of procedural justice evaluations incorporated employee assessments of managers’ practices from both the ‘what’ and ‘how’ dimensions of governance using schematic templates of expectancy. Collectively, these assessments of decision-making and interpersonal treatment had been empirically demonstrated to predict employee trust in management (Colquitt, LePine, Piccolo, Zapata, & Rich, 2012; Connell et al., 2003; Dirks & Ferrin, 2002; Lind & Tyler, 1988). Given this study’s focus, it was also notable that Albrecht
and Travaglione’s (2003) research in the Western Australian public-sector pointed to employee procedural justice evaluations of managers being significant negative predictors of their cynicism to change.

Of further relevance to the study and its focus on the nursing profession was the proposition that the norms for both decision-making and interpersonal treatment of staff that underpin employees’ procedural justice evaluations emerged from group socialisation (Lind & Tyler, 1988). This argument was common in the organisational literature (Connell & Mannion, 2006; Epitropaki & Martin, 2004; Morrison & Robinson, 1997) and in the context of decisional environments like strategic governance, suggested nurses developed shared expectancy frameworks they subsequently used to evaluate both the procedures used by their managers and the interpersonal treatment they experienced from them. In particular, this resonated with the general notion of employee ‘psychological contracts’ that comprised schema of expectations of their own and their employers’ behaviour (Morrison & Robinson, 1997; Robinson & Rousseau, 1994; Robinson, Kraatz, & Rousseau, 1994). In a two-year follow up study of this concept with 128 Master of Business Administration graduates, Robinson and Rousseau found that, controlling for initial intentions, perceived psychological contract violation by employers accounted for a significant proportion of intention to quit (16%). Thus, as Morrison and Robinson suggested, employee expectancies of employers appeared important because they could play an important role in determining how employees felt about their jobs and how they behaved in the workplace.

The specific notion of employees evaluating the decision-making processes of their managers using shared expectancy frameworks or schema was something accommodated within Beach and Mitchell’s (1987) Image Theory. Within this theory, the evaluative process
is referred to as ‘compatibility-testing’, which involves the individual comparing dimensions of their environment against personal standards (i.e. schema) that are framed on the basis of values, expectations and goals (Pleskac, Keeney, Merritt, Schmitt, & Oswald, 2011). While originally hypothesised within a general model of organisational and personal decision-making, Beach and his colleagues subsequently accommodated this process within range of other investigations (Beach, 2009) including some examining the relationship between dissonant images of ideal and actual management practices and staff satisfaction (Dunegan, 2003; Richmond et al., 1998). Like the concept of procedural justice, the synthesis of key findings from this compatibility testing research was that staff compared their managers’ practices with cognitive templates or mental images of good practice and that high-level image compatibility led to greater satisfaction with managers and the broader employer organisation (Beach, 2007).

Consistent with procedural justice, the compatibility-testing process of Image Theory also posited the role of professional values, gained through training and experience, shaping the cognitive templates of expectation employees had of their managers (Miner, 2007). Notably, Rediker, Mitchell, Beach and Beard (1993) referred to the tacit or relatively ‘hidden’ nature of the criteria for compatibility, with their empirical work suggesting that highly entrenched beliefs reduced the chances that “innovation and change will be entertained” (p. 125).

Because compatibility assessment seemed to operate largely beneath active consciousness as an ‘automatic’ mode of thinking, Rediker et al. (1993) argued that some accommodation of dominant belief structures within organisations was likely to be necessary to avoid staff resistance to strategic change. This reinforced the potential value of research elaborating on
these tacit expectancies of strategic aspects of managerial governance in the context of frontline nursing because it suggested it might offer clues about effective strategic decision-making and implementation processes. This point seemed supported by the findings of a sequence of four longitudinal field studies undertaken by Venkatesh and Davis (2000), which pointed to the compatibility-testing process strongly predicting employee intention to use new workplace technologies under both choice and no-choice conditions. The work of Tendler and Freedheim (1994) and Grindle (1997) examining high-level performance in public-sector environments in developing countries also pointed to compatibility with employee norms and standards for strategic change predicting organisational success. Franco et al.’s (2002) contention that motivation levels among clinicians in the public health sector were influenced by their perceptions of the alignment between professional and organisational goals seemed to add weight to the pertinence of the research.

Taken together, therefore, the orientation of this study was supported by a body of literature relating to the cognitive dimension. This literature also offered methodological insights as to how nurse expectancies of managerial governance might initially be characterised and subsequently measured and assessed for relevance. These insights included encouragement of preliminary use of techniques to elucidate nurse expectations of strategic managerial governance practices; the subsequent use of analytical methods appropriate to schema interpretation; and finally, reference to a general purpose measure that offered a plausible outcome indicator for assessing the checking or evaluation propositions associated with the process of schema compatibility testing. Given the importance of the outcome measure to broader claims of the relevance of nurse governance schema, the following section describes the choice of turnover intention and
offers a justification for its choice, including an outline of its relevance as a measure of organisational impact.

2.4 The outcome measure: An important organisational variable

2.4.1: Justifying the choice

Nurse turnover had been internationally recognised as a problem within the profession (Coomber & Barriball, 2007; Holtom et al., 2008; Hwang & Chang, 2008; McCarthy et al., 2007; West, 2005). Its precursor, turnover intention, the outcome measure used in this study, had a similar status because one-in-two of the nurses who reported an intention to quit acted on it within three years (Shields & Ward, 2001). The extent of the turnover issue had led to a global nursing shortage (Buchan & Aiken, 2008; Cai & Zhou, 2009; Jacobs & Roodt, 2007; Ma et al., 2009) that had been further exacerbated by worldwide growth in the need for health professionals (Roberge, 2009). In relative terms, turnover among nurses had been more significant than among other professions because of their faster rate of departure (Cai & Zhou, 2009; van der Heidjen, van Dam, & Hasselhorn, 2009).

Australia’s experience with nursing turnover reflected the global situation, with more nurses being lost than could be replaced (Duffield & O’Brien-Pallas, 2003). More particularly, in this study’s context of rural nursing, Australia’s historical tendency to low levels of turnover (Hegney & McCarthy, 2000) seemed under some threat because a particularly high attrition rate was said to apply to new nurses (Mills et al., 2010).

The negative consequences of high rates of nurse turnover had been suggested to extend beyond the efficient functioning of hospitals to potentially affect overall population-level health. Thus, for instance, Minore et al. (2005) indicated it compromised health among Indigenous Australians living in remote communities who suffered whenever there was a
lack of nursing continuity. Rural communities were another example of populations said to be adversely affected by high levels of nurse turnover (Buchan & Aiken, 2008) and this had led to the issue being identified a significant priority for further research in these specific contexts (Roberge, 2009).

A further concern regarding nursing turnover was that it was costly in financial terms. One US estimate indicated replacing one staff member costs as much as 1.2-1.3 times a nurse’s average annual salary (Jones, 2008). O’Brien-Pallas et al.’s (2006) international, multicentre study of nursing turnover impacts suggested a more modest, but nonetheless significant replacement cost of approximately US$17,000 for Australian hospitals. Turnover among registered nurses had also been shown to have a more general positive, linear relationship with overall hospital costs, with the greatest impact being felt in smaller hospitals (Alexander et al., 1994).

Higher nursing turnover also had the potential to reduce the quality of patient care (Ma et al., 2009; Hayes et al., 2006) and to stimulate a ‘vicious cycle’ of further turnover (Jones, 2008). Paradoxically, however, the problem of nurse turnover had been said to have remained under-recognised by health executives (Jones, 2008) possibly as a result of the limited research undertaken to demonstrate its system-wide cost implications (Holtom et al., 2008).

With regard to stemming nurse turnover, the existing literature pointed to a need to both retain older staff as a result of their valuable experience (West, 2005) and keep enough young nurses to replace retirees (Kovner, Brewer, Greene, & Fairchild, 2009). The latter issue was regarded as particularly challenging given that job dissatisfaction was highest among younger nurses (Wilson, Squires, Widger, Cranley, & Tourangeau, 2008).
Shifting focus to the factors that predicted nurse turnover, Davidson, Folcarelli, Crawford, Duprat, and Clifford (1997) indicated it had been the subject of extensive research since the 1960s. Despite the absence of a comprehensive explanatory model of nursing turnover (DeGieter, Hofmans, & Pepermans, 2011; Gilmartin, 2012; McCarthy et al., 2007) and the limited understanding of why nurses leave the profession (van der Heijden et al., 2009) job satisfaction was cited as the most important determinant of their intention to quit (Davidson et al., 1997; Hayes et al., 2006; Shields & Ward, 2001; Tourangeau, Cummings, Cranley, Ferron, & Harvey, 2009). This was reportedly influenced by personal, environmental and organisational attributes (Davidson et al., 1997). With respect to the latter, empirical data suggested that clinicians who were dissatisfied with management policy and practice were 65% more likely to leave their jobs than their satisfied counterparts (Brunetto et al., 2010). Of relevance to this study, Brunetto et al. also conjectured on the basis of their qualitative and quantitative study of Australian nurses across four States and a range of geographic settings, that the management relationship might be more important to those in the public- than the private-sector because frontline public-sector nurse managers had more decision-making power.

Buykx, Humphreys, Wakerman and Pashen (2010) had also maintained that despite limited empirical attention being given to the link between organisation and management of regional and rural health services and health worker retention, it would be an important element in any effective overall retention strategy. Consistent with this, recognition of the role played by organisational factors in nurse satisfaction had led to them being identified as targets for intervention to reduce nursing turnover (Boyle, Bott, Hansen, Woods, & Taunton, 1999; Taunton, Boyle, Woods, Hansen, & Bott, 1997). Among these organisational factors,
management style and governance had been implicated (Acree, 2006; Hayes et al., 2006; Kleinman, 2004) particularly for younger nurses (Mills et al., 2010; Wilson et al., 2008) although the link of these aspects to turnover was yet to be empirically elaborated (Tourangeau et al., 2009; Tourangeau, Cranley, Spence Laschinger, & Pachis, 2010).

Of relevance to this study was Tourangeau, Cummings, Cranley, Ferron and Harvey’s (2009) interpretation of results from their descriptive research undertaken in two Canadian provinces that entailed 13 focus groups with a total of 78 nurses. They reported both direct and indirect links between nurse assessments of both: (a) their organisations’ support and practices; and (b) their relationship with their managers, and their subsequent intentions to remain employed. While the dimension of organisational support practices Tourangeau et al. described spanned a variety of issues, it did include some aspects relevant to strategic areas of governance (e.g. involvement in hospital committees). Further, their description of nurse expectations of managers reflected key dimensions of relational trust in management as outlined previously. Both claims lent support to this study’s use of turnover intention as an appropriate measure of nurse assessments of strategic aspects of their managers’ governance practices.

The literature also supported the relevance of frontline managers to turnover processes, in part because they provide coal-face nurses with their link to senior levels of the organisation, interpreting and translating organisational values (Jeon, Glasgow, Merlyn, & Sansoni, 2010) and providing a potential bridge between “organisational and professional goals” (Hogan et al., 2007, p. 196). In Australia, this relevance was reinforced by a Victorian public hospital study (Funnell, 2010) that found a common reason nurses gave for planning
to stay in the profession was that they believed they had an effective unit manager and the
reverse was true among those who planned to leave.

In relation to the kind of frontline managerial governance environment to which nurses
seemed to best respond, relevant features appeared to include the extent to which they
were empowered, experienced trust, and perceived it to provide them with capacity to
provide high-quality care (Cummings et al., 2010; Duffield et al., 2007; Hayes et al., 2006;
Hwang & Chang, 2009; Park & Kim, 2009; Van Bogaert, Meulemans, Clarke, Vermeyen, &
Van de Heynin, 2009). The emphasis nurses placed on the issue of quality of care had been
reinforced by an English study of more than 6000 nurses (Reeves, West, & Barron, 2005)
which found their intention to quit was as likely to derive from this aspect as it was from
dissatisfaction with their employment conditions. Such evidence supported one of the
major contentions underpinning this study, which was that nurses shared an outward
looking, stewardship-type expectation of strategic governance practice at the frontline of
care and that this had links to their future employment intentions. Qualitative research in
three Western Australian metropolitan hospitals by Naude and McCabe’s (2005) also lent
support to this proposition.

In relation to the relevance of compatibility testing to nurse turnover intentions, empirical
support had been provided by Morrell et al.’s (2008) study of 352 voluntary nurse leavers
from UK NHS hospitals. Morrell et al.’s measures used included nurse compatibility
assessment in areas of personal and professional ethics and goals versus those they
perceived to be the ethics and goals of their former employer organisations. This research
suggested ‘image violation’ among nurse leavers (i.e. the product of the compatibility test)
in relation to aspects related to their perspectives of their organisation’s strategic
governance practices did play a part in most cases (77%) of turnover and lent support for
the choice of a measure of turnover intention as an outcome indicator of compatibility
testing in this study.

To summarise, therefore, a body of turnover literature lent support for the choice of
turnover intention as an appropriate outcome measure of nurse governance compatibility-
testing in this study. The discussion pointed to evidence suggesting that styles of
governance that reflect nurses’ underlying motivations played a role in turnover and, in this
context, made reference to an influential role having been attributed to frontline managers.
Further, nurse turnover intention was characterised as a particularly important
organisational variable in regional and rural hospitals, with potentially acute implications for
local communities where it is high. Consequently, turnover intention appeared an
appropriate theoretical and practical choice for this study.

2.4.2 Measuring turnover intention
Among researchers, dominant interpretations of turnover were of it was a multistage
process, with a final stage being intention to stay or leave (Holtom et al., 2008; Martin &
Roodt, 2008; McCarthy et al., 2007). This accorded with the Morrell et al.’s (2008)
previously-mentioned findings of the most common voluntary turnover pathway associated
with professional and personal value image compatibility testing among 352 NHS hospital
nurse leavers. Morrell et al.’s measure of image violations included evaluative elements of
evaluation of strategic governance and their research suggested a stepwise or gradual
pathway of image violation leading to turnover applied to 44% of the 77% of nurse leavers
that could be classified according to processes of compatibility testing. For the remaining
33% that could be classified, the explanation was a sudden event or ‘shock’ leading to
quitting rather than gradual withdrawal. Consequently, this suggested gradual withdrawal provided the best interpretation of the effect of violation of nurses’ governance schema on their turnover intention.

As the most direct and immediate antecedent of turnover (Jacobs & Roodt, 2007; McCarthy et al., 2007) and the strongest predictor of departure (Tett & Meyer, 1993; van der Heijden et al., 2009) turnover intention had been a central measure of interest to turnover researchers for some decades. Over this period, the relationship had been interpreted as so clearly demonstrated that turnover intention was considered a safe substitute for turnover behaviour (Hwang & Chang, 2008).

The use of turnover intention as an outcome measure had a number of advantages over actual turnover. One of these was that it avoided complex market and psychological considerations that form part of the process of actually leaving an organisation (Vandenberg & Nelson, 1999). This was especially important in this study’s regional and rural context, where the decision to leave a local hospital was much more likely to mean relocation of family and factors like the sale of a home. Thus, an intention to leave healthcare settings in these areas seemed less likely to be acted on in reality. Another benefit of turnover intention was its temporality; that is, it reflected an employee’s assessment ‘at the moment’. Turnover intention was also organisationally relevant whether or not it was acted upon because of its association with other negative organisational outcomes, such as absence and diminution of performance (Holtom et al., 2008). For this reason, Dalessio, Silverman and Schuck (1986) had assessed turnover intention as being potentially more important to employers than actual turnover.
The advantages of measuring turnover intention had led to its extensive use as a dependent variable. This use had included a number of studies that examined aspects of the employee-environment interface in health service environments. For example, it had been used in studies that looked at: the impact of organisational climate on employees in rural health organisations (Albion, Fogarty, Machin, & Patrick, 2008; Mulki et al., 2008) and hospitals (Hwang & Chang, 2009; Kivimaki et al., 2007); organisational culture and its impact on nurses (Jacobs & Roodt, 2008; Park & Kim, 2009); the effects of structural empowerment on hospital nurses (Cai & Zhou, 2009); job stress among hospital staff (Chiu, Chien, Lin, & Hsiao, 2005); perceived job demands on nurses (Chiu, Chung, Wu, & Ho, 2009); and the impact of knowledge-sharing on hospital nurses (Jacobs & Roodt, 2007).

Turnover intention had also been used as a dependent variable in research pertaining to employee values, including evaluation of the impacts of public servants’ public service motivation (van Vianen, De Pater & Van Dijk, 2007) and perceived organisational barriers to nurses delivering high-quality care (Reeves et al., 2005). Along with this, it had been used as a dependent variable in studies with more descriptive orientations, including research that examined the career plans of new graduate nurses (Kovner et al., 2009; Beecroft, Dorey, & Wenten, 2008) and those of frontline hospital nurses (McCarthy et al., 2007).

Notwithstanding its extensive use as a dependent variable, turnover intention had been assessed using a variety of measures, including single items (Bright, 2008; Kudo et al., 2006; Ma et al., 2009; Mulki et al., 2008; Hwang & Chang, 2009) and three- to four- item scales (Cai & Zhou, 2009; Chiu et al., 2005; Chiu et al., 2009; van Vianen et al., 2007; Wells & Peachey, 2011). Other measures that had been employed included multi-option checklists
(Shields & Ward, 2001) and instruments that differentiated short- and long-term turnover intentions (Moynihan & Pandey, 2008).

Sager, Griffeth, and Hom (1998) criticised most approaches to the measurement of turnover intention. Their criticisms related to the common failure to take account of the turnover cognitions that occurred prior to the decision to leave, which as noted previously, seemed pertinent to the compatibility testing process for most nurses with respect to strategic dimensions of governance (Morrell et al., 2008). Kovner et al. (2009) interpreted these as comprising stages of withdrawal that commence with thoughts of quitting, progress to an intention to search for a new job, and then result in an intention to quit. Consistent with this, multi-item measures of turnover intention had been found to account for more than twice as much variance in actual turnover as single-item measures (Tett & Meyer, 1993). In light of their superior performance, broader measures of turnover intention account of aspects like employee motives for leaving (Vandenberg & Nelson, 1999) and job-search behaviour (Chen, Chu, Wang, & Lin, 2008) were increasingly encouraged.

A measure incorporating these aspects and adhering to Kovner et al.’s (2009) interpretation of turnover intention as a stage-related process was one developed by Roodt (Jacobs & Roodt, 2007). This 14-item scale had been tested in several studies (Jacobs & Roodt, 2007, 2008; Martin & Roodt, 2008) including an evaluation of the turnover intentions of South African hospital nurses (Jacobs & Roodt, 2008). Cronbach alphas of close to 0.9 had been obtained for this scale in both Martin and Roodt’s and Jacobs and Roodt’s research, indicating they had acceptable reliability. A subsequent large-scale (n= 2429) validation study of a shortened six-item version of the original scale by Bothma and Roodt (2013) had also confirmed its criterion-predictive validity in regards to actual turnover. The advantages
of this scale, including its reliability, past use in a public hospital study of nurses, and its apparent comprehensiveness suggested it as an appropriate choice for this study.

2.5 The study context

2.5.1 Hospitals in the public system: A brief overview

The public-health sector refers to government-funded and -run healthcare services that provide the primary source of healthcare in most developed countries (Paris, Devaux, & Wei, 2010). Within this sector, the predominant service category is hospitals. Public hospital beds account for more than two thirds of the total capacity of the health systems of Canada, the UK, New Zealand, Italy, and Australia (Paris et al., 2010). Australia’s investment in public hospitals is at the OECD average (Ruggie, 2001) mirroring other developed economies (OECD, 2009).

Pertinent characteristics of Australian public hospitals include their diversity in size and scope of services, and their status as state- or territory-controlled organisations, albeit that they are subject to some influence from the Australian Federal Government (Foster & Fleming, 2008). In 2008-09, there were 756 public hospitals in Australia, which, categorised according to size and role, included: principal referral hospitals; specialist women’s and children’s hospitals; and large, medium, and small acute hospitals (AIHW, 2010). While the principal referral hospital category accounts for three-in-five of all days of acute care, these facilities are numerically less common than their smaller, predominantly rural counterparts.

Consistent with their number and cost, Australia’s public hospitals provide significant employment. In 2008-09 they had almost 250,000 full-time equivalent staff, with nurses the largest of the professional categories (45%) (AIHW, 2010). In summary, therefore, public
hospitals are important organisations, both as dominant providers of healthcare and in regard to their role within the broader economy.

2.5.2: Western Australian Country Health Service (WACHS)

WACHS, which provided the organisational context in which this study was undertaken, was a relatively recently-formed arm of the WA public health system. Established in 2002 via the consolidation of more than 40 separate (predominantly local) health services, it was the largest regional and rural health system in Australia and provided an array of healthcare services across an area of approximately 2.5 million square kilometres to more than half-a-million people (WACHS, 2012). The organisation employed approximately 8500 part- and full-time staff of whom 40% (2300 full time equivalents) were nurses (WACHS, 2007). Although regional healthcare structures like WACHS had been asserted to facilitate reduced duplication, increased service integration, and to provide better continuity of care, little evidence was available to support these claims (Philippon & Braithwaite, 2008).

WACHS services were diverse and highly dispersed across the Western Australia’s extensive landmass. Of note given this study’s focus, it has 71 hospitals, of which, most (50) were ‘small’ eight-bed type, low-activity, low-acuity facilities serving townships with populations no more than 6,000 (ABS, 2013; WACHS, 2007). Of the remainder, six were regional ‘hubs’, located in major townships of between 16-35,000 people (ABS, 2013). These hospitals served their immediate townships and acted as regional referral services. WACHS also had 15 integrated district health services, which served mid-sized regional communities, with populations that typically fell between those of the smaller hospitals and regional centres (ABS, 2013; WACHS, 2007). Complementing its hospital network, WACHS had 47 nursing posts, which provided limited emergency services and some community care, but had no
inpatient role. As noted previously, under the Western Australian Hospitals and Health Services Act (Section 2, 1927) nursing posts are considered hospitals and this interpretation was used in this study.

WACHS organisational structure incorporated seven administrative regions, which each had separate budget allocations and regional bureaux, headed by Regional Directors who were each supported by a team including Regional Directors of Nursing and Medicine. These regional bureaux had a high degree of delegated authority for planning, resource use, and the development and management of local services (WACHS, 2008). This seemed consistent with Regmi’s (2012) characterisation of the widespread adoption of decentralised governance in public-health services directed to increasing local autonomy to make services effective. WACHS regions were complemented by central office based in Perth and headed by a Chief Executive Officer (CEO). The CEO was supported by a range of generalist and specialist policy and administrative personnel, including Area-wide Directors of Nursing and Medicine.

Collectively, the broader Central and Regional structure of WACHS ‘management’ was the organisational leadership Dirks and Ferrin (2002) suggested frontline staff distinguished from their immediate local managers. Aspects of their governance role formed a secondary referent for this study’s nurse respondents. The primary referent for respondents was their local area or ‘immediate’ nurse managers. In smaller, eight-bed facilities, these positions carried the title of Hospital Director of Nursing/Health Service Manager (DON/HSM). In intermediate and regional hospitals, which had a more substantial management hierarchy, they incorporated Clinical Nurse Manager positions (i.e. unit-level nurse management) and Nursing Coordinator positions (i.e. hospital-level nurse management).
In relation to strategic aspects of governance, WACHS (2007) strategic planning framework suggested the centre of the organisation was informed by broad directions indicated by the Western Australian Department of Health and then provided broad direction to regions that each had their own strategic plans. In most cases, regions had two or more subordinate district or sub-regional strategic plans (WACHS, n.d.). While overall strategic accountabilities lay at either the central or regional levels of management, delegation of responsibility to local-level management occurred as required (WACHS, 2011). At the local level, this was reflected in WACHS standard job description forms (JDF’s) for nursing management positions that specified a range of strategic governance roles, including providing leadership on service development initiatives and clinical reform, and the maintenance of effective collaborative networks with other healthcare provider organisations. Thus, as suggested in the following schematic (Figure 3) all levels of WACHS management seemed to be expected to participate to some degree in the area of strategic governance.

![Figure 3: General Framework for Strategic Aspects of Governance in WACHS](image)
Lord, Jefferson, Klass, Nowak, and Thomas’s (2013) study of nursing leadership in Western Australia seemed to affirm and extend the above-mentioned interpretation. They suggested public hospital management in rural areas of the State entailed more significant delegated responsibility than found elsewhere in the health system and emphasised the consequent importance of appropriately skilled local leadership.

WACHS (2007) interpretation of its own strategic context seemed to resonate with Lord et al.’s (2013). It described itself as an organisation in need of reform and that central to this was change to its hospitals. Five issues were identified as driving the need for reform: (1) a growing and changing population; (2) workforce shortages; (3) a relatively higher burden of disease in rural communities of WA than in the metropolitan area; (4) growing concerns about patient safety and service quality; and (5) increasing costs and complexity associated with rural healthcare delivery (WACHS). In response to these, a key part of WACHS overall reform directions was establishing each of its seven regions as “fully integrated health networks” (WACHS, 2007, p. 30). The organisation implied that responsibility for this was shared across different levels of the organisation and with key external stakeholders and communities. Again, this pointed to significant assignment of strategic governance responsibilities to central, regional and local levels of the organisation.

The accommodation of bottom-up and top-down strategic roles was also consistent with the distinctly different populations and issues each WACHS region confronted and the vast distances associated with the organisation’s scope of geographic responsibility. As one example of these issues, Indigenous people comprised 42% of Western Australian Kimberley region’s total population, while in its South West counterpart, they accounted for only two percent (WACHS, 2007). Other examples included the selective population effects of the
Western Australian ‘mining boom’ and of declining agricultural fortunes, particularly in the State’s Wheatbelt (ABS, 2013).

Of relevance to this study, WACHS (2007) 1990-2005 activity data indicated that while hospital admissions in its six regional centres were growing relatively rapidly (+60%) they were stable in its’ 15 integrated sites and declining in small hospitals (-46%). This was pertinent to strategic governance in that it pointed to an organisation in the midst of significant change, especially in its larger and smaller facilities. Consistent with this, WACHS indicated their smaller facilities were substantially changing their focus, hastened by challenges associated with attracting doctors and maintaining technical skills of their nurses in the face of low activity levels. They also pointed to economic imperatives for change and highlighted increasing difficulties attracting nurses to these facilities (WACHS).

In response to these pressures, WACHS (2007) indicated a reorientation of their smaller facilities away from acute care to addressing issues like the needs of growing aged populations and those with chronic health problems. WACHS characterised the future of these hospitals as locally collaborative services oriented to preventing hospitalisations rather than delivering inpatient care. Their description of these facilities as community-based health maintenance, disease prevention and aged-support services seemed akin to a population-level health management responsibility reflected in the WHO concept of Stewardship Governance. It also signalled substantial role changes for both nursing staff and managers in most of WACHS hospitals.

The direction of this change was consistent with Mahnken’s (2001) broader assessment of the course of reform in most small Australian rural hospitals, which she characterised as “merging of the illness and wellness paradigms” (p. 4). Of note given the focus of this study,
the success of this change seemed likely to be highly dependent on the reactions of nurses to both their general direction and the related nature of strategic aspects of governance required to ensure appropriate planning, implementation and evaluation occurred. Mahnken recognised this, but argued it was poorly understood by senior decision-makers and politicians in State health systems. In the context of this study, this reinforced the relevance of the governance of strategic transition within regions, especially at the local level. This was because it was at this level that managers were likely to be the ones primarily responsible for steering the complex course required to achieve the appropriate mix of health promotion, disease prevention, chronic disease management and social care that each smaller rural community would need (Mahnken).

In relation to growth in its regional hospitals, WACHS (2007) indicated the major challenge this imposed related to building additional capacity in both capital and human terms. Associated with this was the positioning of these larger facilities as regional referral centres, providing a wide range of diagnostic, procedural, emergency, and specialist services to the populations being served. While the implications of these changes for both frontline nurses and their managers in these facilities were less clear than in small hospitals, they seemed nonetheless significant. For hospital-level nursing managers in particular, the change suggested a greater role in planning and implementing new models of regional service provision. This also implied extensive consultation and communication with staff, external service providers (e.g. medical specialists), referrers and other stakeholders, and communities. All these roles were reflected in WACHS (2007) strategic reform documentation. Once again, success with implementing change in regional hospitals seemed likely to be highly dependent on frontline nurse reactions because they were
central to most aspects of healthcare delivery. Further, as WACHS (2007) indicated, there were workforce shortages in nursing and approaches to strategic aspects of governance that did not take account of their perspectives seemed likely to exacerbate this problem.

Along with the above-mentioned changes to the roles of WACHS regional and smaller hospitals, the organisation also identified broader reform directions that seemed to have significant implications for the roles of regional and local managers and frontline nursing staff. Among these, and consistent with the WHO’s (2000) notion of healthcare leaders having a ‘stewardship’ responsibility for the overall health of the populations they serve, WACHS (2007) signalled a desire to ‘build healthier communities’. Among other things, the organisation suggested it could achieve this by expanding the capacity of all its service providers to deliver mental health and drug-related harm-reduction interventions, and by increasing their capacity to improve Indigenous health. Given that a majority of the organisation’s clinical staff were frontline hospital nurses (WACHS, 2007) the implementation of these reforms had significant implications for their practice and further reinforced the relevance of the nursing perspectives of strategic aspects of governance practice.

2.6 Summary and synthesis of main variables from the literature review for the study

This review of literature pointed to merits of investigating an area of public-sector governance that Lynn et al. (2004) categorised as relating to discretionary aspects of organisation, management, and administration and the core technologies, primary work and service transactions overseen by public-service agencies. In healthcare, this area is
predominantly oriented to the provision of frontline hospital care, where nurses are the mainstay of the workforce.

The review delineated strategic aspects of managerial governance practice pertaining to public hospitals and highlighted them as a potentially valuable area for empirical study. In doing so, it identified the WHO (2000) Stewardship Governance Framework as a theoretical underpinning that seemed most appropriate to guide aspects of such investigations, especially since it had been specifically proposed for health systems and had been suggested to accord well with the underlying sense of mission of those involved with the delivery of clinical care (Saltman & Ferrousier-Davis, 2000). At the same time, the apparent relevance of the character of principal-agent governance relationships to governance of the process of strategy formulation and implementation at the frontline of healthcare was outlined. In this context, relational trust and Clark and Payne’s (2006) general architecture for workplace trust assessments were identified as pertinent to research into this area.

In considering aspects of governance in frontline areas of healthcare, this review considered the merits of the little-studied proposition that coal-face hospital nursing perspectives on the issue deserve more empirical attention. Arguments in support of this were outlined, including the potential for nurses to be supportive of change, perhaps even ‘allies’ in its design and implementation, if procedural and relational aspects of the practice of strategic governance reflected their expectations.

In relation to nurses’ expectations of strategic aspects of governance practice, the review offered an outline of empirically-supported cognitive theories that provided explanations of the formation and use of schema in appropriateness judgements. Consistent with these theories, nurse turnover intention was delineated as a relevant outcome of nurse
judgements of the appropriateness managerial governance. This measure was also discussed as something of broader relevance to healthcare organisations as a result of widespread nursing shortages and the related need to maximise nurse retention.

Finally, the review characterised the study’s organisational context, WACHS, as an organisation in the midst of significant transition, especially in relation to its network of hospitals and the roles of frontline nursing staff. With regard to interpreting locally-appropriate strategies and plans for these services, this review pointed to dispersed responsibilities across WACHS management layers, including substantial regional and local hospital-level managerial roles for identifying and implementing appropriate change. This local assignment of responsibility was reflected in the organisation’s strategic documentation and in hospital and unit-level managers’ role statements or job description forms. The strategic role expected of local-level WACHS managers reinforced the proposition that supportive and engaged frontline nursing staff were likely to be an important determinant of the organisation’s potential for successful change, especially since substantial aspects of implementing any change would inevitably fall to them.

Lastly, in relation to the broader WACHS agenda for strategic change, this review noted that one of the organisation’s major reforms, ‘creating healthier rural communities’, accorded with the population-health orientation of stewardship governance (WHO, 2000). This emphasis reinforced the relevance of assessing whether WACHS frontline nurses’ expectancies of strategic governance were consistent with the WHO model.

The following schematic (Figure 4) provides a general framework for nurse evaluations of strategic dimensions of managerial governance practice. It illustrates the theoretical positioning of the various aspects discussed in this review, including the ‘what’, ‘where’ and
‘how’ dimensions, the place of schema and compatibility testing, and the proposed outcome variable, turnover intention, which is posited as a measure of the personal and organisational relevance of nurse governance evaluations.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>WACHS broader management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Strategic aspects of governance</td>
<td>Nurse schema of procedurally appropriate practice</td>
<td>Compatibility Test</td>
<td>Turnover Intention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WACHS Local hospital level management</td>
<td>Relational practices of governance</td>
<td>Nurse schema of relationally appropriate practice</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 4: General Framework for Nurse Evaluations of Strategic Dimensions of Managerial Governance Practice
3. Methodology

3.1 Introduction

This chapter locates the research philosophically and provides an overview of issues that influenced the choice of methods used in the research. It briefly reiterates key aspects of the organisational focus of the research and identifies committees that provided ethics clearance for the studies. It then describes the methods of data collection used in preliminary and main studies, in each case providing an outline of the respective study samples, procedures, measures and analyses.

By way of general overview, the studies involved: (a) initial conceptual validation of the intent of the research as an endeavour using a small sample of experienced WACHS managers, most of whom had a clinical background in nursing (i.e. ‘expert’ opinion); (b) generation of an extensive inventory of management practices that ‘experts’ believed to be preferred by frontline nurses working in WACHS hospitals and that seemed consistent with dimensions of Stewardship Governance (Travis et al., 2003) and Trust in Management (Clark & Payne, 1997, 2006); (c) conversion of this inventory to questionnaire format and an initial instrument development survey to ascertain WACHS hospitals nurse responses to items using a method appropriate to elucidating schema; and (d) use of the questionnaire refined via an instrument development survey with a larger sample of frontline WACHS hospital nurses to confirm dimensions of their schema of strategic aspects of governance practice and to assess their direct ‘significance’ to nurses using a measure of turnover intention (i.e. hypothesis testing). The ‘significance’ of strategic aspects of nurses’ governance schema practices was examined using an outcome indicator of schema ‘compatibility-
testing’ (Beach & Mitchell, 1987) against their perceptions of WACHS managers’ actual governance practice. Previous governance-related research with nurses suggested the design features of the turnover intention scale used in the study made it an appropriate choice with respect to schema compatibility testing (Morrell et al., 2008).

To aid the reader, the domains and sub-functions of Travis et al.’s (2003) interpretation of health system Stewardship Governance and Clark and Payne’s (1997, 2006) domains of Trust in Management are described in Appendix 1.

As noted, ‘expert opinion’ was used as both a preliminary ‘proof of concept’ exercise to assess the appropriateness of the theoretical basis of the proposed study and to aid subsequent generation of an inventory of governance items that appeared consistent with one or other of the two theoretical frames. This approach was consistent with Clark and Payne’s (1997) exploratory study of workers’ Trust in Management and reflects Streiner and Norman’s (2008) description of the use of ‘expert opinion’ in the development of scales. As Streiner and Norman indicated, the distinctions between ‘research’ and ‘expert opinion’ are somewhat arbitrary, but the methods used reflected their description of the latter usually entailing a small number of people being consulted on an individual basis.

The subsequent development of questionnaire items measuring Stewardship Governance and Trust in Management proceeded in accordance with direction provided in the literature (e.g. de Vaus, 1991; Hinkin, 1995; Tharenou, Donohue, & Cooper, 2007). The first stage of item development met Hinkin’s (1995) prerequisite for the development of new measures by ensuring a transparent link between items and theoretical domains. This was achieved by mapping specific practices mentioned by ‘experts’ during individual consultations to dimensions of strategic governance
apparent from Travis et al.’s (2003) characterisations of the dimensions of Stewardship Governance and Clark and Payne’s (1997, 2006) outline of the facets of Trust in Management. Consistent with Streiner and Norman’s (2008) guidance, given the objective of the preliminary stage was to generate as many items as possible that appeared consistent with the two theoretical frames, those suggested by even one interviewee were considered for inclusion in the initial instrument.

The next phase of the study entailed translating governance-relevant management practices into a questionnaire format and refining this instrument using a method that mirrored that of the main study (Jackson & Furnham, 2000). The analysis of instrument-development study data involved using Exploratory Factor Analysis to identify constructs (i.e. schema) and identify relevant item sets or measures of these cognitive structures (DeVellis, 1991). This followed Floyd and Widaman’s (1995) advice that factor analysis was appropriate when developing measures of cognitive schema. Given the proposed method of analysis, an instrument development study sample size of 200 was considered adequate (Tabachnick & Fidell, 1989) and this was randomly drawn from a database of all frontline hospital nurses working in WACHS regional and rural hospitals.

As indicated, the procedure followed in the main study mirrored that used in the instrument development study. The main study did, however, involve a larger sample (n=1544) and a briefer questionnaire following item reduction facilitated by the analyses of instrument development study data. Table 1 provides a summary of the key elements of the research.
Table 1 Summary of Key Elements of the Research

<table>
<thead>
<tr>
<th>Developmental Studies</th>
<th>Main Study</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td><strong>Step 2</strong></td>
</tr>
<tr>
<td><strong>What:</strong> Validating the conceptual basis of a study.</td>
<td><strong>What:</strong> Developing a preliminary questionnaire pertaining to WACHS managers practices consistent with Stewardship Governance and Trust in Management thought to be favoured by frontline hospital nurses</td>
</tr>
<tr>
<td><strong>How:</strong> n=16 ‘expert’ interviews</td>
<td><strong>How:</strong> n=16 ‘expert’ interviews and information from Stewardship Governance and Trust in Management concepts.</td>
</tr>
<tr>
<td><strong>Who:</strong> Highly experienced WACHS managers, most with nursing backgrounds</td>
<td><strong>Who:</strong> Highly experienced WACHS managers and the theoretical frameworks of Travis et al. (2002, 2003) and Clark and Payne (1997, 2006).</td>
</tr>
<tr>
<td><strong>Outcome:</strong> The conceptual basis of the study was supported.</td>
<td><strong>Outcome:</strong> An inventory of Stewardship and Trust-related WACHS manager governance practices was developed.</td>
</tr>
</tbody>
</table>
3.2 The General Perspective

The research purpose spanned a combination of elements of exploration, description and explanation (Neuman, 2006) of whether frontline nurses working in WACHS hospitals had schema-based expectations of their immediate and broader managers’ governance practices that accorded with Travis et al.’s (2003) characterisation of the Stewardship functions of health-sector governance and Clark and Payne’s (1997, 2006) dimensions of Trust in Management. As the study was founded on a specific ‘moral’ perspective of frontline regional and rural hospital nurses (i.e. Travis et al.’s proposition that Stewardship concepts were consistent with the sense of ‘mission’ common to healthcare professionals) and had an applied emphasis (i.e. regional and rural hospitals), it reflected an attempt to create reflexive knowledge (Neuman, 2006).

In broad terms, the research approach was consistent with what Maylor and Blackmon (2005) referred to as an objectivist ontology and an epistemology of realism. This philosophy is one in which reality is considered to exist beyond people’s thoughts and beliefs (Saunders, Lewis, & Thornhill, 2003). With respect to the current research, this philosophy was said to recognise “the importance of understanding people’s socially-constructed interpretations and meanings, or subjective reality, within the context of seeking to understand broader social forces, structures or processes that influence, and perhaps constrain, the nature of people’s views and behaviours” (Saunders et al., 2003, p. 85).

The research method adopted in the study was consistent with the early steps in a process that Yeung (1997) referred to as iterative abstraction. Yeung indicated this method was often used in realism to identify and describe generative mechanisms. The method entails iterative exploration of the relationship between phenomena (e.g.
an aspect of organisational performance) and deeper causes (e.g. governance practices) by collecting empirical evidence then revising and retesting ideas.

The research method also accorded with a paradigm referred to by Forza (2009) as “holistic constructual” (p. 88) as it encompassed an iterative process of theory construction and testing. The general conceptualisation of the study was that it would be a first step in interpreting the nature and possible relevance of a framework of strategic governance behaviour for managers responsible for regional and rural hospitals and health services based on structural notions of Stewardship (i.e. the ‘what’ of strategic aspects of governance and process dimensions of Trust in Management (the ‘how’ of strategic aspects of governance).

3.3 Overview of Issues that Influenced the Choice of Methods

Given that the distribution of Stewardship Governance roles and responsibilities across subordinate jurisdictions in specific countries was a gap in the literature (Brinkerhoff & Bossert, 2013) developments in the more specific area of measuring nurse schema of practice in this area were understandably non-existent. Brown et al. (2011) had also pointed to the limited empirical work on the nature of healthcare professionals’ views of the characteristics of ‘face-to-face’ interactions with managers most suited to building trust.

Consequently, points of reference for investigating nurse schema of strategic aspects of the governance role of WACHS managers were limited. This was consistent with a broader lack of conceptualisation and study of managers’ governance practices in the context of public hospitals (Storey & Holti, 2009). Notwithstanding this, guidance like that provided by Travis et al.’s (2003) who contended that survey instruments would play a potentially valuable role in assessing Stewardship Governance was influential.
Literature on areas of schema, procedural justice, and schema compatibility testing, which appeared relevant to nurse evaluations of governance practice, also supported the use of survey methods (Lind & Tyler, 1988; Morrell et al., 2008; Scott, 1990; Van Rekom et al., 2006). Instrument development processes apparent from research in these areas encouraged the steps of using the literature and in-depth interviews with experts to identify specific governance-related practices along with subsequent instrument development to refine measures. This seemed consistent with the staged process followed by Goodhew et al. (2005) in their study identifying the schema financial services managers’ used to make judgments about the performance of their branch.

Forza (2009) also offered general support for the choice of survey method, which he nominated as the preferred method for theory testing because it: (1) allowed hypothesised relationships to be assessed across different settings; (2) offered greater generalisability of results; and (3) was more economical than the alternatives. He too indicated that qualitative research should be undertaken during the developmental stage, indicating that it would help mitigate some of the weaknesses of surveys. Others to suggest that survey method was an appropriate choice included Tharenou et al. (2007) and Zikmund (1994) who specifically pointed to multi-item measures or scales as having been commonly used in management studies. Their contention was that developments in survey methods had substantially improved the quality of this type of research and this offered further reassurance that the choice was appropriate.

Guiding frames on the development of survey instruments to establish valid measures of underlying psychological constructs reinforced the appropriateness of the previously-mentioned instrument development process (Clark & Watson, 1995;
Goodwin & Leech, 2003; Hinkin, 1998). Notably, this also aligned with Cronbach and Meehl’s (1955) sentinel description of the appropriate processes to follow to establish construct validity in questionnaire measures.

Notwithstanding the appropriateness of survey methodology to the research context, criticisms had been made of its use as a principal form of data collection. The basis of this was that correlational data could not be used to demonstrate causal links and also as a reaction to issues like non-response and response bias (Foddy, 1993). Much of this criticism, however, was said to be a consequence of misinterpreting the nature and potential of such research (de Vaus, 1991). In acknowledging the imperfections of surveys, de Vaus (1991) pointed to good design and appropriate analyses as remedies for the most commonly cited deficiencies, adding that the challenge of developing meaningful explanations from research was not restricted to surveys. Thus, despite having weaknesses, the choice of survey method was supported as an effective and realistic way to elucidate the character of frontline regional and rural hospital nurses’ schema of appropriate governance practice.

3.4 Organisational and Professional Focus of the Study
A consideration in the choice of organisation in which to conduct the study was the broader relevance of the research findings to Australian regional and rural public hospitals. In part, the Western Australian Country Health Service (WACHS) was selected because it was a single, large and geographically diverse organisation, responsible for the management of 71 public hospitals (approximately 10% of the national total) and 47 nursing posts across the State. As noted earlier, Western Australia’s regional and rural hospitals were frontline healthcare services for almost 500,000 people or one quarter of the State’s population (WACHS, 2007) and in the
context of governance research, provided the capacity to explore frontline regional and rural hospital nurses’ perceptions of strategic aspects of governance across an array of acute care settings.

All WACHS acute-care services, like the majority of their Australian counterparts in other states, were in the public domain (AIHW, 2010) and the communities they served were diverse, spanning highly urbanised areas, relatively isolated mining communities, small farming townships, through to remote Aboriginal communities. In this sense, the communities that WACHS’s hospitals served mirrored the spectrum of the broader Australian population.

WACHS had a significant operating budget (i.e. A$605.37 million in 2005/06) and employed more than 8,500 full- or part-time staff, of whom approximately 40% were nurses predominantly working at the frontline of the organisation’s hospitals (WACHS, 2007). To assist the reader with regard to the profile of frontline nurses working in WACHS hospitals, they include registered and enrolled nurses. Registered nurses (RNs) require a three-year undergraduate or postgraduate degree in nursing, or the equivalent (AIHW, 2009). In contrast, enrolled nurses (ENs) are vocationally trained in courses of between one and two years. RNs form by far the greater number of nurses working in Australia, comprising four in five of the total pool (AIHW, 2009) and the current research focussed on this category.

Data on the Australian nursing workforce offered a picture of relative consistency across all geographic areas (AIHW, 2009). This extended to similarities in the average age of nurses, their gender profile, the proportion of nurses who were RNs, and the number of nurses per capita. Broadly, this profile can be summarised as: 9 in 10 nurses were female; the average age of nurses was in the mid-40s; eight-in-ten nurses were
RNs, and the number of nurses per 100,000 people was in the 1200-1300 range. Nurses employed in WACHS hospitals, therefore, appeared to have a similar general profile to their counterparts elsewhere in Australia.

As a single organisation, undertaking the research project within WACHS meant that its’ organisational hierarchy was able to streamline administrative approvals and provide support for the implementation of a survey of clinical staff across all regional and rural areas of the State. This support was confirmed with senior WACHS staff during the research planning phase and extended to an agreement that sample selection and questionnaire mail-out would be facilitated via the provision of database of frontline hospital nurses working in the organisation’s regional and rural hospitals.

3.4 Ethics
Ethics approval for the research was sought and obtained from the research ethics committees of both Edith Cowan University and WACHS.

3.5 Expert Interviews and Questionnaire Development
As noted, ‘expert opinion’ was used as a preliminary stage of the research. The approach taken resembled one described by Clark and Payne (1997) and was consistent with Streiner and Norman’s (2008) description of the use of ‘expert opinion’ to develop health-related measurement scales. As in Clark and Payne’s study, ‘exploratory’ interviews with experts were used to assess the appropriateness of the theoretical frame (i.e. Stewardship Governance and Trust in Management). Likewise, data gathered from these interviews used to aid the development of questionnaire items (i.e. to identify ‘context-specific’ practices and to ensure ‘context-relevant’ wording).
‘Experts’ were selected on the basis that they had extensive backgrounds in both the clinical and managerial worlds of WACHS regional and rural public hospitals. This first-hand exposure was anticipated to have afforded them substantial opportunity to reflect on ‘clinician perspectives and preferences’ regarding a spectrum of governance issues and to afford what Handy (1999) characterised as a ‘helicopter view’ of WACHS management and clinical worlds. This was important because their views were to provide an initial ‘validation’ of the merit of the theoretical basis for undertaking the study. Their role in the subsequent issue of item development with appropriate context-specific wording was also important as a means of maximising the potential content validity of the instrument development study questionnaire (Bohrnstedt, 1983; DeVellis, 1991; Hinkin, 1995).

‘Expert’ interviews were undertaken in mid-2008 and, with one exception, involved people working at the most senior tier of clinical management in WACHS, including State-wide and Area Directors of Nursing and Medicine and three other director-level staff working in areas of population health, primary health and quality improvement, who each had qualifications in nursing. Most interviewees were in their mid-to-late careers and all had at least 25 years work experience in the WA health system, predominantly in regional and rural areas of the State.

Recruitment of experts began with an email invitation sent to 19 WACHS clinician-managers asking them to participate in an interview. An additional non-clinical, non-WACHS manager was also approached on the basis that he had recent senior managerial experience within WACHS and extensive involvement with the Australian College of Health Service Executives, including a period of presidency of the national body. His experience suggested he would have valuable reflections on clinician
perspectives of strategic aspects of governance practice in relation to regional and rural public hospitals.

Of the 20 people initially approached, 18 agreed to participate (90%) and two did not respond. Subsequently, one of those who had agreed to be interviewed cancelled a sequence of appointments because of competing work commitments and another was unavailable as a result of leave (i.e. 2 were unavailable). Consequently, 16 people (i.e. 80% of those approached) with senior-tier managerial experience in WACHS were interviewed and 15 of these had a clinical background. Interviewees included all of WACHS’ most senior clinical managers (i.e. had state-wide responsibilities for medicine, nursing, population health, primary health, and quality). Twelve (75%) of the interviewees had a nursing qualification and 11 (69%) were female.

Interviews were conducted face-to-face with seven of the experts. These included all those with state-wide responsibilities (five), one area director of medicine, and the non-WACHS manager. The remaining nine ‘clinician-managers’ were interviewed by phone, primarily because each of them worked in locations at a significant distance from the investigator (i.e. more than 400 kilometres).

Interviews lasted between 30 minutes and one hour and were guided by an introductory statement outlining the focus and purpose of the research and a sequence of discussion points as an interview guide (Myers, 2009). A copy of this statement and the questions used to prompt discussions with interviewees is provided in Appendix 2. The broad focus of ‘expert opinion’ interviews was to explore whether respondent perceptions of the governance practices preferred by WACHS frontline hospital clinicians reflected aspects that were consistent with dimensions of Stewardship Governance (Travis et al., 2003) and Trust in Management (Clark and
Payne, 2006). At the outset, interviewees were asked to consider and respond on the basis of their interpretations of ‘broad features’ of clinician-organisation relationships rather than in relation to specific cases of individual managerial performance or the causes of ‘individual differences’ between clinicians in responses to similar circumstances.

At interview, the approach taken reflected a protocol described by Jackson and Furnham (2000) that indicated that researchers should:

- be relaxed in their approach;
- be neutral and non-judgemental during the interview;
- assure complete confidentiality;
- avoid asking leading questions; and
- provide feedback to ensure information gathered is accurate.

To build rapport and heighten interviewee comfort, preliminary discussion points pertained to interviewee backgrounds in the health system and, where it was relevant, their clinical training and experience. Subsequent discussion focused on their views about issues and trends in health-sector management and about regional and rural hospital effectiveness.

Because governance was a concept was associated with an array of interpretations (Chhotray & Stoker, 2009) the term was not used in interviews. Rather, ‘expert’ opinion on clinician perspectives of governance were gathered via a mix of a standard schedule of questions that were supplemented with deeper probing to clarify specific
details about the practices they believed clinicians responded to more/most positively.

Examples of questions from the schedule are:

*Leaving individual issues of personality and workplace conditions aside, in your experience, what approaches to public hospital management get the best out of clinicians within your profession?*

*Thinking broadly about the relationship between public hospitals and the clinicians who work in them, are there any specific practices that you think highlight that the organisation understands and respects the clinician’s view of the world and the contribution they are trying to make?*

Interviewee opinions were hand-recorded at the time of discussion and more detailed notes were made at the conclusion of each session.

As noted, the ‘exploratory’ aspect of ‘expert’ interviews pertained to a preliminary validation of the theoretical basis of the study, specifically to establish whether Stewardship Governance (Travis et al., 2003) and Trust in Management (Clark & Payne, 1997, 2006; Payne & Clark, 2003) provided potentially relevant frameworks for interpreting frontline WACHS hospital nurse preferences for governance practice. Reflecting Streiner and Norman’s (2008) characterisation of the absence of ‘hard and fast rules’ regarding the use of expert judgement, this process did not proceed according to any predetermined benchmark of acceptability to progress. Rather, what was sought was an indication as to whether dimensions identified as being elements of Stewardship Governance and Trust in Management seemed relevant to frontline WACHS clinicians and more specifically, to nurses working in its regional and rural hospitals. This goal seemed appropriate given that the proposed study was to occur in
stages that included further empirical validation via surveys of WACHS frontline hospital nurses.

Given that interviewee data provided a general level of conceptual support that seemed adequate to progress the study, information gathered from key informants was then used to aid the development of a preliminary questionnaire pertaining to the governance practices of WACHS managers’ that conceptually accorded with aspects of Stewardship Governance or Trust in Management (de Vaus, 1991; Rossi, Wright, & Anderson, 1983; Saunders et al., 2003).

The method used resonated with the approach outlined by Clark and Payne (1997) and entailed using the relatively detailed ‘maps’ of the domains and sub-functions of provided by Travis et al. (2003) (i.e. Stewardship Governance) and Clark and Payne (2006) (i.e. facets of employee Trust in Management). These ‘maps’ were used as reference points to identify aspects of strategic governance practice key informants had mentioned as appropriate to WACHS management contexts and relevant to ‘getting the best’ response from frontline hospital nurses. Thus, interview notes were extensively checked for content against each of the domains and sub-functions of Stewardship Governance and where ‘expert opinion’ referred to an aspect that appeared related to an element within these, it was included in the inventory. The same process was applied with regard to Trust in Management, using Clark and Payne’s (2006) facet frame and with further conceptual assistance in interpreting these from their inventory of items on workers trust in their managers (Clark & Payne, 1997).

The wording of items in the inventory attempted to accurately reflect the intent of ‘expert opinion’ and accord with elements of the theoretical frames. In almost all
cases, this meant that comments were taken directly or in marginally modified form (i.e. active versus passive voice) from those in interview notes. For instance, comments like: ‘ensuring efficient systems are in place in the hospital’ or ‘respect the knowledge of clinical staff in the hospital’ extracted from notes of interviews. In one instance, however, interviewees described a dimension of governance practice using a spectrum of words that seemed better substituted by those provided in the Stewardship Governance frame. This pertained to ‘intelligence gathering’, which interviewees tended to describe in a variety of ways that seemed less purposeful, often required background explanations unsuited to the inventory format.

The use of theory to frame the analysis of expert interview data and to check on the coverage of information gathered accorded with the process outlined by Jackson and Furnham (2000) and was consistent with DeVellis’ (1991) guidelines for scale development. DeVellis’ (1991) advice on the usefulness of over-inclusivity and redundancy in items was also accommodated, meaning that the approach taken to preparing the initial inventory was ‘liberal’. Consistent with Streiner and Norman’s (2008) guidance on the use of expert opinion in the development of scales, this meant that even single mentions or suggestions of governance practices that accorded with the study’s theoretical frameworks were considered for inclusion in the initial inventory.

At the conclusion of the above-mentioned process, an extensive inventory of what appeared to be Stewardship- and Trust-related governance practices suggested by ‘experts’ to be relevant to WACHS regional and rural healthcare management and preferred by nurses working in its hospitals was compiled. This was emailed to the 16 interviewees who were asked to review them for both content and coverage with
respect to getting the best response from frontline hospital clinicians (Hinkin, 1995). This process led to minor editorial changes and the addition of one item. The final inventory of governance items was then translated into questionnaire format following DeVellis’ (1991) suggestions on item construction and Foddy’s (1993) guidance on preparing attitude questions, which included ensuring items had a high level of evaluative specificity and that response category labels were used. Items were then used to construct a draft questionnaire, with sections respectively delineating work-level (i.e. local hospital or nursing post) and organisational (WACHS) management. This reflected guidance that staff distinguished the practices of immediate managers from management in their organisation more generally (Clark & Payne, 1997, 2006; Dirks & Ferrin, 2002; Payne & Clark, 2003).

The local hospital component (Part A) of the questionnaire comprised 79 items referring to respondent’s immediate workplace managers, while the WACHS component (Part B) was predominantly a subset of 30 of the 79 items pertinent to organisation-wide management in general. By way of example, managers ‘delivering on promises’ appeared in both Part A and B, whereas managers ‘ensuring the right staff mix as consistently as possible’ was only included in the first section. The wording of some items in Part B was modified to reflect the broader organisational focus (e.g. ‘ensure WACHS is accountable...’ rather than ‘ensure the hospital is accountable...’).

A copy of the draft questionnaire was then emailed to the 16 ‘experts’, with a request that they review the items and advise whether: (1) they believed they made sense; (2) any appeared to duplicate others; and (3) the draft adequately tapped into issues they felt were important to WACHS frontline hospital clinicians. In accordance with Platek, Pierre-Pierre and Stevens’ (1985) recommendation, the questionnaire was also
reviewed by a university-based expert panel that had extensive management research experience. On the basis of feedback from key informants and the expert panel, minor modifications were made to some questionnaire items.

The next stage of questionnaire development entailed consideration of the appropriate choice of response scales. Ultimately, the decision made was to use a balanced five-point Likert-type scale (i.e. Strongly Disagree, Disagree, Uncertain, Agree, Strongly Agree) on each item (Brace, 2008). This choice appeared better suited to the nature of the managerial practices identified by key informants and five-point scales were said to be within the optimal range (Brace, 2008). It also took account of Brace’s (2008) advice that the decision on the number of points should be based on the distinction that was possible between the points and the degree of discrimination being sought. The five-point option also seemed suitable given both that the reliability of Likert scales increases up to five-points and then tapers, and because five-point scales have been the most common choice in management research (Mangione, 1995).

Design issues identified by Mangione (1995) were considered in preparing the questionnaire. Many of these aspects were addressed by choosing to have the questionnaire mailed, which allowed recipients extensive time to reflect on items. Other issues were accounted for by opting for a survey design that ensured respondent anonymity. Mangione suggested these features helped address problems with sensitive items, question-order effects and response-order effects. He also advocated the use of multi-point scales and reverse ordering of some items to avoid the problem of acquiescence bias. Multi-point scales were used, but reverse ordering
of items was avoided because it had been associated with reduced validity of responses (Hinkin, 1995).

The issue of possible central tendency bias identified by Mangione (1995) was considered a potential weakness of five-point scales. The strategies he identified for dealing with this, such as leaving out the middle response, appeared inappropriate given that uncertainty about some items was likely among some respondents. Consequently, the steps taken to limit central tendency bias entailed extensively reviewing each questionnaire item to maximise the overall clarity and simplicity of the instrument (Mangione, 1995).

Reflecting the process of schema ‘compatibility testing’ (Beach, 1990) and in accordance with Cronbach and Meehl’s (1955) guidance that an existing measure or dependent variable should be used to test the applied relevance of a new measure, Part C of the questionnaire comprised a turnover intention scale (i.e. construct validation). Colquitt (2001) pointed to the need for outcome variables in construct validation to have relevance to both the study setting and to the primary measure (i.e. governance) and to have been well researched. The relevance of turnover intention to the study setting (i.e. public hospitals) was that:

- clinician retention was a significant issue in healthcare organisations both in Australia and internationally (Albion et al., 2008; Chen et al., 2004; Coomber & Barriball, 2007; Productivity Commission, 2005; Rondeau et al., 2009; Shields & Ward, 2001);
research on nurses’ turnover intentions suggested about half of those indicating a desire to leave would actually do so within three years (Shields & Ward, 2001); and

there was evidence of a link between turnover and quality of clinical care and hospital productivity (Hayes et al., 2006; Kivimaki et al., 2007; Rondeau et al., 2009).

Turnover intention was also relevant to the primary measure (i.e. governance) in that:

- organisational factors, including management-staff relationships, were associated with turnover intention among clinicians (Albion et al., 2008; Hayes et al., 2006; van der Heijden et al., 2009); and

- turnover intention had been frequently used as a measure in empirical studies in the area of healthcare management (Brewer, Kovner, Greene & Cheng, 2009; Hayes et al., 2006; Tzeng, 2002).

The turnover intention measure selected was a fourteen-item, seven-point response scale that had been used in research into the impact of the organisational culture of hospitals on nurse retention (Jacobs & Roodt, 2008) and the effects of university mergers on employee work commitment and satisfaction (Martin & Roodt, 2008). This measure had demonstrated acceptable levels of reliability (Martin & Roodt, 2008 Jacobs & Roodt, 2007, 2008) and a six-item version had also been demonstrated to have criterion-predictive validity in regards to actual turnover (Bothma & Roodt, 2013). Approval was obtained to use the 14-item scale from its author (i.e. Roodt).
Relative to the alternative options, a strength of the selected fourteen-item scale was that it used more than the usual one-three items to assess quitting intentions (van der Heijden et al., 2009; Jacobs & Roodt, 2007; Park & Kim, 2009). To aid the reader, examples of single item measures refer to respondent propensity ‘to leave the organisation within the next year’ (Beecroft et al., 2008; Janssen, de Jonge, & Bakker, 1999). By contrast, Cammann, Fichman, Jenkins, and Klesh’s (1983) commonly cited three-item scale from the Michigan Organizational Assessment Questionnaire comprises a similar first item on intention (i.e. ‘I will probably look for a new job in the next year’) along with one reflecting cognitions (i.e. ‘I often think about quitting’) and another related to labour market impressions (i.e. ‘How likely is it that you could find a job with another employer with about the same pay and benefits you now have?’).

Roodt’s fourteen-item scale also responded to Tett and Meyer’s (1993) recommendation that measures of turnover intention should reflect it as a process of cognitive withdrawal, involving a sequence of steps. This step-wise withdrawal process of ‘accumulating dissatisfaction’ (Harman, Lee, Mitchell, Felps, & Owens, 2007) appeared pertinent to governance-related compatibility testing amongst Morrell et al.’s (2008) UK sample of 352 frontline public hospital nurses who voluntarily left their jobs. In that study, the stepwise process appeared to apply to more than half (i.e. 154/271) of the 77% of nurse leavers who could be classified according to processes of compatibility testing. The use of the longer scale also avoided the problem of low reliability that Tett and Meyer had attributed to briefer scales, especially single-item measures. Roodt’s scale also avoided aspects of market and psychological considerations involved in nurses actually leaving an organisation like WACHS (Vandenberg & Nelson, 1999). This was especially important given this study’s regional
and rural context, where the decision to leave a local hospital entailed potential practical barriers not usually faced by metropolitan nurses, including the need to relocate a whole family and to sell a home.

While inclusion of the turnover intentions scale in the initial instrument development study was not essential given that a Cronbach alpha satisfying Jackson and Furnham’s (2000) internal consistency criteria had been reported (Jacobs & Roodt, 2008) the alpha level indicated some potential for item redundancy (Jackson & Furnham). Another consideration encouraging its inclusion was that alterations had been made to the scale following consultation with an experienced Australian management researcher. These changes included the aspects of using Australian phraseology, incorporating the internet as a job search option. A copy of the original version of Roodt’s questionnaire indicating modifications made to it in the current study is provided in Appendix 3.

The initial questionnaire also included a final section with four items that respectively asked respondents to indicate their gender, age, time spent nursing in hospital settings, and the nature of their formal nursing education. These variables were included to aid assessment of the representativeness of the sample and because they had potential associations with expectations of governance (Martin & Roodt, 2008).

3.6 Instrument Development Study: Sample, Procedure, Methods and Analysis

Following completion of the draft management practices questionnaire, an initial instrument development study was undertaken. The objectives of this were: identification of constructs within the managerial governance items for both local hospitals and WACHS regions; item reduction; and assessment of the performance of
Roodt’s Turnover Intentions Scale. Following Jackson and Furnham’s (2000) guidance, this study was designed to mirror the method to be used in the main study and entailed mailing the questionnaire to a random sample of 200 Level One and Two nurses (i.e. frontline nurses) employed in WACHS hospitals. Choice of mail distribution was determined by the fact that postal addresses were the only contact information made available by WACHS. The research context matched that described by Mangione (1995) as suitable to mail surveys in that:

- the sample was widely distributed geographically;
- the research budget was modest;
- subjects needed time to think about answers;
- the questions were written in a close-ended style;
- the research subject was likely to be of moderate-to-high interest to the sample;
- the research objectives were modest;
- subjects’ privacy in answering was important;
- the questions worked better in visual rather than oral mode; and
- there was limited person power to help with the study.

Bowling (2002) had also indicated that mail surveys elicited less social desirability bias than face-to-face interviews and were useful with sensitive topics because they provided anonymity. Given that both of these issues were potential problems with the type of research being undertaken, use of mail had advantages.
The uniformly high educational status of the study population was expected to help ameliorate the problem of survey refusal said to be more common among those with lower levels of formal education (Dillman, 2007). Further, nurses were not expected to have difficulty interpreting the content of the questionnaire.

Features that had the potential to cause problems such as open-ended questions (Jackson & Furnham, 2000), screening questions (Mangione, 1995) and completion deadlines (Mangione, 1995) were also avoided. Further, the questionnaire had no skips, items could be tackled in any sequence, and there were no negatively-worded or reverse-scored items because these were potential threats to the validity of responses, (Hinkin, 1995).

While a good deal of effort was invested in avoiding problems common to mail surveys, non-response was a consideration given the questionnaire’s length (Dillman, 2007). Steps taken to manage this problem included:

- personalising letters to encourage respondent interest;
- using double-sided printing to reduce the appearance of the questionnaire’s size;
- including a reply-paid envelope to eliminate the cost of questionnaire return; and
- outlining the potential importance of the study to the nursing profession and health system (Dillman, 2007).

Sample selection was undertaken using a database of names and addresses of all Level One and Two nurses employed in WACHS hospitals, multi-purpose services (i.e. a type
of small hospital delineated by their funding model), and nursing posts (acute facilities without an inpatient service). As noted previously, all of these facilities are defined as hospitals within the Western Australian legal framework. WACHS supplied this employee data in a Microsoft Excel file that contained 2223 names and addresses. Given that the database was said to be current, typical sampling pitfalls such as out-of-date lists and lack of coverage (Mangione, 1995) were not expected.

As previously mentioned, items in the instrument development study questionnaire were separated into four sections or ‘parts’. Items in Part A asked respondents to rate item agreement on five-point response scales (i.e. strongly disagree, disagree, uncertain, agree, and strongly agree) and referred to nurses’ immediate hospital managers and whether they implemented practices that appeared to accord with dimensions of Stewardship Governance (Travis et al., 2003) or with the conditions necessary for the development of employee Trust in Management (Clark & Payne, 1997, 2006; Payne & Clark, 2003).

In accordance with findings that employees differentiated between immediate and broader managerial levels (Clark & Payne, 1997; Dirks & Ferrin, 2002) Part B of the questionnaire focussed on the governance practices of the latter. By and large, the items in Part B were a subset of those in Part A relevant to the broader management of the organisation. These items were prefaced with the instruction that respondents should rate agreement on the five-point response scales in accordance with their perspectives on ‘WACHS managers in general’. Where appropriate, the wording of Part B items was altered from the Part A originals to ensure they were appropriately contextualised to management across the organisation. A new item that related to
organisational management ensuring relative priority was given to service safety rather than ‘balancing the budget’ was also included in Part B.

Part C of the questionnaire was Roodt’s 14-item turnover intention measure, which had a seven-point Likert response scale. Items in the scale spanned a range of work related emotions (e.g. ‘How much did your current job satisfy your personal needs?’), job withdrawal cognitions (e.g. ‘How often did you dream about getting another job that better suited your personal needs?’) and active job search behaviours (e.g. ‘How frequently did you scan newspapers, the internet or other employment listings in search of alternative job opportunities?’). Thus, taken together, the items in Part C reflected an interpretation of turnover as a process of gradual withdrawal (Tett & Meyer, 1993) and accorded with Morrell et al.’s (2008) characterisation of the most common outcome pathway of nurse ‘compatibility-testing’ of organisational governance practices.

Part D of the questionnaire comprised four demographic items: gender; age; length of time spent nursing in hospital settings, and the form of the respondent’s primary nursing education (i.e. hospital- or university-based).

As noted, the research plan entailed using Exploratory Factor Analysis to assist with the development of managerial governance scales. Straub (1989) indicated that using factor analysis in instrument development studies enabled construct validity to be assessed. He went on to point the appropriateness of principal components analysis, highlighting that it helped to confirm that measurement scales obtained from using the method reflected latent constructs (i.e. ‘schema’). However, Straub, Boudreau and Gefen (2004) also made the point that while factorial validity addressed issues of
convergent and discriminant validity, it did not rule out the possibility of common methods variance, which was a potential issue in this study.

The position taken on the issues of common method variance and validation in this study was that its goal was to contribute to thinking and further research in the field rather than definitively establishing the construct validity of measures of managerial governance. In light of this, the issue of common method variance was not comprehensively addressed. Substantial support for the position taken was derived from Jaju and Crask (1999) who noted construct validation was rarely established on the basis of a single study and Strauss and Smith (2009) who described validation as a longer-term developmental process. Added to this, there was evidence of some debate in the literature as to the actual extent of the problem caused by common method variance (Spector, 1987, 2006; Straub, et al., 2004). While Podsakoff, MacKenzie, Lee, and Podsakoff’s (2003) critical review of the literature suggested there was agreement amongst most behavioural researchers that common method variance was a potential problem, Spector (2006) encouraged abandoning the term, suggesting the idea that common method variance automatically affected variables measured in the same way was a “distortion and oversimplification” (p. 221).

Some empirical support for the position taken was provided by Malhotra, Kim and Patil (2006) whose analysis of more than 200 correlations from survey data found the inflation caused by common methods variance was of the order of 0.1 and that adjusting for it changed little with respect to statistical interpretations of structural relationships in data. At the very least, this reinforced Podsakoff et al.’s (2003) point that the magnitude of the problem of common method variance was likely to substantially vary across different research contexts.
Notwithstanding the lack of a comprehensive approach to common methods variance, a number of procedural remedies were used to reduce its effects. According to Podsakoff, et al. (2003) these remedies had the potential to minimise or even eliminate this threat to research findings. The procedures they outlined and which were adopted in the instrument development study were:

- Ensuring respondent anonymity;
- Keeping the wording of questions simple;
- Avoiding complicated syntax;
- Using labels for the midpoints of scales; and
- Using different scale formats for the predictor and criterion measures.

Field’s (2005) guidance on Exploratory Factor Analysis suggested that a sample of 200 was adequate if the response achieved was in the vicinity of 50% (i.e. 100 questionnaires). This seemed a reasonable expectation given Jackson and Furnham’s (2000) discussion of response rates for mail surveys. A simple random sample of 200 names and addresses was, therefore, drawn from the database using the Excel random number function. This entailed the creation of unique, random numbers for all nurses in the database, ordering names using this variable, and then selecting the first 200 as the sample. At a later administrative stage of mailing, a duplicate name was found among the addressees, which led to 199 questionnaires being mailed. This problem arose because there were some duplicates in the WACHS database.

The letter that accompanied the questionnaire attempted to persuasively outline the researcher’s reasons for asking respondents to complete it (Jackson & Furnham, 2000;
Maylor & Blackmon, 2005). This was important given the questionnaire’s length (127 items) and because it was mailed out immediately prior to Christmas (Dillman, 2007). The covering letter encouraged respondents to make comments and suggestions on the questionnaire alongside items they found unclear or confusing. A copy of this letter is included as Appendix 5.

To make the task of completing the questionnaire more relaxing and enjoyable for recipients, a coffee bag (i.e. an infusion bag with sufficient coffee to make one cup) was included in each envelope. This choice took account of problems associated with inducements that can reduce response rates (Jackson & Furnham, 2000) and reference in the covering letter reflected its purpose.

As previously noted, anonymity was ensured in the instrument development study. This was considered an essential feature of the research given that the questionnaire asked nurses for their views of their local and organisation-wide WACHS managers. Without anonymity, the threat to response seemed likely to be substantial, yet the choice also introduced the problem that non-responders could not be targeted for follow-up (de Vaus, 1991).

Advice on aesthetic and management issues in mail surveys was also taken into account in designing the instrument development study (Dillman, 2007; Mangione, 1995). This included using double-sided printing of the questionnaire, including a post-paid return envelope, and using the Edith Cowan University logo alongside the survey title. A copy of the questionnaire appears in Appendix 6.

Instrument development study questionnaires were mailed in early December. Because questionnaires contained no identifying information, a follow-up letter was
sent to the full sample two weeks later. While this was the extent of the follow-up effort, Cook, Dickinson and Eccles (2009) investigation of healthcare professionals response rates in postal surveys suggested that first reminders made some difference to response rates, however, more than one did not. Additional follow-up reminders were also impractical as they would have had to be sent during the January-February holiday period, which was considered intrusive and unlikely to substantially improve the response rate without a second mass-mailing of the questionnaire. This step would also have introduced its own risks, such as the potential for multiple returns without any capacity to detect them.

The follow-up letter acknowledged recipients that had completed and returned questionnaires and invited those who hadn’t to do so. It also advised recipients that had disposed of their questionnaire that they could still complete it at an internet site (i.e. Survey Monkey) where an electronic copy of the questionnaire had been placed. Eighty-six completed questionnaires were returned to the researcher, with all but one returned by post. Given this, the potential for response bias associated with the internet completion option (Van Selm & Jankowski, 2006) was not apparent. Three questionnaires were returned unopened with a notification that the intended recipient no longer lived at the mailing address. One phone notification was also received advising that a selected nurse was living overseas. This reduced the eligible sample to 195 nurses and consequently, the response rate was 44%. This compared favourably to most surveys (Maylor & Blackmon, 2005), which often achieve returns of 10-15%, and exceeded Jackson and Furnham’s (2000) minimum level for acceptability (35%). Consequently, the rate achieved was accepted as a reasonable outcome.
The main problems caused by non-response are bias and unacceptably reduced sample sizes (de Vaus, 1991). For reasons outlined earlier, the issue of sample size was not considered problematic in the current study. Potential for checks on the degree or specific form of bias caused by non-response in the instrument development study were quite limited as the demographic section of the study questionnaire incorporated only four questions. While a weakness, the common forms of bias usually checked in mail surveys (Grosset, 1994) were able to be assessed. The restricted professional focus of the study also limited key forms of potential bias, such as level of education. Further, given the study’s developmental nature, bias was inherently less problematic than it might otherwise have been.

To check on age and sex bias in the instrument development study sample, the respondent profile was assessed with reference to the total population of 2223 level 1 and 2 nurses in the WACHS database. Representativeness was checked using a GraphPad Chi-square test of observed and expected numbers in different age and sex groupings (http://www.graphpad.com/quickcalcs/chisquared1.cfm). More details on the instrument development study sample characteristics are provided in the Results chapter that follows.

Fox-Wasylyshyn and El-Masri (2005) indicated that missing data could be managed using deletion or imputation methods. According to Enders (2012) deletion was inappropriate because it reduced power and could lead to bias. Among imputation methods there were a variety of techniques that could have been used, including replacement of scores with scores from similar cases (‘hot-deck’ imputation) regression imputation based on other variables in a data set or replacement of missing values with either the sample mean for an item or a person mean across variables.
(Fox-Wasylyshyn & El-Masri; Roth, 1994). Fox-Wasylyshyn and El-Masri indicated that item mean substitution should not be considered unless the extent of missing data was small. Downey and King’s (1998) simulation study of the effects of item mean substitution in replacing missing data in Likert scales suggested that the method was appropriate when the extent of missing items was less than 20%. While Roth (1994) had also argued that the choice of technique only became important when missing data approached 15-20%, he suggested that mean substitution should only be used if missing data was at the lower end of the 1-5% range. Given that missing item data in the current study was less than one percent, the issue was addressed by substituting blanks with mean item values.

Instrument development study questionnaire data was entered into an Excel spreadsheet and subsequently transferred to SPSS version 15.0 for Windows in which all subsequent data-cleaning and analyses were undertaken. As noted, Exploratory Factor Analysis (EFA) was chosen as the analytic method for the instrument development study data. Swisher, Beckstead, and Bebeau (2004) confirmed the appropriateness of EFA in evaluating instruments that measured concepts relating to professionalism, and Floyd and Widaman (1995) pointed to factor analysis as being useful when developing measures of cognitive schema.

In the case of the instrument development study data, the explicit purpose of the EFA was as a tool for reducing the number of variables and examining correlations among variables without an intention to test theory (Tabachnick & Fidell, 1989). Consequently, the analysis proceeded according to Tabachnick and Fidell’s (1989) dictum that “theoretical and practical limitations to FA [be] relaxed in favour of a frank exploration of the data” (p. 601). Field’s (2005) position on participant-to-variable
ratios in factor analysis was also accepted, which meant that factors with four or more loadings greater than 0.6 were considered reliable.

The first step in the analysis was an examination of local manager data (Part A of the questionnaire). As a starting point, sampling adequacy was assessed using the Kaiser-Meyer-Olkin (KMO) measure, which assesses the appropriateness of data for factor analysis (Field, 2005). Local manager data were then screened to ensure variables correlated well and that those that did not were eliminated (Field, 2005). Subsequently, the diagonal values of the anti-image correlation matrix were examined to ensure all values were above the minimum specified by Field (2005) (i.e. 0.5). As exclusion of variables affects KMO statistics (Field, 2005), the KMO and Bartlett’s test of sphericity were then re-calculated.

While the two basic approaches to EFA of principal components analysis (PCA) and factor analysis yielded similar results (Stevens, 1996), Stevens had argued PCA was simpler, psychometrically sound, and avoided troublesome features associated with its counterpart. As PCA was also the most common factoring method in published management research (Hinkin, 1995) it was selected for the analysis of the instrument development study data. Varimax rotation, the most commonly used form of orthogonal rotation (Hinkin, 1995), was also used to enhance interpretability and utility (Tabachnick & Fidell, 1989). Varimax does this because, after rotation, variables tend to be associated with one factor and factors represent a small number of variables (Abdi, 2003). It also often aids factor interpretation because it allows them to be considered in light of a few variables with contrasting positive and negative loadings (Abdi).
The next step in the analysis was to run an initial PCA to check the factor structure and variance. On the basis of viewing the results, and in accordance with Stevens’ (1996) advice, it was arbitrarily decided to limit the number of factors by accepting those that explained two thirds of the variance in the data. This resulted in a six-factor solution as the starting point for interpretation. While a further 6 factors (i.e. 12 overall) had eigenvalues greater than one, each of them contributed less than two percent additional variance and were considered to be of little relevance to the broader research goals (Field, 2005; Stevens, 1996). Subsequently, the results were reviewed, sequentially examining reductions in factors with respect to: (1) the interpretability of the solutions (Tabachnick & Fidell, 1989); and (2) ensuring components had four or more item loadings of 0.6 or above (Field, 2005) or three or more over 0.8 (Stevens, 1996).

Following selection of a three-component solution with a minimum eigenvalue of 2.411, items were assessed with a view to eliminating those which: (1) did not have loadings of at least 0.4 on any of the components (Stevens, 1996); and (2) had loadings of more than 0.4 on more than one component (Field, 2005). Subsequently, all remaining item loadings were subjected to a .01 (two-tail) critical value significance assessment (Stevens, 1996), which indicated that given the pilot-study sample size, only those with loadings of greater than 0.572 should be retained.

On the basis that the three components reflected distinct underlying cognitive dimensions of nurses’ governance schema and that the items within the respective components measured aspects of these putative dimensions, items within each of the components were treated as parts of a scale. The three scales were then subjected to
reliability analysis (Field, 2005), which, according to DeVellis (1991, p. 24) represented “the fundamental issue in psychological measurement”.

Hinkin (1995) identified the two major concerns with reliability as: (1) internal consistency of items within a scale; and (2) stability of a measure over time. In this case, assessment of the stability of components over time was not appropriate because the assessments staff made of management were expected to change over time in accordance with changes in either managerial behaviour or in staff perceptions of their behaviour (Hinkin, 1995). Internal consistency reliability refers to item homogeneity in scales (DeVellis, 1991) and tests of consistency reliability measure how much of the total variance among the items in a component derive from one phenomenon. As the most widely accepted measure of internal consistency was Cronbach’s alpha (Hinkin, 1995) items on the three scales were assessed on this basis and in accordance with the conditions for deletion indicated by Field (2005).

Following analysis of the local manager data, the same process was applied to Part B or WACHS-level items (i.e. the items that referred to WACHS managers in general). To recapitulate, this process began with an assessment of sampling adequacy using the KMO measure. Items were then screened.

An initial PCA was then conducted and the component structure was checked. A five-component solution, which explained 71.5% of the variance in the data, was used as a starting point for interpretation with eigenvalues for these factors all above 1. Subsequently, solutions with four, three, and two components were examined for interpretability and to ensure each met the previously mentioned conditions with respect to the number and size of item loadings. While a three-component solution was most interpretable (minimum eigenvalue of 1.536), the third component didn’t
meet essential criteria (Field, 2005; Stevens, 1996) because it had two items with relatively high weightings (approximately 0.8) while the others met the criteria for deletion. For such cases, Stevens’ suggestion was to treat the items as specific variables rather than as a component and this approach was followed.

Items loading on the components were then reviewed and items excluded if they had multiple loadings of greater than 0.4 or because they did not meet a two-tailed significance test (Stevens, 1996). Reliability analysis was then undertaken to assess whether items on the scales met the conditions for deletion (Field, 2005). Cronbach’s alpha scores were used to assess the overall reliability of each scale according to conditions specified by Field (2005).

Following the EFA of the local and WACHS-level management items (Parts A and B data), the reliability of Roodt’s modified Turnover Intention Scale was also assessed using Cronbach’s alpha. While one item in the scale performed relatively poorly, the increase in alpha gained by its removal was marginal and the overall level of reliability of the scale was sound; consequently, no items were deleted (Field, 2005).

Finally, a preliminary check on the criterion and construct validity of the components derived from the EFA using the Turnover Intentions Scale was undertaken. Although construct validity was to be fully evaluated in the main study, this check was carried out to provide reassurance ahead of the main study that the hypothesised relationship between governance styles and turnover intention was evident.

In the context of the instrument development study scales, both criterion and construct validity were assessed via the degree of the relationship between scale scores (i.e. ‘schema’ measures) for the nurse sample and their results on the Turnover
Intention Scale. DeVellis (1991, p. 47) argued that “the same exact correlation can serve either purpose” and that the difference between criterion and construct validity related to the researcher’s intent. He also pointed out that criterion validity was established if an empirical association with a reference measure (e.g. turnover intention) was demonstrated, whereas construct validity required demonstration that theoretically proposed relationships between measures held true. The latter was reflected in the proposition that turnover intention was an outcome indicator of nurses’ ‘compatibility testing’ of their governance schema against their perceptions of actual management practice.

Bohrnstedt (1983) identified two forms of criterion validity: predictive validity, which related to prediction of future events, such as quitting work, on the basis of results on a measurement scale (e.g. work satisfaction); and concurrent validity, which referred to the correlation between a measure and another indicator at the same point in time (e.g. work satisfaction and desire to quit). As Bohrnstedt had noted, assessing concurrent validity was the more feasible of the two, although given previous research suggested that as many as one-in-two of those indicating a desire to leave an organisation would do so within three years (Shields & Ward, 2001), the Turnover Intention Scale appeared to provide a measure with both concurrent and predictive criterion validity with respect to the hospital and WACHS-level scales and items. To evaluate the extent that the schema measures had criterion and construct validity, bivariate correlation coefficients between them and the Turnover Intentions Scale were calculated and two-tailed tests of significance assessed. Given that the Turnover Intention Scale was a broad measure of workplace satisfaction, the low-moderate
(Zikmund, 1994) correlations found provided useful evidence of criterion and construct validity of the schema measures, ahead of the main study.

At the conclusion of the instrument development study, the objective of identifying potential schema measures and gauging their apparent reliability and validity had been achieved. Significant deletion of items from both local and WACHS-wide sections of the draft was facilitated through the EFA process, and the reliability of the Turnover Intention Scale had been found adequate. The scales derived from the analytic process were also conceptually consistent with core dimensions of Stewardship Governance and Trust in Management. On this basis, planning for the main study progressed.

As part of the main study planning process, a revised questionnaire was prepared comprising:

- Part A, which related to local hospital managers and included three scales;
- Part B, which related to WACHS and included two scales and two items;
- Part C, which was the Turnover Intentions Scale; and
- Part D, which incorporated five items relating to age, gender and nursing experience.

The five-point response scale used in the instrument development study (i.e. strongly disagree, disagree, uncertain, agree, and strongly agree) was retained in Parts A and B of the main study questionnaire. Following item reduction facilitated by the instrument development study data analysis, Part A of the main study instrument comprised 36 of the original 79 items that referred to nurses’ immediate hospital managers. Like Part A, Part B of the main study questionnaire comprised approximately half (n=16) of the original 30 items in the instrument development
study instrument. Part C of the main study questionnaire was Roodt’s 14-item turnover intention measure with a seven-point Likert response scale. The scale remained unchanged following the instrument development study analysis. Part D of the questionnaire incorporated the original demographic items that appeared in the instrument development study instrument (gender, age, length of time spent nursing in hospital settings, and the form of the respondent’s primary nursing education) and an additional item asking respondents to indicate their current award level. A copy of the questionnaire is provided as Appendix 8.

3.7 Main Study Sample, Procedure, Methods and Analysis

In accordance with Jackson and Furnham’s (2000) guidance, the main study method generally mirrored that of the instrument development study. The few features that distinguished it were that the instrument was briefer, the sample was larger, and the covering letter to respondents (see Appendix 7) was signed by both the researcher and the WACHS Area Director of Nursing. The Area Director of Nursing was invited to co-sign the main-study letter as part of a further attempt to maximise response rates.

Once again, main-study sample selection was undertaken using a Microsoft Excel database provided by WACHS. This was said to be a copy of the organisation’s employee database of Level One and Two nurses working in WACHS acute facilities. Examination of the database, however, revealed that 412 Level One and Two community-based nurses (i.e. not ‘hospital’ staff) had been erroneously included. These names were removed prior to sample selection as were an additional 80 whose contact addresses were listed as being outside Western Australia. These were removed because the addresses were presumed inaccurate given that the employees were said to be working within WA.
Following exclusions, 2144 names remained in the main-study sampling database. From this, it was planned to randomly select the names of 250 nurses from each of the seven WACHS administrative regions. This was to be done to enable region-level analysis of the main-study data. Inspection of the database, however, revealed that not all regions had the required count of 250 nurses. In these cases, all of the Level One and Two nurses in the database for the region were selected (i.e. a sampling ratio of 100%). This applied in the following cases:

- Goldfields region (n=232);
- Kimberley region (n=231); and
- Pilbara region (n=219).

For the four remaining WACHS regions, the sampling procedure followed the random selection procedure used in the instrument development study. The sampling ratios for the regions for which this procedure was used were:

- Great Southern (total n=304, sampling ratio= 82.2%);
- Midwest (total n=306, sampling ratio= 81.7%);
- South West (total n=526, sampling ratio= 47.5%); and
- Wheatbelt (total n=326, sampling ratio= 76.7%).

As with the instrument development study, the main study entailed an initial questionnaire mail-out followed by a reminder, with data collection undertaken between September and December. While a potential weakness in the study, the limited follow-up was governed by the same practical concerns as applied to the instrument development study (i.e. anonymity aspect and ‘time of year’). Further, as
previously noted, published research on healthcare professionals’ response rates to postal surveys suggested that only first reminders made a difference to response rates (Cook et al., 2009). Like the development study, the main study reminder letter offered the option of Internet completion of the questionnaire as a measure to assist those who might have discarded their paper copy. Once again, however, the potential issue of response bias associated with internet completion (Van Selm & Jankowski, 2006) was not apparent because so few (i.e. 3%) took up this option.

Six hundred and ninety seven completed questionnaires were returned to the researcher, with 21 completed using the internet option. One hundred and thirty eight questionnaires were returned unopened with a notification that the intended recipient no longer lived at the mailing address. These predominantly came from areas farthest from Perth, where nursing turnover and mobility was highest (Lenthall et al., 2009). Most returns had also been sent to Post Office boxes or hospital-supplied housing, which suggested that unclaimed mail sent to private households may have been discarded rather than returned. Consequently, the true volume of unclaimed mail seems likely to have been considerably higher than the 138 indicated. Nevertheless, the best estimate of the eligible sample was that it was 1544 nurses and consequently, the estimated response rate was 45.1%.

The overall response fraction was very similar to that attained in the instrument development study (44%) comparing well to the 23% obtained by Brunetto et al. (2010) in their study of nurse-manager relationships in Australian public and private hospitals. A broader mitigating issue regarding the response fraction was that, while less than 50%, it nevertheless represented study participation by at least one-in-three of all Level One and Two nurses working in WA’s rural hospitals at the time of the
study. Thus, while an overall response fraction of 45% imposed limitations on claims of representativeness, it was not considered a significant flaw in the study.

Main study questionnaire data was entered into a Microsoft Excel spreadsheet, which was then imported to a PASW Statistics (18.0.1) file in which all subsequent data-cleaning and analyses were undertaken. As in the instrument development study, missing data in main-study questionnaires was addressed by substituting missing values with item means. While not a method recommended when the degree of missing data is substantial (Fox-Wasylyshyn & El-Masri, 2005) Roth (1994) had argued that item mean substitution could be used if missing data was at the lower end of the 1-5% range. Given that across the full sample, only one percent of items were missing, mean item substitution was considered an adequate choice in the circumstances.

Instrument development study nurse responses were not included in the main study. The key reason for this was that the sampling frame used in both studies was the total WACHS data base of hospital nurses. Consequently, despite there being a time-lag between surveys, the main study sample included 110 (i.e. more than half) of the nurses selected in its predecessor. Because of respondent anonymity in the pilot, it was not known how many responded to both surveys and as a result, using these responses in the main study was considered inappropriate.

Checks on the extent to which the characteristics of the respondents reflected those of the total sample were undertaken by comparing age, gender, and nursing-level profiles of both groups. Subsequently, in accordance with Gerbing and Andersons’ (1988) paradigm for scale development, the results of the EFA were evaluated to ensure unidimensionality of scales and to assess reliability. This process was followed to
confirm the appropriateness of the exploratory analysis and was undertaken by analysing the covariance matrix obtained from an independent sample (Hinkin, 1998).

The assessment of unidimensionality mirrored that described by both Sharma and Patterson (2000) and Yanamandram and White (2006). A PCA with Varimax Rotation was undertaken using the covariance matrix from the main study data to consider both the factor structure and review item correlations across the factors. The protocol adopted with respect to item loading was consistent with that used in the EFA of the pilot-study data. This involved elimination of those which: (1) did not have loadings of at least 0.4 on any of the components (Stevens, 1996); or (2) had loadings of more than 0.4 on more than one component (Field, 2005). Hinkin (1995) confirmed the use of the 0.4 cut-off as the most common criterion reported in the management literature.

Separate PCAs were conducted with items relating to local managers and WACHS-wide management. Both were conducted iteratively, with item removal proceeding over repeated PCAs until there were no items with loadings of more than 0.4 on more than one factor (i.e. unidimensionality was evident). The results of this process provided the capacity to respond to the study’s first hypothesis.

Subsequent analysis of main-study data was directed to refining measures of each of the components (i.e. schema measures) to facilitate further hypothesis testing (i.e. hypothesis 2). In accordance with Gerbing and Anderson’s (1988) scale development paradigm, this process began with reliability assessment following the approach recommended by Field (2005). The reliability of Roodt’s modified Turnover Intention Scale was also assessed.
Hinkin’s (1998) final stage in assessing construct validity entailed establishing criterion-related validity and he indicated this could be undertaken using regression analysis to examine the relationship between new measures and others to which they might reasonably be assumed to relate. In this case, the relationship between the new measures (i.e. schema scales) and an existing measure (i.e. the Turnover Intention Scale) was grounded on the theoretical contention that the latter was influenced by ‘compatibility testing’ of the former against the benchmark of nurse perceptions of their managers governance practice.

There were a number of issues to be addressed before undertaking multiple regression analysis (Tabachnick & Fidell, 1989). The first of these was to ensure that the ratio of cases to independent variables was greater than 20:1 and this condition was easily met. A second issue was evaluation of outliers within dependent and independent variables. This was carried out using the Z-score method (Field, 2005), which indicated that the scales conformed to the expectations of a normal distribution and, consequently, that outliers were not likely to be a cause of bias in the regression model.

Stevens (1996) argued that intercorrelations between independent variables within the moderate-to-high range complicated the assessment of the importance of predictors and led to greater instability in prediction equations. Consequently, collinearity in the independent variables was assessed using the benchmark that a variance inflation factor (VIF) value of less than 10 was not problematic (Field, 2005; Stevens, 1996). As none of the VIF values for the study’s independent variables approached this cut-off and the tolerances were all above 0.2 (Field, 2005), multicollinearity was not identified as an issue of concern.
A screening multiple regression was then undertaken using three independent variables and the predictor or independent variable (i.e. the Turnover Intention Scale) (Field, 2005). Case-wise standardised residuals on the dependent variable were checked to ensure no more than five percent of cases had values above 2 and that less than one percent had values above 2.5. As 18 cases (2.6%) had residuals above 2, with only five of these above 2.5 (<1%), there was little concern regarding cases (Field, 2005).

Lastly, residual scatter plots were checked as a test of the assumptions of linearity and homoscedacity, and the histogram and P-P plot for the Turnover Intention Scale were inspected for normality (Tabachnick & Fidell, 1989; Field, 2005).

The next stage of assessing the construct validity of the scales (i.e. components or ‘schema’ measures) derived from the main-study PCA was to undertake a multiple regression analysis using the Turnover Intentions Scale as a dependent measure (Hinkin, 1998). As noted previously, the process of validity testing was based on the notion that if the measures reflected WACHS nurses’ shared governance schema, they would show evidence this via the process of ‘compatibility testing’ and its subsequent impact on turnover intentions (Beach, 1990).

Tabachnick and Fidell (1989) identified the primary choices of analytical strategy in multiple regression as standard, hierarchical, or stepwise. The hierarchical approach was selected on the basis of the theoretical primacy of local management aspects over the more distal WACHS-wide dimensions (Clark & Payne, 1997; Hogan et al., 2007) and the logical primacy (Tabachnick & Fidell, 1989) of one of the local management Components (a values-oriented scale) over its counterpart (a process-oriented scale).
Given the uniformity of the sample in terms of profession, gender, field of employment, work orientation and salary, the potential for confounders to systematically affect the results of the multiple regression was relatively restricted. However, age, length of time working in hospitals, formal nursing education, and work-level had been identified as correlates of turnover (Cotton & Tuttle, 1986). Consequently, analyses of variance (ANOVA) were conducted to assess the effect of these variables on turnover intention.

As a potential confounding effect of formal nursing education and nursing level was identified, a further regression analysis was undertaken. This included dummy-coded versions of nursing education and nursing-level variables as predictors. In both cases, a code of one was assigned where respondents were members of the group that had the highest mean turnover intention scores.

Regression analysis was undertaken using the hierarchical approach, with the two dummy-coded variables included in step one. This ensured the variance in the turnover scale associated with nursing level and nursing education was accounted for before the variance associated with the study scales.

3.8 Summary
This chapter described the methods used to investigate WACHS frontline hospital nurse schema of strategic aspects of governance and to test the study hypotheses. A discussion of the methods used in the study was provided, and the course of instrument development charted. This included discussion of questionnaire development, refinement and subsequent use in a main study mail survey of frontline nurses working in WACHS regional and rural hospitals across the State. The chapter
also identified the sampling frame and characteristics of the samples selected for instrument development and main studies and outlined their key features.

Also included was a description of the major aspects of data management and analyses for both instrument development and main studies. This highlighted that the initial study emphasised preliminary scale construction and item reduction using EFA while the main study analyses were directed to refining measures (i.e. scales) and hypothesis testing.
4. Results

4.1 Introduction

To assist the reader, this chapter begins with a restatement of the research question and a summary of the methods used in the study. The subsequent major sections of the chapter discuss the results of preliminary and main studies respectively.

4.1.1 Research question

Are management practices that accord with theoretical frames of Stewardship Governance and Trust in Management apparent in the governance schema of WACHS frontline regional and rural public hospital nurses’?

4.1.2 Research hypotheses

1. Frontline regional and rural public hospital nurses employed by WACHS will show evidence of having governance schema consistent with aspects of the theoretical frames of Stewardship Governance and Trust in Management.

2. Compatibility between the governance schema of frontline regional and rural public hospital nurses employed by WACHS and their perceptions of their managers’ governance practices will predict their turnover intentions where the comparisons pertain to aspects within the theoretical frames of Stewardship Governance and Trust in Management.

4.1.3 Summary of methods used

The research had both a preliminary or developmental stage and a main study. The preliminary stage provided ‘in-principle’ validation of the theoretical basis of the study offering confidence to proceed and enabled information to be gathered that aided the development of an inventory of items pertaining to strategic governance practices of
WACHS managers’. This process entailed ‘expert opinion’ interviews with 16 senior, mostly clinically trained and very experienced managers who were current or past employees of WACHS. The inventory of items developed with the aid of ‘expert opinion’ was subsequently used to aid construction of a governance questionnaire. As a subsequent step, an instrument development survey of frontline regional and rural WACHS hospital nurses was undertaken. Analysis of data from this survey was then used to guide construction of the questionnaire used in the main study.

The main study was a mail survey of a randomly selected sample of approximately 80 percent of nurses working in regional and rural public hospitals across WA.

4.2 Preliminary Studies

4.2.1 ‘Expert opinion’

As noted previously, ‘expert opinion’ interviews were undertaken to establish preliminary or ‘in-principle’ validation of the theoretical basis of the study and subsequent to this, to aid the development of an initial inventory of governance items reflecting: (a) apparent frontline WACHS hospital nurse governance preferences; and (b) that were consistent with dimensions of Stewardship Governance and Trust in Management.

A review of detailed hand written records of ‘expert’ interviews established a base-level indication of the relevance of the theoretical basis of the study. Governance-related themes identified by the 16 interviewees seemed broadly similar regardless of clinical training (nursing or medicine).

With respect to Stewardship Governance aspects, these were universally mentioned by interviewees as either general statements of what interviewees regarded as the
intent of most WACHS frontline regional and rural hospital clinicians (e.g. ‘most people become clinicians to do well by the population’) or in terms of specific governance practices they endorsed as appropriate (e.g. ‘ensuring evidence-based practice’, ‘ensuring a vision for the service’, ‘being data driven’ etc.). Some experts described the perspectives of clinicians regarding dimensions of Stewardship Governance in terms that seemed consistent with the notion of a coherent governance schema. The following comment provides one example of this:

[WACHS hospitals should be] “data driven, with a public health/preventive aspect...concerned with the health of the community. The work should be evidence-based and clinicians are information driven. There is a good connection into the community and the service is transparent” (E3).

Insofar as the issue of Trust in Management was concerned, all experts identified it in overall terms (i.e. clinician trust in management itself was frequently mentioned as important) and all mentioned at least one of its dimensions of ability, benevolence, integrity or openness as important to the effective management of clinicians. For example, interviewee mentions of managers’ openness (e.g. ‘having an open door policy’), integrity (e.g. ‘delivering on commitments/promises’), fairness, or demonstrating their competence in a variety of areas/ways (e.g. ‘understand the system’, ‘articulate’, ‘mental agility’ etc.) were common.

Some of the experts interviewed also described Trust in Management in a context of coherent sets of practices, once again seeming to reflect the character of the notion of clinician governance schema. For example, one interviewee described optimal clinician management as reflecting a broad range of trust dimensions:
showing an understanding of the work, support for good clinical practice and training and the ability to discuss how the organisation should work to be effective. Demonstrating engagement with them [clinicians] and a willingness to go on a journey with them to improve practice’ (E3).

Another seemed to give more emphasis to integrity and benevolence dimensions, but still posited something that appeared akin to a schema of governance expectancies:

‘recognising they have a life outside and contribute to the society, not just this organisation. You need to respect them as professionals, respect their knowledge base and ask them what you can do for them…’ (E12).

Likewise, another interviewee gave emphasis to integrity and benevolence, while also pointing to openness as critical to effective nurse management (i.e. ‘participation in decision-making’) (E10).

More commonly, however, expert interviewees seemed to blend concepts of Stewardship Governance and Trust in Management into their descriptions of composite ‘personal models’, each with their own specific interpretation of the style of governance clinicians’ best respond to, while nevertheless reflecting some tendency to underpinning commonality. The following comments are examples of this:

[WACHS hospitals should be] “confidently and competently led, with a vision that is clear. This should provide a heading and there should be trust in and engagement with staff to allow their input, so they are allowed to follow their dreams and aspirations. This entails letting-go of power” (E15);

[WACHS management should be] “out there, on the floor, communicating and sharing information with staff. It needs to be relationship-based, accessible,
meeting and talking, informal, sharing problems and sharing data. It should represent something in terms of where the service is heading, it’s not enough to just be money managers” (E7);

[WACHS management should] “make sure the right structures and frames are in place in consultation with clinicians, monitoring to see where improvement can be made, building relationships, trust and professional respect, clarifying direction and areas of concern” (E9);

[WACHS hospitals should] “have a culture that leads to low turnover, a full staff and a style of leadership that promotes quality and research. There should be respect for the professions and adoption of Magnet principles. The journey needs to be clear, with access to resources when they are needed and current equipment. Managers need to publicly support clinicians and express their trust in them” (E10);

[WACHS management should] “involve lower-levels in decision making. It all needs to be open and transparent and there need to be consistent messages. Information also needs to flow readily, with regular meetings with all staff. We need to have appropriate systems and processes and lower-tiers need to be involved in designing them. The value position needs to be consistent, with true honesty and integrity and no bullying. Staff need to know managers will go to ‘bat for the team’” (E12); and

[WACHS managers should] “look at what they can do not what they can’t. Have a plan for improvement that starts with gathering data from statistics, the literature, staff focus groups. Use root cause analysis and then make a
recommendation on the basis of cost effectiveness. There needs to be participatory decision-making with doctors, nurses and finance-no ‘us and them’. Clinicians need to be able to feel safe in criticising and have their opinions valued. When you move forward, there needs to be a grounding in good reasons, a rationale. It’s all about relationships and the how the mission, values and vision flow down” (E13).

Overall, therefore, most experts interviewed seemed to characterise WACHS managers’ strategic governance role as providing an architecture for organisational-professional goal alignment (e.g. “bringing insights from both worlds” E13, “managers as facilitators of understanding” E14, “a clinical-management balance” E15). Notably, however, while most did seem to offer governance perspectives of clinicians that characterised them as privileging the core values of clinical care (e.g. ‘doing the best for patients’, ‘fulfilling the mission’), most also made room for WACHS frontline hospital clinicians accepting their managers also needed to balance resourcing, community and political contexts associated with delivering healthcare.

Thus, many experts accommodated hospital clinicians being aware of and accepting the legitimacy of competing decision-making dimensions as part of the WACHS managers’ governance role (e.g. “a middle route” E6, “achieving a balance between organisational and staff perspectives” E15, “clinicians can adapt [to other perspectives]” E16 ). Notably, some experts interpreted managerial success in achieving the ‘appropriate balance’ in this process as a determinant of how clinicians would feel about their jobs, WACHS as an organisation, and, consequently, their propensity to stay or leave their regional and rural hospital employment. Consequently, under this scenario, the manager’s role in framing governance
processes was seen as critical (e.g. because “nurses are in short supply and are tired…”E12).

A feature of many expert interviews was also an assertion of a trend in recent years towards declining levels of congruence between frontline WACHS hospital nurse governance preferences and management practice across the WA public health system. Interviewees described the implications of this in a variety of ways. Some suggested nurses had become less committed to the health system, less trusting of decision-makers, and more disposed to adopting what appeared to be principal-agent relationships with managers, characterised by working to clearly specified performance expectations and placing tighter boundaries around their work-life balance. Some examples of these comments were:

“not going in positive directions...huge attrition rate of grad nurses...” (E13);

“the perception of nurses is that the organisation is not interested in patients or clinicians...mostly disengaged, some angry...” (E11);

“clinicians ‘bag’ managers...tend to mistrust them and are prone to seeing them as incompetent...there is a cultural problem...” (E8);

“organisational culture...not good, people [nurses] are disengaged, bunkering down ...” (E7);

Given that ‘expert opinion’ interviews offered what was considered sufficient ‘in principle’ support to progress a study examining the relevance of dimensions of the Stewardship Governance and Trust in Management to the governance schema of frontline WACHS hospital nurses an inventory of practices was developed using governance practices they identified assessed for consistency against content maps of
the two theoretical frames. As noted in the previous chapter, given the objective of the preliminary stage of instrument development was to generate as many items as possible that appeared consistent with the two theoretical frames, practices suggested by even one interviewee were considered for inclusion.

While not all items could readily be assigned to single theoretical domains due to some conceptual overlap between elements of Stewardship and Trust in Management, the coverage of those in Part A did seem to span the intent of Travis et al.’s (2003) various broad Stewardship Governance domains of: generating intelligence, formulating policy direction, ensuring tools for implementation, building relationships, ensuring a fit between policy objectives and the structure and culture of the organisation, and ensuring accountability. Likewise, the coverage of Part A items also seemed to span the Trust in Management domains of: integrity; ability; benevolence; integrity; and openness. Table 2 provides a summary guide to the apparent alignment of items in Part A with Stewardship and Trust domains. A full list of items and their apparent alignment is also provided in Appendix 4.
### Table 2 Instrument Development Study Questionnaire Part A Items Reflecting Stewardship and Trust Domains

<table>
<thead>
<tr>
<th>Domain</th>
<th>Part A Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generating Intelligence</td>
<td>3 Items</td>
</tr>
<tr>
<td>Formulating Policy Direction</td>
<td>5 Items</td>
</tr>
<tr>
<td>Ensuring Tools for Implementation</td>
<td>6 Items</td>
</tr>
<tr>
<td>Building Coalitions and Partnerships</td>
<td>8 Items</td>
</tr>
<tr>
<td>Ensuring a fit between Policy Objectives and the Structure and Culture of the Organisation</td>
<td>2 Items</td>
</tr>
<tr>
<td>Ensuring Accountability</td>
<td>4 Items</td>
</tr>
<tr>
<td>Integrity</td>
<td>11 Items</td>
</tr>
<tr>
<td>Ability</td>
<td>10 Items</td>
</tr>
<tr>
<td>Benevolence</td>
<td>13 Items</td>
</tr>
<tr>
<td>Openness</td>
<td>17 Items</td>
</tr>
</tbody>
</table>

Table 3 provides a summary guide as to the alignment count of items in Part B with Stewardship and Trust domains. A full list of items and their apparent alignment is provided in Appendix 4.
Table 3 Instrument Development Study Questionnaire Part B Items Reflecting Stewardship and Trust Domains

<table>
<thead>
<tr>
<th>Domain</th>
<th>Part B Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generating Intelligence</td>
<td>3 Items</td>
</tr>
<tr>
<td>Formulating Policy Direction</td>
<td>4 Items</td>
</tr>
<tr>
<td>Ensuring Tools for Implementation</td>
<td>2 Items</td>
</tr>
<tr>
<td>Building Coalitions and Partnerships</td>
<td>1 Item</td>
</tr>
<tr>
<td>Ensuring a fit between Policy Objectives and the Structure and Culture of the Organisation</td>
<td>0 Items</td>
</tr>
<tr>
<td>Ensuring Accountability</td>
<td>3 Items</td>
</tr>
<tr>
<td>Integrity</td>
<td>6 Items</td>
</tr>
<tr>
<td>Ability</td>
<td>5 Items</td>
</tr>
<tr>
<td>Benevolence</td>
<td>4 Items</td>
</tr>
<tr>
<td>Openness</td>
<td>2 Items</td>
</tr>
</tbody>
</table>

4.2.2 Instrument development survey

As indicated previously, subsequent to compiling and checking an inventory of governance-related practices, a final item set was used to construct a questionnaire. This comprised four sections and a total of 127 items. This questionnaire was then refined using a small scale survey of WACHS hospital nurses. The objectives of this study were: item reduction; assessment of the performance of Roodt’s Turnover Intentions Scale; and identification of constructs (i.e. schema measures) within the managerial governance items for both local hospitals and WACHS regions.

Eighty-six completed questionnaires were returned to the researcher, with all but one returned by post reflecting a response rate of 44%. With respect to missing data, 82
questionnaires were fully completed, while four were not. In the first of these four cases, the respondent had failed to complete the entire section on organisational governance; in the second, the respondent had completed only some of the local hospital governance items; in the third, six items on one page had been omitted; and in the fourth, the respondent did not complete the demographic items. Overall, missing item data in the current study was less than one percent and given this, the issue was addressed by substituting blanks with mean item values.

To check on age and sex bias in the pilot study sample, the respondent profile was assessed with reference to the total population of 2223 level 1 and 2 nurses in the WACHS database. The gender split in the study sample (94.2% females and 5.8% males) was virtually identical to that found in the full population of nurses and, consistent with this, the Chi-square value derived from comparing observed and expected value distributions was not statistically significant (chi-squared=0.213, df=1, 2-tailed p=0.6448, n.s). Similarly, the Chi-square test result from the comparison of observed and expected age-group distributions for the respondent sample was not significant (chi-square=4.063, 2-tailed p=0.395, n.s). As a result, the sample was considered to be broadly representative of level 1 and 2 WACHS nurses.

While there were no benchmark data to use to assess sample representativeness in terms of their level or type of formal nursing education, the largest group of respondents indicated their training had entailed a mix of hospital and university programs (43.0%), approximately one third (31.4%) reported that they had only undertaken hospital training, and almost one quarter (24.4%) were primarily university trained. This was consistent with an AIHW (2009) profile of Australian nurses and offered reassurance that the respondent sample included nurses across the range of
training backgrounds. Table 4 summarises pilot study sample characteristics that ascertained from the original database and from Part D of the pilot study questionnaire.

Table 4 Instrument Development Study Sample and Respondent Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Pilot Sample (%)</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean age</strong></td>
<td>42.1</td>
<td>43.3*</td>
</tr>
<tr>
<td><strong>Female</strong></td>
<td>96</td>
<td>94.2</td>
</tr>
<tr>
<td><strong>Male</strong></td>
<td>4</td>
<td>5.8</td>
</tr>
<tr>
<td><strong>Level 1</strong></td>
<td>76.9</td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Level 2</strong></td>
<td>23.1</td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Length of service in hospital settings</strong></td>
<td>Not available</td>
<td>11.9**</td>
</tr>
<tr>
<td><strong>Hospital Trained</strong></td>
<td>Not available</td>
<td>31.4</td>
</tr>
<tr>
<td><strong>University Trained</strong></td>
<td>Not available</td>
<td>24.4</td>
</tr>
<tr>
<td><strong>Mixed university and hospital trained</strong></td>
<td>Not available</td>
<td>43.0</td>
</tr>
</tbody>
</table>

*Calculated using mid-points of age ranges. 61+ category midpoint assigned 63. ** Calculated using mid-points of service range. 11+ years assigned 15.

**4.2.3 Analysis of the instrument development survey data**

Exploratory Factor Analysis (EFA) was the analytic method used with instrument development survey data. The purpose of the EFA was as a tool for reducing the number of variables and examining correlations among variables. The first step in the analysis was an examination of local manager data (Part A of the questionnaire).
Sampling adequacy was ‘good’ on the basis of the Kaiser-Meyer-Olkin (KMO) measure (0.713) and Bartlett’s test of sphericity was significant (p<0.0000).

Screening of local manager data to ensure variables correlated well resulted in no variables being excluded at this stage. Subsequently, the diagonal values of the anti-image correlation matrix were examined. On the basis of the minimum specified by Field (2005) (i.e. 0.5), two variables were excluded:

Managers in my hospital, MPS or nursing post ensure there is no bullying in the workplace (r=0.469); and

Managers in my hospital, MPS or nursing post understand the business of healthcare delivery (r=0.465).

The KMO and Bartlett’s test of sphericity were then re-calculated and the subsequent KMO result was improved (0.773) and Bartlett’s test of sphericity remained significant (p<0.0000).

An initial PCA to check the factor structure and variance used a six-factor solution as the starting point for interpretation, with each of the factors beyond this level contributing less than 2% additional variance. After examining item loadings on outputs from different factor solutions, a three-component solution was considered the most interpretable (see table 5 for eigenvalues and rotated sums of squared loadings). This explained 61% of the variance in the data and the factors broadly related to the issues of:

1. respect and support for, and engagement with, clinical staff (i.e. related to Trust in Management);
2. use of evidence to make decisions and to plan developments for the service (i.e. related to *Stewardship Governance*); and

3. understanding of, and links to, the local community (i.e. related to *Stewardship Governance*).

**Table 5 Eigenvalues and Rotated Loadings for Initial Three Component Solution**

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Rotated Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
</tr>
<tr>
<td>Component 1</td>
<td>42.0</td>
<td>54.5</td>
</tr>
<tr>
<td>Component 2</td>
<td>2.8</td>
<td>3.7</td>
</tr>
<tr>
<td>Component 3</td>
<td>2.4</td>
<td>3.1</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Following selection of the three-component solution, items were eliminated if they: (1) did not have loadings of at least 0.4 on any of the components; or (2) had loadings of more than 0.4 on more than one component. Remaining item loadings were then subjected to a .01 (two-tail) critical value significance assessment, with the result being that there were 20 items with significant loadings on the respect component (component 1), 11 with significant loadings on the evidence component (component 2), and five with significant loadings on the community links component (component 3). The local manager PCA rotated component matrix item loadings are provided in tables 6-8.
Table 6 Principal Component Analysis Rotated Component 1 Matrix: Local Managers

<table>
<thead>
<tr>
<th>Item</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure clinical staff in the hospital know that management will support them when the chips are down</td>
<td>.784</td>
</tr>
<tr>
<td>Ensure clinical staff feel clinically safe and supported</td>
<td>.774</td>
</tr>
<tr>
<td>Ensure that clinical staff feel safe making constructive criticisms about aspects of the running of the hospital</td>
<td>.770</td>
</tr>
<tr>
<td>Are willing to go on a service improvement journey with their clinical staff</td>
<td>.732</td>
</tr>
<tr>
<td>Are engaged with their staff</td>
<td>.715</td>
</tr>
<tr>
<td>Ensure clinical staff can get help if they need it</td>
<td>.707</td>
</tr>
<tr>
<td>Are capable of compromise</td>
<td>.703</td>
</tr>
<tr>
<td>Encourage open and frank communication between staff and managers</td>
<td>.695</td>
</tr>
<tr>
<td>Make requests for information from clinical staff respectfully</td>
<td>.682</td>
</tr>
<tr>
<td>Trust the clinical staff that work in the hospital</td>
<td>.654</td>
</tr>
<tr>
<td>Respect the knowledge of clinical staff in the hospital</td>
<td>.638</td>
</tr>
<tr>
<td>Ensure clinical staff remain challenged but not &quot;out of their depth&quot;</td>
<td>.627</td>
</tr>
<tr>
<td>Are committed to the professional development of their clinical staff</td>
<td>.626</td>
</tr>
<tr>
<td>Encourage ownership of the service among clinical staff</td>
<td>.625</td>
</tr>
<tr>
<td>Publicly support their clinical staff</td>
<td>.609</td>
</tr>
<tr>
<td>Provide forums for clinical staff to talk to managers</td>
<td>.602</td>
</tr>
<tr>
<td>Explain their reasons if they don't act on an issue of concern to clinical staff</td>
<td>.601</td>
</tr>
<tr>
<td>See clinical staff as the core of the service</td>
<td>.589</td>
</tr>
<tr>
<td>Have an open door policy</td>
<td>.581</td>
</tr>
<tr>
<td>Regularly meet with all staff in the hospital</td>
<td>.575</td>
</tr>
</tbody>
</table>
Table 7 Principal Component Analysis Rotated Component 2 Matrix: Local Managers

<table>
<thead>
<tr>
<th>Item</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use a variety of forms of “intelligence gathering” to help them make decisions</td>
<td>.751</td>
</tr>
<tr>
<td>Have a clear agenda for service improvement within the hospital</td>
<td>.717</td>
</tr>
<tr>
<td>Are realistic about the potential for change in the hospital</td>
<td>.704</td>
</tr>
<tr>
<td>Share information and data about the hospital with clinical staff</td>
<td>.693</td>
</tr>
<tr>
<td>Use evidence as the basis for decision making</td>
<td>.688</td>
</tr>
<tr>
<td>Are clear and articulate</td>
<td>.686</td>
</tr>
<tr>
<td>Ensure efficient systems are in place in the hospital</td>
<td>.671</td>
</tr>
<tr>
<td>Promote quality within the hospital</td>
<td>.633</td>
</tr>
<tr>
<td>Set goals for our service</td>
<td>.630</td>
</tr>
<tr>
<td>Are clear about their expectations of staff</td>
<td>.572</td>
</tr>
<tr>
<td>Ensure effective evaluation of hospital activities</td>
<td>.572</td>
</tr>
</tbody>
</table>

Table 8 Principal Component Analysis Rotated Component 3 Matrix: Local Managers

<table>
<thead>
<tr>
<th>Item</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have sound links with other local services</td>
<td>.881</td>
</tr>
<tr>
<td>Foster effective relationships with other local services</td>
<td>.840</td>
</tr>
<tr>
<td>Have good connections with the local community</td>
<td>.785</td>
</tr>
<tr>
<td>Understand the local community</td>
<td>.743</td>
</tr>
<tr>
<td>Represent the interests of the local community effectively</td>
<td>.722</td>
</tr>
</tbody>
</table>

On the basis that the three components were hypothesised to reflect underlying distinct dimensions of nurses’ governance schema and that the items within components reflected aspects of these dimensions, the components were treated as scales. Scale Reliability analysis was then undertaken, with the resultant Cronbach’s alpha scores each above 0.8 (1=0.966, 2=0.940, 3=0.925) indicating good consistency reliability so that no items were deleted. Overall, therefore, the EFA led to the
retention of approximately half of the original set of 79 local management items reflecting measures of three underlying nurse governance constructs.

The same process applied to the manager data was applied to WACHS-level items (i.e. items referring to ‘WACHS managers in general’). The KMO for WACHS-level manager items was superb (0.908) and Bartlett’s test of sphericity was significant (p<0.000). Items were screened and no variables were excluded at this stage.

An initial PCA was conducted using a five-component solution which explained 71.5% of the variance in the data as a starting point for interpretation. Subsequent examination suggested that while a three-component solution was most interpretable (see table 9 for eigenvalues and rotated sums of squared loadings), the third component didn’t meet the essential criteria as it had two items with relatively high weightings (approximately 0.8) while the remainder met the criteria for deletion. Consequently, these items were treated as specific variables rather than a component. Consequently, a two-component plus two-variable solution was selected. The two components related to the following:

1. commitment to clinical outcomes and to clinical staff (i.e. related to Trust in Management); and

2. use of evidence to make decisions and to plan developments for the service (i.e. related to Stewardship Governance).

The two retained variables related to understanding and effective representation of the interests of rural communities (i.e. related to Stewardship Governance).
Table 9: Eigenvalues and Rotated Loadings for Initial Three Component Solution

<table>
<thead>
<tr>
<th></th>
<th>Initial Eigenvalues</th>
<th>Rotated Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
</tr>
<tr>
<td>Component 1</td>
<td>15.6</td>
<td>51.9</td>
</tr>
<tr>
<td>Component 2</td>
<td>2.1</td>
<td>7.0</td>
</tr>
<tr>
<td>Component 3</td>
<td>1.5</td>
<td>5.1</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Items loading on Components One and Two were reviewed and were excluded if they had multiple loadings of greater than 0.4 or because they did not meet a two-tailed significance test and, as a result of this, the first component was a nine-item scale, while its counterpart comprised five items. In total, therefore, 16 items were retained from an original pool of 30 (i.e. two components with 14 items and two individual variables). Once again, given that the two components were interpreted as reflecting underlying distinct dimensions of nurses’ governance schema items within the components were treated as scales. Reliability analysis of the items on the two scales indicated good overall reliability for each (Cronbach’s alpha scores of 0.934 and 0.859 respectively). The WACHS manager PCA rotated component matrix item loadings are provided in tables 10-11.
Table 10 Principal Component Analysis Rotated Component 1 Matrix: WACHS Managers

<table>
<thead>
<tr>
<th>Item</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Represent staff working in country health services across the State effectively</td>
<td>.807</td>
</tr>
<tr>
<td>Ensure decision making is open and transparent</td>
<td>.802</td>
</tr>
<tr>
<td>Listen to and work with clinical staff to solve problems</td>
<td>.783</td>
</tr>
<tr>
<td>See clinical staff as the core of country health services</td>
<td>.782</td>
</tr>
<tr>
<td>Are committed to the professional development of clinical staff working in rural and remote areas of the State</td>
<td>.745</td>
</tr>
<tr>
<td>Deliver on their promises</td>
<td>.718</td>
</tr>
<tr>
<td>Provide hospitals with the resources they need to deliver a high quality service</td>
<td>.638</td>
</tr>
<tr>
<td>Ensure clinical perspectives are considered in decision making</td>
<td>.623</td>
</tr>
<tr>
<td>Are more focused on delivering safe services than on balancing their budget.</td>
<td>.612</td>
</tr>
</tbody>
</table>

Table 11 Principal Component Analysis Rotated Component 2 Matrix: WACHS Managers

<table>
<thead>
<tr>
<th>Item</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure effective monitoring and review of WACHS activities occurs</td>
<td>.794</td>
</tr>
<tr>
<td>Use data and evidence as a basis for decision making</td>
<td>.742</td>
</tr>
<tr>
<td>Encourage research in WACHS hospitals</td>
<td>.687</td>
</tr>
<tr>
<td>Promote quality in WACHS hospitals</td>
<td>.668</td>
</tr>
<tr>
<td>Set goals for health care delivery in country areas of the State</td>
<td>.657</td>
</tr>
</tbody>
</table>

Reliability assessment of Roodt’s modified Turnover Intention Scale using Cronbach’s alpha was 0.908 and, while one item in the scale performed relatively poorly, the increase in alpha gained by its removal was marginal and the overall level of reliability of the scale was sound; consequently, no items were deleted.
As a preliminary check on the criterion and construct validity of the components derived from the EFA, bivariate correlation coefficients between them and the Turnover Intentions Scale were calculated and two-tailed tests of significance were performed. The results of these analyses are detailed in Tables 12 and 13. The low-moderate correlations identified provided useful evidence of criterion and construct validity of the governance measures, ahead of the main study.

### Table 12 Correlations - Local Manager Scales and Turnover Intention Scale

<table>
<thead>
<tr>
<th>Local Manager Scales</th>
<th>Pearson Correlation</th>
<th>Significance (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respect and support for, and engagement with, clinical staff (related to Trust in Management)</td>
<td>-0.571</td>
<td>p&lt;0.01</td>
</tr>
<tr>
<td>Use of evidence to make decisions and to plan developments for the service (related to Stewardship Governance)</td>
<td>-0.561</td>
<td>p&lt;0.01</td>
</tr>
<tr>
<td>Understanding of, and links to, the local community (related to Stewardship Governance)</td>
<td>-0.462</td>
<td>p&lt;0.01</td>
</tr>
</tbody>
</table>

### Table 13 Correlations - WACHS Scales and Turnover Intention Scale

<table>
<thead>
<tr>
<th>WACHS Management Scales/Variables</th>
<th>Pearson Correlation</th>
<th>Significance (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respect and support for, and engagement with, clinical staff (related to Trust in Management)</td>
<td>-0.485</td>
<td>p&lt;0.01</td>
</tr>
<tr>
<td>Use of evidence to make decisions and to plan developments for the service (related to Stewardship Governance)</td>
<td>-0.336</td>
<td>p&lt;0.01</td>
</tr>
<tr>
<td>Understand country communities in WA (item) (related to Stewardship Governance)</td>
<td>-0.337</td>
<td>p&lt;0.01</td>
</tr>
<tr>
<td>Represent the interests of country communities across WA effectively (item) (related to Stewardship Governance)</td>
<td>-0.305</td>
<td>p&lt;0.01</td>
</tr>
</tbody>
</table>

At the conclusion of the instrument development survey, the objective of evaluating the draft questionnaire to identify constructs and assess the reliability and validity of
items had been achieved. Significant deletion of items from both local and WACHS-level governance sections of the draft had been facilitated through the EFA process, and the reliability of the modified Turnover Intention Scale had been found to be adequate. Scales and items derived from the analytic process were also conceptually consistent with aspects of Trust in Management and Stewardship Governance. On this basis, the main study was progressed.

4.3 The Main Study

4.3.1 Survey response

Of 1682 questionnaires mailed to WACHS nurses, 138 were returned unclaimed (i.e. no longer living at the specified address). These predominantly came from areas farthest from Perth. Most returns had also been sent to Post Office boxes or hospital-supplied housing, which suggested that unclaimed mail sent to private households may have been discarded rather than returned. Consequently, the true volume of unclaimed mail seems likely to have been higher than the 138 indicated. Of 699 partially or fully completed questionnaires returned, 697 were usable. Twenty-one of these were completed online, which meant that the participant’s work location (region) could not be distinguished. Questionnaire data was initially entered into an Microsoft Excel spreadsheet and subsequently imported to PASW (SPSS) Statistics 18 for analysis. The response fractions by WACHS region are described in Table 13.
Table 14 Main Study Response Fractions by WACHS Region

<table>
<thead>
<tr>
<th>WACHS Region</th>
<th>Total Population (n)</th>
<th>Initial Mail-out (n)</th>
<th>Return to Sender (n)</th>
<th>Sample (n)</th>
<th>Returns (n)</th>
<th>Response Fraction (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goldfields</td>
<td>232</td>
<td>232</td>
<td>27</td>
<td>205</td>
<td>68</td>
<td>33.2</td>
</tr>
<tr>
<td>Great Southern</td>
<td>304</td>
<td>250</td>
<td>8</td>
<td>242</td>
<td>118</td>
<td>48.8</td>
</tr>
<tr>
<td>Kimberley</td>
<td>231</td>
<td>231</td>
<td>31</td>
<td>200</td>
<td>84</td>
<td>42.0</td>
</tr>
<tr>
<td>Midwest</td>
<td>306</td>
<td>250</td>
<td>19</td>
<td>231</td>
<td>88</td>
<td>38.1</td>
</tr>
<tr>
<td>Pilbara</td>
<td>219</td>
<td>219</td>
<td>33</td>
<td>186</td>
<td>70</td>
<td>37.6</td>
</tr>
<tr>
<td>South West</td>
<td>526</td>
<td>250</td>
<td>6</td>
<td>244</td>
<td>123</td>
<td>50.4</td>
</tr>
<tr>
<td>Wheatbelt</td>
<td>326</td>
<td>250</td>
<td>14</td>
<td>236</td>
<td>124</td>
<td>52.5</td>
</tr>
<tr>
<td>Online</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2144</strong></td>
<td><strong>1682</strong></td>
<td><strong>138</strong></td>
<td><strong>1544</strong></td>
<td><strong>697</strong></td>
<td><strong>45.1</strong></td>
</tr>
</tbody>
</table>

A Chi-square test ([http://www.graphpad.com/quickcalcs/chisquared1.cfm](http://www.graphpad.com/quickcalcs/chisquared1.cfm)) for observed and expected responses from the seven WACHS regions was significant at the 0.05 level (Chi-squared=16.681, df=6, 2-tailed p=0.011). This was a product of the general tendency for response fractions to be higher among nurses working in areas closer to Perth.

The 45% response fraction was similar to that attained in the instrument development study (44%) and exceeded the minimum level for acceptability (35%) in all cases but the Goldfields (33.2%). In this case, attribution of two responses from the online sample to the total based on probability assessment meant that the actual fraction was probably at the boundary of the minimum level. As address details were also far more likely to be incorrect in remoter regions like the Goldfields, actual response rates (i.e. fully adjusted for sample loss) for these areas were probably higher than estimated. The study response reflected participation by at least one-in-three Level
One and Two nurses working in WA’s regional and rural hospitals at the time of the study.

Checks on the extent to which the characteristics of the respondents reflected those of the total sample were undertaken by comparing age, gender, and nursing-level profiles of both groups. The gender profile of the respondents and the overall sample were identical (94% female). The age profile of respondents and the overall sample are described in Table 14.

**Table 15 Age Profile of Respondents versus Total Sample**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Sample (n)</th>
<th>Respondent (n)</th>
<th>Sample (%)</th>
<th>Respondent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-30</td>
<td>263</td>
<td>96</td>
<td>17.0</td>
<td>13.8</td>
</tr>
<tr>
<td>31-40</td>
<td>426</td>
<td>157</td>
<td>27.6</td>
<td>22.5</td>
</tr>
<tr>
<td>41-50</td>
<td>431</td>
<td>217</td>
<td>27.9</td>
<td>31.1</td>
</tr>
<tr>
<td>51+</td>
<td>424</td>
<td>227</td>
<td>27.5</td>
<td>32.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1544</strong></td>
<td><strong>697</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

A Chi-square test ([http://www.graphpad.com/quickcalcs/chisquared1.cfm](http://www.graphpad.com/quickcalcs/chisquared1.cfm)) for observed and expected numbers in the relevant age-group cells was significant at the 0.05 level (Chi-squared=19.933, df=3, 2-tailed p=0.000). This was the result of a general tendency for younger nurses to be non-responders. The nursing-level profile of respondents indicated in Table 15 was also significantly different to that found in the overall sample (Chi-squared=92.782, df=1, 2-tailed p=0.000). While partially explained by the tendency for older and presumably more experienced nurses responding, some of this difference may have related to nurses acting in roles of a higher level than their substantive positions.
While benchmark data for WACHS hospital nurses regarding predominant forms of professional education were not available, broadly similar proportions of respondents indicated that they had respectively undertaken: (1) mostly hospital-based training; (2) both hospital and university training; and (3) mostly university training (Table 16).

**Table 16 Nursing-Level Profile of Respondents versus Total Sample**

<table>
<thead>
<tr>
<th>Nursing Level</th>
<th>Sample (n)</th>
<th>Respondent (n)</th>
<th>Sample (%)</th>
<th>Respondent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1215</td>
<td>445</td>
<td>78.7</td>
<td>63.8</td>
</tr>
<tr>
<td>2</td>
<td>329</td>
<td>252</td>
<td>21.3</td>
<td>36.2</td>
</tr>
<tr>
<td>Total</td>
<td>1544</td>
<td>697</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Predominant Form of Nursing Education</th>
<th>Respondent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mostly hospital-based training</td>
<td>32.7</td>
</tr>
<tr>
<td>Both hospital and university training</td>
<td>39.5</td>
</tr>
<tr>
<td>Mostly university training</td>
<td>27.8</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

Overall, while responders and non-responders had the same gender profile, responders were significantly older and worked at higher levels, implying they had more nursing experience than their non-responder counterparts.

**4.3.2 Database preparation and preliminary analysis**

Missing data in main-study questionnaires, which represented one percent of items overall, was addressed via substitution of missing values with item means. Subsequently, the results of the EFA were evaluated to confirm the appropriateness of the exploratory analysis. The assessment of unidimensionality entailed a PCA with Varimax Rotation being undertaken using the covariance matrix from the main study.
data to consider both the factor structure and review item correlations across the factors. Separate PCAs were conducted with items relating to local managers and WACHS-wide management. Both were conducted iteratively, with item removal proceeding over repeated PCAs until there were no items with loadings of more than 0.4 on more than one factor (i.e. unidimensionality was evident). For local manager data, this sequence of analyses led to the elimination of 20 items and the identification of a two-component solution (see Table 18). Almost all eliminated items (17) were those that had been in Component 1 in the EFA. This component related to respect and support for, and engagement with, clinical staff (i.e. related to Trust in Management).

**Table 18 Eigenvalues and Rotated Loadings for Two Component Solution**

<table>
<thead>
<tr>
<th></th>
<th>Initial Eigenvalues</th>
<th>Rotated Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
</tr>
<tr>
<td>Component 1</td>
<td>9.4</td>
<td>53.6</td>
</tr>
<tr>
<td>Component 2</td>
<td>1.6</td>
<td>9.3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The two-component solution from the main-study local-manager items accounted for 63.7% of the variance in the sum of squared loadings in the covariance matrix (Component 1=37.8% and Component 2=25.9%). Although the first component comprised 11 items from the second component identified in the EFA (i.e. related to Stewardship Governance) it also included three items from Component 1 in the EFA (i.e. related to Trust in Management). Thus, Component 1 in the main study was a composite of the two theoretical frames and pertained to the use of evidence to make decisions and to plan development of the service and decision-making transparency.
Component 2 (five items) in the main study mirrored the third component in the EFA, which related to assessments of local managers’ understanding of, and links to, their local community (i.e. related to Stewardship Governance). The results of the final rotated component matrix conducted with items relating to local managers are provided in Table 19.

**Table 19 Principal Component Analysis Rotated Component Matrix: Local Managers**

<table>
<thead>
<tr>
<th>Item</th>
<th>Component 1</th>
<th>Component 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promote quality within the hospital</td>
<td>.770</td>
<td></td>
</tr>
<tr>
<td>Use evidence as the basis for decision-making</td>
<td>.720</td>
<td></td>
</tr>
<tr>
<td>Use a variety of forms of intelligence gathering to help them make decisions</td>
<td>.717</td>
<td></td>
</tr>
<tr>
<td>Ensure effective evaluation of hospital activities</td>
<td>.728</td>
<td></td>
</tr>
<tr>
<td>Are realistic about the potential for change in the hospital</td>
<td>.719</td>
<td></td>
</tr>
<tr>
<td>Ensure efficient systems are in place in the hospital</td>
<td>.733</td>
<td></td>
</tr>
<tr>
<td>Are clear and articulate</td>
<td>.751</td>
<td></td>
</tr>
<tr>
<td>Are clear about their expectations of staff</td>
<td>.775</td>
<td></td>
</tr>
<tr>
<td>Regularly meet with all staff in the hospital</td>
<td>.593</td>
<td></td>
</tr>
<tr>
<td>Trust the clinical staff that work in the hospital</td>
<td>.629</td>
<td></td>
</tr>
<tr>
<td>Respect the knowledge of clinical staff in the hospital</td>
<td>.675</td>
<td></td>
</tr>
<tr>
<td>Understand the local community</td>
<td></td>
<td>0.821</td>
</tr>
<tr>
<td>Have good connections with the local community</td>
<td></td>
<td>0.857</td>
</tr>
<tr>
<td>Represent the interests of the local community effectively</td>
<td></td>
<td>0.815</td>
</tr>
<tr>
<td>Have sound links with other local services</td>
<td></td>
<td>0.790</td>
</tr>
<tr>
<td>Foster effective relationships with other local services</td>
<td></td>
<td>0.770</td>
</tr>
</tbody>
</table>

For WACHS-level management items, the PCA led to the elimination of two items and the identification of a one-component solution (14 items). The solution accounted for
56.5% of the variance in the sum of squared loadings in the covariance matrix (see Table 20).

Table 20 Eigenvalues and Rotated Loadings for One Component Solution

<table>
<thead>
<tr>
<th>Initial Eigenvalues</th>
<th>Rotated Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
</tr>
<tr>
<td>Component 1</td>
<td>7.6</td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
</tbody>
</table>

Like Component 1 from the analysis of local management responses, its WACHS-wide counterpart reflected items from both theoretical domains of Stewardship Governance and Trust in Management. The results of the final rotated component matrix of items relating to WACHS management are provided in Table 21.
Table 21 Principal Component Analysis Rotated Component Matrix: WACHS Managers

<table>
<thead>
<tr>
<th>Item</th>
<th>Component 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deliver on their promises</td>
<td>.738</td>
</tr>
<tr>
<td>Ensure clinical perspectives are considered in decision-making</td>
<td>.786</td>
</tr>
<tr>
<td>Promote quality in WACHS hospitals</td>
<td>.718</td>
</tr>
<tr>
<td>Use data and evidence as a basis for decision-making</td>
<td>.687</td>
</tr>
<tr>
<td>Understand country communities in WA</td>
<td>.735</td>
</tr>
<tr>
<td>Represent the interests of country communities across WA effectively</td>
<td>.747</td>
</tr>
<tr>
<td>Set goals for healthcare delivery in country areas of the state</td>
<td>.667</td>
</tr>
<tr>
<td>See clinical staff as the core of country health services</td>
<td>.766</td>
</tr>
<tr>
<td>Are committed to the professional development of clinical staff working in rural and remote areas of the state</td>
<td>.745</td>
</tr>
<tr>
<td>Represent staff working in country health services across the state effectively</td>
<td>.821</td>
</tr>
<tr>
<td>Ensure decision-making is open and transparent</td>
<td>.822</td>
</tr>
<tr>
<td>Listen to and work with clinical staff to solve problems</td>
<td>.823</td>
</tr>
<tr>
<td>Provide hospitals with the resources they need to deliver a high-quality service</td>
<td>.727</td>
</tr>
<tr>
<td>Are more focused on delivering safe services than on balancing their budget</td>
<td>.727</td>
</tr>
</tbody>
</table>

4.3.3 Scale checking prior to multiple regression

Reliability assessment of the scales derived from the PCA found that Cronbach’s alpha scores were each above 0.8 (Local Manager Component 1=0.928, Local Manager Component 2=0.918, WACHS Manager Component 1=0.941) indicating good reliability. Cronbach’s alpha for Roodt’s modified Turnover Intention Scale was 0.904, indicating good overall scale reliability, with all item total correlations above 0.4 and none meeting conditions that warranted deletion.

The ratio of cases to independent variables was greater than 20:1 and checks for outliers within dependent and independent variables using the Z-score method.
indicated that the scales conformed to the expectations of a normal distribution and, consequently, that outliers were not likely to be a cause of bias in the regression model. Collinearity in the independent variables was assessed, with none of the VIF values these variables approaching the cut-off of 10 and tolerances all above 0.2 indicating multicollinearity was not an issue of concern.

A screening multiple regression was undertaken using the three independent variables and the predictor or independent variable. Case-wise standardised residuals on the dependent variable were checked to ensure no more than five percent of cases had values above 2 and that less than one percent had values above 2.5. As 18 cases (2.6%) had residuals above 2, with only five of these above 2.5 (<1%), there was little concern regarding cases.

Lastly, residual scatter plots were checked as a test of the assumptions of linearity and homoscedacity, and the histogram and P-P plot for the Turnover Intention Scale were inspected for normality. These checks (see Figures 5-7) indicated that these assumptions of regression were satisfied and that further screening of variables was not required.
Figure 5 Dependent Variable: Turnover Intention Scale

Figure 6 Normal P-P Plot of Regression Standardised Residual for Dependent Variable: Turnover Intention Scale

Figure 7 Scatter Plot for Dependent Variable: Turnover Intention Scale
4.3.4 Multiple regression analysis

Scales derived from the main-study PCA were used as independent variables in a multiple regression analysis with Turnover Intention Scale scores as the dependent measure (i.e. to test hypothesis two). Hierarchical multiple regression was used on the basis of the primacy of local management aspects over more distal WACHS management dimensions and the logical primacy of the local management Component 1 (a values-oriented scale) over its counterpart component (a process-oriented scale).

The results of the multiple regression are outlined in Table 22.

Table 22 Hierarchical Multiple Regression

<table>
<thead>
<tr>
<th>Step 1</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>90.62</td>
<td>2.08</td>
<td></td>
</tr>
<tr>
<td>Local Manager Composite Trust</td>
<td>-1.08</td>
<td>0.06</td>
<td>-.57*</td>
</tr>
<tr>
<td>and Stewardship Scale</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 2</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>91.30</td>
<td>2.31</td>
<td></td>
</tr>
<tr>
<td>Local Manager Composite Trust</td>
<td>-1.04</td>
<td>0.08</td>
<td>-.55*</td>
</tr>
<tr>
<td>and Stewardship Scale</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local Manager Stewardship Scale</td>
<td>-0.11</td>
<td>0.17</td>
<td>-.03</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 3</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>93.81</td>
<td>2.40</td>
<td></td>
</tr>
<tr>
<td>Local Manager Composite Trust</td>
<td>-0.88</td>
<td>0.09</td>
<td>-.47*</td>
</tr>
<tr>
<td>and Stewardship Scale</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local Manager Stewardship Scale</td>
<td>-0.01</td>
<td>0.17</td>
<td>-.00</td>
</tr>
<tr>
<td>WACHS Management Composite Trust and Stewardship Scale</td>
<td>-0.25</td>
<td>0.07</td>
<td>-.15*</td>
</tr>
</tbody>
</table>

Note: $\Delta R^2 = .33$ for Step 1; $\Delta R^2 = .00$ for Step 2; $\Delta R^2 = .01$ for Step 3 (ps < .01). *p < .01

The regression indicated that Model 1 in the hierarchy, which comprised the local manager composite scale (i.e. items reflecting both Trust in Management and Stewardship Governance) accounted for a statistically significant 33 percent of the variance in nurses’ Turnover Intention Scale scores. Table 1 indicates that the predictor
was negative so that higher scores on the *Local Manager Composite Trust and Stewardship Scale* significantly predicted lower Turnover Intention Scale scores. Thus, nurses who perceived that their local managers practiced more governance behaviours that accorded with Stewardship Governance and Trust in Management were significantly less likely to express turnover intentions.

The addition of the local partnership scale in the subsequent models did not make a significant contribution to accounting for variance in Turnover Intention Scale scores; however, the *WACHS Management Composite Trust and Stewardship Scale* did explain an additional one percent of variance. Once again, the predictor was negative so that higher scores for nurses on the Composite Trust and Stewardship Scale significantly predicted lower scores on the Turnover Intention Scale. Consequently, nurses who perceived WACHS management more generally as practicing more governance behaviours that were in line with Stewardship Governance and Trust in Management were also less likely to express turnover intentions.

As age, length of time working in hospitals, formal nursing education, and work-level had been identified as potential correlates of turnover, analyses of variance (ANOVA) were conducted to assess the effect of these variables on Turnover Intention Scale scores. Dependent variable means for each age group were similar, with 95 percent confidence intervals each spanning the sample mean (See Table 23). This was reflected in the non-significant finding from the age-group ANOVA, where $F(3, 693)=1.26$, $p=0.29$ (n.s).
The results of the ANOVA which assessed the effect of length of time working in hospitals also identified similar group means, with 95% confidence intervals (CIs) for each spanning the sample mean (see Table 24). The ANOVA results were: F (3, 693)=0.446, p=0.720 (n.s).

ANOVA results which assessed the effect of respondents’ formal nursing education on turnover intention identified differences in group means that were significant at an alpha level of .05: F(2, 694)=3.85, p=0.02. In this case (see Table 25), the mostly hospital-trained group had a mean turnover intention that lay outside the 95% CI for
the sample mean. Thus, higher levels of university education, either pre- or in-service, were associated with higher scores on the Turnover Scale.

Table 25 Turnover Intention Mean Scores by Formal Nursing Education

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>95% Confidence Interval for Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>Mostly hospital based</td>
<td>228</td>
<td>51.45</td>
<td>49.29</td>
</tr>
<tr>
<td>Hospital and university</td>
<td>275</td>
<td>55.64</td>
<td>53.59</td>
</tr>
<tr>
<td>Mostly university based</td>
<td>194</td>
<td>53.40</td>
<td>51.01</td>
</tr>
<tr>
<td>Total</td>
<td>697</td>
<td>53.64</td>
<td>52.38</td>
</tr>
</tbody>
</table>

Assessment of differences in Turnover Intention Scale scores by nursing level also revealed a significant effect at an alpha level of 0.05, F (1, 695)=10.62, p=0.00. In this case, nurses employed at Level Two had higher mean turnover intention scores than those at Level One (see Table 26).

Table 26 Turnover Intention Mean Scores by Nursing Level

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>95% Confidence Interval for Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>Level 1</td>
<td>445</td>
<td>52.08</td>
<td>50.49</td>
</tr>
<tr>
<td>Level 2</td>
<td>252</td>
<td>56.41</td>
<td>54.36</td>
</tr>
<tr>
<td>Total</td>
<td>697</td>
<td>53.64</td>
<td>52.38</td>
</tr>
</tbody>
</table>

Given the potential confounding effect of formal nursing education and nursing level, a further regression analysis was undertaken. This included the two stewardship scales (local managers and WACHS-wide) and dummy-coded versions of the nursing education and nursing-level variables as predictors. In both cases, codes of one were
assigned where respondents were members of the group with the highest mean turnover intention scores.

Hierarchical multiple regression was undertaken with the two dummy-coded variables included in step one ensuring the variance in the turnover scale associated with nursing level and nursing education was accounted for before the variance associated with the governance scales. The results of this regression analysis are provided in Table 27.

Table 27 Hierarchical Multiple Regression

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>52.08</td>
<td>0.80</td>
<td></td>
</tr>
<tr>
<td>Nurse level</td>
<td>-1.08</td>
<td>1.33</td>
<td>.12*</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>49.47</td>
<td>1.25</td>
<td></td>
</tr>
<tr>
<td>Nurse level</td>
<td>4.67</td>
<td>1.33</td>
<td>.13*</td>
</tr>
<tr>
<td>Nurse training</td>
<td>3.70</td>
<td>1.36</td>
<td>.10*</td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>88.06</td>
<td>2.36</td>
<td></td>
</tr>
<tr>
<td>Nurse level</td>
<td>3.93</td>
<td>1.10</td>
<td>.11*</td>
</tr>
<tr>
<td>Nurse training</td>
<td>1.08</td>
<td>1.13</td>
<td>.03</td>
</tr>
<tr>
<td>Local Manager Composite Trust and Stewardship Scale</td>
<td>-1.07</td>
<td>0.06</td>
<td>-.57*</td>
</tr>
<tr>
<td><strong>Step 4</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>91.04</td>
<td>2.52</td>
<td></td>
</tr>
<tr>
<td>Nurse level</td>
<td>3.52</td>
<td>1.10</td>
<td>.10*</td>
</tr>
<tr>
<td>Nurse training</td>
<td>1.10</td>
<td>1.12</td>
<td>.03</td>
</tr>
<tr>
<td>Local Manager Composite Trust and Stewardship Scale</td>
<td>-0.89</td>
<td>0.08</td>
<td>-.47*</td>
</tr>
<tr>
<td>WACHS M’ger Composite Trust and Stewardship Scale</td>
<td>-0.23</td>
<td>0.07</td>
<td>-.14*</td>
</tr>
</tbody>
</table>

Note: \( R^2 = .02 \) for Step 1; \( \Delta R^2 = .03 \) for Step 2; \( \Delta R^2 = .34 \) for Step 3; \( \Delta R^2 = .01 \) for Step 4 (ps < .01). *p < .01
The regression analysis indicated that while significant independent proportions of variance in Turnover Intentions Scale scores were associated with nursing level and nurse training, both were small. The results also highlighted that the variance in Turnover Intentions Scale scores associated with training type was captured within the *Local Manager Composite Trust and Stewardship Scale*. Despite this, the potential magnitude of confounding was small, given that the variance in Turnover Intentions Scale scores explained by training type was approximately one percent while, in contrast, the *Local Manager Composite Trust and Stewardship Scale* accounted for more than 30%. Consequently, any potential confounding in the interpretation of the governance scale as a result of training was too small to compromise hypothesis testing.

### 4.3.5 Frontline Hospital Nurses’ Perceptions of Governance in WACHS

Analysis of study data on the *Local Manager Composite Trust and Stewardship Scale* indicated an overall sample mean score of 34.30 (95% CI: 33.63-34.96). This reflected an item-mean close to the ‘uncertain’ ranking. Study data were analysed to quantify the potential for improvement in nurses’ Turnover Intention Scores if WACHS nurses’ perceptions of their local managers’ governance practice were more consistent with the aspects of Stewardship Governance and Trust in Management reflected in the Local Manager scale. This was done by comparing mean Turnover Intention Scale scores of nurses across the full sample with those in the sub-sample who scored an average of four or more on the *Local Manager Composite Trust and Stewardship Scale* (i.e. an ‘agree’ average or better). Thus, Turnover Intention Scale scores for the full sample were compared to those for nurses whose ratings of their managers’ governance practices suggested they were ‘compatible’ with their governance schema.
For the 109 nurses (i.e. 15.6% of the sample) who gave local managers mean ratings of at least four on the Local Manager Governance Scale (i.e. a positive ranking), the mean Turnover Intention Scale score was $39.50^{(95\% \text{ CI: } 36.77-42.23)}$. The corresponding mean for the full sample was $53.64^{(95\% \text{ CI: } 52.38-54.90)}$. An unpaired $t$-test indicated this difference was statistically significant at the .05 level. Turnover Intention Scale scores among nurses who gave average Local Manager Governance Scale ratings of at least four were, therefore, 26% lower than those found across the full sample of nurses.

Figure 8 also indicates statistically significant differences in Local Manager Governance Scale scores for nurses in regions with the highest means (i.e. WACHS regions ‘4’ and ‘5’) and their counterpart with the lowest (i.e. region ‘6’). The best estimate of the gap between the highest and lowest region-wide mean is an item-mean difference of $0.66^{(95\% \text{ CI: } 0.33-1.00)}$ on the Local Manager Governance Scale.

![Figure 8 Local Manager Scale Scores by WACHS Region](image)

**Figure 8 Local Manager Scale Scores by WACHS Region**

Analysis of the WACHS-wide Governance Scale for the total sample identified a mean of $39.78^{(95\% \text{ CI: } 39.02-40.55)}$, translating to an overall response that was consistent with the Local Manager Scale data (i.e. an ‘uncertain’ ranking). As per the procedure used with Local Manager Scale data, 46 nurses (i.e. 6.6% of the total sample) with mean item-ratings of four or more (i.e. an ‘agree’ average or better) were identified. For these
nurses, the mean Turnover Intention Scale score was 37.28 (95% CI: 33.06-41.50) while the contrasting result for the full sample was 53.64 (95% CI: 52.38-54.90). An unpaired t-test indicated the difference was statistically significant at the .05 level.

Using the procedure followed with the Local Manager Governance Scale data, WACHS-wide Governance Scale data were also analysed by region (see Figure 9). These data highlighted statistically significant differences at the five percent level between the WACHS regions with the highest mean scale scores (i.e. regions ‘4’ and ‘5’) and their counterpart with the lowest (i.e. region ‘6’). The best estimate of the gap between the highest and lowest regional means is 6.37 (95% CI 2.08-10.66) translating to an item mean difference on the local-manager stewardship scale of 0.46.

![Figure 9 WACHS Management Scale Scores by Region](image)

### 4.3.6 Hypothesis Testing

The two study hypotheses were:

1. Frontline regional and rural public hospital nurses employed by WACHS will show evidence of having governance schema consistent with aspects of the theoretical frames of Stewardship Governance and Trust in Management.

2. Compatibility between the governance schema of frontline regional and rural public hospital nurses employed by WACHS and their perceptions of their
managers’ governance practices will predict their turnover intentions where the comparisons pertain to aspects within the theoretical frames of Stewardship Governance and Trust in Management.

Hypothesis one was supported by the PCA results obtained from the analysis of main study results. These analyses supported the proposition that WACHS frontline hospital nurses have governance schema that are consistent with elements of the theoretical frames of Stewardship Governance and Trust in Management. This theoretical consistency of the two theoretical frames was apparent both in relation to WACHS frontline hospital nurses’ schema of the roles of their local managers and with regard to their broader ‘organisation-wide’ WACHS management.

Hypothesis two was supported by the results of multiple regression analysis which highlighted that WACHS frontline hospital nurses’ turnover intentions were predicted by schema-practice consistency in regards to both their immediate managers and WACHS management more generally. The findings are discussed in detail in the subsequent chapter.

4.3.7 Summary
This chapter discussed the results of research undertaken within the WA Country Health Service to explore the relevance of theoretical concepts of Trust in Management and Stewardship Governance to frontline regional and rural hospital nurses’ governance schema and to gauge their importance using the outcome indicator of turnover intention. Sixteen ‘expert opinion’ interviews were used as a preliminary measure to establish ‘in-principle’ validation of the theoretical basis of the study and to aid the development of a theoretically-relevant inventory of governance items. ‘Expert opinion’ interviews offered ‘sufficient support to progress the study.
Theoretically-relevant items of governance-related practices derived from ‘expert opinion’ interviews were first tested via an instrument development survey of an eligible sample of 195 WACHS frontline hospital nurses, which achieved a response rate of 44%. Items relating to both nurses immediate or local managers and WACHS management more generally were included in the initial instrument. An existing Turnover Intention Scale was also incorporated in the instrument. Exploratory Factor Analysis (EFA) was used to analyse instrument development survey data and this facilitated substantial reduction in governance items and an initial exploration of correlations among variables. The reliability of the Turnover Intentions Scale was also assessed.

Instrument modification proceeded using the results of the instrument development survey and this was then used in a main study of 1544 eligible WACHS frontline hospital nurses, which achieved a response rate of 45% (n=697). Main study data facilitated hypothesis testing, which was achieved via Principal Components Analysis to confirm dimensions of nurses’ governance schema that accorded with elements of Trust in Management and Stewardship Governance and using multiple regression analysis to assess the significance of associations between the dimensions of governance schema and nurse scores on the Turnover Intentions Scale. The latter was posited to be an outcome indicator of the process of schema ‘compatibility testing’.

Regional ratings of Local Manager Composite Trust and Stewardship Scale data and its WACHS-wide counterpart were discussed, highlighting overall rankings on both that suggested the organisation’s frontline hospital nurses were ‘uncertain’ as to whether these domains of governance practice were being undertaken in ways that reflected their expectations (i.e. their schema).
Both study hypotheses were accepted, reflecting the findings that WACHS frontline regional and rural hospital nurses’ did appear to have governance schema that accorded with elements of the respective theoretical frames and that nurse turnover intentions were significantly higher when local and WACHS-wide managers’ governance practices were less consistent with these elements.
5. **Discussion and Conclusions**

### 5.1 Introduction

This study broadly pertained to the issue of public health sector governance, which situated it as being concerned with the means used to direct, coordinate and control healthcare organisations and those who work within them (Forbes et al., 2007). The field of healthcare governance had been characterised as having challenges of greater intricacy and sensitivity than those found in any other sector (Philippon & Braithwaite, 2008). While increasingly regarded as important to health system performance, governance had, however, been evaluated as poorly understood in conceptual and practical terms and subject to competing ideas regarding its role and challenges (Brinkerhoff & Bossert, 2013).

Specifically, the study explored frontline public hospital nurse perspectives of strategic aspects of health sector governance in regional and rural areas of Western Australia. Because of its heavy reliance on its nursing workforce, the Australian regional and rural health system had been described as an essentially ‘*nurse-led*’ healthcare context that was also dominated by public hospitals (Bish et al., 2012). Further, regional and rural health reforms had deeply affected the practice and work environments of many nurses in these areas over a period of more than two decades and more change was proposed by both State and Commonwealth levels of government (Department of Health and Ageing, 2010; Mahnken, 2001; WACHS, 2007, 2009). The Department of Health and Ageing had suggested an outcome of this process had been that many clinicians in regional and rural areas were unhappy with strategic aspects of healthcare governance and this had led to less responsive services and the loss of opportunities to improve clinical safety and quality.
Given this context, the governance perspectives of frontline hospital nurses’ employed by the Western Australian Country Health Service appeared an important area of study. Supporting this assessment was that research into nurse leadership issues in regional and rural areas appeared scant (Bish et al., 2012) and the emphasis given to follower perspectives of the governance practices of leaders had been quite limited (Van Vugt et al., 2008). Briggs, Smyth, and Anderson (2012) had also pointed to the critical nature of enhancing understanding of the relationship between professional cultures and management roles in hospital settings.

A core purpose of the study was to anchor the assessment of regional and rural nurses’ perspectives of governance within the theoretical frames of Stewardship Governance (Travis et al., 2003) and Trust in Management (Clark & Payne, 1997, 2006; Payne & Clark, 2003). The rationale for this was that these frames had been postulated as consistent with the underpinning motives of caring professions such as nursing (Brown & Calnan, 2010, 2011; Calnan et al., 2006; Saltman & Ferroussier-Davis, 2000). If so, it seemed they were likely to be apparent within the profession’s broader architecture of ‘shared mental models’ or schema of appropriate practice (Epitropaki & Martin, 2004; Mohammed et al., 2010).

In light of the above-mentioned propositions, methods suited to elucidating schema were employed in the study (Floyd & Widaman, 1995). The validity of the schema measures identified was subsequently tested with respect to their relevance and importance to the study population. This validation process was theoretically grounded in the empirically-supported cognitive process of schema ‘compatibility testing’ (Beach, 1993; Miner, 2007) and entailed the identification and use of an outcome measure likely to be pertinent to nurse assessments of the extent to which
their governance expectations of their managers were met. The choice of nurse turnover intention seemed an appropriate outcome measure because turnover had been recognised as a widespread and important problem (Coomber & Barriball, 2007; Holtom et al., 2008; Hwang & Chang, 2008; McCarthy et al., 2007; West, 2005) and linked to management styles and governance (Attree, 2005; Hayes et al., 2006; Kleinman, 2004). Consequently, it seemed a worthy benchmark against which to assess the relevance and importance of a governance framework to the profession. The design features of the measure of turnover intention used in the study meant that it appeared suited to nurse ‘compatibility testing’ of governance schema (Morrell et al., 2008).

The following sections of this chapter provide an interpretation of the study results in light of what has appeared in the literature. The discussion commences by focussing on the ‘what’, ‘who’, and ‘how’ dimensions of WACHS frontline hospital nurses’ governance schema, followed by attention to the ‘compatibility-testing’ aspects of the study. Subsequently, regional and WACHS-wide data on nurse perceptions of governance are also considered.

5.2 WACHS nurses’ governance schema- ‘What’, ‘How’ and ‘Who’

Overall, the process of establishing measures of the governance schema of WACHS frontline regional and rural hospital nurses’ identified two scales that satisfied the conditions suggested by Hinkin (1998). The scales accommodated the elements of shared employee schema referred to by Mohammed et al. (2010) in their review of this area, reflecting evaluative belief dimensions pertaining to ‘what’, ‘how’ and ‘who’ (i.e. context) aspects of governance practice. They also reflected a context-specific model of the elements of the governance of teams (Lane & Wallis, 2009). To reiterate,
the scales comprised the items indicated in Tables 28 and 29 and respectively related to nurses’ immediate hospital managers and WACHS managers more generally.

### Table 28 Local Manager Governance Scale

<table>
<thead>
<tr>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promote quality within the hospital</td>
</tr>
<tr>
<td>Use evidence as the basis for decision-making</td>
</tr>
<tr>
<td>Use a variety of forms of intelligence gathering to help them make decisions</td>
</tr>
<tr>
<td>Ensure effective evaluation of hospital activities</td>
</tr>
<tr>
<td>Are realistic about the potential for change in the hospital</td>
</tr>
<tr>
<td>Ensure efficient systems are in place in the hospital</td>
</tr>
<tr>
<td>Are clear and articulate</td>
</tr>
<tr>
<td>Are clear about their expectations of staff</td>
</tr>
<tr>
<td>Regularly meet with all staff in the hospital</td>
</tr>
<tr>
<td>Trust the clinical staff that work in the hospital</td>
</tr>
<tr>
<td>Respect the knowledge of clinical staff in the hospital</td>
</tr>
</tbody>
</table>

### Table 29 WACHS-wide Management Governance Scale

<table>
<thead>
<tr>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deliver on their promises</td>
</tr>
<tr>
<td>Ensure clinical perspectives are considered in decision-making</td>
</tr>
<tr>
<td>Promote quality in WACHS hospitals</td>
</tr>
<tr>
<td>Use data and evidence as a basis for decision-making</td>
</tr>
<tr>
<td>Understand country communities in WA</td>
</tr>
<tr>
<td>Represent the interests of country communities across WA effectively</td>
</tr>
<tr>
<td>Set goals for healthcare delivery in country areas of the state</td>
</tr>
<tr>
<td>See clinical staff as the core of country health services</td>
</tr>
<tr>
<td>Are committed to the professional development of clinical staff working in rural and remote areas of the state</td>
</tr>
<tr>
<td>Represent staff working in country health services across the state effectively</td>
</tr>
<tr>
<td>Ensure decision-making is open and transparent</td>
</tr>
<tr>
<td>Listen to and work with clinical staff to solve problems</td>
</tr>
<tr>
<td>Provide hospitals with the resources they need to deliver a high-quality service</td>
</tr>
<tr>
<td>Are more focused on delivering safe services than on balancing their budget</td>
</tr>
</tbody>
</table>

In both cases, the governance scales suggested frontline regional and rural hospital nurses in WACHS have schema that accord with elements of Stewardship Governance (Travis et al., 2003) and Trust in Management (Clark & Payne, 2006). Consistent with this, the scales pointed to WACHS frontline hospital nurses’ shared governance
schema fitting with Davis et al.’s (1997) description of a management philosophy based on Stewardship Theory. Cornerstones of this include elements of the desire for employee participation and involvement in decision-making and a concern with long-term organisational outlooks and performance enhancement.

The two scales reflected WACHS frontline regional and rural public hospital nurses having governance schema which reflected their preference for high-trust relationships with their managers and to the expectation that their managers would act as stewards of the health of the local and regional populations they serve. These propositions appear consistent with the underlying values of the nursing profession (Attree, 2005) and suggest frontline hospital nurses in WACHS place importance on the extent to which the styles of managerial governance they experience are sympathetic to them.

The schema dimensions identified in the study were also consistent with WACHS strategic directions policy documentation (WACHS, 2007; 2009) and with the organisation’s standard Director of Nursing/Health Service Manager position or job description forms (JDF’s). Moreover, they were consistent with literature on the kinds of frontline managerial governance environment to which nurses’ best respond (Duffield et al., 2007; Hayes et al., 2006; Hwang & Chang, 2009; Park & Kim, 2009; Van Bogaert et al., 2009).

In pointing to dimensions of the governance schema of frontline regional and rural public hospital nurses, the current study findings link to literature pertaining to appropriate theoretical frames for public-sector governance and to the nature of effective leadership in organisations, including public-sector-agencies. Early examples
of this literature are the work of Argyris (1960) and McGregor (1960) who encouraged more positive views of the underlying motivations of employees, suggesting scope for the manager-employee governance relationships based on shared interests. The current study seemed to affirm this general sentiment.

The research findings also resonate with more recent propositions regarding the relevance of the notion of stewardship and concepts associated with Stewardship Theory to the public-sector. Armstrong (1997) for example, argued market-based NPM reforms were inadequate to guard and guide the performance of the public-sector and advocated the embrace of a culture of stewardship as part of further public service reform. In describing this, he posited stewardship as a concept capable of accommodating market-based approaches while also responding to public interest aspects.

Armstrong’s (1997) description of the culture he had in mind appeared reinforced by the governance schema apparent in the current study’s regional and rural nurse population. For example, items in the governance scales identified in the current study reflected nurses’ accommodating the validity of concerns with market-based concerns such as service efficiency and effectiveness (e.g. ‘efficient systems’, ‘ensuring evaluation’) while also favouring other elements of Armstrong’s ‘stewardship organisations’ such as ‘people building’, ‘responsiveness to local communities’ and ‘openness and transparency’. Thus, the style of governance suggested by the study scales also appeared to reflect WACHS nurses having a perspective that lies well beyond the notion of a “limited and fragile compromise between ‘autonomy’ and ‘control’” (O’Reilly & Reed, 2010, p. 972) to be outward-looking, community-
responsive, and capable of accommodating key professional and organisational perspectives.

An extension of the stewardship theme to prescribe a more specific form of health sector governance practices was the WHO’s (2000) advocacy of Stewardship Governance. This posited a governance framework suggested as appropriate to ‘steering’ national health systems, with part of the rationale being that a model based on stewardship would fit “well with the sense of mission that has traditionally been the central motivation of healthcare providers (Saltman & Ferrousier-Davis, 2000, p. 735). The current study lent support to this claim using the reference point of the framework of Stewardship Governance practices identified for the WHO by Travis et al. (2003).

The findings of this research also linked to existing literature on the nature of effective leadership in organisations. A body of this literature was concerned with concepts of leader-led relations, giving emphasis to countering the notion of ‘heroic’ concepts of leadership and offering a ‘post-heroic’ discourse more concerned with ‘followership’ (e.g. Collinson & Collinson, 2005, 2009; Fulop, 2010; The King’s Fund, 2011, 2012; Van Vugt, Hogan, & Kaiser, 2008). Thus, for example, consecutive annual papers by The King’s Fund (2011, 2012) on leadership and management in the NHS argued heroic notions of leadership were ill-suited to contemporary health system demands and that a new context-specific model of leadership was required. As part of this, the King’s Fund discussed the need for employee engagement, arguing a need for greater interpretation of leadership on the basis of the standpoints of those to be engaged.

The same theme has been evident in the work of Braithwaite and colleagues (Braithwaite, 2008; Braithwaite et al., 2009; Braithwaite et al., 2005; Braithwaite &
Westbrook, 2004; Braithwaite et al., 2011; Greenfield, Nugus, Travaglia & Braithwaite, 2011). In these contributions, Braithwaite and others encouraged a far greater embrace of clinical perspectives in governance, arguing the alternatives had largely failed to secure needed change in the Australian health system. As an example of the importance of this, Greenfield et al.’s (2011) longitudinal study of reform projects in an Australian health jurisdiction of similar size to that of WACHS found only half made any significant progress. Significantly, in the majority of cases where progress was made, Greenfield et al. pointed to evolution of the ‘original idea’ as a consequence of refinement processes flowing from the involvement of clinicians.

Despite the apparent growth in recognition of the importance of follower perspectives and input, Collinson and Collinson (2009) noted that little research had been undertaken to ascertain dimensions of leadership practice that employees might actually prefer in any public-sector contexts. Collinson and Collinson’s research into employee perspectives on effective leadership in the UK further education sector was, however, an exception. Their findings were relevant to the current study in that they found UK further education staff prioritised both what they referred to as traditional forms of leadership and elements of distributed or shared forms thus blending previously considered incompatible dichotomies in leadership styles. Elements of the same blending of leadership styles were apparent in the current study’s local manager and WACHS-wide governance scales, suggesting frontline regional and rural public hospital nurses may also favour what Collinson and Collinson referred to as ‘blended and balanced’ leadership.

Examples of the apparently blended style evident in WACHS frontline nurses’ governance schema were that they expected immediate and more general WACHS
management to provide clarity and transparency about directions, but they also wanted clinical perspectives to be listened to and taken into account in decision-making. Perhaps, as Collinson and Collinson (2009) argued, blended and balanced governance offers professional staff like regional and rural nurses the mix of clarity, transparency and involvement they value and expect from those in leadership positions. Like Collinson and Collinson’s further education staff, the balance for the study’s nurse sample seemed to chart a middle course between what might be interpreted as the contrasting ‘evils’ of too much uncertainty or ambiguity versus too much rigidity, inflexibility and a lack of opportunity for personal development.

The apparent consistency in Collinson and Collinson’s (2009) findings and those of the current study lend support to Fulop’s (2010) claims about the relevance of ‘hybridity’ to concepts of effective leadership in healthcare. In particular, the results reinforce her assessment that either-or claims about the importance of individual leadership roles may have less relevance than pluralist propositions, with healthcare leadership perhaps being better understood by giving more emphasis to how those in these roles might create persuasive interpretations of context (e.g. current challenges, the need for change etc.) in ways that respond to the core values and concerns of the led (i.e. nurses). This seems especially pertinent in regional and rural nursing leadership contexts like those confronted by WACHS, in which proposed reform directions are expected to have major implications for nursing roles, making change dependent on their perceptions and interpretations, including those derived from nurses’ sensitivity to the dimension of healthcare services being delivered to their local communities.

Reinforcing the latter point was the apparent consistency between the results of this research and those of Collinson and Collinson’s (2009) regarding professionals’
concern for local communities. Collinson and Collinson referred to further education staff perceiving effective leadership of their local colleges as entailing a sound knowledge of, and empathy for the communities being served. In the current study, a similar dimension seemed apparent, reflected in nurses’ expectation that WACHS-level management should understand and effectively represent the interests of regional and rural communities. This sentiment, which Collinson and Collinson attributed to an intensely local and regional dimension of daily professional practice, seemed likely to be pertinent to WACHS frontline hospital nursing staff. It was certainly apparent to the Department of Health and Ageing (2010) in their consultations with regional and rural clinicians across Australia. Reflecting this, they pointed to the commitment clinicians tended to express for ‘their communities’ and to the health services provided to them. These sentiments seem likely to be acute among nurses because they have tended to be the most consistent, and in some cases the only local healthcare providers in regional and rural communities (Mahnken, 2001).

Another area with which the research findings found concordance was receptivity to change. Pettigrew et al. (1992) explored this issue in the NHS more than 20 years ago, noting greater receptivity to change in some contexts than in others. This led them to posit eight ‘signs and symptoms of receptivity’. Notably, many of these seemed manifest in this study’s governance scales. These included their reference to the ‘fit between change agendas and locales’ and aspects in the current study’s scales reflecting nurses’ expectations of locally-grounded realism about the potential for change and an understanding of regional and rural communities. Likewise, Pettigrew et al.’s reference to receptivity being associated with ‘clear goals and priorities’ seemed apparent in the current study’s scales. Other similarities included areas
Pettigrew et al. referred to as ‘the quality and coherence of policy analysis’, ‘effective manager-clinician relations’, and a ‘supportive culture’.

It was notable Pettigrew et al. (1992) cautioned against viewing the elements of receptivity as a ‘shopping list’ but rather, that the concept encapsulated a combination of aspects that together, might “raise energy levels around change in ways which are highly district specific” (p. 31). The same caution may apply to the current study results, given that the schematic nature of nurses’ governance expectancies suggested the whole might matter more than just the sum of parts.

In this context of ‘wholism’, Khodyakov’s (2007) proposition of ‘trust as process’ having an agentic nature and Colquitt et al.’s (2012) contention of a fairness heuristic being a useful concept in employee-manager relationships seem pertinent. Both suggested employees might be engaged in an ongoing heuristically-driven process of checking for cues across the overall ‘package’ of governance practices that gives them cause for confidence about managers’ intentions and the quality of their ‘plans’. Khodyakov referred to this process as one of ‘imaginative anticipation’, which in the context of the current study suggests that while nurses might not be able to accurately predict the future of their hospital, they are likely to make guesses about it on the basis of their interpretations of both the intentions of their managers and their assessments of the quality of the processes they are using to steer their organisations into the future. It may be that where these guesses result in what they perceived to be positive outcomes for their service, their community and their own professional roles, nurses are more ‘receptive’ to the course and destinations being proposed and will actively support their implementation.
The above characterisation appears consistent with Albrecht’s (2002) and Albrecht and Travaglione’s (2003) interpretations of their findings from research in two Western Australian public-sector organisations. This work explored the issue of receptivity from the perspective of employee ‘cynicism to change’ and highlighted its correlation with a range of measures that seemed to reflect many of the elements in the current study’s WACHS-wide scale measure. Albrecht and Travaglione’s work, however, was limited to senior management of the public-sector agencies they studied, whereas the current study explored frontline nurse perspectives of both immediate and broader WACHS management, suggesting the issue of receptivity is shaped and influenced in distinct ways by different levels of management.

Others to undertake research touching on the receptivity issue have been Degeling and his colleagues (Degeling & Carr, 2004; Degeling, Hill, Kennedy, Coyle & Maxwell, 2000; Degeling et al., 2006; Degeling et al., 2001; Degeling & Maxwell, 2002). An aspect of this work has included an emphasis on Australian hospital nurses and their acceptance of the reforms being pursued in most developed economies (i.e. the link between clinical and resourcing dimensions, balancing clinical autonomy with accountability, team work and systematisation of clinical work). This work has painted a picture of the strategic perspectives of Australian nurses that also resonated with those of the current study in that it suggested they tended to a collectivist/institutional orientation and while supportive of aspects of reform, tended to reject the clinical-resource dimension (Degeling et al., 2000). This appeared to have been reflected in WACHS nurse schema, suggesting they were inclined to interpret organisation- and system-wide initiatives and policies as important (e.g. quality, goals, professional development, etc.) and open to ‘realistic’, ‘evidence-based’ change. Like Degeling et al.
(2000) however, WACHS frontline hospital nurses appeared ambivalent or opposed to resource constraints, albeit that this was reflected in a context of the quality and safety of services (i.e. the resources needed to deliver high-quality, more focussed on safety than balancing budgets) and not for its own sake.

Using Degeling and Carr’s (2004) ‘agentic’ language of the authorisation of followership, the current study suggests WACHS nurses do assign their immediate and regional managers authority to make systematic, perhaps even significant change to local hospital services. Notably, however, this authorisation seems constrained to conditions including that: they are consulted; the nature of decisions is evidence-based and realistic given the context; the expectations placed upon them are clear; they are supported with efficient internal systems; and, that ongoing professional development and support are provided. This picture also seems to accord with the idea of the give-and-take of exchange agreements or ‘psychological contracts’ between employees and employer organisations that when breached, have consequences for things like job satisfaction (Brown et al., 2011; Moody & Pesut, 2006; Suazo, Turnley, & Mai-Dalton, 2008). It also aligns with Attree’s (2005) characterisation of registered nurses’ perspectives of hospital governance and their need to be able to reconcile their ‘professional expectations’ of this area with the practice of their managers.

The previous description of WACHS nurses’ authorisation of managers vis-à-vis strategic aspects of governance also seems consistent with Boak’s (n.d.) research-based characterisation of the competencies of those who have actually been effective change agents in UK and Australian healthcare organisations. It also seems to reflect the dimensions of Braithwaite’s (2004) model of clinician-manager behavioural routines that were derived from three Australian studies with both qualitative and
quantitative components. Additionally, the picture of authorisation accords with core elements of the factors found to sustain improvement initiatives in an Australian health-service jurisdiction by Greenfield et al. (2011) identified via a large-scale longitudinal action research study. However, by exploring nurse schema of strategic governance practice, the findings of the current study echo Crevani, Lindgren, and Packendorff’s (2010) assessment that leadership might be better understood as something practiced in daily interaction between managers and staff and as emergent from these processes rather than as a quality of the individual heroic leader, “detached from their cultural context” (p. 77).

As noted previously, the study scales reflected elements of Clark and Payne’s (2006) facet structure Trust in Management, with items that appeared consistent with the framework of ability, benevolence (loyalty and fairness), integrity, and openness apparent in either one or both. This supported Calnan and Rowe’s (2008) interpretation of their case study findings suggesting that clinician trust in managers was conditional on them demonstrating the above-mentioned facets in their practice along with an indication that they shared common values and agendas for their service. As Payne and Clark (2003) found, however, differences in trust items across the current study’s two scales reinforced the importance of clarifying the targets of trust in organisational research and highlighted the complexity of the concept more generally. Reflecting this point, differences in scale items related to trust for direct managers and WACHS management in general accorded with previous research findings that pointed to distinctive trust assessments being made depending on whether the referent was an individual manager or management more collectively (Dirks & Ferrin, 2002).
Trust in Management items in both scales reflected a conceptualisation of trust as an aspect of relationships (Schoorman et al., 2007). The nature of the framework and the items in the scales themselves also reinforced Schoorman et al.’s assessment of trust being domain-specific. The current research supported this specificity at the level of WACHS management, although Schoorman et al. added that trust was also task- or domain-specific, meaning that nurse expectations of trust-related management behaviour in the context of governance might not be the same as those expected in other domains.

Given this potentially rich picture of trust, Mullarkey et al.’s (2011) assessment that there was a lack of clarity within the nursing profession about the concept of trust in nurse-management relationships is unsurprising. The current study does, however, suggest that trust in local or direct nurse-manager governance relationships might be more dependent on the ability and openness facets, whereas in more distal nurse–manager relationships, it may span a broader range. This seems to accord with Brown et al.’s (2011) assessment of the importance of ‘facework’ in the area of clinician-manager trust relations. According to Brown et al. trust is best developed and maintained through regular close interaction, allowing trustees to observe and evaluate a trustor’s trustworthiness. This allows what they refer to as ‘concrete’ and immediately ‘verifiable’ knowledge of the type reflected in ability and openness dimensions in the local manager scale, whereas the scale pertaining to broader and more remote WACHS management seems to accord with their point about trust for such referents requiring a range of ‘inferential assumptions’.

Dirks and Ferrin (2002) noted the deficiency of research directed to understanding the trust-related distinctions made with respect to different levels of management and of
their implications. More particularly, Calnan and Rowe (2008) highlighted a pressing need for further evidence about trust between health professionals and different levels of management. The current study scales point to the distinction among WACHS frontline nurses vis-à-vis strategic aspects of governance being that they seem to predominantly show willingness to invest trust in line management that interprets and communicates a realistic and clear strategy to the local context and staff, while they likewise appear willing to invest trust in a broader organisational management that establishes a governance architecture capable of providing appropriate system-wide capacity, direction and responsiveness.

These linked but distinctive architectures both resonate with, and extend, Brown and Calnan’s (2011) arguments about a trust-based governance framework to drive healthcare quality and performance improvement. One area of this resonance is in the area of ensuring local capacity and opportunity to: (a) explore proposed strategies in the contexts and by the people expected to adopt them; and (b) facilitate their adaptation and refinement. Resonance is also evident in Brown and Calnan’s contention that governance needs to be rooted in the principle of privileging patient interests as the means of engaging clinicians and giving them some ownership of the quality and performance improvement agenda. Each of these dimensions seem clearly reflected in the current study’s nurse governance schema, suggesting that WACHS might enhance the effectiveness of its extensive program of proposed healthcare reform by ensuring the kind of trust-based governance practice advocated by Brown and Calnan. The governance schema also provide reassurance that nursing perspectives on strategic aspects of governance do not envision management adopting
a form of ‘blind-trust’ in clinicians that Brown et al. (2011) characterised as ‘unthinkable’.

Brown and Calnan’s (2011) arguments about the need for a trust-based governance framework to drive healthcare quality and performance improvement appear as persuasive in the context of nurses at the frontline of Western Australian regional and rural public hospitals as for clinicians in the broader NHS to whom they referred. In particular, their assessment that clinicians in situ were best placed to understand the nuance of the work being done and to have the most accurate conception of what quality means in given contexts seems to find no truer organisational example than the highly diverse communities served by WACHS almost 120 hospitals and nursing posts.

As noted previously, these span communities with very high proportions of Indigenous Australians, to others with heavy population biases to young men (i.e. mining communities), to ‘retirement towns’ and a variety of other similarly distinctive demographies. In each case, the histories, cultures and health needs of this spectrum of communities infer dimensions of uniqueness, meaning local knowledge is likely to matter to clinicians. Moreover, because nurses have tended to be either the mainstay, or in the case of nursing posts, the only health professionals working in these communities, the pertinence of Brown and Calnan’s arguments to them is even clearer.

Shifting attention to the ‘who’ dimension of governance, the research findings suggested WACHS regional and rural public hospital nurses’ schema accord with Lynn et al.’s (2001) notion that different governance roles exist across the hierarchy of the public-sector. Their schematic perspectives also seem to accord with Hupe’s (2010) characterisation of the ‘Russian Doll’ arrangement of governance, with the elements of
nurses’ WACHS-wide- and local-manager governance schema resonating with his respective notions of ‘directional governance’ (i.e. giving direction) and ‘operational governance’ (i.e. getting things done).

The governance schema of WACHS frontline hospital nurses also seemed to reflect the arguments of Floyd and Wooldridge and their colleagues (Floyd & Wooldridge, 1997, 2000; Wooldridge et al., 2008) regarding strategy formation. In particular, nurses’ schema supported Floyd and Wooldridge’s perspective of strategy formation entailing a dimension of generative learning fuelled by interaction across organisational layers or levels, including ‘respecting the knowledge of clinical staff’ and ‘listening to and working with them to solve problems’. This was consistent with Dopson and Fitzgerald’s (2006) findings from their extensive research in the NHS focussing on the management of change. They indicated that to be effective, this required active management processes across the organisational spectrum, including a need for local capacity to ensure broader strategy was ‘translated’ to suit local contexts.

This study’s local manager governance scale reflected something of this translational flavour and accorded with Floyd and Wooldridge’s (1997) typology of middle management influence over organisational strategy. This entailed middle managers influencing both up- and down-the-line via processes like gathering and interpreting local information, supporting particular directions and supporting the adaptability of their staff. Thus, for example, like Floyd and Wooldridge, the current study suggested WACHS hospital nurses’ governance schema situated line managers as interpreters of things like the aspects of strategy that were likely to work in specific local organisational contexts and as providers of realistic assessments of the potential for change. Along with this, the local manager scale pointed to nurses attributing
responsibility to them for a range of local information-gathering tasks, including ensuring effective evaluation of hospital activities. The scale also suggested they viewed their line managers in more traditional roles like ensuring organisational goals and strategies translated to clear and realistic expectations of nursing staff and that these were facilitated via efficient local support systems (Checkland et al., 2011).

The line management governance schema of frontline WACHS hospital nurses sits well with Currie’s (2006) perspective of nurses in operational management roles being well positioned to be strategic “‘boundary spanners’ that translate policy intention to context specific practices” (p. 10) and Bolton’s (2004) characterisation of them as vital in the mediation between operational and strategic management. Similarly, it accorded with Jasper and Crossan’s (2012) contention that nurse managers are in a potent position to ensure broader organisational strategies are coherent with coalface nursing contexts and culture. Currie argued, however, that this required supportive organisational contexts, with executive levels of management that foster this role via an investment in organisation and management development.

The current study did not attend to questions of the extent to which WACHS provided this kind of development environment and even the nature of what might actually be required appears to have received little empirical emphasis (Birken et al., 2012). Reflecting this, Currie and Procter (2005) highlighted a need for research to examine both the environmental cues that might appropriately signal support from senior management and the developmental requirements to build middle management’s capacity to make a strategic contribution. Carney (2009) reinforced this with her assessment that these aspects have hitherto been absent in the area of nursing
management, such that it remains unclear if those in these roles even consider strategy development as one of their areas of responsibility.

As noted, these aspects were not the focus of the current study and have received little attention in the literature. Nonetheless, qualitative research by Paliadelis (2005) exploring nursing unit managers’ (NUM’s) experiences in rural New South Wales painted a picture suggesting they tended to feel unprepared for their roles; identified as nurses rather than managers; and had had limited opportunities for education or ongoing support. The NUM’s Paliadelis interviewed also indicated they had received insufficient guidance from senior management about role expectations and felt significant isolation, particularly when working in smaller rural facilities. While the degree to which this characterisation altogether fits with the WACHS context is unclear, it does suggest a need for investment of the kind envisaged by Currie (2006) that did not appear to be evident in WACHS recent strategic planning documentation (WACHS, 2007, 2009).

Dopson and Fitzgerald’s (2006) research-based guidance on core elements of the kind of framework most appropriate to the management of strategic change suggested the nurse governance schema highlighted in the current study may be a relevant point of departure with respect to investment in this area of organisational capacity. Consistent with the WACHS nurses who participated in the current study, Dopson and Fitzgerald pointed to key aspects within the strategic domain of hospital governance being: facilitative, negotiative approaches to translating strategic directions to local settings; collaborative manager-clinician relationships oriented to earning and maintaining trust; the establishment of change targets that reflect sympathy with clinical values; the use of data and evidence to inform decision making; and the establishment of
clinical/professional forums for discussion and debate about issues and trends. These aspects were either directly reflected or inferred in the current study’s respective WACHS-wide- and local-management governance scales and as a consequence, their relevance as a frame for strategic aspects of the ‘what’, ‘how’ and ‘who’ of governance practice seems to have been reinforced.

Moving beyond the specific detail of governance roles and processes to broader considerations about its nature and purpose, the frame provided by the study scales suggests WACHS nurses’ governance schema have some resonance with the perspectives and arguments of those such as Feldman and Khademian (2002, 2005, 2007, 2009). These theorist-researchers pointed to the strategic dimension of governance having an emergent and reciprocal nature flowing across ideas generation, to the development of policy plans, and through to successfully implementing them. Given this, they referred to the need to embrace plural forms of governance, drawing on the traditions of the planning discipline and notions of democratic policy development processes.

Feldman and Khademian (2002, 2007) argued that in the complex, messy ‘real world’ context of the strategic dimensions of public governance, high quality policy development and implementation requires public-sector managers to be facilitators, oriented to ensuring sound structures and relationships along the continuum from ‘ideas-to-practice’. As Bandelj (2012) has argued, and as the current study scales seem to suggest, such management roles go beyond ”mere sociality” (p. 179) but rather, comprise a specific set of technical skills linked to the achievement of policy goals “even if that goal is not clearly defined from the start” (p. 179).
Case study research undertaken by Weber and Khademian (2008) exploring effective collaborative governance practice by public-sector managers working in areas of complex public policy has suggested that a consistent set of general principles emerge. Weber and Khademian argued these principles, which are reflected in the Stewardship Governance and Trust in Management dimensions of the current study’s scales, lie at the heart of building the capacity required to resolve, or cope with, “very difficult, often paralysing, wicked problems” (p. 434). Given WACHS (2007) characterised its policy challenges in these terms, the perspective on the strategic dimensions of governance position encouraged by Feldman and Khademian (2002, 2005, 2007, 2009) and reflected in the specific skill/practice dimensions apparent in the study scales may be apt considerations for the organisation.

That WACHS frontline hospital nurses’ governance schema seemed consistent with Feldman and Khademian’s (2002, 2005, 2007, 2009) perspectives on governance may reflect Bolton’s (2004) assessment that nurses have a motivation to achieve the best for patients and work to interpret the governance processes that facilitate this. Adoption of Feldman and Khademian’s stance would certainly accord with the notion of structural empowerment advocated by Bish et al. (2012) as important to driving reform in Australia’s rural health services. By responding to Bish et al.’s call for the development of theory to support nursing leadership in this area, the elements of governance practice elucidated in the current study’s scales may offer guidance in the development of management skill sets most appropriate to strategic governance in regional and rural health services.
5.3 The ‘Compatibility Test’- Schema consistency and turnover intention

To reiterate, this study investigated strategic dimensions of WACHS frontline hospital nurses’ governance schema and elucidated two scales reflecting elements of shared expectancies these nurses had of the governance practices of their local and broader organisational management. As noted previously, the study incorporated use of a turnover intention measure developed by Roodt, which was posited to be an outcome indicator of nurses’ ‘compatibility testing’ their managers’ governance practices against their own cognitive schema of governance practice. The characteristics of the turnover measure used in the study were consistent with Morrell et al.’s (2008) research-based characterisation of the most common voluntary turnover pathway associated with NHS nurses’ compatibility testing of governance dimensions, which Harman et al. (2007) describe as one of ‘accumulating dissatisfaction’ and a consequential ‘search for alternatives’.

Regression analysis found the local manager governance scale accounted for a statistically significant 33% (p<.01) of the variance in turnover intention scale scores. The addition of the WACHS-wide management governance scale explained an additional one percent, which, while small, was statistically significant (p<.01). These findings from the ‘compatibility testing’ aspect of the research provided an indicator of the criterion validity of the study’s scales and provided support for the relevance of frontline regional and rural hospital nurses’ perspectives on strategic aspects of WACHS management’s governance practice as a cause of their turnover intentions.

The significance of this finding relates to the earlier-mentioned issue that nursing turnover is a significant worldwide problem and threat to sustainable healthcare
delivery (Roberge, 2009). Australia’s broader experience with the issue has reflected the global situation (Duffield & O’Brien-Pallas, 2003) and although the Nation’s overall rural nursing workforce has tended to have low rates of turnover (Hegney & McCarthy, 2000) a high attrition rate among new nurses (Mills et al., 2010) seems likely to threaten this position. It is also important to note that Australia’s regional and rural areas vary substantially, so while turnover may not be a problem in all areas, it is still a significant issue in many (Buykx et al., 2010).

For rural health services, the problems of high levels of nursing turnover have also been suggested to go beyond the significant costs of staff replacement (Jones, 2008; O’Brien-Pallas et al., 2006) and threats to hospital efficiency, in that they might affect the overall health of local communities. Minore et al. (2005) for example, suggested high nurse turnover could compromise health in remote Indigenous communities and Buchan and Aiken (2008) indicated the health of residents in rural townships was also adversely affected by high levels of nurse turnover. These factors are consistent with the reality that in regional and rural areas of Australia, the healthcare system is heavily reliant on its nursing workforce, with many local services appropriately described as ‘nurse-led’ (Bish et al., 2012). Taken together, therefore, the finding that 34% of overall variance in the measure of turnover intention used in the study could be explained by the study’s governance scales (i.e. 33% + 1%) supports an interpretation of the issue as one of substantial strategic importance to WACHS and of practical significance to the communities and populations the organisation serves.

In general terms, the results of the turnover intention analysis accorded with a body of literature suggesting a link between management practice and nursing retention and turnover (Brunetto et al., 2010; Coomber & Barriball, 2007; Currie & Hill, 2012; Hayes
et al., 2012; Naude & McCabe, 2005; Tourangeau et al., 2010) and highlighting the significant role played by nurses’ immediate managers in this regard (Attree, 2005; Brewer & Lok, 1995; Chen et al., 2008; Duffield et al., 2010; Townsend et al., 2012). By highlighting a framework of governance practice that might reduce levels of turnover intention, the research findings also respond to Cummings et al.’s (2009) criticism that little literature has given adequate direction to leadership practices that might be enacted to address underlying problems of nurse dissatisfaction.

The turnover intention findings of the study were consistent with Morrell et al.’s (2008) findings from their study of the causes of 352 cases of voluntary nurse turnover in the NHS. Like the current study, their research suggested nurses’ schema or ‘images’ of organisational governance practices seemed to play an important role in their evaluations of their workplace and that where nurses perceived violations of their professional and personal values, ethics and goals occur they were more inclined to think about and take steps along the pathway to leaving their jobs.

With respect to the practical significance of the results of the ‘compatibility testing’ dimension of the study, Lambert, Hogan and Barton’s (2001) analysis of US nationally representative cross-sectional data from a sample of more than 1500 employees found that the combination of job satisfaction, alternative job options, remuneration, tenure, and age accounted for 32% of the variance in their measure of turnover intention. Thus, the magnitude of the variance in the measure of turnover intention accounted for by the current study’s local manager governance scale was of a consistent magnitude to that accounted for in a population sample of employees by a combination of variables consistently identified as key elements of voluntary turnover (Holtom et al., 2008).
The combined variance in the turnover intention measure accounted for by the current study’s governance scales was also two thirds of that (34% versus 49%) found by Jacobs and Roodt (2007) using the same dependent measure in their study of South African registered nurses and a regression model incorporating a combination of variables, including organisational commitment, culture, job satisfaction, age, length of service, education and family composition. These comparisons lend further support to the claim that the governance practices of WACHS managers seem a significant area of interest to its frontline hospital nursing staff and may make a substantial contribution to the issue of nurse turnover.

Collectively, the study findings in support of an important relationship between nurses’ governance schema and their turnover intentions via the suggested pathway of ‘compatibility testing’ appear salient, especially given the organisational context in which the study was conducted. As noted previously, as the largest regional and rural health system in Australia, WACHS provides an array of healthcare services across a landmass of approximately 2.5 million square kilometres and to a population of more than half-a-million people (WACHS, 2012). The organisation is also a substantial employer, with a part- and full-time staff of approximately 8,500, including 2300 full-time-equivalent nursing staff (WACHS, 2007). Alongside its organisational significance as a regional and rural healthcare provider, WACHS is also an organisation in the midst of significant long-term strategic reform across its network of hospitals and nursing posts (WACHS, 2007, 2009).

Given WACHS dependence on nurses and the implications of proposed changes to those in the profession working in their hospitals and nursing posts, their reactions to processes of reform design and implementation appear critical. This is not simply
because nurses might be less committed, contemplate turnover or even leave their roles if they believe reforms have not been appropriately managed. More importantly is the possibility that frontline hospital nurses’ reactions matter because as practitioners both ‘closest to the ground’ and with governance schema reflecting a to see evidence-based approaches leading to higher quality healthcare, they are well-placed to assess whether needs assessments and resultant models of care being proposed are appropriate to their setting.

While Mahnken (2001) argued the Australian rural health system did not have a sound record of attending to nursing perspectives on strategic dimensions of governance, it is notable that the broad principles, values and processes signalled by WACHS (2007, 2009) in recent strategic plans were consistent with the governance schema elucidated by frontline hospital nurses’ sampled in this study. Given this, the structural barriers to concordance between organisational intentions and nursing preferences for strategic dimensions of governance practice seemed absent. Consequently, the following section focusses on the degree to which WACHS frontline hospital nurses perceived the governance practices of their local and WACHS-wide managers reflected their schema.

The relevance of the issue of consistency between practice and schematic expectations was reinforced by a Commonwealth Government announcement that governance and managerial responsibility for hospitals would be devolved to the local level and that local managers and clinicians would be expected to “drive innovation, efficiency and improvements for patients” (Department of Health and Ageing, 2010, p. 5). Moreover, the Commonwealth identified engagement with clinicians’ perspectives and incorporating them “into day to day operations” (p. 5) as a centrepiece strategy
for hospital reform across Australia. They saw this as being particularly important in rural and regional areas, where they argued clinicians believed their perspectives had tended to have been overlooked (Department of Health and Ageing, 2010). Thus, in the emerging world of healthcare governance, substantial reliance was to be placed on the capacity of the governance interface between frontline clinicians and local managers to deliver system-wide improvement.

5.4 Nurses’ perceptions of governance in WACHS

Broadly, the study’s findings regarding WACHS frontline hospital nurses’ perceptions of strategic aspects of the governance practice of their local and organisation-wide managers suggest they may be important influences on turnover intentions among this critical group of professionals. This is consistent with findings of Australian Productivity Commission’s (2005) review of the health workforce and Collyer’s (2007) study of the impact of health reforms on Australian clinicians. Different mean governance ratings at the level of both health regions and hospitals reinforce a point made by the Productivity Commission that action at these levels of the health system appears to make a difference to clinician satisfaction and retention.

As indicated previously, analyses of local manager scale data highlighted that WACHS nurses in this study assigned a mean score close to the ‘uncertain’ ranking. This resonates with Brunetto et al.’s (2010) assessment of Australian public hospital managers failing to create optimal relationships with frontline nurses and suggests a reason for this may relate to specific aspects of strategic governance practice.

With respect to the underlying causes of WACHS frontline hospital nurses’ ratings of their immediate or line managers, the literature pointed to several possible contributing factors. Paliadelis’s (2005) qualitative research into Nurse Unit Managers...
(NUM’s) in rural New South Wales suggested a lack of preparation and support for those in these roles both prior to and following appointment. This was consistent with Duffield and Franks’ (2001) criticism that the Australian health system failed to take enough responsibility for the preparation and support of clinical nurses making the transition to management. This seemed to fit with Paliadelis’s finding that all the NUM’s in her rural health service study continued to identify as nurses rather than managers and felt it was their clinical skills that had led to their initial appointment.

The current study findings also supported Paliadelis’s (2005) research findings that regional and rural nurse managers may fail to fully project themselves into their roles, leaving them less likely to accept responsibility for the full range of governance practices expected by frontline nurses. Paliadelis also indicated that once rural NUM’s were appointed to these roles, they tended to find themselves isolated from former peers. This isolation might have the reinforcing effect that feedback from frontline nurses about aspects of managers performance is not altogether forthcoming and that their concerns may go relatively unheard. This seems consistent with a context described by Stewart, Holmes, and Usher (2012) of nurses transitioning from clinical to managerial roles causing them to become ‘confused strategic actors’, struggling to balance the competing demands of organisation and profession. It seems reasonable to expect that a by-product of this confusion might be a misalignment of governance expectations of frontline hospital nurses and their managers, which was apparent in US study data reported by Gormley (2011).

Another possible explanation for WACHS frontline hospital nurses’ ratings on the local manager governance scale is that they may relate to the degree of latitude WACHS affords local-area nursing managers to make decisions and have influence. Bish et al.
(2012) referred to this dimension as the degree of ‘structural empowerment’ and their study of nurse leaders in Australia’s Victorian rural health services found levels that were only in the moderate range. Stewart et al. (2012) also suggested nursing leaders were often channelled into certain patterns of managerial behaviour by organisational constraints, and there was some evidence of this in Bish et al.’s findings in regards to nursing managers’ ratings of their resourcing and opportunity areas of capacity that enabled them to make organisational changes.

It is also possible that WACHS frontline nurses’ rankings of their local managers simply reflected their generalised disposition to judge their managers more harshly than is reasonable. Payne and Clark’s (2003) UK research with a sample drawn from both banking and public hospitals seemed to discount this likelihood, suggesting managers were generally more likely to be judged by staff on the basis of rubrics of direct experience weighed against expectation. Notwithstanding this, Rediker et al. (1993) pointed to empirical evidence suggesting strongly-held belief structures do lead to more demanding ‘compatibility test’ assessments. Thus, while frontline hospital nurses might not be disposed to negative judgements of their managers per se, it is possible that strongly-held schema of governance practice might lead them to evaluate their managers against overly-high standards of expected practice.

With respect to these differing potential explanations for nurses’ judgements of their managers’ governance practice, the role of structural empowerment within administrative regions does seem supported by the consistent pattern of nurses’ local manager and WACHS-wide governance scale scores within regions. As noted earlier, WACHS administrative regions have a high degree of delegated authority for core aspects of strategic governance (WACHS, 2007, 2009). The regions are also vast and
very geographically remote from one-another and from their central office in the State’s capital city, Perth. WACHS was also a product of a somewhat recent amalgamation of 40 disparate health services.

While the impact of these contextual factors militating against the alignment of strategic governance processes across regions might have been somewhat constrained by WACHS-wide strategic planning and policy frameworks, it seems nonetheless likely that forces like distance, established cultures and delegated authority will have been potent counterweights. Taken together, these may have ensured regional managers retained capacity to encourage and maintain a degree of distinctively local governance practice. WACHS (2009) itself seems to have interpreted this as appropriate to the development of region-specific models of healthcare provision. If so, levels of structural empowerment of nursing management in WACHS might be relatively highly region-specific. Certainly, the study data seemed to support the contention that choices of governance practice being made by WACHS regional-level management differ and that this may have had distinctive impacts on the respective practice of local-hospital managers in the different regions. This proposition resonates with Daft and Weick’s (1984) contention that similar governance practices are likely to arise because local-area managers will tend to be inculcated with region-wide perspectives offered by their senior management.

The overall pertinence of the study’s findings regarding WACHS frontline hospital nurses’ ratings of local and WACHS-wide governance practice seems reinforced by the emerging context of proposed moves by Australia’s Commonwealth Government to devolve significant healthcare governance responsibility to local areas and to give greater weight to clinicians’ strategic perspectives. As Attree (2005) has argued, such
reforms by themselves will provide no guarantee of any real change in governance. Rather, if, as appeared apparent, a centrepiece of proposed Commonwealth reforms in regional and rural contexts included the intention to more effectively engage with nurses’ perspectives in the area of strategic governance, this study suggested the reforms would require capacity for a set of specific governance practices to be developed and supported. This is a point Lega, Prenestini, and Spurgeon (2013) suggested was relevant to all healthcare systems. Their assessment was that recent decades of broader healthcare governance reform across most countries would not be sufficient to ensure sustainable systems unless they were accompanied by long-term, focussed development of management capabilities.

In highlighting specific elements of governance that WACHS frontline hospital nurses appeared to regard as important in WA’s regional and rural areas, the current study may have offered useful insights into the kinds of strategic governance frameworks Lega et al. (2013) identified as more likely to lead to successful reform because they directly reflect clinical knowledge and decision-making. This appears important given WACHS (2007, 2009) extensive health service reform agenda, where success in implementing core aspects of change in its hospitals is likely to be dependent on frontline nurses’ reactions as they are central to most aspects of service delivery. Wallace, Freeman, Latham, Walshe, and Spurgeon (2001) argued that organisational change in such contexts should not be reliant on unspecified ‘diffusion processes’ but rather, should be driven by a systematic approach that facilitates the establishment of an appropriate governance culture.
5.5 Implications for Western Australia’s Regional and Rural Health System

As Brinkerhoff and Bossert (2013) noted, despite being recognised as an important determinant of the performance of health systems, governance has remained an area in need of both conceptual development and contributions that help clarify the elements that contribute to its effectiveness. By conducting a theoretically-grounded study that explored dimensions of the ‘what’, ‘who’ and ‘how’ of governance in a regional and rural public hospital context from the perspective of one group of stakeholders, the current study attempted to shed light on these issues.

The specific implications of the current study for Western Australia’s regional and rural health system seem to emerge from the following: (1) the potential for the theoretical frames of Stewardship Governance (WHO, 2001) and Trust in Management (Clark & Payne, 2006) to inform the strategic governance practice of WACHS management; (2) scope for facilitation of the effectiveness of its change management program by accommodating nurses’ governance schema into the governance practice of WACHS management; (3) the apparent link between levels of nurse turnover intention and elements of the strategic governance practices of WACHS management.

These specific implications sit within a broader implication of the study for WACHS in that it offered a perspective of its frontline nurses’ governance schema that reflected their: concern to ensure evidence-based policy and practice; capacity to accommodate goal-directed strategic change; acceptance of the need for accountability; and focus on patient well-being and the quality of care being offered to regional and rural communities. Thus, the architecture WACHS frontline hospital nurses’ governance schema identified in the study seemed to reflect Saltman and Ferrousier-Davis’s (2000)
contention that it would derive from the sense of mission traditionally associated with the profession. The study findings also resonated with those of Collinson and Collinson (2009) in that, like them, a core group of frontline professional employees were found to prefer a blend of governance practices from what had been previously interpreted as incompatible styles of management. Thus, on the one hand, while WACHS nurses’ governance schema suggested they wanted the clarity and structure associated with traditional hierarchical leadership, they also expected two-way communication, shared manager-staff problem solving approaches and high levels of trust in and respect for clinicians.

As a matter of principle, the study lent support to the argument that WACHS can look to the nursing perspective of the strategic domain of governance as one oriented to optimising health system performance. This reinforced the potential utility of WACHS fully engaging the profession with respect to local and regional strategic decision-making on aspects of system reform. In supporting the case for engagement, the findings accord with a ‘modernising discourse on professional bureaucracies’ (Bezes et al., 2012), which stressed frontline capacity for change and the organisational merit of involving professionals in reform-related decisions.

Stewardship Theory (Davis et al., 1997) suggests that an implication for WACHS of not choosing a governance relationship with nurses that reflects this interpretation is that it runs the risk that this group of clinicians will experience feelings of both frustration and betrayal. Given this reflects what Attree (2005) indicated she found in her study of governance in NHS hospitals, these risks seem to be capable of readily translating to a frontline reality. As Attree noted, the consequences of this can include nurses experiencing dissatisfaction with their occupation, low morale and turnover, which can
all impact on the quality of care in hospitals. Such outcomes run counter to the short
and long-term strategic interests of WACHS and, seen in the context of the current
study’s findings, encourage consideration of the appropriateness of current strategic
governance practice within the organisation.

The task of examining the appropriateness of current strategic governance practice
would be likely to require extensive formative research to establish a sufficiently
detailed model to accommodate the competing demands faced by WACHS regions and
their respective community-level services. Core aspects of this work seem
appropriately located as further developments in the area of clinical governance
(Attree, 2005, Travaglia et al., 2011). As Attree has argued, locating the issue within
the framework of clinical governance seems appropriate because the ultimate
challenge for strategic governance within public healthcare organisations like WACHS
lies in ensuring quality of care and managing the factors that can affect standards of
practice.

The study findings also lent support to Lynn et al.’s (2001) assessment of governance
as a multi-level issue, such that any model would need to delineate the boundaries of
roles, responsibilities and recommended practices for local, regional and WACHS-wide
staff and management. While the current study pointed to areas of governance
practice and began the process of ‘teasing out’ respective layers of potential
responsibility, the measurement scales developed provided little more than broad
labels for areas of activity. Notwithstanding this, the elucidation of coherent
governance schema suggested that those at the coalface of nursing practice in WACHS
hospitals would be able to offer more detailed insights with regard to how the
organisation might optimise strategic governance practice at its different levels so as to facilitate locally-appropriate healthcare reform.

A further implication of the current study was an apparent need for further investment in developing and supporting WACHS management capacity for strategic aspects of governance. This seems essential if the organisation is to successfully implement its broad reform program (WACHS, 2007, 2009). A core area for this investment appears to be the local level of nurse management, who, as Currie (2006) contended, appear ideally positioned to “translate policy intention into context-sensitive practices, which solve local problems” (p. 10).

The current study findings suggest that many frontline hospital nurses in WACHS do not believe their local managers are demonstrating the kinds of strategic governance practices likely to have the translational success identified by Currie. Duffield et al. (2010) have pointed out that this may relate to both the complexity of these roles and the limited formal training and development many in these positions have had. As they noted, the provision of both formal management courses and mentorship programs might assist with these aspects. Attree (2005) also argued that simply encouraging more emphasis among nurse managers on reflecting on how they could make governance more effective was a good start. The study scales would provide a framework that WACHS managers could use to guide their reflections in this area.

In addition to a potential need for further development of local management capacity, the current study suggested this needed to be accompanied with higher levels of structural empowerment provided to local area nurse managers by regional leaders. Bish et al. (2012) argued that the structural empowerment of nurse leaders working at the local community level of Australia’s rural health services was central to both
successful reform and to nurse retention in these areas. The findings of the current study accord with these contentions and with the assessment that current levels of local area nurse management structural empowerment in regional and rural areas do not appear consistent with either goal.

Methods for achieving higher levels of structural empowerment for nurse managers in regional and rural hospitals do not appear to have been given sufficient attention in the literature. Bish et al. (2012) placed much of the onus for addressing the problem of inadequate empowerment on the managers themselves, suggesting they should further develop their knowledge and skills so as to raise their performance in the area. However, as the current study suggests, in the absence of a supportive regional hierarchy, the capacity for empowerment of local area WACHS managers may be limited. WACHS (2009) organisation-wide statements of values and principles point to a broad commitment to high levels of structural empowerment, implying the translation of intention to action in this area falters between senior levels (i.e. metropolitan-based leaders) and regional practice. These issues and their implications seem to require further investigation before any tentative suggestions could be offered regarding action.

As noted, one of the specific implications of the study for WACHS was the finding of an apparent association between elements of the strategic governance practices of its managers and levels of turnover intention among its frontline hospital nurses. While this association seemed most substantial with regard to nurse perceptions of the governance practice of local managers, it was also apparent at the WACHS-wide level.

As Buykx et al. (2010) have indicated, the turnover of health professionals in regional and rural areas is both expensive and impacts upon quality of care. Nursing turnover is,
therefore, an issue pertaining to the long-term sustainability of regional and rural health services. Given that a core purpose of WACHS (2007) governance efforts is the sustainability of its services, governance practices that impact either positively or negatively on impact nurse retention seem inextricably linked with judgements about their adequacy. Mahnken (2001) has argued, however, that consideration of frontline nursing perspectives in the domain of Australian rural health policy has been limited. The findings of the current study are consistent with this apparent failure to attend to nursing perspectives and suggest that without a recalibration of levels of concern with this issue by WACHS, a core dimension of the sustainability of their health services will remain an issue of strategic concern.

Lastly, while not a direct implication of the study, it appears appropriate to outline some potential future uses of the governance scales that arose from the research. One area of potential application is in the area of governance evaluation, within which the scales might aid with impact assessment of organisational development related to the issue (e.g. management development). The scales might also have utility as a guide to researchers interested in the issue of governance perceptions among other groups of health professionals working within WACHS.

5.3 Broader Significance
While Davis et al. (1997) contended that governance relationships are best framed on the basis of context-specific assessments, Kooiman and Jentoft (2009) have argued that instead, they tend to have been the result of “fundamental assumptions and world views” (p. 824). The current study supported Davis et al.’s contention and as Collinson and Collinson (2009) found in their study of UK Further Education employees, suggested the strategic governance perspectives of frontline staff in professionally
dominated human service agencies should not be theoretically assumed. In this case, these governance perspectives reflected frontline WACHS hospital nurses’ accommodating a nuanced blend of much of what the organisation itself was likely to see as its long-term strategic interests along with valuing processes they saw as likely to lead to the most appropriate policy translation to local contexts.

The broader significance of this is that as health and other public-sector agencies struggle with the need for reform, they should not overlook or assume the motivations or capacities of frontline staff to help management locate, support and implement appropriate solutions. Indeed, it may often be that a great deal more capacity for reform is best located in these parts of organisations, with the up-the-line role centring on longer-range strategic aspects like interpreting and articulating emerging system-wide problems and challenges and providing the information, support and skills to assist those at the frontline to interpret and respond to them in locally appropriate ways.

Such assessments accord with The King’s Fund (2012) argument that success in meeting the challenges faced by parts of the public-sector like healthcare require a rethinking of the way in which power and responsibility are configured to engage the problem solving capacity of those at all levels. As they note, such engagement must be begin by efforts to understand the perspectives of those who are to be engaged. This appears important because, as the findings of the current study suggest, while those at the frontline might have strong views about specific elements of governance and want their perspectives heard, they also expect those in leadership roles to lead rather than merely respond to the guidance of those either up- or down-the-line. It seems, therefore, that those at the frontline may often have a constrained view of the
strategic dimensions of the various governance roles of those in management vis-à-vis their own positions. The current study suggests that this includes an acceptance of the legitimacy of leaders taking account of different views and issues than those the frontline may prioritise, but that these aspects should be made transparent and be located within processes consistent with underlying values related to serving the collective good.

In this sense, it may be that those at the frontline envision the governance role of management as a different but consistent formulation of the challenges they confront in their own roles. For example, nurses at the frontline face constraints such as the circumstances of individual patients, the resources and skills that are available, the patients’ expressed interests, family preferences, the views of other clinicians and so on. In other words, they face the challenge of charting often difficult courses in which adherence to a defined sequences of evidence- and values-based processes are critical but come without an expectation that their own views of what is correct of best will prevail. Such a commitment to process may also apply at the frontline of other professionally dominated parts of the public-sector like education and suggests that professions like nursing and teaching that must constantly deal with issues of compromise in their roles are well placed to work within high-involvement governance frameworks facilitated by management.

In light of this, a broader implication of the study results relates to the issue of the requirements of those in different public-sector leadership roles. As Collinson and Collinson (2009) argued, perspectives in this area may have been too limited, constrained by the limits of fixed theoretical perspectives. Crevani et al. (2010) contended there was a need for more emphasis to be given to the manager-staff
interaction styles likely to best suit different settings, with a view to leadership being interpreted more as a product of systems of interaction rather than qualities of distinct individuals. The current study seemed to support this proposition, pointing to WACHS nurses having a distinct view about how managers might shape and coordinate systems of interaction with them in ways that resonated with their views of high quality nursing processes.

In light of the previous discussion, it is apposite to briefly canvas the question of evidence suggesting greater managerial responsiveness to frontline expectations of strategic aspects of governance has system-level benefits. While tentative, two examples suggest that are such benefits from greater investment in aligning governance processes with frontline expectations. The first is the Finnish public education sector, which has not pursued “conventional market-oriented reform strategies of many other countries” (Sahlberg, 2007, p. 147), but rather, placed emphasis on the capacity of coal-face teachers (and students) to innovate via new methods “while respecting schools’ pedagogic legacies” (Sahlberg, 2007, p. 152). According to Sahlberg, the shift occurred gradually over the past 30 years, during which the country has risen to world leadership in student performance (Hargreaves, Halasz, & Pont, 2007) whilst also maintaining mid-range per-student expenditure relative to other OECD countries.

A second example is the Danish public health system, which has had relative success in controlling cost growth, improving productivity, and maintaining internationally high levels of satisfaction with services (Pedersen, Christiansen & Bech, 2005). A distinguishing feature of Danish health reforms has been that from the outset in the mid-1980s, they included high levels of frontline medical and nursing involvement,
leading Kirkpatrick, Dent, Jespersen, and Neogy (2007) to characterise the reform process as one of “co evolution between governments, organisations and clinical professions” (p. 20). Thus, while tentative, both the Finnish and Danish examples suggest that taking more account of frontline perspectives on the strategic dimension of governance can lead to significant system-level benefits.

Seen through the lens of Crevani et al.’s (2010) perspective of leadership, therefore, the current study’s findings suggest management training in public-sector organisations might fruitfully take closer account of the frameworks of practice and related values associated with those they are expected to work with. The advantages of this area of knowledge seem to have been suggested by the superior performance of clinician managers over their counterparts who lack a clinical background (Lega et al., 2013). The current study’s findings may also have implications for management development at higher organisational levels, where there may be a broader need to take account of a span of professional perspectives. If so, management training to establish awareness of these differences and their implications for governance would appear important to role preparation for senior managers in those parts of the public-sector where substantial professional workforce heterogeneity is found.

A related implication of the study relates to the need to clarify the governance perspectives of frontline professional staff on the basis of context-specific data. In the current study, theoretical frames, expert interviews, and surveys of frontline staff were used to develop measures reflecting WACHS hospital regional and nurses’ shared governance schema. All aspects seemed necessary to adequately locating nurses’ perceptions across geographic and organisational space, and with respect to the underlying values that informed their position. Consequently, it seems that if other
public sector agencies were interested in adequately establishing the governance perspectives of their frontline staff, similarly designed processes would be likely to be required.

Lastly, a part of the broader significance of the study is also that it cast further light on an apparent relationship between aspects of governance and employee turnover intentions. This appeared especially important in the context of an ageing workforce where increasing numbers of employees were likely to have more choice about whether to stay or leave their jobs because of relative financial security. Ageing is a particular concern for the WA public-sector as it has the oldest workforce of any Australian jurisdiction (Deloitte, 2010). Without higher rates of retention in the Australian workforce, future labour supply problems are anticipated (Graham & Duffield, 2010) and the current study offered an account of an area of action that human service agencies might consider as part of an overall strategy to ensure they staff were engaged and committed to their jobs.

5.4 Limitations

A number of limitations of the study are acknowledged. At the outset, the orientation of the study to regional and rural public hospitals and health professionals meant caution was required in drawing implications for other organisational contexts. In particular, the regional and rural focus of the research meant that at least some aspects of the framing of questions and the specific nature of some findings were specific to this environment. A clear example of this was aspects of the WACHS-wide governance scale pertaining to the representation of rural interests. Consequently, it was inevitable that ascertainment of the organisation-wide perspective of management would have been somewhat different for WACHS nurses than their
counterparts working in metropolitan hospitals. In contrast, rural-metropolitan differences in the domain reflected in the local manager scale, however, are less clear-cut, with the potential that there is high-level equivalence.

The orientation of the study to nurses working in the public acute sector and to Western Australia regional and small rural hospitals/nursing posts was a further limitation. It is possible that these work environments either attract particular types of nurses, or that they foster within them a professional motivation different than that of their counterparts elsewhere in the public health system. Consequently, the pertinence of governance based on the theoretical frames of the current study to contexts beyond these areas should be demonstrated before firmer conclusions are drawn about nurse preferences more generally.

Another limitation of the study was its professional focus. While nurses were easily the most numerous of the professions working in WACHS public hospitals, the governance preferences of others such as allied health staff and doctors were also relevant to choices of governance practice by managers across the organisation. A feature related to the professional focus of the study was that most WACHS nurses were female. While other health professions were also female dominated (Productivity Commission, 2005), few were to the extent found in nursing. Consequently, if governance preferences were associated with gender, this would have implications for patterns across the different professions.

A feature of the study was the use of turnover intention as a measure reflecting ‘compatibility testing’. While turnover intention had been strongly associated with subsequent turnover and had been described as a safe substitute for turnover behaviour (Hwang & Chang, 2008) and the instrument used reflected Morrell et al.’s
(2008) work on image violation and turnover among NHS nurses, the relevance of the measure used to WACHS network of regional and rural hospitals was less clear. More broadly, appraising the compatibility of governance against nurses’ turnover intentions is only one aspect of evaluating its adequacy. Measuring other outcomes so as to interpret whether things like patient safety and hospital cost efficiency were also higher under conditions of higher schema compatibility would have offered potential to extend the assessment of the relevance of frontline hospital nurses’ governance schema to WACHS.

The cross-sectional nature of the study, with concurrent measurement of governance and turnover intention also limited the capacity for robust conclusions to be made about the relationship between the two. As Bonita, Beaglehole, and Kjellstrom (2006) have noted, the issue of confounding is a risk in such study designs. Consequently, the association between governance and turnover intention may have been an artefact of unmeasured confounding variable(s). While the problem of confounding can be addressed via longitudinal study designs in which the dependent variable(s) is monitored across different exposures to the independent variable over time, the expense and time involved in this type of research meant that it was out of scope.

A further limitation of the research was the survey response rates, which were 44% and 45% in the developmental and main studies respectively. An advantage of higher response rates is that they reduce the likelihood of non-respondent bias or the chances that those who respond are not representative of the population being sampled (Asch, Jedrzewski, & Christakis, 1997). Attempts to secure high response rates in the study surveys included the use of persuasive letters (Jackson & Furnham, 2000; Maylor & Blackmon, 2005) assurances of anonymity, attention to aesthetic and
management aspects (Dillman, 2007; Mangione, 1995) and the use of reminder letters with the offer of internet completion for those who had discarded questionnaires. Further follow-ups would have been desirable, but were considered impractical in light of the timing of both surveys late in the year, immediately before Christmas and the January-February holiday period.

There are many factors that may have led WACHS nurses not to complete and return questionnaires. These include questionnaire length, a lack of interest in the topic, and the time of year questionnaires was sent. There was also an issue with incorrect home address details in the databases provided by WACHS of unknown scope, but which seemed extensive especially with respect to nurses in the more remote regions, which may have explained some of the age and nursing level bias in the main study sample.

While the response rates achieved compromised capacity for claims to be made about the governance schema of all frontline nurses working in WACHS hospitals, the response fraction achieved in the main study represented participation by at least one-in-three of all Level One and Two nurses working in the organisation’s hospitals at the time. This was pertinent given the research was predominantly oriented to exploring the relevance of theoretical frames to nurses’ governance schema rather than being focussed on accurately estimating a specific population parameters. Nevertheless, responders did differ significantly on age and level parameters to those in the overall sample, suggesting that those with more nursing experience were more likely to have participated. Further, response fractions in the remoter regions were lower than those achieved in their counterparts. Consequently, the extent to which the governance schema and related turnover intention data applied to younger nurses and those in more remote areas remains an area requiring further investigation.
Another limitation of the study related to the level of attention given to the potential for common method variance in the survey instrument. As Straub et al. (2004) noted, factorial validity addresses convergent and discriminant validity, but didn’t rule out the possibility of common methods variance, which required additional steps. In the context of the current study, these might have included collecting information via direct observation of managerial governance practices. While some steps were taken to address common methods variance, they were limited and reflected the study goal, which was to contribute to thinking and further research rather than definitively establish the construct validity of measures of managerial governance.

Given these limitations, further research is required to extend understanding of the governance preferences of WACHS frontline hospital nurses’ and to obtain more evidence as to the merits of the general claim that the theoretical frames of Stewardship Governance and Trust in Management have relevance for strategic aspects of governance practice within the organisation.

5.5 Future Research
The results of the current study encouraged consideration of a range further research projects. Among these were to extend the current investigation to include the governance perspectives and preferences of metropolitan nurses and of other professions. There might also be value in assessing whether particular nursing specialisms that show different patterns of concern with the strategic governance practices of managers. Such research would assess the extent to which the governance preferences of WACHI regional and rural hospital nurses apply to other groups and
may also assist with the design of longitudinal research into the relationship between
governance and public hospital performance.

Another potentially fruitful area of investigation would be to examine the consistency
between nurses’ and managers’ perspectives of governance practice. There are a
range of potential alignments, and these would be useful to explore. For instance,
hospital managers might variously avoid making an attempt to align their management
practice with nurse preferences, consider it important and strive for it but fail, or make
attempts but misread nurses’ expectations. Research into this area appears important
because it offers potentially useful diagnostic information about what might be done
to better align the governance practices of hospital managers with nurses’
preferences.

Also relevant to the issue of investigating the benefits of improved alignment of
governance with nurses’ preferences would be an exploration of the actual
governance practices of managers in WACHS regions. Among other things, such
research might offer the potential for subsequent intervention studies into the impact
changes to governance practice have on nurse turnover intention and other indicators
of hospital performance. Research within this domain might also include studies
comparing nurse perceptions of governance practice across geographically and
demographically similar regions that have different rates of nurse turnover. This would
help to further clarify the relevance of strategic aspects of governance practice to
public hospital performance and may aid with further development of governance
measures.

Ultimately, the merits of any propositions about the relevance of WACHS hospital
nurses’ expectations and perceptions of governance to the organisation need to be
tested via longitudinal research controlling for potential confounders. It is inevitable that such research will become more important given that the attitudes of health professionals to their workplace environments will increasingly determine the sustainability of health services (Manahan & Lavoie, 2008). Such research will make the greatest contribution if it offers the potential to move WACHS to a normative position on managerial governance that is capable of accommodating the increasing complexity and turbulence it faces (Mickan & Boyce, 2006).

Beyond the immediate issue of governance, an area of potentially productive research is further assessment of Roodt’s Turnover Intention Scale. In particular, examination of the specific characteristics of scale score translation to actual turnover would be valuable as a precursor to assessing its value as a human resource monitoring and evaluation instrument. Its potential applications in this area include monitoring the risk of employee turnover in difficult to staff areas and in evaluating initiatives to retain staff in these locations.

5.6 Conclusion

This thesis provided new information regarding frontline WACHS hospital nurses’ schema of local and organisation wide governance and its links to their turnover intentions. It highlighted the potential relevance of the theoretical frames of Stewardship Governance (WHO, 2000) and Trust in Management (Clark & Payne, 2006) to managers of this organisation’s network of regional and rural hospitals.

Along with this, the study provided new measures related to governance practice and tested an existing measure of turnover intention, thereby offering new avenues to pursue regarding studies in both areas. Overall, the study achieved its broader goal of providing a foundation for further investigation of the relevance of schematic
perspectives frontline hospital nurses have of strategic aspects of governance practice in their organisations and the degree to which this is a matter of professional and organisational significance.
References


Brown, P. R., & Calnan, M. (2011) The civilizing process of trust: Developing quality mechanisms which are local, professional-led and thus legitimate. *Social Policy & Administration, 45*(1), 19-34.


Fulop, L. (2010). Exemplary leadership, the clinician manager and a thing called ‘hybridity’. Paper presented at the 7th Biennial International Conference in
Organisational Behaviour in Health Care (OBHC). Retrieved from:

http://www.download.bham.ac.uk/hsmc/liz-fulop.pdf


http://journals.lww.com/naqjournal/Fulltext/2002/04000/Developing_Staff_Nurse_Shared_Leadership_Behavior.8.aspx


Hegney, D., & McCarthy, A. (2000). Job satisfaction and nurses in rural Australia. *Journal of Nursing Administration, 30*(7/8), 347. Retrieved from: [http://ovidsp.tx.ovid.com/sp-3.5.1a/ovidweb.cgi?QS2=434f4e1a73d37e8c676ec2d6238753f27d81dec49ae89cc9bfca27db03e84cd17f621c053a35111d384f8f418e06f7aa4a0ce5cae2dc253cedde902dff0c86eb886c25a5c5c6d5d71b80f3e7de1784203149229464b9aab5]


*Hospital and Health Services Act 1927 (WA).*


Van Bogaert, P., Meulemans, H., Clarke, S., Vermeyen, K., & Van de Heyning, P. (2009). Hospital nurse practice environment, burnout, job outcomes and quality of


<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>AERA</td>
<td>American Educational Research Association</td>
</tr>
<tr>
<td>AIHW</td>
<td>Australian Institute for Health and Welfare</td>
</tr>
<tr>
<td>ANOVA</td>
<td>analyses of variance</td>
</tr>
<tr>
<td>APS</td>
<td>Australian Public Service</td>
</tr>
<tr>
<td>CFA</td>
<td>confirmatory factor analysis</td>
</tr>
<tr>
<td>CGCQ</td>
<td>clinical governance climate questionnaire</td>
</tr>
<tr>
<td>CI</td>
<td>confidence interval</td>
</tr>
<tr>
<td>CJNR</td>
<td>Canadian Journal of Nursing Research</td>
</tr>
<tr>
<td>ECU</td>
<td>Edith Cowan University</td>
</tr>
<tr>
<td>EFA</td>
<td>exploratory factor analysis</td>
</tr>
<tr>
<td>EN</td>
<td>enrolled nurse</td>
</tr>
<tr>
<td>KMO</td>
<td>Kaiser-Meyer-Olkin</td>
</tr>
<tr>
<td>NHS</td>
<td>National Health Service</td>
</tr>
<tr>
<td>NPM</td>
<td>New Public Management</td>
</tr>
<tr>
<td>PCA</td>
<td>principal components analysis</td>
</tr>
<tr>
<td>POS</td>
<td>perceived organisational support</td>
</tr>
<tr>
<td>PSS</td>
<td>perceived supervisor support</td>
</tr>
<tr>
<td>RN</td>
<td>registered nurse</td>
</tr>
<tr>
<td>VIF</td>
<td>variance inflation factor</td>
</tr>
<tr>
<td>WA</td>
<td>Western Australia</td>
</tr>
<tr>
<td>WACHS</td>
<td>Western Australian Country Health Service</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
</tbody>
</table>
APPENDICES

APPENDIX 1: Stewardship Governance and Trust in Management Dimensions

1. Travis et al.'s (2003) interpretation of health system Stewardship Governance

   a) Generation of intelligence about:

      ii. The political, economic, and institutional context.
      iii. Possible policy options, based on national and international evidence and experience.

   b) Formulation of a strategic policy framework that:

      i. Articulates health system goals and objectives.
      ii. Clearly defines roles of different actors in financing, provision, resource generation, and stewardship functions.
      iii. Identifies policy instruments and institutional arrangements required to achieve improvements in financing, provision, resource generation, stewardship, and thus health system goals.
      iv. Outlines strategies for making required changes.
      v. Guides prioritization of health expenditures, based on realistic resource and needs assessment.
      vi. Outlines arrangements to monitor performance and effects of change.

   c) Ensuring tools for implementation: powers, incentives, and sanctions so that:

      i. Stewards have powers commensurate with their responsibilities, and these powers are used properly.
      ii. Stewards set and ensure enforcement of fair rules, incentives, and sanctions that are in line with the health system goals, for actors involved in provision, financing, and resource generation.
      iii. Stewards ensure that the rights and responsibilities of users/consumers are defined and that mechanisms to protect consumers are exercised fairly.

   d) Building coalitions/building partnerships where:

      i. Types of partnerships vary along a spectrum of formality from loose affiliations to legally binding partnerships.
      ii. The parties involved in partnerships are determined by the purpose of the relationship.
      iii. The purposes for which partnerships need to be established include specific one-off events or issues, regular and repeated tasks, and ongoing activities.

   e) Ensuring a fit between policy objectives and organizational structure and culture so that:

      i. Organizational arrangements minimize overlap, undesirable duplication, or fragmentation.
      ii. Intended separation or integration of functions and responsibilities is reflected in organizational arrangements.
      iii. Clear and operational lines of communication and reporting exist.
      iv. There is policy stability and institutional memory, for example, through staff continuity and records.
v. There is a supportive management culture: fostering and communicating successful innovation and experiment, reducing patronage, and rewarding good performance.

vi. There is a high quality of bureaucracy—judged by the amount of unnecessary “red tape,” institutional rigidity, irregular payment, and the competence of civil servants.

vii. Resources are available to identify and build stewardship skills and management capacities to carry out responsibilities.

f) Ensuring accountability

   i. health system actors are held accountable to stewards as proxies or representatives of the population
   ii. stewards are themselves held accountable to the population for which they are responsible.

2. Clark and Payne’s (2003) dimensions of Trust in Management

   a. Openness- mental accessibility and availability and a willingness to share ideas and information freely and accurately
   b. Integrity- discreteness and promise fulfillment
   c. Ability- competence and consistency
   d. Loyalty and fairness- benevolent motives, equal treatment
APPENDIX 2: Key Informant Discussion Points

Introduction

Research suggests that all human behaviour in an organisation is caused by one or a combination of three things:

- individual factors, such as personality and values
- group factors, such as team dynamics; and
- formal organisational factors like policies, structures and so on

This study is investigating how clinicians tend to interact with health organisations, most particularly hospitals through management. The focus of the study is on system-wide issues and trends in the clinician-organisation relationship rather than the ways individual managers perform or why individual clinicians respond differently to the same circumstances. An example of a system-wide issue that relates to the clinician-organisation relationship would be the way public hospital managers as a group tend to make decisions that impact on clinical services. The organisation’s managers as a whole might tend to avoid such decisions, leaving it all to clinicians to work out and live with. Alternatively, they might make all decisions without clinician input, or perhaps they might make all decisions that impact on clinical services in partnership with clinicians. Obviously, the real-life scenarios are a lot more complicated than that, but you I am sure you get the general idea.

The aspects of the clinician-health organisation relationship I want to focus on are clinician perspectives of things like their levels of trust of the motives of public health organisations, beliefs about the willingness of public health organisations to
collaborate with them to solve challenges, and whether they have a sense of having common or shared purpose with public health organisations in the desire to achieve goals and solve problems.

Ultimately, through this study, I hope to explore whether there is a particular philosophical and values base that should drive the organisation-clinician relationship so that the best possible outcomes can be achieved by both public health organisations (say, in terms of performance or motivated staff) and for clinicians. I also want to know whether we are on the right track with this issue in the WA public health system.

1. Do you have any questions before we start? Okay, can we start by talking about your own background in the health system and your clinical training and experience?

2. There is a lot of talk in government services about effectiveness. When you think about effectiveness and public hospitals, how do you think this should be judged?

3. Do you think managers and clinicians tend to have the same views about public hospital effectiveness?

4. Beyond the issue of money, can you say what things come to mind as the major determinants of public hospital effectiveness?

5. I’d like you to reflect on your views of the characteristics of effective public hospitals. In these hospitals, what attributes and practices would characterise the organisation’s relationship with its clinicians?
6. Still thinking about your views about public hospital effectiveness, what do you consider to be the best configuration of management and clinical roles in organisational governance?

7. Some people believe that organisational perspectives of service delivery and those usually present among clinicians will always be different, perhaps even conflicting or incompatible while others have a different view. Do you think it is possible that the goals and values of public health organisations and the clinicians that work in them can be aligned? If yes, can you describe some of the ways in which this can be achieved?

8. From your experience of public hospitals in WA, are the goals and values that are driving the way they are managed increasingly or decreasingly like those that drive clinicians? (If says: closer or further apart, ask:) Can you highlight any practices or directions being taken by these organisations that you think are causing this?

9. Leaving individual issues of personality and workplace conditions aside, in your experience, what approaches to public hospital management get the best out of clinicians within your profession?

10. Thinking broadly about the relationship between public hospitals and the clinicians that work in them, are there any specific practices that you think highlight that the organisation understands and respects the clinician’s view of the world and the contribution they are trying to make?
APPENDIX 3: Modifications to Roodt’s Turnover Measure

1. All rating scales changed from 5-point to 7-point. All rating scales had a mid-point label added (e.g. ‘sometimes’). ‘All the time’ used in place of ‘Always’ as an end-point label. ‘Not at all’ used in place of ‘To no extent’.

2. All other modifications made are indicated in parentheses in the following. Words within the parentheses reflect the original Roodt text and those in bold indicate changes.

**DURING THE PAST 9 MONTHS.....**

<table>
<thead>
<tr>
<th>Question</th>
<th>Rating Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often did you consider [have you considered] leaving your job?</td>
<td>1=Never, 2=Sometimes, 3=All the time</td>
</tr>
<tr>
<td>How frequently did [do] you scan newspapers, the internet or other employment listings in search of alternative job opportunities?</td>
<td>1=Never, 2=Sometimes, 3=All the time</td>
</tr>
<tr>
<td>How much did your current job satisfy [To what extend is your current job satisfying] your personal needs?</td>
<td>1=Not at all, 2=Sometimes, 3=To a very large extent</td>
</tr>
<tr>
<td>How often did you feel frustrated at work because you were not being [are you frustrated when not] given the opportunity to achieve your personal work-related goals?</td>
<td>1=Never, 2=Sometimes, 3=All the time</td>
</tr>
<tr>
<td>How often were [are] your personal values compromised at work [compromised]?</td>
<td>1=Never, 2=Sometimes, 3=All the time</td>
</tr>
<tr>
<td>How often did [do] you dream about getting another job that [will] better suited [suit] your personal needs?</td>
<td>1=Never, 2=Sometimes, 3=All the time</td>
</tr>
<tr>
<td>How likely was it that [are] you would have accepted [accept] another job with the same conditions if it had been [at the same compensation level should it be] offered to you?</td>
<td>1=Highly unlikely, 2=Somewhat likely, 3=Highly likely</td>
</tr>
<tr>
<td>How often did [do] you look forward to another day at work?</td>
<td>1=Never, 2=Sometimes, 3=All the time</td>
</tr>
<tr>
<td>How often did [do] you think about starting your own business?</td>
<td>1=Never, 2=Sometimes, 3=All the time</td>
</tr>
<tr>
<td>How often did you feel that it was only your personal responsibilities that prevented [To what extent do other responsibilities prevent] you from quitting your job?</td>
<td>1=Never, 2=Sometimes, 3=All the time</td>
</tr>
<tr>
<td>How often did you feel that it was only the [To what extent do the] benefits associated with your current job that prevented [prevent] you from quitting this [your] job?</td>
<td>1=Never, 2=Sometimes, 3=All the time</td>
</tr>
<tr>
<td>How often [frequently] were you emotionally agitated when you arrived [arriving] home from [after] work?</td>
<td>1=Never, 2=Sometimes, 3=All the time</td>
</tr>
<tr>
<td>How much did [To what extent does] your current job negatively affect [have a negative effect on] your personal well-being?</td>
<td>1=Not at all, 2=Sometimes, 3=To a very large extent</td>
</tr>
<tr>
<td>How much did a [To what extent does the] “fear of the unknown” prevent you from quitting your current job?</td>
<td>1=Not at all, 2=Sometimes, 3=To a very large extent</td>
</tr>
</tbody>
</table>

310
APPENDIX 4: Item-Alignment with Stewardship and Trust in Management

**Initial Questionnaire Part A Items Reflecting Stewardship and Trust Domains**

<table>
<thead>
<tr>
<th>Domain</th>
<th>Part A Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generating Intelligence</td>
<td>1) Ensure clinical perspectives are heard and considered in decision making</td>
</tr>
<tr>
<td></td>
<td>2) Encourage research within the hospital</td>
</tr>
<tr>
<td></td>
<td>3) Strive to reach a shared understanding about issues affecting the hospital with staff</td>
</tr>
<tr>
<td>Formulating Policy Direction</td>
<td>4) Use evidence as the basis for decision making</td>
</tr>
<tr>
<td></td>
<td>5) Use a variety of forms of “intelligence gathering” to help them make decisions</td>
</tr>
<tr>
<td></td>
<td>6) Have a clear vision of how the hospital should be in the future</td>
</tr>
<tr>
<td></td>
<td>7) Set goals for our service</td>
</tr>
<tr>
<td></td>
<td>8) Have a clear agenda for service improvement within the hospital</td>
</tr>
<tr>
<td>Ensuring Tools for Implementation</td>
<td>9) Provide clinical staff with a safe working environment</td>
</tr>
<tr>
<td></td>
<td>10) Provide the resources clinical staff need to do their jobs</td>
</tr>
<tr>
<td></td>
<td>11) Ensure the right staff mix as consistently as possible</td>
</tr>
<tr>
<td></td>
<td>12) Ensure clinical staffing for the service is adequate or explains the problems that prevent this</td>
</tr>
<tr>
<td></td>
<td>13) Ensure clinical staff have access to current equipment</td>
</tr>
<tr>
<td></td>
<td>14) Ensure efficient systems are in place in the hospital</td>
</tr>
<tr>
<td>Building Coalitions and Partnerships</td>
<td>15) Foster effective relationships with other local services</td>
</tr>
<tr>
<td></td>
<td>16) Have good connections with the local community</td>
</tr>
<tr>
<td></td>
<td>17) Have sound links with other local services</td>
</tr>
<tr>
<td></td>
<td>18) Understand the local community</td>
</tr>
<tr>
<td></td>
<td>19) Are willing to go on a service improvement journey with their clinical staff</td>
</tr>
<tr>
<td></td>
<td>20) Ensure there is a sense of team among all the staff</td>
</tr>
<tr>
<td></td>
<td>21) Encourage ownership of the service among clinical staff</td>
</tr>
<tr>
<td></td>
<td>22) Provide forums for clinical staff to talk to managers</td>
</tr>
<tr>
<td>Ensuring a fit between Policy Objectives and the Structure and Culture of the Organisation</td>
<td>23) Balance clinical and organisational interests effectively</td>
</tr>
<tr>
<td></td>
<td>24) Ensure that the systems that support the running of the hospital have been designed with clinical staff</td>
</tr>
<tr>
<td>Ensuring Accountability</td>
<td>25) Encourage pride in the workplace</td>
</tr>
<tr>
<td></td>
<td>26) Ensure effective evaluation of hospital activities</td>
</tr>
<tr>
<td></td>
<td>27) Ensure the hospital is accountable for the care it delivers</td>
</tr>
<tr>
<td></td>
<td>28) Promote quality within the hospital</td>
</tr>
<tr>
<td>Integrity</td>
<td>29) Deliver on their promises</td>
</tr>
<tr>
<td></td>
<td>30) Explain their reasons if they don’t act on an issue of concern to clinical staff</td>
</tr>
<tr>
<td></td>
<td>31) Are honest about the potential for service improvements</td>
</tr>
<tr>
<td></td>
<td>32) Are committed to high standards of patient care</td>
</tr>
<tr>
<td></td>
<td>33) Behave in ways that set a good example for staff</td>
</tr>
<tr>
<td></td>
<td>34) Act on suggestions made by staff</td>
</tr>
<tr>
<td></td>
<td>35) Respond to clinical concerns</td>
</tr>
<tr>
<td></td>
<td>36) Consider the impact of their decisions on patients</td>
</tr>
<tr>
<td></td>
<td>37) Are enthusiastic about the hospital</td>
</tr>
<tr>
<td></td>
<td>38) Have similar values about health care delivery</td>
</tr>
<tr>
<td></td>
<td>39) Give consistent messages to staff</td>
</tr>
<tr>
<td>Domain</td>
<td>Part A Items</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Ability</strong></td>
<td>40) Understand how things work in the clinical world</td>
</tr>
<tr>
<td></td>
<td>41) Ensure clinical staff remain challenged but not “out of their depth”</td>
</tr>
<tr>
<td></td>
<td>42) Understand the clinical implications of their decisions</td>
</tr>
<tr>
<td></td>
<td>43) Understand the business of health care delivery</td>
</tr>
<tr>
<td></td>
<td>44) Are realistic about the potential for change in the hospital</td>
</tr>
<tr>
<td></td>
<td>45) Have clear management style</td>
</tr>
<tr>
<td></td>
<td>46) Are clear about their expectations of staff</td>
</tr>
<tr>
<td></td>
<td>47) Are clear and articulate</td>
</tr>
<tr>
<td></td>
<td>48) Represent the staff effectively</td>
</tr>
<tr>
<td></td>
<td>49) Represent the interests of the local community effectively</td>
</tr>
<tr>
<td><strong>Benevolence</strong></td>
<td>50) Make requests for information from clinical staff respectfully</td>
</tr>
<tr>
<td></td>
<td>51) Ensure there is no bullying in the workplace</td>
</tr>
<tr>
<td></td>
<td>52) Ensure fairness in the workplace</td>
</tr>
<tr>
<td></td>
<td>53) Respect the knowledge of clinical staff in the hospital</td>
</tr>
<tr>
<td></td>
<td>54) Understand and appreciate the clinician’s role</td>
</tr>
<tr>
<td></td>
<td>55) See clinical staff as the core of the service</td>
</tr>
<tr>
<td></td>
<td>56) Are committed to the professional development of their clinical staff</td>
</tr>
<tr>
<td></td>
<td>57) Publicly support their clinical staff</td>
</tr>
<tr>
<td></td>
<td>58) Ensure the opinions of clinical staff are valued</td>
</tr>
<tr>
<td></td>
<td>59) Ensure clinical staff feel clinically safe and supported</td>
</tr>
<tr>
<td></td>
<td>60) Ensure clinical staff can get help if they need it</td>
</tr>
<tr>
<td></td>
<td>61) Ensure clinical staff in the hospital know that management will support them when the chips are down</td>
</tr>
<tr>
<td></td>
<td>62) Recognise that clinical staff have a life outside the hospital</td>
</tr>
<tr>
<td><strong>Openness</strong></td>
<td>63) Ensure that clinical staff feel safe making constructive criticisms about aspects of the running of the hospital</td>
</tr>
<tr>
<td></td>
<td>64) Empower clinical staff to make decisions</td>
</tr>
<tr>
<td></td>
<td>65) Share control over the organisation and its resources with clinical staff</td>
</tr>
<tr>
<td></td>
<td>66) Regularly meet with all staff in the hospital</td>
</tr>
<tr>
<td></td>
<td>67) Trust the clinical staff that work in the hospital</td>
</tr>
<tr>
<td></td>
<td>68) Are engaged with their staff</td>
</tr>
<tr>
<td></td>
<td>69) Ensure clinical staff feel part of the decision making process in the hospital</td>
</tr>
<tr>
<td></td>
<td>70) Understand their staff as individuals</td>
</tr>
<tr>
<td></td>
<td>71) Share information and data about the hospital with clinical staff</td>
</tr>
<tr>
<td></td>
<td>72) Share problems about the running of the hospital with clinical staff</td>
</tr>
<tr>
<td></td>
<td>73) Encourage staff to participate in decision making in the hospital</td>
</tr>
<tr>
<td></td>
<td>74) Ensure decision making is open and transparent</td>
</tr>
<tr>
<td></td>
<td>75) Listen to and work with clinical staff to solve problems</td>
</tr>
<tr>
<td></td>
<td>76) Have an open door policy</td>
</tr>
<tr>
<td></td>
<td>77) Involve all levels of the organisation in decision making processes</td>
</tr>
<tr>
<td></td>
<td>78) Encourage open and frank communication between staff and managers</td>
</tr>
<tr>
<td></td>
<td>79) Are capable of compromise</td>
</tr>
<tr>
<td>Domain</td>
<td>Part A Items</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Generating Intelligence                    | 1) Ensure clinical perspectives are considered in decision making  
2) Understand country communities in WA  
3) Encourage research in WACHS hospitals |
| Formulating Policy Direction               | 4) Have a clear vision of how the country health services should be in the future  
5) Have a clear agenda for service improvement within WA country health services  
6) Set goals for health care delivery in country areas of the State  
7) Use data and evidence as a basis for decision making |
| Ensuring Tools for Implementation          | 8) Ensure efficient systems are in place to support WACHS hospitals  
9) Provide hospitals with the resources they need to deliver a high-quality service |
| Building Coalitions and Partnerships       | 10) Provide forums for clinical staff to talk to WACHS managers  |
| Ensuring a fit between Policy Objectives and the Structure and Culture of the Organisation | 11) Promote quality in WACHS hospitals  
12) Ensure effective monitoring and review of WACHS activities occurs  
13) Ensure WACHS is accountable for the care it delivers |
| Ensuring Accountability                    | 14) Deliver on their promises  
15) Are committed to high standards of patient care  
16) Respond to clinical concerns  
17) Consider the impact of their decisions on patients  
18) Are more focused on delivering safe services than on balancing their budget  
19) Give consistent messages to staff working in country areas of the State |
| Integrity                                  | 20) Understand the clinical implications of their decisions  
21) Represent staff working in country health services across the State effectively  
22) Understand the business of health care delivery  
23) Are realistic about the potential for change in the WACHS hospitals  
24) Represent the interests of country communities across WA effectively |
| Ability                                    | 25) Understand and appreciate the clinician’s role  
26) Are capable of compromise  
27) See clinical staff as the core of country health services  
28) Are committed to the professional development of clinical staff working in rural and remote areas of the State |
| Benevolence                                | 29) Ensure decision making is open and transparent  
30) Listen to and work with clinical staff to solve problems |
Dear

Research into the impact of hospital management on nurses’ turnover intentions

I am writing to ask for your help with a pilot study of a questionnaire for WACHS nurses. I have obtained your address from WACHS after receiving formal ethics approval from the WACHS Research Ethics Committee for the study. Questionnaires are only being sent to a small number of nurses, so your participation will be very valuable in guiding future research.

I am sure you are aware that there is a crisis in nursing retention in Australia. No doubt you will agree that this is something we should all be concerned about, particularly given that nurses comprise 2 in 3 clinicians working in our hospitals.

While the reasons for the crisis are varied, I am conducting research into how nurses are managed and whether this makes a difference to their retention. In particular, my research will help to identify specific things managers can do to increase the likelihood that nurses will remain in the profession. That is why I have written to ask for your help.

The enclosed questionnaire asks about management practices some people have suggested might make a difference to the retention of WACHS hospital nurses. The list of practices is extensive, however, I hope you agree that for such an important issue, the time you spend outlining your views about management will be a worthwhile contribution.

The questionnaire should take about 20 minutes to complete and participation is entirely voluntary. Your responses are anonymous and no individual data from pilot study will be given to WACHS. If any questions aren’t clear to you, please feel free to indicate this by writing on your copy of the questionnaire.

The research is being completed as part of a doctoral study at Edith Cowan University. Completed questionnaires will be securely stored at ECU’s Joondalup campus and will not be accessible to anyone other than myself.

As I indicated at the beginning of this letter, your participation in this research will help improve understanding of how managers should work with nurses. If you have any complaints or concerns about the way in which his research is being conducted, I encourage you to contact the Chairman of the Research Ethics Committee on 9223 8575.

In closing, I know this is a busy time of year, so I would respectfully ask you to take the time to complete the questionnaire now and to return it to me before the Christmas rush is upon us. I have enclosed a coffee bag to help make the task of completing the survey a little more relaxing and enjoyable.

Yours sincerely

Lecturer and PhD Candidate
Edith Cowan University
Email: k.clark@ecu.edu.au
Ph: 6304 5159
APPENDIX 6: INITIAL STUDY QUESTIONNAIRE

Survey Of

Nurses Working In WA Country Health Services

On

Attitudes to Hospital Management and Turnover Intentions

2008

Please complete and return in the reply paid envelope provided
### Part A

This section is about your impressions of management in your own hospital, MPS or nursing post. As you read each statement, think about how you feel about managers in general that work in your hospital, MPS or nursing post (this includes nursing and non-nursing managers). Then, rate how strongly you agree or disagree with each statement by circling the number on the scale that best describes how you feel.

<table>
<thead>
<tr>
<th>Managers in my hospital, MPS, or nursing post…</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Uncertain</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deliver on their promises</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Explain their reasons if they don’t act on an issue of concern to clinical staff</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Are honest about the potential for service improvements</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Are committed to high standards of patient care</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Make requests for information from clinical staff respectfully</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ensure that clinical staff feel safe making constructive criticisms about aspects of the running of the hospital</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ensure there is no bullying in the workplace</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Encourage pride in the workplace</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Behave in ways that set a good example for staff</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Understand how things work in the clinical world</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ensure clinical perspectives are heard and considered in decision making</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Empower clinical staff to make decisions</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Share control over the organisation and its resources with clinical staff</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Balance clinical and organisational interests effectively</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Act on suggestions made by staff</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Respond to clinical concerns</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Consider the impact of their decisions on patients</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Provide clinical staff with a safe working environment</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Provide the resources clinical staff need to do their jobs</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ensure clinical staff remain challenged but not “out of their depth”</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
## Managers in my hospital, MPS, or nursing post...

<table>
<thead>
<tr>
<th>Ensure the right staff mix as consistently as possible</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Uncertain</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure clinical staffing for the service is adequate or explains the problems that prevent this</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ensure clinical staff have access to current equipment</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Understand the clinical implications of their decisions</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Promote quality within the hospital</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Encourage research within the hospital</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Use evidence as the basis for decision making</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Use a variety of forms of “intelligence gathering” to help them make decisions</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ensure effective evaluation of hospital activities</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ensure the hospital is accountable for the care it delivers</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Understand the local community</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Have good connections with the local community</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Represent the interests of the local community effectively</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Have sound links with other local services</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Foster effective relationships with other local services</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Understand the business of health care delivery</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Are realistic about the potential for change in the hospital</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ensure efficient systems are in place in the hospital</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ensure that the systems that support the running of the hospital have been designed with clinical staff</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Have a clear vision of how the hospital should be in the future</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Have a clear agenda for service improvement within the hospital</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Are clear and articulate</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Are clear about their expectations of staff</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Give consistent messages to staff</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Have similar values about health care delivery</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Have clear management style</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Set goals for our service</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Managers in my hospital, MPS, or nursing post...</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Uncertain</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-------------------</td>
<td>----------</td>
<td>-----------</td>
<td>-------</td>
<td>----------------</td>
</tr>
<tr>
<td>Ensure fairness in the workplace</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Regularly meet with all staff in the hospital</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Trust the clinical staff that work in the hospital</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Respect the knowledge of clinical staff in the hospital</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Understand and appreciate the clinician’s role</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>See clinical staff as the core of the service</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Are committed to the professional development of their clinical staff</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Are engaged with their staff</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Represent the staff effectively</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Publicly support their clinical staff</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Encourage ownership of the service among clinical staff</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ensure clinical staff feel part of the decision making process in the hospital</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ensure the opinions of clinical staff are valued</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ensure there is a sense of team among all the staff</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ensure clinical staff in the hospital know that management will support them when the chips are down</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ensure clinical staff can get help if they need it</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ensure clinical staff feel clinically safe and supported</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Are willing to go on a service improvement journey with their clinical staff</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Understand their staff as individuals</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Recognise that clinical staff have a life outside the hospital</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Share information and data about the hospital with clinical staff</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Share problems about the running of the hospital with clinical staff</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Have an open door policy</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ensure decision making is open and transparent</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Listen to and work with clinical staff to solve problems</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Encourage staff to participate in decision making in the hospital</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

318
<table>
<thead>
<tr>
<th>Managers in my hospital, MPS, or nursing post...</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Uncertain</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involves all levels of the organisation in decision making processes</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Strive to reach a shared understanding about issues affecting the hospital with staff</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Are capable of compromise</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Encourage open and frank communication between staff and managers</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Provide forums for clinical staff to talk to managers</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Are enthusiastic about the hospital</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
This section is about your overall impressions of managers of WA Country Health Services (WACHS). As you read each statement, think about how you feel in general about the management of WACHS (this includes nursing and non-nursing managers). Then, rate how strongly you agree or disagree with each statement by circling the number on the scale that best describes how you feel.

<table>
<thead>
<tr>
<th>WACHS managers in general...</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Uncertain</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deliver on their promises</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Are committed to high standards of patient care</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ensure clinical perspectives are considered in decision making</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Respond to clinical concerns</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Consider the impact of their decisions on patients</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Understand the clinical implications of their decisions</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Promote quality in WACHS hospitals</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Encourage research in WACHS hospitals</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Use data and evidence as a basis for decision making</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ensure effective monitoring and review of WACHS activities occurs</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ensure WACHS is accountable for the care it delivers</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Understand country communities in WA</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Represent the interests of country communities across WA effectively</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Understand the business of health care delivery</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Are realistic about the potential for change in the WACHS hospitals</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ensure efficient systems are in place to support WACHS hospitals</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Have a clear vision of how the country health services should be in the future</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Have a clear agenda for service improvement within WA country health services</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Give consistent messages to staff working in country areas of the State</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Set goals for health care delivery in country areas of the State</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Understand and appreciate the clinician’s role</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>WACHS managers in general...</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Uncertain</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------------------</td>
<td>-------------------</td>
<td>----------</td>
<td>-----------</td>
<td>-------</td>
<td>----------------</td>
</tr>
<tr>
<td>See clinical staff as the core of country health services</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Are committed to the professional development of clinical staff working in rural and remote areas of the State</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Represent staff working in country health services across the State effectively</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ensure decision making is open and transparent</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Listen to and work with clinical staff to solve problems</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Are capable of compromise</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Provide hospitals with the resources they need to deliver a high-quality service</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Are more focused on delivering safe services than on balancing their budget</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Provide forums for clinical staff to talk to WACHS managers</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Part C
This section asks questions that relate to your feelings about your current job and workplace over the last 9 months. Please read each question and indicate your response by circling the number on the scale that best describes your feelings about your current job during the past 9 months:

DURING THE PAST 9 MONTHS.....

How often did you consider leaving your job?

1--------2-----3-----4-----5-----6------7
Never    Sometimes         All the time

How frequently did you scan newspapers, the internet or other employment listings in search of alternative job opportunities?

1--------2-----3-----4-----5-----6------7
Never    Sometimes         All the time

How much did your current job satisfy your personal needs?

1--------2-----3-----4-----5-----6------7
Not at all  Sometimes           To a very large extent

How often did you feel frustrated at work because you were not being given the opportunity to achieve your personal work-related goals?

1--------2-----3-----4-----5-----6------7
Never    Sometimes         All the time

How often were your personal values compromised at work?

1--------2-----3-----4-----5-----6------7
Never    Sometimes         All the time

How often did you dream about getting another job that better suited your personal needs?

1--------2-----3-----4-----5-----6------7
Never    Sometimes         All the time

How likely was it that you would have accepted another job with the same conditions if it had been offered to you?

1--------2-----3-----4-----5-----6------7
Highly unlikely  Somewhat likely    Highly likely

How often did you look forward to another day at work?

1--------2-----3-----4-----5-----6------7
Never    Sometimes         All the time

How often did you think about starting your own business?

1--------2-----3-----4-----5-----6------7
Never    Sometimes         All the time

How often did you feel that it was only your personal responsibilities that prevented you from quitting your job?

1--------2-----3-----4-----5-----6------7
Never    Sometimes         All the time

How often did you feel that it was only the benefits associated with your current job that prevented you from quitting this job?

1--------2-----3-----4-----5-----6------7
Never    Sometimes         All the time

How often were you emotionally agitated when you arrived home from work?

1--------2-----3-----4-----5-----6------7
Never    Sometimes         All the time

How much did your current job negatively affect your personal well-being?

1--------2-----3-----4-----5-----6------7
Not at all  Sometimes           To a very large extent

How much did a “fear of the unknown” prevent you from quitting your current job?

1--------2-----3-----4-----5-----6------7
Not at all  Sometimes           To a very large extent
Part D
This section asks some questions about you and your nursing background and experience. For each question, please tick the box alongside the answer that is true for you.

1. Are you male or female?
   Female [ ]
   Male [ ]

2. What is your age?
   20-30 years [ ]
   31-40 years [ ]
   41-50 years [ ]
   51-60 years [ ]
   61 year or older [ ]

3. Approximately how long have you been nursing in hospital settings?
   0-3 years [ ]
   4-5 years [ ]
   6-10 years [ ]
   11+ years [ ]

4. Which of the following best describes your own formal nursing education?
   It has mostly been hospital-based [ ]
   It has included both hospital and university-based programs [ ]
   It has mostly been university-based [ ]

Thank you very much for your time
APPENDIX 7: MAIN STUDY LETTER

Dear Faith,

Research into the impact of hospital management on nurses’ turnover intentions

We are writing to ask for your help with a follow-up study of nurses’ attitudes to management styles and their turnover intentions. Your participation will be very valuable in guiding how health care organisations manage nursing staff in the future. The study has received ethics approval from the WACHS Research Ethics Committee and the WACHS Executive.

As you are aware, nursing retention is a significant challenge across Australia. We are sure you will agree that this is something we should all be concerned about, particularly given that nurses comprise 2 in 3 clinicians working in our hospitals.

This research looks into how nurses are managed and whether this makes a difference to their retention. In particular, the research will help to identify what managers can do to increase the likelihood that nurses will remain in the profession. That is why we have written to ask for your help.

The enclosed questionnaire asks about hospital management practices that your colleagues have indicated can make a difference to the retention of nurses. We hope you will agree that for this important issue, spending a bit of your time outlining your views about management will be a worthwhile contribution.

The questionnaire takes about 15 minutes to complete and participation is entirely voluntary. Your responses are anonymous and no individual data from the study will be given to WACHS.

The research is being completed as part of a doctoral study being completed by Kim Clark at Edith Cowan University. Completed questionnaires will be securely stored at ECU’s Joondalup campus and will not be accessible to anyone other than Kim.

As we indicated at the beginning of this letter, your participation in this research will help improve understanding of how managers should work with nurses. If you have any complaints or concerns about the way in which his research is being conducted, we encourage you to contact the Chairman of the Research Ethics Committee on 9223 8575.

Thank you in anticipation of your help; we have enclosed a coffee bag to help make the task of completing the survey a little more relaxing and enjoyable.

Yours sincerely,

Karen Bradley
A/Executive Director of Nursing
WA Country Health Service
189 Wellington Street, PERTH WA 6000
Tel: (08) 9223 8544

Karen Clark
Lecturer and PhD Candidate
Edith Cowan University
Email: k.clark@ecu.edu.au
Ph: 6304 5159
APPENDIX 8: MAIN STUDY QUESTIONNAIRE

Survey Of

Nurses Working In WA Country Health Services

On

Attitudes to Hospital Management and Turnover Intentions

2009

Please complete and return in the reply paid envelope provided
**Part A**

This section is about your impressions of management in your own hospital, MPS or nursing post. As you read each statement, think about how you feel about managers in general that work in your hospital, MPS or nursing post (this includes nursing and non-nursing managers). Then, rate how strongly you agree or disagree with each statement by circling the number on the scale that best describes how you feel.

<table>
<thead>
<tr>
<th>Managers in my hospital, MPS, or nursing post…</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Uncertain</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explain their reasons if they don’t act on an issue of concern to clinical staff</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Make requests for information from clinical staff respectfully</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ensure that clinical staff feel safe making constructive criticisms about aspects of the running of the hospital</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ensure clinical staff remain challenged but not “out of their depth”</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Promote quality within the hospital</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Use evidence as the basis for decision making</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Use a variety of forms of “intelligence gathering” to help them make decisions</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ensure effective evaluation of hospital activities</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Understand the local community</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Have good connections with the local community</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Represent the interests of the local community effectively</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Have sound links with other local services</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Foster effective relationships with other local services</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Are realistic about the potential for change in the hospital</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ensure efficient systems are in place in the hospital</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Have a clear agenda for service improvement within the hospital</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Are clear and articulate</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Are clear about their expectations of staff</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Set goals for our service</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Managers in my hospital, MPS, or nursing post...</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Uncertain</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-------------------</td>
<td>---------</td>
<td>-----------</td>
<td>-------</td>
<td>----------------</td>
</tr>
<tr>
<td>Regularly meet with all staff in the hospital</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Trust the clinical staff that work in the hospital</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Respect the knowledge of clinical staff in the hospital</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>See clinical staff as the core of the service</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Are committed to the professional development of their clinical staff</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Are engaged with their staff</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Publicly support their clinical staff</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Encourage ownership of the service among clinical staff</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ensure clinical staff in the hospital know that management will support them when the chips are down</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ensure clinical staff can get help if they need it</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ensure clinical staff feel clinically safe and supported</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Are willing to go on a service improvement journey with their clinical staff</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Share information and data about the hospital with clinical staff</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Have an open door policy</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Are capable of compromise</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Encourage open and frank communication between staff and managers</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Provide forums for clinical staff to talk to managers</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Part B
This section is about your overall impressions of managers of WA Country Health Services (WACHS). As you read each statement, think about how you feel in general about the management of WACHS (this includes nursing and non-nursing managers). Then, rate how strongly you agree or disagree with each statement by circling the number on the scale that best describes how you feel.

<table>
<thead>
<tr>
<th>WACHS managers in general...</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Uncertain</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deliver on their promises</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ensure clinical perspectives are considered in decision making</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Promote quality in WACHS hospitals</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Encourage research in WACHS hospitals</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Use data and evidence as a basis for decision making</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ensure effective monitoring and review of WACHS activities occurs</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Understand country communities in WA</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Represent the interests of country communities across WA effectively</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Set goals for health care delivery in country areas of the State</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>See clinical staff as the core of country health services</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Are committed to the professional development of clinical staff working in rural and remote areas of the State</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Represent staff working in country health services across the State effectively</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ensure decision making is open and transparent</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Listen to and work with clinical staff to solve problems</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Provide hospitals with the resources they need to deliver a high-quality service</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Are more focused on delivering safe services than on balancing their budget</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
**Part C**

This section asks questions that relate to your feelings about your current job and workplace over the last 9 months. Please read each question and indicate your response by circling the number on the scale that best describes your feelings about your current job during the past 9 months:

### DURING THE PAST 9 MONTHS…..

<table>
<thead>
<tr>
<th>Question</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often did you consider leaving your job?</td>
<td>1------2------3------4------5------6------7</td>
</tr>
<tr>
<td>How frequently did you scan newspapers, the internet or other employment listings in search of alternative job opportunities?</td>
<td>Never</td>
</tr>
<tr>
<td>How much did your current job satisfy your personal needs?</td>
<td>1------2------3------4------5------6------7</td>
</tr>
<tr>
<td>How often did you feel frustrated at work because you were not being given the opportunity to achieve your personal work-related goals?</td>
<td>Never</td>
</tr>
<tr>
<td>How often were your personal values compromised at work?</td>
<td>1------2------3------4------5------6------7</td>
</tr>
<tr>
<td>How often did you dream about getting another job that better suited your personal needs?</td>
<td>Never</td>
</tr>
<tr>
<td>How likely was it that you would have accepted another job with the same conditions if it had been offered to you?</td>
<td>Highly unlikely</td>
</tr>
<tr>
<td>How often did you look forward to another day at work?</td>
<td>1------2------3------4------5------6------7</td>
</tr>
<tr>
<td>How often did you think about starting your own business?</td>
<td>Never</td>
</tr>
<tr>
<td>How often did you feel that it was only your personal responsibilities that prevented you from quitting your job?</td>
<td>Never</td>
</tr>
<tr>
<td>How often did you feel that it was only the benefits associated with your current job that prevented you from quitting this job?</td>
<td>Never</td>
</tr>
<tr>
<td>How often were you emotionally agitated when you arrived home from work?</td>
<td>Never</td>
</tr>
<tr>
<td>How much did your current job negatively affect your personal well-being?</td>
<td>1------2------3------4------5------6------7</td>
</tr>
<tr>
<td>How much did a “fear of the unknown” prevent you from quitting your current job?</td>
<td>Not at all</td>
</tr>
<tr>
<td></td>
<td>1------2------3------4------5------6------7</td>
</tr>
</tbody>
</table>
Part D
This section asks some questions about you and your nursing background and experience. For each question, please tick the answer that is true for you.

5. Are you male or female?
   - Female
   - Male

6. What is your age?
   - 20-30 years
   - 31-40 years
   - 41-50 years
   - 51+ years

7. Approximately how long have you been nursing in hospital settings?
   - 0-3 years
   - 4-5 years
   - 6-10 years
   - 11+ years

8. Please indicate the nursing level at which you are currently employed?
   - Level 1
   - Level 2
   - Level 3

9. Which of the following best describes your own formal nursing education?
   - It has mostly been hospital-based
   - It has included both hospital and university-based programs
   - It has mostly been university-based

Thank you very much for your time
APPENDIX 9: Item-Alignment with Stewardship and Trust in Management

Main Study Questionnaire Part A Items Reflecting Stewardship and Trust Domains

<table>
<thead>
<tr>
<th>Domain</th>
<th>Part A Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generating Intelligence</td>
<td></td>
</tr>
<tr>
<td>Formulating Policy Direction</td>
<td>1. Use evidence as the basis for decision making</td>
</tr>
<tr>
<td></td>
<td>2. Use a variety of forms of “intelligence gathering” to help them make decisions</td>
</tr>
<tr>
<td></td>
<td>3. Set goals for our service</td>
</tr>
<tr>
<td></td>
<td>4. Have a clear agenda for service improvement within the hospital</td>
</tr>
<tr>
<td>Ensuring Tools for Implementation</td>
<td>5. Ensure efficient systems are in place in the hospital</td>
</tr>
<tr>
<td>Building Coalitions and Partnerships</td>
<td>6. Foster effective relationships with other local services</td>
</tr>
<tr>
<td></td>
<td>7. Have good connections with the local community</td>
</tr>
<tr>
<td></td>
<td>8. Have sound links with other local services</td>
</tr>
<tr>
<td></td>
<td>9. Understand the local community</td>
</tr>
<tr>
<td></td>
<td>10. Are willing to go on a service improvement journey with their clinical staff</td>
</tr>
<tr>
<td></td>
<td>11. Encourage ownership of the service among clinical staff</td>
</tr>
<tr>
<td></td>
<td>12. Provide forums for clinical staff to talk to managers</td>
</tr>
<tr>
<td>Ensuring a fit between Policy Objectives and the Structure and Culture of the Organisation</td>
<td></td>
</tr>
<tr>
<td>Ensuring Accountability</td>
<td>13. Ensure effective evaluation of hospital activities</td>
</tr>
<tr>
<td></td>
<td>14. Promote quality within the hospital</td>
</tr>
<tr>
<td>Integrity</td>
<td>15. Explain their reasons if they don’t act on an issue of concern to clinical staff</td>
</tr>
<tr>
<td>Ability</td>
<td>16. Ensure clinical staff remain challenged but not “out of their depth”</td>
</tr>
<tr>
<td></td>
<td>17. Are realistic about the potential for change in the hospital</td>
</tr>
<tr>
<td></td>
<td>18. Represent the interests of the local community effectively</td>
</tr>
<tr>
<td></td>
<td>19. Are clear about their expectations of staff</td>
</tr>
<tr>
<td></td>
<td>20. Are clear and articulate</td>
</tr>
<tr>
<td>Benevolence</td>
<td>21. Ensure clinical staff in the hospital know that management will support them when the chips are down</td>
</tr>
<tr>
<td></td>
<td>22. Make requests for information from clinical staff respectfully</td>
</tr>
<tr>
<td></td>
<td>23. Respect the knowledge of clinical staff in the hospital</td>
</tr>
<tr>
<td></td>
<td>24. See clinical staff as the core of the service</td>
</tr>
<tr>
<td></td>
<td>25. Publicly support their clinical staff</td>
</tr>
<tr>
<td></td>
<td>26. Are committed to the professional development of their clinical staff</td>
</tr>
<tr>
<td></td>
<td>27. Ensure clinical staff feel clinically safe and supported</td>
</tr>
<tr>
<td></td>
<td>28. Ensure clinical staff can get help if they need it</td>
</tr>
<tr>
<td>Openness</td>
<td>29. Ensure that clinical staff feel safe making constructive criticisms about aspects of the running of the hospital</td>
</tr>
<tr>
<td></td>
<td>30. Regularly meet with all staff in the hospital</td>
</tr>
<tr>
<td></td>
<td>31. Encourage open and frank communication between staff and managers</td>
</tr>
<tr>
<td></td>
<td>32. Are capable of compromise</td>
</tr>
<tr>
<td></td>
<td>33. Are engaged with their staff</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>34.</td>
<td>Share information and data about the hospital with clinical staff</td>
</tr>
<tr>
<td>35.</td>
<td>Have an open door policy</td>
</tr>
<tr>
<td>36.</td>
<td>Trust the clinical staff that work in the hospital</td>
</tr>
</tbody>
</table>
### Main Study Questionnaire Part B Items Reflecting Stewardship and Trust Domains

<table>
<thead>
<tr>
<th>Domain</th>
<th>Part A Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generating Intelligence</td>
<td>1. Ensure clinical perspectives are considered in decision making</td>
</tr>
<tr>
<td></td>
<td>2. Understand country communities in WA</td>
</tr>
<tr>
<td></td>
<td>3. Encourage research in WACHS hospitals</td>
</tr>
<tr>
<td>Formulating Policy Direction</td>
<td>4. Set goals for health care delivery in country areas of the State</td>
</tr>
<tr>
<td></td>
<td>5. Use data and evidence as a basis for decision making</td>
</tr>
<tr>
<td>Ensuring Tools for Implementation</td>
<td>6. Provide hospitals with the resources they need to deliver a high-quality</td>
</tr>
<tr>
<td></td>
<td>service</td>
</tr>
<tr>
<td>Building Coalitions and Partnerships</td>
<td></td>
</tr>
<tr>
<td>Ensuring a fit between Policy Objectives and the</td>
<td></td>
</tr>
<tr>
<td>Structure and Culture of the Organisation</td>
<td></td>
</tr>
<tr>
<td>Ensuring Accountability</td>
<td>7. Promote quality in WACHS hospitals</td>
</tr>
<tr>
<td></td>
<td>8. Ensure effective monitoring and review of WACHS activities occurs</td>
</tr>
<tr>
<td>Integrity</td>
<td>9. Deliver on their promises</td>
</tr>
<tr>
<td></td>
<td>10. Are more focused on delivering safe services than on balancing their</td>
</tr>
<tr>
<td></td>
<td>budget</td>
</tr>
<tr>
<td>Ability</td>
<td>11. Represent the interests of country communities across WA effectively</td>
</tr>
<tr>
<td></td>
<td>12. Represent staff working in country health services across the State</td>
</tr>
<tr>
<td></td>
<td>effectively</td>
</tr>
<tr>
<td>Benevolence</td>
<td>13. See clinical staff as the core of country health services</td>
</tr>
<tr>
<td></td>
<td>14. Are committed to the professional development of clinical staff working</td>
</tr>
<tr>
<td></td>
<td>in rural and remote areas of the State</td>
</tr>
<tr>
<td>Openness</td>
<td>15. Ensure decision making is open and transparent</td>
</tr>
<tr>
<td></td>
<td>16. Listen to and work with clinical staff to solve problems</td>
</tr>
</tbody>
</table>