Acute Care Nurses' Attitudes, Behaviours and Perceived Barriers towards Discharge Risk Screening and Discharge Planning

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CERTIFICATE OF AUTHORSHIP/ORIGINALITY

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

Signature of Student

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ABSTRACT

Background: Patient safety and economic imperatives have made discharge planning for patients in acute care increasingly important in the last two decades. Indeed patients have more complex health care needs, shorter lengths of stay and longer recovery times. Discharge planning therefore must start early in the patient's admission to ensure there is enough time to manage each patient's discharge appropriately. Nurses have a pivotal role in discharge planning and early assessment for discharge. However, few studies have measured nurses' compliance with elements of discharge planning or their attitudes towards discharge planning.

Aim: The aim of this research was to identify nurses' discharge planning behaviours, in particular compliance with discharge risk screening (DRS) policy, their attitudes towards discharge planning and the factors influencing their behaviours.

Methods: A cross sectional descriptive design was used comprising two components, the first of which was an audit of one hundred patients' medical records for DRS compliance. The second component was a self-report survey, which was in part informed by the audit results, of 94% of nurses who worked in the setting.

Results: Nurses' compliance with DRS, as observed in the audit and self-report survey, was low (between 24.2% and 33%). Patients admitted with a medical diagnosis (OR = .1 95% Confidence Interval .03 - .37) or surgical diagnosis (OR = .13 95% CI .03 - .06) were significantly less likely to have their DRS completed than patients with a respiratory diagnosis and there was a trend for patients admitted on weekdays to be less likely to have DRS completed (OR = .31, 95% I

.08 – 1.2). Nurses had an overall positive attitude to the DRS and discharge planning and their screening was mostly accurate. Furthermore, nurses who complied with DRS policy had a more positive attitude (mean 37.14, SD 3.6) than those who did not (mean 34.77, SD 4.2) (P = .03) and were more likely to start discharge planning early. Nurses identified that the major barriers to DRS and discharge planning were the busyness of the ward on weekdays and patient characteristics. These factors hindered compliance with the DRS policy and discharge planning. Other findings suggest that nurses' discharge planning knowledge and behaviours were inconsistent, that they were uncertain of their role, and the relationship between medical officers and nurses may have influenced their behaviours.

Conclusion: This study determined that nurses do not often comply with DRS policy and therefore starting discharge planning early is hampered. The study suggests that there is a link between nurses' attitudes, DRS compliance and starting discharge planning early. The implications for nurses' practice include the need to develop clear guidelines, criteria or processes for discharge planning, which incorporate agreed upon roles for all members of the multidisciplinary team, in particular the nurses' role. There is also a need to investigate a systematic, methodical approach to discharge planning that includes early screening, using the DRS and involvement of nurses in the development of guidelines and implementation of the systematic approach. Further investigation of nurses' attitudes toward the DRS and discharge planning is recommended, as this was the only nurse characteristic in this study that was found to be linked to their behaviours.

INTRODUCTION

Introduction to the study

Discharge planning is an important part of patients' care in acute care hospital wards given that the aim for all patients is that they will leave this setting once their acute health care needs have been managed or it is obvious what the next stage of care will be. All patients who leave acute care hospitals require discharge planning; however, the extent of planning for each patient varies because some patients have complex needs, while others have more straightforward requirements. Nurses have a pivotal role in discharge planning as they are the discipline in most constant contact with the patient.

This study was designed to identify acute care nurses' discharge planning practices, their compliance with policy and factors that influenced their behaviours. Particular emphasis was placed on identifying nurses' early screening of patients' discharge risks and their subsequent actions from the screening. The need for this information emerged from the researcher's experience of standardising the process of patients' admission assessment, which included the discharge risk screen (DRS), in an acute care setting where issues with nurses' compliance with the DRS policy was recognised. This information is vital to understand and develop the nurses' role in discharge planning, particularly in the current context of the Australian health care setting where there is an expectation of a reduction in length of stay, increasing number of patients with complex health care needs and a disparity in the availability of appropriate community services to meet these patients' needs at home (Australian Bureau of Statistics, 2009c; Australian Government, 2009; Australian Institute of Health and Welfare, 2008, 2009).

This study investigated nurses' DRS and discharge planning behaviours and is guided by Ajzen's (1991) Theory of Planned Behaviour. Ajzen (1991), Ajzen and Madden (1986) and Crano and Prislin (2006) theorise that one of the main factors influencing behaviours is the intention to perform the behaviour (Ajzen, 1991) and this intention is influenced by multiple factors, which are explained in more depth in Chapter Two, but include context-related factors such as time and the cooperation of other people, personal capacities such as knowledge, perceptions of control and attitudes toward the behaviour (Ajzen & Madden, 1986; Crano & Prislin, 2006). Importantly, in this framework, attitudes can be dependent on the context and are influenced by beliefs (Ajzen, 2001; Crano & Prislin, 2006). These beliefs are that the behaviour will lead to a specific outcome and that completion of the activity will be met with approval or disapproval by other co workers perceived as being important to the person (Ajzen & Madden, 1986). Finally, the behaviour of interest must be a conscious choice or decision and this is ultimately influenced by contextual factors.

A cross sectional descriptive design using audit and survey techniques was chosen for this study. This approach offers the researcher the opportunity to determine nurses' discharge risk screening compliance as well as elicit nurses' subjective beliefs and thoughts regarding discharge risk screening and discharge planning in the one study setting (Burns & Grove, 2005). It also allows for factors that influence nurses' behaviours to be identified and connections to be made between nurses' behaviours and the influencing factors. The results from the audit phase of the study have been published in an international peer reviewed journal (Graham, Gallagher, & Bothe, 2010), (Appendix A).

Dissertation structure

This dissertation is presented in seven chapters. The first chapter provides a background to the study by describing the purpose of discharge planning, the essential elements, and different patient groups requiring discharge planning. The pivotal role of nurses in discharge planning is outlined and specific roles described.

The problems with completion of aspects of discharge planning are presented and the consequences for patients described. Chapter Two discusses the challenges to discharge planning in acute care hospital wards, specifically the influence of the push to reduce length of stay and the effect of the demographic changes. These changes will continue to affect discharge planning. The effectiveness of discharge planning and the issues with completion of discharge planning are explored. Chapter Three reviews the literature investigating nurses' discharge planning behaviours, in particular the issues with nurses' completion of discharge planning. The challenges influencing the behaviours are reviewed. The limited literature investigating nurses' attitudes towards discharge planning and compliance with aspects of discharge planning are also examined, in particular compliance with the DRS policy.

Chapter Four describes the study design, data collection and method of analysis. Chapter Five presents the findings of the study, including a description of the patients and nurses sampled for the study, nurses' actual and self-reported compliance with DRS and major aspects of discharge planning. The findings presented are: the significant predictors of DRS policy compliance and nurses' attitudes toward DRS and discharge planning; their role in completing the DRS and discharge planning and the perceived barriers preventing nurses from completing the DRS and discharge planning. Chapter Six discusses the findings of the study in the context of the existing literature and analyses the limitations of the study. Finally, Chapter Seven more fully examines the implications of the findings for nursing practice, patient care and policy implementation and makes several recommendations for the future.

CHAPTER 1: DISCHARGE PLANNING

1.1 Introduction

This chapter describes the ideal process of discharge planning in acute care wards, the purpose of discharge planning, key roles and the problems that exist with the completion of discharge planning. Firstly, an overview of hospital discharge planning in the acute care setting and the difference between straightforward and complex discharge planning is outlined. Following this overview, the elements and process of discharge planning are explained including patient and family roles and the link between discharge planning and patient safety. The central role of nurses in discharge planning is outlined and specific nursing roles in discharge planning are described. Finally, issues related to non completion of the elements of discharge planning are examined and the outcomes for patients described.

1.2 Discharge planning

1.2.1 Overview of discharge planning

Discharge planning is recognised internationally as the process that promotes patient safety post-discharge from acute care wards by ensuring that the environment and support available (both domestic and health specific) are adequate to promote recovery and prevent an unplanned readmission to hospital (American Medical Association, 1996; Association of Discharge Planning Co-ordinators of Ontario, 2009; Lim, Chong, Caplan, & Gray, 2009; Lin, Wang, Chang, & Yang, 2005; NHS Institute for Innovation and Improvement, 2008; NSW Department of Health, 2007a; Schlemmer, 1989; The Australian Council for Healthcare Standards, 2009; The Joint Commission on Accreditation of Healthcare Organizations, 2009). The discharge destination may be home or another health

care institution or aged care facility, where the patient's ongoing physical and health care needs will need to be managed, including recovery from the acute health care episode. Discharge planning also ensures that the next care provider has the ability, capacity and information to manage the patient's needs. The process is only effective if appropriate sources of care are available and sufficient information is provided to continue the necessary care. This includes the patient's and their family's ability to provide the care (American Medical Association, 1996; Anderson & Helms, 1994; Arenth & Mamon, 1985; McGinley et al., 1996; Rorden & Taft, 1990).

The purpose of discharge planning is to identify the patient's post-hospital needs and prepare the patient and family for transition from the acute care hospital to the next care setting to ensure that continuity of patient care is maintained (American Medical Association, 1996; Katikireddi & Cloud, 2009; Lowenstein & Hoff, 1994; McKenna, Keeney, Glenn, & Gordon, 2000; Rorden & Taft, 1990; Snow et al., 2009; Victor & Vetter, 1988). Ideally, the discharge planning process is managed in the following way. Firstly, it commences when the patient is admitted to hospital, comprises of a series of events during the patient's stay in hospital, concludes on the day of discharge and involves the patient and family throughout the patients' stay. Secondly, the process is multidisciplinary, which means members of the allied health professions such as physiotherapists, social workers and occupational therapists may work with medical officers and nurses to develop a patient's discharge plan. Thirdly, the process requires sufficient time to complete all of the potential elements of discharge planning and, ideally, one health professional should coordinate the plan. Fourth, discharge planning is ideally aligned with the patient's medical trajectory, with the best outcome being that the patient and family are ready to continue the care at home when the patient is medically ready for discharge. If other care providers are taking over some or all of the care, that they too are ready and available at the time of discharge (Arenth & Mamon, 1985; Congdon, 1994; Katikireddi & Cloud, 2009; Schlemmer, 1989; Victor & Vetter, 1988). Finally, at discharge the patient's ongoing care needs are handed over to

the next care provider, who may be the patient or family member, the staff in the community or staff in the institution accepting the patient (American Medical Association, 1996; Anderson & Helms, 1994; Arenth & Mamon, 1985; McGinley et al., 1996; Rorden & Taft, 1990; Snow et al., 2009).

All patients admitted to the acute care hospital require discharge planning: however, the extent of this planning varies. For instance, some straightforward surgical procedures such as hip or knee surgery are usually planned and have a predictable trajectory which is promoted by screening of post-discharge needs before the patient enters hospital for surgery. In these cases, discharge planning may be quite systematic, predetermined and incorporated into existing processes, such as clinical pathways (NSW Department of Health, 2007a). These pathways guide a clinician's practice by identifying an appropriate sequence of clinical interventions, timeframes, milestones and expected outcomes that patients need to meet to be ready for discharge (Campbell, Hotchkiss, Bradshaw, & Porteous, 1998; Dowsey, Kilgour, Santamaria, & Choong, 1999; Kinsman, 2004).

Clinical pathways guide the management of patients with very common diagnoses such as myocardial infarction or fractured hip, which also have a relatively predictable trajectory. However, these groups of patients are often admitted through the emergency department and they would have a longer length of stay than patients having straightforward procedures. These patients' discharge plans are more unpredictable because their admission is unplanned and they would not have been screened in the same manner as patients that have a planned procedure (Campbell et al., 1998; Kinsman, 2004; Stephen & Berger, 2003).

Many other patients not only have an unexpected or unplanned admission through the emergency department, but have multiple conditions. This causes their trajectory to be more unpredictable. For example, 60% of all patients admitted to Australian hospitals are unplanned and are admitted through the emergency department (Australian Government, 2010; Australian Institute of Health and

Welfare, 2009). The presence of other conditions or co-morbidities can change many aspects of a patient's medical treatment and trajectory and it may not be immediately clear which pathway the patient will take (Chan, Chong, Basilikas, Mathie, & Hung, 2002; Dawson, Weerasooriya, & Webster, 2008). Finally, the information gathering process for emergency admissions may be incomplete, prolonging the process of organising a patient's discharge (Considine et al., 2009; Nairn, Whotton, Marshal, Roberts, & Swann, 2004). This means that early and complete discharge planning is more important for patients admitted through an emergency department because it is likely their discharge planning needs will be complex requiring involved planning.

Additional factors that influence the predictability of a patient's discharge include the degree to which a patient can provide their own care at home and the availability of family and friends and community services to supplement care. It may be difficult to determine the patient's functional ability (mainly their ability to walk, shower and feed themselves) and the capacity of family to provide any care until very close to the discharge date. As a result, planning and referral to other health professionals may require additional lead-time (Rorden & Taft, 1990). When the usual family carers and services are not immediately available to take over care, the patient may need to be transferred to another health care setting, such as a rehabilitation or an aged care facility. Therefore, the actual date of discharge will depend on the availability of beds in the accepting setting (Rhudy, Holland, & Bowles, 2009; Rorden & Taft, 1990).

1.2.2 Essential elements

To determine each patient's discharge needs and develop a discharge plan a number of elements have been acknowledged internationally as being necessary. Not every element will be required for every patient, as some patients have very straightforward needs (American Medical Association, 1996; Department of Health, 2003; Lim et al., 2009; McKenna et al., 2000; NHS Direct Wales, 2009; NHS

Institute for Innovation and Improvement, 2008; NSW Department of Health, 2007a; Rorden & Taft, 1990). The elements are as follows:

- assessment of the patient on admission and identification of each patient's potential discharge needs;
- referrals to allied health personnel, allocation of an estimated date of discharge and collaboration;
- patient and family participation and identification of the discharge goal;
- verbal communication between the patient, family and all the members of the healthcare team, and,
- documentation in the patient's medical record of the communication between the healthcare team and community service providers.

As there are potentially multiple elements and many people involved in the discharge planning process, allocation of sufficient time is crucial to ensure that the following occurs: all the activities required for each patient are completed in the timeframe of the patients' illness trajectory; the skilled health care personnel are available and there is good overall coordination of the discharge plan. The final element of the discharge plan is the handing over of the patient's care to the next care provider (Association of Discharge Planning Co-ordinators of Ontario, 2009; Bull & Roberts, 2001; Carroll & Dowling, 2007; Katikireddi & Cloud, 2009; Rorden & Taft, 1990).

Assessment of the patient on admission and identification of discharge needs

Regardless of the patient's condition there are two elements of discharge planning that must occur at a specific point in time in the patient's hospitalisation. These are the patient's admission assessment, which occurs when the patient is admitted to the ward, and the handover of care which occurs at the point of discharge. Other elements are triggered by the patient's condition so that timing of discharge planning elements or events may overlap (Association of Discharge Planning Co-ordinators of Ontario, 2009; Bull & Roberts, 2001; Carroll & Dowling, 2007;

Katikireddi & Cloud, 2009; Rorden & Taft, 1990). The specific elements of discharge planning are described below.

Each patient admitted to an acute care ward has an assessment that is completed independently by both medical and nursing staff. The data gathered from both health professionals' assessments includes information regarding the patient's medical history, their reason for admission, current medications, functional status (namely their current and previous ability to walk, shower and manage their own care), allergies, cognitive status, usual living arrangements, and usual bowel and bladder habits (American Medical Association, 1996; Australian Nursing and Midwifery Council, 2005, 2007; Bull & Roberts, 2001; Carroll & Dowling, 2007; Clausen, 1984; Jewell, 1993; Katikireddi & Cloud, 2009; Lim et al., 2009; Maramba, Richards, Myers, & Larrabee, 2004; NSW Department of Health, 2007a; Rorden & Taft, 1990; Snow et al., 2009). This information provides a starting point for planning both the patient's individual treatment and care plan as well as their discharge plan.

Referrals to allied health personnel, allocation of timeframe and collaboration

From the initial assessments, the patient's initial needs are identified, and if required, referrals are made to other members of the health care team (as appropriate to their medical condition) and then further investigation of identified needs is undertaken by appropriate members of the team (Clausen, 1984; Maramba et al., 2004; NSW Department of Health, 2007a; Rorden & Taft, 1990). Patients with complex requirements need additional specific expertise and the involvement of an increasing range of health care professionals (McGinley et al., 1996; Rorden & Taft, 1990). The timing of each specialist health professional's involvement depends on the patient's medical condition, reason for admission and the choice of post-discharge care (Bull & Roberts, 2001; Katikireddi & Cloud, 2009; Lim et al., 2009; NSW Department of Health, 2007a; Rorden & Taft, 1990). Therefore, effective collaboration between all members of the multidisciplinary

team, patient and family is necessary to ensure every person involved is working towards the same agreed upon discharge goal.

Collaboration means effective team work, which is based on trust, the building of relationships over time, the willingness of each team member to participate and an understanding of each health professional's role in discharge planning (Bull & Roberts, 2001; San Martın-Rodrıguez, Beaulieu, D'Amour, & Ferrada-Videla, 2005). Effective collaboration then requires the provision of an expected discharge date by the medical officer early in the patient's admission, so that patient and family preferences are considered early, goals are congruent and all are working within the same timeframe (Bowles, Foust, & Naylor, 2003; Bowles, Naylor, & Foust, 2002; Bull, 1994; Bull & Roberts, 2001; Katikireddi & Cloud, 2009; Lalani & Gulzar, 2001; Lim et al., 2009; NSW Department of Health, 2007a; Rhudy et al., 2009; Watts & Gardner, 2005). Effective collaboration also requires a clear exchange of information, sufficient time to share the information and spaces to meet to discuss the patients' potential discharge options (San Martın-Rodrıguez et al., 2005).

Patient and family participation and identification of their discharge goal

Patient and family participation in discharge planning is crucial because they are most knowledgeable about their home situation, their ability to manage ongoing care at home and their goals (Carroll & Dowling, 2007; Clausen, 1984; Katikireddi & Cloud, 2009; Lim et al., 2009; Rorden & Taft, 1990). Involving the patient and family enables health care staff to assess the patient's and family members' abilities to manage the patient's care after discharge, assess the family dynamics and determine the discharge goals. These aspects can influence health care staff recommendations on the patient's discharge options. Ongoing collaboration with the patient and family is necessary to ensure that they are adequately prepared for discharge and that discharge goals remain congruent between all involved (American Medical Association, 1996; Association of Discharge Planning Co-

ordinators of Ontario, 2009; Carroll & Dowling, 2007; Lim et al., 2009; NHS Institute for Innovation and Improvement, 2008; Rorden & Taft, 1990; Snow et al., 2009).

Verbal and written communication

Effective communication is required for all elements of discharge planning and should include the patient, their family, all members of the patient's health care team and any community care providers previously involved in the patient's care. Clear and timely communication ensures continuity of discharge planning and patient care planning. Regardless of the discharge destination there must be effective communication between the staff and the patient and family in planning the next phase of care (Bull & Roberts, 2001; Carroll & Dowling, 2007; Katikireddi & Cloud, 2009; Rorden & Taft, 1990). Verbal and written communications are important to ensure the correct sequence of the discharge planning elements and thus a well-organised discharge occurs (Anthony & Hudson-Barr, 1998; Armitage & Kavanagh, 1998; Bull, 1994; Bull & Roberts, 2001; Cannaby, Parker, Cheater, & Baker, 2003; Carroll & Dowling, 2007; Day, McCarthy, & Coffey, 2009; Jewell, 1993; Maramba et al., 2004; McKenna et al., 2000; Watts & Gardner, 2005). Good communication is essential during the handover of care to the patient and family, healthcare personnel and community care service providers who are continuing the patient's care after discharge from hospital.

Verbal communication is necessary to complete many of the elements, including patient assessment, identifying the patient's discharge goal, collaboration, patient education and handover to the next care provider. These discussions can occur in many different ways. For example, at the patient's bedside or during other patient care activities, as well as during multidisciplinary team meetings, case conferences, family conferences, medical ward rounds, nurses handover, through phone calls and when referrals between team members are made (Bull & Roberts, 2001; Cannaby et al., 2003; Carroll & Dowling, 2007; Day et al., 2009; Garling, 2008; Rhudy et al., 2009; Rorden & Taft, 1990). Good verbal communication promotes a safe transition to home because patients and families who have a clear

understanding of what symptoms to expect after discharge and how to manage the ongoing care and medications have reduced anxiety levels (Bull & Roberts, 2001; Carroll & Dowling, 2007; Katikireddi & Cloud, 2009; Rorden & Taft, 1990). This decreases the likelihood of unplanned appointments with a general practitioner (GP) or specialist after discharge (Carroll & Dowling, 2007; Congdon, 1994; Forster, Asmis et al., 2004; Forster, Clark et al., 2004; Forster, Murff, Peterson, Ganhdi, & Bates, 2003; Lim et al., 2009; McMurray, Johnson, Wallis, Patterson, & Griffiths, 2007; Rorden & Taft, 1990; Wilson et al., 1995).

However, health care staff are not always able to speak to each other directly. Consequently, timely documentation in the patient's medical record of completed activities, discussions with the patient and between team members is vital to ensure current information is available to all involved health care staff (Bull & Roberts, 2001; Cannaby et al., 2003; Carroll & Dowling, 2007; Day et al., 2009; Rhudy et al., 2009; Rorden & Taft, 1990). The documentation needs to include the completed discharge risk screening tools, the referrals made to allied health personnel, as a result of the screening, and the outcome of all of these assessments. This will result in all team members being aware of each others' recommendations for the patient's discharge plan and all are ideally working towards the same goal (Anderson & Helms, 1994; Rorden & Taft, 1990). Clear and systematic documentation promotes efficient discharge planning and continuity of care and also avoids unnecessary repetition of discharge planning elements by different members of the health care staff. This can result in a delayed discharge, as the correct sequencing of the activities may be interrupted.

Time and Timing

Time to plan patients' discharge is crucial because sufficient time and adequate notice of discharge are needed to allow for the coordination of discharge activities that each patient may need (Bowles et al., 2003; Bowles et al., 2002; Bull, 1994; Bull & Roberts, 2001; Lalani & Gulzar, 2001; Rhudy et al., 2009; Watts & Gardner, 2005). The estimated duration of a patient's admission is based on the expected

illness trajectory, which is usually dictated by the patient's diagnosis and medical events (American Medical Association, 1996; Katikireddi & Cloud, 2009; Lees, 2008; Lim et al., 2009). The actual duration will vary and ongoing communication between all those involved is required as the discharge date changes in response to the patient's condition (Armitage & Kavanagh, 1996; Bull, 1994; Day et al., 2009; Jewell, 1993; Lalani & Gulzar, 2001; Maramba et al., 2004; NSW Department of Health, 2007a; Victor & Vetter, 1988; Watts & Gardner, 2005). Ensuring that the elements of discharge planning occur in a timely manner and in response to the patient's condition promotes continuity of care and reduces the likelihood of a delayed discharge.

The timing of the elements of discharge planning is not always sequential because the patient's discharge goal can be unclear early in the admission. A patient's treatment interventions can be used to inform the discharge plan. An example of how this might occur follows in this paragraph and concludes in the next. On admission to the ward a patient with a diagnosis of acute stroke may be unconscious or unable to move one side of their body or be unable to talk. The priority at this stage is the treatment of the patient's medical condition and monitoring their response to the treatment. Referrals to other health care personnel, such as physiotherapist and speech therapist, will be based on the patient's current clinical needs and not their discharge needs in the initial stages of their admission (National Institute for Health and Clinical Excellence, 2008).

Some time after admission a physiotherapist may assist the patient to start walking early as part of therapy. When this happens they are doing two things: they are treating the patient according to evidence-based practice; and developing a baseline measurement of the patient's ability to walk. As the treatment continues, the physiotherapist is monitoring the patient's progress against their initial assessment of the patient's ability to walk, while at the same time considering the discharge options (National Institute for Health and Clinical Excellence, 2008). Whether or not the acute stroke patient has improved, their walking ability during

the treatment phase will determine the physiotherapist's recommended discharge destination for the patient. The physiotherapist might refer the patient to a rehabilitation specialist to ascertain whether the patient would benefit from a rehabilitation program. Alternately, the recommended option may be transfer to an residential aged care facility (National Institute for Health and Clinical Excellence, 2008). The data gathered by the physiotherapist during treatment influences the patient's discharge plan. It will be at this point that discharge options are further discussed with the other healthcare staff, the patient and their family as their trajectory is now more obvious.

Health care staff need to have experience and an appropriate skill level to complete specific discharge planning activities, as well as the overall discharge planning process (Atwal, 2002; Rorden & Taft, 1990). In addition, knowledge of the available resources in the community and how to access these services is also necessary (Anthony & Hudson-Barr, 1998; Arenth & Mamon, 1985; Atwal, 2002; Foust, 2007; Rorden & Taft, 1990). Skills are acquired through experience working in the acute care ward and with many different health professionals involved in patients' discharge planning. Experienced health care staff are more able to recognise changes in the patient's condition and refer such changes to the appropriate health care professional (Benner, Tanner, & Chesla, 1992; Tanner, Benner, Chesla, & Gordon, 1993).

Coordination and standardisation of process

While all the previous elements are essential, especially for patients with complex needs, coordination of the discharge plan is key to ensuring the process is completed within the timeframe of the patient's admission because many patients have a complex discharge planning process. Properly coordinating the available time and the appropriate sequencing of planning elements results in a well-organised and safe transition to the next care setting, which is especially important for complex patients with multifaceted discharge needs (Day et al., 2009; Katikireddi & Cloud, 2009; NSW Department of Health, 2007a; Parker, 2005;

Rorden & Taft, 1990). Many studies and government bodies have identified that one member of the health care team must be responsible for coordinating the discharge planning process (Anthony & Hudson-Barr, 2004; Association of Discharge Planning Co-ordinators of Ontario, 2009; Bull & Roberts, 2001; Carroll & Dowling, 2007; Hegney et al., 2002; Holland & Harris, 2007; Jewell, 1993; Katikireddi & Cloud, 2009; Lim et al., 2009; McGinley et al., 1996; McKenna et al., 2000; Naylor et al., 1999; NHS Institute for Innovation and Improvement, 2008; NSW Department of Health, 2007a; Pearson, Procter, Wilcockson, & Allgar, 2004; Williams, 1991). A number of studies also acknowledge that nurses are best placed to coordinate the patient's discharge plan because they have the most constant contact with the patient and are best placed to oversee patients' discharge (Anthony & Hudson-Barr, 1998; Armitage & Kavanagh, 1996; Bolch et al., 2005; Foust, 2007; Lalani & Gulzar, 2001; Lowenstein & Hoff, 1994; Rhudy et al., 2009; Rorden & Taft, 1990; Watts & Gardner, 2005; Williams, 1991). Therefore, discharge planning has to be integral in and responsive to the daily practices of nurses. The nurses' role in discharge planning is more fully explored later in this chapter and nurses' discharge planning behaviours are reviewed in Chapter Three (Armitage, 1981; Armitage & Kavanagh, 1996; Atwal, 2002; Bowles et al., 2002; Bull & Roberts, 2001; Cannaby et al., 2003; Clausen, 1984; Day et al., 2009; Foust, 2007; Hancock et al., 2003; Jewell, 1993; Kalisch, 2006; Lalani & Gulzar, 2001; Lowenstein & Hoff, 1994; Pearson et al., 2004; Rorden & Taft, 1990; Schlemmer, 1989; S. Shepperd et al., 2010; Watts & Gardner, 2005; Williams, 1991).

Finally, another element that was identified in the literature as promoting effective discharge planning is the development and implementation of a hospital-wide framework directing the whole process. Researchers and government health departments have recommended that each organisation has a standardised approach that is consistent across all the acute care wards. This ensures that every patient has the same discharge planning activities completed in the same way; for example, the use of standardised discharge risk identification tools such

as the discharge risk screen (DRS), which must be completed early in the patients' admission to the acute care ward (Armitage & Kavanagh, 1996; Association of Discharge Planning Co-ordinators of Ontario, 2009; Katikireddi & Cloud, 2009; Lalani & Gulzar, 2001; Lim et al., 2009; Lowenstein & Hoff, 1994; Maramba et al., 2004; McGinley et al., 1996; NSW Department of Health, 2007a; Schlemmer, 1989; Watts & Gardner, 2005). A number of studies and government policies have acknowledged role delineation is also necessary as part of standardising the process of discharge (Caplan & Brown, 1997; Clausen, 1984; Department of Health, 2003; Greenwald & Jack, 2009; Lane, Jackson, Odom, Cannella, & Hinshaw, 2009; Maramba et al., 2004; NHS Direct Wales, 2009; NSW Department of Health, 2007a). Anthony and Hudson-Barr (1998), noted that standardised tools, clear discharge criteria and clarity around whose role it was to complete the tools is necessary for successful discharge planning. Health care staff then clearly know what is expected of them regarding discharge planning and should complete the process accordingly (Halm et al., 2002; Maramba et al., 2004; Spivak & Brenner, 2001).

1.2.3 Patient safety

The purpose of discharge planning is to promote a safe transition from the acute care setting to the next setting where patients' ongoing health care needs will be managed. Discharge planning is seen by government bodies as a process that promotes patient safety and improves health outcomes by reducing patients' length of stay, improving the quality of post-discharge care, increasing patient satisfaction and reducing unplanned readmissions to hospital (Australian Government, 2010; Carroll & Dowling, 2007; Department of Health, 2003; NHS Institute for Innovation and Improvement, 2008; NSW Department of Health, 2007a; Rorden & Taft, 1990; S. Shepperd et al., 2010).

Safety after discharge for patients aged over 65 years is a greater concern because in addition to their pre-existing health conditions and physical impairments they are much more affected by hospitalisation than younger patients (Australian

Institute of Health and Welfare, 2008, 2009; Creditor, 1993; Graf & Aprn, 2006; King, 2006). Hospitalised elders often experience a rapid decline in their physical condition and frequently complications arise that are unrelated to their reason for admission, such as loss of their ability to walk and care for themselves (Creditor, 1993; Graf & Aprn, 2006; King, 2006). This is of concern because there has been an increase of up to 10% of people aged over 80 years living at home alone since 1986 emphasising the importance of effective discharge planning (Australian Bureau of Statistics, 2009b).

For older patients the recovery process at home can require an intense physical and emotional struggle, especially for those living alone. Even simple tasks, such as bending to get pots and pans from a cupboard can be difficult and fatiguing, which increases their risk of an event at home (LeClerc, Wells, Craig, & Wilson, 2002). Comprehensive and timely discharge planning activities can promote patient safety at home and reduce the likelihood of re-hospitalisation for older and other vulnerable patients (Australian Institute of Health and Welfare, 2009; Bolch et al., 2005; Bowles et al., 2002; Bull, 1994; Bull & Roberts, 2001; Hancock et al., 2003; LeClerc et al., 2002; Lin et al., 2005; Mamon et al., 1992; NHS Institute for Innovation and Improvement, 2008; NSW Department of Health, 2003).

1.3 Nurses' role in discharge planning

Discharge planning requires a multidisciplinary health team approach although not every discipline will always be involved. The two disciplines that are always involved in acute patient care and discharge planning are medical officers and nurses. All patients in acute hospitals have a senior medical officer who is responsible for their admission and discharge (Cannaby et al., 2003; Jewell, 1993; NSW Department of Health, 2007a; Williams, 1991). The medical officer's role in acute care hospitals is to care for the sick by investigating and treating the patients' illness (McKeown, 1998). Therefore, the medical officer's decision to discharge is based on the patient meeting the criteria relevant to the primary acute or chronic diagnosis.

All patients in acute care hospitals also have nurses involved in their care throughout their entire hospital stay (Clausen, 1984; McGinley et al., 1996; Schlemmer, 1989). Nurses have the most frequent contact with the patient and family; therefore, they have more opportunity to interact with and monitor the patient, their situation and needs, and the family dynamics. This gives the nurse a holistic view of the patient as a person. Furthermore, nurses are expected to engage in comprehensive patient assessment for discharge planning and to be involved in all stages of the process in accordance with their standards of practice, competencies and code of ethics (Australian Nursing and Midwifery Council, 2005, 2007, 2008a, 2008b). The nurse's admission assessment provides a starting point for discharge planning (Bull & Roberts, 2001; Rorden & Taft, 1990; Watts & Gardner, 2005). Therefore, nurses have a key role in identifying patients' discharge needs, developing a discharge plan and coordinating the process.

Discharge planning is considered an essential aspect of daily nursing practice. However, discharge planning is one of many activities that nurses complete on the acute care ward and although they are well positioned to coordinate the process of discharge planning, the acute care ward where nurses complete their work has many competing demands, which can vary and are not always predictable (Ebright, Patterson, Chalko, & Render, 2003; Jones & Cheek, 2003; Redding & Robinson, 2010; Wolf et al., 2006). Discharge planning has been recognised as a complex activity for many patients, which may require dedicated staff with specialised knowledge to coordinate the process (Day et al., 2009; Lane, Jackson, Odom, Cannella, & Hinshaw, 2009; Maramba et al., 2004; NSW Department of Health, 2007a). Consequently discharge planning may no longer be perceived by all ward nurses as being part of their role, regardless of how appropriate this is (Kalisch, 2006). The specialist discharge planning roles will be described below.

In larger metropolitan hospitals some ward-based nurses' roles are specifically dedicated to discharge planning (Day et al., 2009; Lane, Jackson, Odom, Cannella,

& Hinshaw, 2009; Maramba et al., 2004; NSW Department of Health, 2007a). These roles vary internationally and include case managers, nurse coordinators, discharge planning coordinators, advanced practice nurses (APN), hospital liaison nurses and discharge planning clinical nurse consultants (CNC) (Day et al., 2009; Hofmeyer & Clare, 1999; Houghton, Bowling, Clarke, Hopkins, & Jones, 1996; Maramba et al., 2004; Naylor, Bowles, & Brooten, 2000; Naylor et al., 1999; Schneider, 1992). All these roles could be defined as advanced practice nurses (Naylor et al., 2000). By contrast, in smaller rural or regional hospitals, nurses take on many aspects of the specialist discharge and allied health roles because of the fewer resources in these areas (Baernholdt & Mark, 2009; McCoy, 2009). The ward-based nurse coordinator, discharge planning coordinator and discharge planning clinical nurse consultant (CNC) roles are described below.

Generally, ward-based nurse coordinators have a broad job description, with their major function being overall coordination of patient care planning in the acute care ward, inclusive of discharge planning. The role comprises other responsibilities, such as patient flow, ward organisation, complaints manager and information channel between the multidisciplinary team, the nurses and the patient (Day et al., 2009). Usually the nurse coordinator either oversees or directly organises patient discharge, such as communicating with patient and family about discharge arrangements, confirming transport needs, referrals to community nurses and handover to community care providers.

The nurse discharge coordinator works over multiple wards and specifically focuses on discharge planning management. This includes identifying the patients' needs on admission, medication reconciliation and coordination of the discharge plan until the day of discharge (Lane et al., 2009).

The discharge planning CNC role (in larger Australian hospitals) often has a wider perspective because it is performed at the hospital level, encompassing both in-patient and outpatient health care needs. Each hospital establishes the role to fit

with other health professionals' roles and the needs of the organisation. The researcher's role, as discharge planning CNC in the research setting, reflects some but not all discharge planning CNC roles in large tertiary referral hospitals (NSW Department of Health, 2007a).

The researcher, as the discharge planning CNC, provides advice to all members of the multidisciplinary team across the organisation, following referrals for patients with complex discharge needs from nurse coordinators, nurse unit managers, social workers and medical officers. The researcher, as the discharge CNC, is often contacted to assist with developing appropriate discharge plans for patients with difficult or complex discharge requirements. This is in addition to case-managing patients who present to hospital more frequently than their condition would normally dictate. The role is similar to the ward based nurse coordinator, but different in that the CNC consults throughout the hospital and community, with all levels of staff and liaises directly with senior managers. Monitoring nurses' compliance with aspects of the discharge planning policy, including screening for patients' discharge risk, is part of the researcher's role as discharge planning CNC.

1.4 Discharge planning performance

Systematic reviews of the effectiveness of discharge planning have been completed in the last ten years, with earlier reviews suggesting the effectiveness of discharge planning in reducing cost, patients' length of stay, health outcomes post-discharge and unplanned readmissions to hospital was uncertain (S. Shepperd, Parkes, McClaren, & Phillips, 2006). More recently Shepperd et al (2010) conducted a systematic review of a number of studies (n=21) and asserts that the effectiveness of discharge planning in achieving its intentions to improve patient outcomes and contain costs is uncertain. Nevertheless, more than half of the studies (n=11) investigating the outcome of interventions for older patients identified a reduction in length of stay and readmission rates and an increase in patient satisfaction. However, the studies reviewed by the authors were comparing different interventions, implemented at different stages of the patient's admission,

in three different types of health care institutions. The studies also measured different outcomes although definitions for the interventions were similar. This makes it difficult to compare these studies; however, some conclusions about the effectiveness of a specific discharge planning intervention can be made from this review.

Studies investigating discharge planning in acute care have identified common issues with the completion of all aspects of discharge planning (Anthony & Hudson-Barr, 1998; Armitage & Kavanagh, 1996; Atwal, 2002; Bowles et al., 2003; Bull, 1994; Day et al., 2009; Foust, 2007; Jewell, 1993; Lalani & Gulzar, 2001; Lowenstein & Hoff, 1994; Lundh & Williams, 1997; Watts & Gardner, 2005; Williams, 1991). Little has changed in the last two decades with many of the same problems still being identified in recent studies (Armitage & Kavanagh, 1996; Atwal, 2002; Bull, 1994; Cannaby et al., 2003; Clausen, 1984; Garling, 2008; Garratt, 2009; Holland & Harris, 2007; Jewell, 1993; Lalani & Gulzar, 2001; McMurray et al., 2007; Rhudy et al., 2009; Schlemmer, 1989; Watts & Gardner, 2005; Williams, 1991). The areas of discharge planning performance that have been identified as being problematic are described, including the outcome for patients.

1.4.1 Completion of essential elements

Elements of discharge planning that were frequently found to be absent or incomplete were: patient assessment; patient and family involvement; sufficient time to prepare for discharge; lack of referrals to services and communication between team members and between the health care team and the patient and family (Armitage & Kavanagh, 1996; Bowles et al., 2002; Cannaby et al., 2003; Congdon, 1994; Jewell, 1993; McMurray et al., 2007; Victor & Vetter, 1988). Many elements were also found to be completed in a less than ideal manner, so that the discharge planning was completed hastily or in a manner that was chaotic, disjointed or ad hoc (Armitage & Kavanagh, 1996; Bull & Roberts, 2001; Cannaby et al., 2003; Day et al., 2009; Lowenstein & Hoff, 1994; Williams, 1991). Without adequate discharge planning, patients were at risk of experiencing events at home,

unplanned visits to the General Practitioner (GP) or specialist or readmission to hospital (Bowles et al., 2002; Lalani & Gulzar, 2001; Mamon et al., 1992; McMurray et al., 2007; Victor & Vetter, 1988). An unscheduled readmission to hospital results in extra cost to the health care system, the patient and their family.

Of greater concern were the studies that identified that some patients did not have an assessment completed on admission or at any time in their stay. An exploration of the adequacy of discharge for surgical patients highlighted that all patients (n=13) in three hospitals did not have any review of their discharge needs on admission or at all during their admission. While the reasons for the omission were not clear, the authors theorised that as these patients had clinical pathways for their procedures, staff may have assumed that their discharge had been discussed and planned with the patient before admission and therefore no further assessments were required (McMurray et al., 2007). This study did not investigate health care staff's role. However, the admission assessment is a standard and expected process for all patients' admitted to any hospital in New South Wales or Victoria (Katikireddi & Cloud, 2009; Lim et al., 2009; NHS Institute for Innovation and Improvement, 2008; NSW Department of Health, 2007a; Rorden & Taft, 1990). This small qualitative study suggests that discharge planning was not part of routine practice.

In the study by Bowles at al (2002), a complex group of patients did not receive referrals for services at home; shorter length of stay was identified as the main factor influencing this outcome. The authors reviewed referrals for the control group of patients (n= 174) in a randomised control trial that investigated the outcomes for patients who received standard discharge planning compared to those that received an intervention. More than half of the control group (n=99) didn't receive a referral for community services and the authors determined that many of these patients (n=49) were in need of services at home, as they had the same or similar high risk characteristics as those that did receive a referral. Patients with a shorter length of stay were less likely to receive a referral for

services and also had a significantly higher risk of readmission (Bowles et al., 2002). The authors of this large, well-designed study convincingly concluded that the short length of patient stay hampered health care staff's ability to complete all the necessary elements of discharge.

1.4.2 Patient outcomes

Patients' perceived that discharge planning was incomplete and that they were often not involved in their own discharge planning. Some patients asserted that communication from health care staff was at times either absent or contradictory. Patients were then anxious about their discharge because they were concerned about how to manage their illness, unsure about what they could do at home and worried about a recurrence (Cannaby et al., 2003; Lalani & Gulzar, 2001; McMurray et al., 2007). Patients acknowledged that they were discharged without adequate resources to support their needs, or any knowledge of what services were available at home. Consequently, some patients in vulnerable states had to organise their own support after discharge, which increased their anxiety and risk of readmission to hospital (Bull, 1994; Cannaby et al., 2003; Jewell, 1993; Lalani & Gulzar, 2001; Lundh & Williams, 1997; McMurray et al., 2007).

Patients and families reported that they were unsure of the discharge date and notice of discharge was inadequate (Armitage & Kavanagh, 1998; Jewell, 1993; McMurray et al., 2007; Victor & Vetter, 1988). Some patients and family members received less than 24 hours to prepare for discharge home (Armitage & Kavanagh, 1998; Jewell, 1993; McMurray et al., 2007; Victor & Vetter, 1988). Consequently, patients went home unprepared because they did not have enough time to discuss their needs. Some patients then required unscheduled medical interventions by the GP or specialist and readmission to hospital (Armitage & Kavanagh, 1996; Bowles et al., 2002; Bull & Roberts, 2001; Cannaby et al., 2003; Congdon, 1994; Foust, 2007; Jewell, 1993; Lalani & Gulzar, 2001; McMurray et al., 2007).

A delay in a patient's discharge also creates problems for the patient and family because an extended stay in hospital can contribute to the patient's functional decline. This may change the recovery trajectory or discharge plans, particularly for older patients, and may frustrate family members who are likely to have other obligations, such as paid work (Bull, 1994; Cannaby et al., 2003; Creditor, 1993; Graf & Aprn, 2006; King, 2006; McMurray et al., 2007).

Patient satisfaction surveys completed in the United Kingdom and New South Wales (NSW) found varying levels of patient involvement in discharge planning, some of which were higher than reported in other studies (Garratt, 2009; NSW Health, 2009). The results of the 2008 annual patient satisfaction survey of all acute care trusts in the United Kingdom found that many patients (84%) reported they felt they were involved in their discharge planning. Just over half (54%) were definitely involved, compared to 30% who were somewhat involved indicating nearly half of the patients' required much more involvement. Nearly two thirds (61%) of patients received printed information about their care at home. However, less than half (40%) were fully aware of any danger signals to watch for at home and one fifth (21%) were somewhat aware of danger signals. Only 44% of the patient's family or carers received information from nurses or medical officers on how to manage the patient's care after discharge. These results reveal that there are still significant proportions of patients and family members who are not receiving information about the patient's care at home and are not completely involved in their discharge planning. This report did not indicate which information nurses were responsible for providing (Garratt, 2009).

The results from the NSW Health Patient Survey 2009, which asked patients broader questions about their transition from hospital to home, indicated comparable levels of information being given to patients and their family (NSW Health, 2009). This survey of patients (n= 11431) across NSW hospitals found that staff had discussed with just over half of the patients what danger signals to watch for at home (53%) and when to resume normal activities (52%). More than half of

the patients (64%) were fully aware of when they could go home; however nearly a third of patients (29.5%) were only somewhat aware of when they could go home. This report did not indicate which staff provided the information to patients or when patients were fully aware of their discharge and neither report indicated whether patients were aware if discharge planning started early (NSW Health, 2009).

1.5 Summary

Effective discharge planning promotes a safe transition for patients from the acute care setting to the next setting where their ongoing health care needs will be met, whether this is at home or another health care setting. The process of discharge planning can be complex and include many elements and health professionals. Adequate and timely completion of all the elements of discharge planning is important to ensure that the discharge planning activities are completed within the timeframe of the patient's medical trajectory. Completion of a structured discharge planning process can result in reducing patients' length of stay; however, the effect on health outcomes and cost is uncertain. Nonetheless, absent or incomplete discharge planning can result in patients' needing unexpected health care interventions or readmission to hospital.

Nurses have a pivotal role in identifying patients' needs early and planning their discharge because they have the most frequent contact with the patient. Nurses' discharge planning behaviours and the factors influencing their role will be discussed in the Chapter Three.

Several factors challenge the completion of discharge planning. However, these same factors also increase the need for effective discharge planning. The impact of the current context of health care on discharge planning will be discussed in the next chapter.

CHAPTER 2: CHALLENGES TO EFFECTIVE DISCHARGE PLANNING

2.1 Introduction

This chapter describes the challenges to the completion of discharge planning in the current context of health care. The challenges to effective discharge planning include: the imperatives to reduce length of stay; the increasing number of complex patients accessing health care; an increasing demand for acute care hospital beds; decreasing availability of family and a mismatch between the demand for community services and availability of services. These and other factors impacting on discharge planning will be described.

2.2 Challenges to effective discharge planning

Ensuring patient safety post-discharge through the implementation of effective discharge planning has become increasingly important and more challenging in the last two decades. This is due to changes in government funding, patient demographics, improved technology and drug therapies, all resulting in older, more complex patients having shorter lengths of stay in hospital and requiring their ongoing health care to be managed in the community (Carroll & Dowling, 2007; Katikireddi & Cloud, 2009; Lim et al., 2009; NHS Institute for Innovation and Improvement, 2008; NSW Department of Health, 2007a). Improved technology has reduced the time patients need to spend in hospital because many new procedures or surgery are not as invasive or as debilitating as old techniques and are now often a day surgery procedure (NSW Department of Health, 2007b). Rather then recovering in hospital, as done in the past, patients now go home to recover (American Medical Association, 1996; Baker, Einstadter, Husak, & Cebul, 2004; Halm et al., 2002; Kosecoff et al., 1990). However, patients with ongoing health care needs who are discharged without adequate support are at risk of a harmful

event at home often resulting in a readmission to hospital (American Medical Association, 1996; Bowles et al., 2003; Halm et al., 2002; Halm et al., 2003; McMurray et al., 2007; Naylor et al., 1999).

For the last two decades discharge planning has not been completed in an ideal manner. This is not surprising given the increasingly complex needs of patients and economic constraints placed on health care providers. The challenges to completion of discharge planning in acute care wards are:

- imperatives to reduce patients' length of stay;
- insufficient growth in community health services to meet the demand;
- an increasing demand for acute hospital care;
- an increasing number of older patients with complex health care needs accessing acute care, and,
- decreasing family availability.

Each of these factors has increased the emphasis in health care policy on more efficient, methodical and explicit discharge planning to ensure all patients have the discharge plan implemented that is appropriate for them. However, these factors also make discharge planning more difficult to complete.

2.2.1 Imperatives to reduce length of stay

Internationally, in the last two decades there has been a drive to reduce patients' length of stay and shift increasingly complex care to the community to reduce cost. This drive is also the result of fewer acute care beds, improved technology and government funding models to contain cost and ensure more patients have access to acute care beds (Australian Institute of Health and Welfare, 2006a, 2009; Caplan & Brown, 1997; Organisation for Economic Co-Operation and Development (OECD), 2007). As the length of stay decreases, the number of patients being admitted and discharged from acute care wards increases. In the five years between 2003 and 2008 there was a 3.1% increase in the number of patients being

admitted to Australian hospitals and a 0.8% decrease in their average length of stay (Australian Institute of Health and Welfare, 2009). This increase means there are more patients with more complex problems requiring discharge planning to be completed in a timely manner; however, a shorter time in hospital means there is potentially less time to complete all aspects of discharge planning.

To meet this length of stay drive an equivalent demand for community health services that can provide post-acute care interventions has increased over the past 10-15 years. These interventions include such things as complex wound dressings and intravenous therapies (Australian Government, 2010; Caplan & Brown, 1997; Thomas and Associates, 1998; Victorian Government, 2008). Many of these post-acute teams that provide such interventions are now multidisciplinary, so that the ongoing complex health and physical therapy needs can be continued in the home.

2.2.2 Insufficient growth in community services

The number of available post-acute care services in Australia that manage patients' ongoing healthcare needs after discharge has not kept up with the changing population, advances in technology and shorter lengths of stay. There are not enough services to meet all the needs of the patients being discharged (Australian Government, 2009). The mismatch between what is needed and what is available makes the process of planning each patient's discharge even more difficult. The disparity can delay discharges or increase patients' risk of an unwanted event at home because all the necessary care is not available (Rorden & Taft, 1990). For discharge planning to be successful there must be an appropriate number and range of services available in the community (American Medical Association, 1996; Anderson & Helms, 1994; Arenth & Mamon, 1985; McGinley et al., 1996; Rorden & Taft, 1990).

2.2.3 Increasing demand for acute hospital care

The increasing demand for hospital beds results in patients being allocated to any available bed. As a consequence, patients are often admitted to wards where the staff expertise does not match their care needs. Patients need to move during their stay to get to the ward with the specialist health care staff who have the expertise to best manage their care and discharge plan (Alameda & Suárez, 2009). In their study, investigating medical and surgical wards within NSW hospitals, Duffield et al (2007) identified that patients were experiencing, on average, two transfers during their mean length of stay of four days. The term “churn” was used to describe the phenomenon, which has been recognised as a major factor affecting the effective gathering of patient information on admission and throughout the stay in hospital (Duffield et al., 2007).

Churn also affects patients’ continuity of care. Multiple ward moves result in important information being missed because the emphasis is on moving the patient through the system (Duffield et al., 2007). This reduces the time for the health care staff to get to know the patient and the amount of time available for staff to complete the discharge planning process in a methodical and comprehensive manner (Armitage & Kavanagh, 1996; Atwal, 2002; Bull, 1994; Bull & Roberts, 2001; Cannaby et al., 2003; Jewell, 1993; Rhudy et al., 2009; Watts & Gardner, 2005). The handover of care to the next ward’s health professionals may be inadequate due to the lack of time to gather patient data and lack of familiarity with the patient or their condition. This missing information at handover adversely affects the flow of the discharge planning process and has been shown to result in adverse events at home (Garling, 2008; Mamon et al., 1992; Pothier, Monteiro, Mooktiar, & Shaw, 2005).

The demand for beds has also caused an increased diversity of patients on each ward. The reduced availability of appropriate specialty beds has resulted in an increasing variety of medical conditions being admitted to each acute care ward over the five years from 2001 to 2005 in NSW hospitals (Duffield et al., 2007). An

increased variety of medical conditions require health care professionals to have a much broader knowledge of treatments, medications and protocols for different patients' conditions and therefore their discharge needs (Duffield et al., 2007). The escalating diversity of patients in specialty wards also makes discharge planning harder for staff to complete confidently.

2.2.4 Patient complexity

Internationally, in the last two decades, the types of patients accessing healthcare are changing. In the member countries of the Organisation for Economic Co-Operation and Development (OECD), people are living an average of nine years longer, older people with more complex health care needs are living at home and many of these people have multiple conditions that include cognitive or physical impairment (The OECD Health Project, 2004). Australia is also experiencing these changes, so that in the 50 years from 1956 through to 2006 the number of people aged over 65 has doubled and the number of people over 85 years has increased seven-fold (Australian Government, 2009).

Not only is the population ageing, but many have pre-existing health conditions or are limited in their physical abilities. In Australia, a large proportion of people aged over 65, are living at home with a disability (76%), such as chronic pain, hearing loss, decreased mobility, or mental health issues. A similar proportion (77%) in all age groups, are living with one long term condition or chronic disease, such as diabetes, vascular disease or chronic airways limitations (Australian Government, 2009). Most of these people require help in at least three areas of their life, for example, transport, property maintenance or housework (Australian Institute of Health and Welfare, 2008).

Public hospitals in Australia must provide care for this growing group of older people accessing health care. The combination of an ageing population with complex health and physical care needs has increased the need for health care interventions in hospitals so that in the five years from 2003 to 2008 there was a

21% increase in patients aged 75-84 years requiring hospitalisation, and close to a 30% increase for those aged 85 years and older (Australian Government, 2010; Australian Institute of Health and Welfare, 2009). New South Wales (NSW) public hospitals are also experiencing this increase. In the years from 2006 to 2007, over one third of all patients using public hospitals were over 65 years and in the following 12 months that figure reached 45% (Garling, 2008). However, many older people living with multiple chronic conditions are remaining in their own homes making discharge planning more important (Australian Institute of Health and Welfare, 2009; Lorig & Holman, 2003).

An additional complexity facing health care staff in acute care hospitals is the growing number of people diagnosed with dementia. This chronic and progressive condition affects the person's memory, thinking, orientation and learning capacity (Access Economics, 2009; Australian Institute of Health and Welfare, 2006b). Patients with this condition have been identified as high users of health care. All people living with dementia were found to need help in at least one area of their life and 91% needed help with communication (Australian Institute of Health and Welfare, 2006b). In Australia, 1.1% of the population was diagnosed with dementia in 2008 and the estimated prevalence ranges from 12% of patients over the age of 75 to 75% of patients over 95 years (Access Economics, 2009).

Discharge planning for patients with dementia is more difficult because in many cases they cannot participate in the process and carers may feel overwhelmed by their situation due to carer stress. Carer stress has been found to impact on how carers view their home situation and they often resist the idea of receiving help adding further challenges to the process of discharge planning (Bruce, Paley, Underwood, Roberts, & Steed, 2002; Oyebode, 2003). The large proportion of older patients with dementia, as well as the number of patients over 65 accessing acute care is expected to grow to potentially unmanageable proportions in the next 30 years. As a result, discharge planning for this group of patients will become increasingly demanding for all health care staff and the family caring for these

patients in the next decades and beyond (Australian Institute of Health and Welfare, 2006b).

2.2.5 Decreasing family availability

At the same time as large numbers of patients (89%) are going home to recover from Australian hospitals, the availability of family carers has decreased because more people are working full-time and part-time. Decreasing family availability also derives from the increasing prevalence of divorce or single-parenthood, mobility to obtain work, and a raft of other social changes (Australian Bureau of Statistics, 2009a; Australian Institute of Health and Welfare, 2009). This means there are less informal care-givers available to provide care at home for their older relatives. They are also less accessible to health care staff to discuss their family member's needs at home. This is especially important for those patients with dementia or patients from a non-English speaking background (14%) (Australian Institute of Health and Welfare, 2009). Both these groups of patients may be less able to participate in discharge planning due to communication barriers. However, it is the responsibility of all concerned to be aware and implement local policies that make available and mandate use of interpretation so that such groups are not differentially disadvantaged in healthcare decision-making processes. While it has primarily been the family who has provided a lot of the patient's care at home after discharge, the decreasing number of family members able to provide this care results in an increased need for community service providers to provide care following discharge from hospital. However, these services may not be adequate to meet the needs of these complex patients.

2.3 Summary

In summary, the emphasis on more methodical, efficient and obvious discharge planning has increased over the last two decades because there are growing numbers of older and complex patients accessing the system and there is a drive to reduce hospital length of stay to reduce costs and increase access to acute care

hospital beds. Therefore, there are an increasing number of older and more complex patients going home to complete their recovery and there is less time to plan their discharge. Unfortunately, while many patients are requiring more complex care in the community, there is a mismatch between the demand and availability of community resources and there are fewer family members able to support their older relatives at home. All of these factors make planning a safe discharge more important and even more difficult.

Nurses have been identified as having a pivotal role in discharge planning but continually encounter the complexities described in this chapter. The literature exploring nurses' performance of discharge planning in acute care wards and factors influencing their behaviours will be reviewed in the next chapter.

CHAPTER 3: NURSES AND DISCHARGE PLANNING

3.1 Introduction

This chapter reviews the literature exploring nurses' perception of discharge planning and nurses' discharge planning behaviours. The literature has been sourced from international and Australian studies; some of which have been completed recently, while others were completed in the last two decades. The focus of this literature review is on the early screening of patients' discharge needs by nurses, their understanding of the process, perceptions of their role in discharge planning and the factors influencing their behaviours.

Firstly, aspects of nurses' discharge planning that are not being completed in an ideal manner are presented. Following this, the nurses' own descriptions of discharge planning reveal problems with their knowledge of the process. The specific areas where nurses' lack understanding are discussed. The areas include: the need for discharge planning to start early, the need for a multidisciplinary approach, the nurses' role in discharge planning, the need to communicate with the patient and family and the requirement to document in the medical record. The effect of education and experience on nurses' discharge planning is described. In addition, the challenges to nurses' completion of discharge planning are presented. These challenges include: lack of time; continuity; and the relationship between medical officers and nurses. The influence of these factors on nurses' practice is discussed. Finally, the limitations of the literature are identified. This includes areas of nurses' discharge planning that have so far not been published. These areas comprise of research into nurses' attitudes, and measurable discharge planning aspects of nursing work.

3.2 Nurses' performance of discharge planning

The literature investigating nurses' discharge planning behaviours reveals problems with the completion of all aspects of the process. This is not surprising given the complexity of the acute care ward environment and the competing demands nurses encounter during each shift (Ebright, Patterson, Chalko, & Render, 2003; Jones & Cheek, 2003; Redding & Robinson, 2009; Wolf et al., 2006). Studies show that: nurses' knowledge of discharge planning is lacking; completion of discharge planning relies on their knowledge of patients' conditions; and contradictions exist between nurses' stated beliefs about discharge planning and their self-reported or observed behaviours (Armitage & Kavanagh, 1996; Lalani & Gulzar, 2001; Lowenstein & Hoff, 1994; Rhudy et al., 2009; Watts & Gardner, 2005).

Discharge planning has been identified as a missed aspect of nursing care (Kalisch, 2006). The specific areas identified as missing include: completion of the patient's admission assessment, appropriate timing of the completion of different elements, referral to team members and community services, communication with the multidisciplinary team and the patient and family (Anthony & Hudson-Barr, 1998; Armitage & Kavanagh, 1996, 1998; Atwal, 2002; Bowles et al., 2003; Bull, 1994; Cannaby et al., 2003; Day et al., 2009; Foust, 2007; Jewell, 1993; Kalisch, 2006; Lalani & Gulzar, 2001; Lowenstein & Hoff, 1994; Lundh & Williams, 1997; McMurray et al., 2007; Rhudy et al., 2009; Watts & Gardner, 2005). Factors influencing these behaviours have been identified and these are discussed later in this chapter.

3.2.1 Admission assessment and referral

Nurses approach patient assessment on admission in an inconsistent manner. Standardised assessment forms, a predefined set of questions or comprehensive assessments are either not completed or completed in an ad hoc way (Anthony & Hudson-Barr, 1998; Armitage & Kavanagh, 1996; Atwal, 2002; Day et al., 2009;

Watts & Gardner, 2005). Nurses either do not use a standardised approach for discharge planning as directed by organisational policy or their beliefs are inconsistent with the policy (Day et al., 2009; Lowenstein & Hoff, 1994). Instead, nurses complete patient admission assessments using informal cues. These assessments vary according to the patient's needs, their diagnosis on admission and the ward the patient is admitted to (Armitage & Kavanagh, 1996; Atwal, 2002; Jewell, 1993; Watts & Gardner, 2005; Williams, 1991).

Nurses' admission assessment behaviour is best demonstrated in the study by Armitage and Kavanagh (1996) where nurses (n=12) from five medical wards were interviewed to determine their perceptions and experience of discharge planning. Nurses reported that different patient groups, such as medical and surgical patients, were perceived to have different discharge needs and because of this not all patients received an assessment. Surgical patients were seen as having straightforward needs and therefore were not likely to need discharge planning, as many were younger with short lengths of stay. In contrast, medical patients were viewed as having a less predictable trajectory; therefore information about their needs was gathered in a random manner by nurses. Patients with obvious or chronic needs were much more likely to have an assessment completed for discharge planning although this approach depended on the nurses' knowledge of the patients' condition, so that patients with unfamiliar conditions were overlooked. There was no standard approach for identifying patients' needs early on admission or for making referrals to other health professionals (Armitage & Kavanagh, 1996).

Similarly, nurses in the study by Rhudy et al (2009) used informal cues to identify if patients required further investigation of their discharge needs. Nurses reported that patient assessments were completed on admission and if the patient followed the expected recovery trajectory post-surgical procedure then discharge planning was not required. However, the method of admission assessment was not described and ten of the fourteen nurses interviewed were working in surgical areas, so it was not obvious what practices nurses used in the medical areas.

Likewise, Atwal (2002) asserted it was not routine for nurses to gather patients' social information on admission and social information was only discussed between nurses near the day of discharge. Lalani and Galzar (2001) noted in a survey of nurses, to determine their perceptions of discharge planning (n =15), that only a third of nurses said that they complete the patient's needs assessment for discharge, with only 10% of patients' medical records (n=15) having any assessment documented. An ad hoc approach to assessment was also demonstrated by registered nurses (n= 12) from several medical and surgical wards in the study by Watts and Gardner (2005). While nurses agreed that planning patients' post-discharge needs should start at admission, most of the participants said that in reality, planning started anywhere from admission up until the day of discharge (Watts & Gardner, 2005).

These findings are consistent with the literature investigating nurses' admission assessment documentation behaviours (Davis, 1994; Ehnfors & Smedby, 1993; O'Connell, 1998). As part of a study exploring nurses' application of the nursing process (which includes patient admission assessments), O'Connell (1998) identified that nurses did not place great importance on the completion of patients' assessment forms. Even if the forms were completed, nurses said they rarely referred to them at a later date, suggesting that the forms were not seen as a valuable source of information.

Other studies have found that nurses incorporate discharge planning into their usual practice. The studies by Bull and Roberts (2001) and Foust (2007) found that assessing and educating patients was part of the daily routine for the nurses in their studies and the patients were involved in their discharge plan throughout their admission. The methods used in both studies were similar and included participant observation, interviews and documentation review but the study settings and population were diverse. The setting for the Bull and Roberts (2001) study was a geriatric rehabilitation hospital and Fousts' (2007) study was completed in an acute hospital ward with a population of predominately women having gynaecological

surgery. As in the studies by Rhudy et al (2009) and Armitage and Kavanagh (1996), nurses in the study by Foust (2007) used the patient's expected trajectory to monitor progress and update the discharge plan accordingly. Nurses were seen to be completing regular patient assessment, but the initial admission assessment process was not described and very little was documented about the discharge plan in the medical record (Foust, 2007).

In comparison, Bull and Roberts (2001) noted that both the formal and informal admission assessment reflected the ideal, which may reflect the methodology used in this study. The assessment was obvious and patients were engaged in the discharge planning process from admission. However, while patients were asked appropriate questions on admission, nurses' documentation of this information was incomplete. This was stated to be due to the pre-formatted assessment form not having appropriate spaces for the information. Despite the difference in study settings, nurses in both studies demonstrated that discharge planning can occur as part of everyday practice. In fact, the study by Bull and Roberts (2001) demonstrated that discharge planning, if completed in the ideal manner, has beneficial outcomes for patients after discharge. An important difference of the setting for the study reviewed is that patients had an average length of stay of two to six weeks, in contrast to the acute care ward average stay of 4.2 days (Australian Institute of Health and Welfare, 2009; Bull & Roberts, 2001).

More commonly commencement of the patient's discharge planning activities by nurses was often prompted by the patients' impending discharge (Armitage & Kavanagh, 1996; Bull, 1994; Lalani & Gulzar, 2001; Rhudy et al., 2009; Watts & Gardner, 2005; Williams, 1991). Nurses frequently stated that they waited for the medical officer to provide a discharge date before discharge planning started. However, medical officers often did not provide the discharge date until the day before or day of discharge meaning that multiple discharge planning activities had to be completed in a very short period of time (Armitage & Kavanagh, 1996; Bull, 1994; Lalani & Gulzar, 2001; Rhudy et al., 2009; Watts & Gardner, 2005; Williams,

1991). The inconsistent approach to patient assessment and late notice of discharge also impacts on referrals to allied health team members and community services.

Inconsistencies were exposed in the area of nurses' referral practices for patients' post-discharge needs. When comparing nurses' referral practices to other health professionals' behaviours, Bowles et al (2003) noted that nurses were the health professional least likely to refer to other health professionals. As for patient assessment, it was found that patient characteristics also influenced nurses' referral behaviours so that patients with subtle needs were overlooked (Bowles et al., 2003). Late referrals to other team members or other services were made by some nurses because they found the process of referring patients for services confusing or because of late notice of discharge. The latter suggests that patients' needs were not identified on admission (Cannaby et al., 2003; Jewell, 1993). The result for these patients was delayed discharge or an inadequate assessment of their discharge needs. Furthermore, some nurses were unaware of the preparation patients had received for discharge and thought that the case manager was in charge of this (Kalisch, 2006). Other nurses would refer the patient to the discharge planner or social worker if the patients' expected recovery trajectory did not conform to the nurses' expectations (Rhudy et al., 2009).

3.2.2 Communication and multidisciplinary team involvement

Communication, verbal and written, and multidisciplinary team work is key to effective discharge planning and the appropriate sequencing of events: however, lack of team work and poor communication between nurses and other team members is a common issue (Anthony & Hudson-Barr, 1998; Armitage & Kavanagh, 1996; Cannaby et al., 2003; Day et al., 2009; Jewell, 1993; Lundh & Williams, 1997; Watts & Gardner, 2005). Atwal (2002) determined in her study exploring acute care nurses' (n=15) perceptions of discharge planning, that communication in discharge planning was not adequate. The author interviewed nurses using a case study approach and observed different specialties'

multidisciplinary meetings (n=28), medical ward rounds (n=14) and nurses' handover. Nurses in this study said communication with medical officers occurred when specific information was required, such as a discharge date or referral. The nurses were not involved in multidisciplinary team meetings because the timing of the meetings clashed with the nurses' routines (Atwal, 2002; Atwal & Caldwell, 2006). When nurses were present in medical ward rounds, other team members observed that nurses were passive and did not actively ask questions about the patient's discharge or provide information about the patient's progress (Atwal, 2002; Atwal & Caldwell, 2006; Cannaby et al., 2003). Furthermore, at nurses' handover information about patients' discharge needs was lost or not considered important enough to discuss (Atwal 2002).

Similarly, in the study by Watts and Gardner (2005), nurses reported that communication with the multidisciplinary team was ad hoc because nurses were not involved in team meetings where discharge plans are discussed and each ward had different systems for communicating patients' discharge issues. Each of the different systems depended on individual nurses' behaviours as to how much information was recorded, either in patients' medical records or on white boards. In comparison, Lowenstein and Hoff's (1994) survey of nurses (n=225), from eight acute care hospitals, revealed that nurse managers of the ward or clinical specialists usually attended the multidisciplinary team meeting. Only just over a third of nurses looking after the patients (39%) had attended a team meeting; consequently, discharge planning decisions were difficult to make as there was confusion about the patient's progress because the nurse with more in-depth knowledge of the patient and their progress was not involved (Atwal, 2002; Atwal & Caldwell, 2005; Lowenstein & Hoff, 1994).

In the limited studies investigating nurses' documentation of discharge planning, documentation was either deficient or absent. Lalani and Galzar (2001) found that less than half (40%) of the patients (n=15) had any discharge planning documentation in their medical record, with the remaining notes having no

documentation in relation to the patient's discharge plan. Foust (2007) reported that, although nurses completed patient assessments and ongoing discharge planning throughout the patients' stay, very little information was documented by nurses in the medical record. Community health staff also claimed that the handover documentation from hospital nursing staff was poor and often not adequate at times to manage patients' ongoing care (Bull & Roberts, 2001; Jewell, 1993; McKenna et al., 2000). Patients' continuity of care, both in hospital and on handover to the community service providers, is affected by poor verbal and written communication and results in patients being discharged without appropriate support at home (Anderson & Helms, 1994; Jewell, 1993).

Communication with the patient and family has been identified as another area of nurses' practice that is lacking. Nurses themselves have identified that they don't involve the patient and sometimes see families as obstructive to the discharge process (Anthony & Hudson-Barr, 1998; Bowles et al., 2003; Cannaby et al., 2003; Lalani & Gulzar, 2001). Some nurses reported that they rarely gave information to patients about community services (Armitage & Kavanagh, 1996). In contrast, all of the nurses in the study by Lalani and Galzar (2001) reported that they provided patient discharge teaching: however, patients in this study reported that it was the medical officer who provided the discharge information. More than half the patients (53%) in this study said that a lack of discharge information resulted in the need for an unplanned health care interventions after discharge from hospital (Lalani & Gulzar, 2001). Other authors support the finding that lack of patient preparation for discharge results in patients being at risk of readmission to hospital (Bull, 1994; Cannaby et al., 2003; Jewell, 1993).

Notably, a limitation of the literature is the paucity of studies that have observed nurses' discharge planning behaviours, measured nurses' completion of the elements of the process and investigated nurses' perceptions of discharge planning in the same setting. Only Foust (2007) and Lalani and Galzar (2001) have explored nurses' perceptions and behaviours in discharge planning, in acute care

hospitals, in this manner. However sample sizes in these studies were small. The most frequent methods used for exploring the nurse's role in discharge planning were surveys, interviews or focus groups. A small number of researchers used observation and interview methods (Atwal, 2002; Bull & Roberts, 2001). The different methods used and the limited number of studies make it difficult to compare results to fully expose nurses discharge planning behaviours, a difficulty identified by Shepperd et al (2010) in their systematic review of discharge planning studies. Nevertheless, most of the studies have reported similar results on beliefs and self-reported behaviours indicating that nurses are not completing discharge planning for patients according to the ideal process.

3.3 Knowledge deficit

3.3.1 Knowledge

Discharge planning is a complex process with many variables affecting the process. The literature exploring nurses' actual behaviours and self-reported behaviours has established there is a lack of understanding of discharge planning and when it should occur. The literature suggests that nurses' knowledge of discharge planning is inconsistent and contradictory in areas such as their understanding of the process, each discipline's role and responsibility (including their own) and the role of the patient or family. The literature also suggests that knowledge of patients' diagnoses assists nurses to complete some aspects of patients' discharge planning.

Nurses in several studies acknowledged that discharge planning was complex and that they needed to understand and have experience with the process before they were able to complete it, access appropriate resources and appropriately document the plan (Anthony & Hudson-Barr, 1998; Atwal, 2002; Bowles et al., 2003; Bull, 1994; Bull & Roberts, 2001; Foust, 2007). Few nurses could clearly outline the elements and process of discharge planning and many were confused about what discharge planning actually meant (Armitage & Kavanagh, 1996; Atwal,

2002; Lalani & Gulzar, 2001; Watts & Gardner, 2005). For example, although most nurses stated that discharge planning should start when the patient is admitted and the process was continuous, some nurses described discharge planning as "organising and planning" and the term assessment was not used (Armitage & Kavanagh, 1996; Lalani & Gulzar, 2001; Lowenstein & Hoff, 1994; Watts & Gardner, 2005). Organising and planning, related to the day of discharge included arranging the patient's medications, discharge paperwork or transport home (Armitage & Kavanagh, 1996; Watts & Gardner, 2005).

Contradictory views on the importance of discharge planning were revealed in a number of studies. While all the nurses in the study by Lalani and Galzar (2001) agreed that discharge planning was an important part of practice, nurses in other studies asserted that discharge planning overall was a lower priority than patients' clinical needs. Nurses rated patients' physical care needs and treatment needs as more important than discharge planning, especially if the patient was very unwell on admission (Armitage & Kavanagh, 1996; Atwal, 2002; Bowles et al., 2003; Hancock et al., 2003; Jewell, 1993; Rhudy et al., 2009; Watts & Gardner, 2005). Other responses from nurses indicated that discharge planning was forgotten in busy areas and that nurses did not effectively participate in discharge planning. Discharge planning was also stated not to be part of patients' everyday care and that other patient care activities were interrupted while discharge planning was completed (Armitage & Kavanagh, 1996; Hancock et al., 2003; Lalani & Gulzar, 2001; Lowenstein & Hoff, 1994; Watts & Gardner, 2005). The last response was referring to completion of the discharge paperwork and contacting community service providers to organise ongoing health care after discharge. This indicated nurses were only thinking about discharge planning on the day of discharge.

Nurses saw themselves as the discipline that coordinated the process of discharge planning. The majority of nurses in the study by Watts and Gardner (2005) said nurses were in total control of discharge planning, with only two of the twelve nurses identifying that the process required a team approach. Similarly, Rhudy et

al (2009) found nurses viewed coordination as a key role for them in discharge planning and they identified that this role started on the patient's admission. Coordination for these nurses included participation in multidisciplinary meetings which were considered to be constructive and useful for facilitating information sharing between team members and prompting further planning for patients. However, activities other than admission assessment or organising the information on the day of discharge were not described (Rhudy et al., 2009). In contrast, confusion over the nurse's responsibility in discharge planning was revealed in the survey completed by Lowenstein and Hoff (1994). Only just over half (56%) of the nurses said that they were the discipline responsible for discharge planning, while at the same time nearly two thirds (63%) agreed social workers were responsible. Although it was possible for nurses to agree to both questions in this survey, the authors asserted that the responses indicated that nurses were unclear about each discipline's role (Lowenstein & Hoff, 1994).

Nurses were confused about community services. For example, most nurses (85%) in the study by Lowenstein and Hoff (1994) said they were aware of available community services: however, more than half (58%) of the same nurses alleged they could not easily access information on available community services. These beliefs may arise because of the limited contact nurses said they have with community services or because nurses believe that case managers prepared patients for discharge (Armitage & Kavanagh, 1996; Kalisch, 2006). Interestingly, nurses, in the study by Armitage and Kavanagh (1996), stated that if sufficient support was organised, patients could stay at home independently. For this to happen they said that patients needed discharge planning, indicating they knew that discharge planning and patient safety at home were linked; however, these nurses could not clearly define what "support at home" meant, the process required to arrange services or the availability of services (Armitage & Kavanagh, 1996).

The literature investigating nurses' perceptions of discharge planning revealed varied results on nurses' awareness of the need for patient and family involvement

in the process. While some nurses reported patients and family had a significant role in planning their discharge (Anthony & Hudson-Barr, 1998; Lalani & Gulzar, 2001; Lowenstein & Hoff, 1994), other nurses did not mention the patient or family when asked to describe the process (Armitage & Kavanagh, 1996; Watts & Gardner, 2005). Very few nurses mentioned patient education as part of preparing a patient for discharge and nurses were unaware of problems that patients might experience at home (Armitage & Kavanagh, 1996; Williams, 1991).

Nevertheless, nurses in the study by Armitage and Kavanagh (1996) clearly identified what was needed to improve the process; that is a comprehensive assessment completed early in the patient's admission, effective communication between members of the health care team, a coordinated multidisciplinary approach and an increased awareness of discharge planning through education. These elements reflect the ideal process of discharge planning.

Knowledge of different patients' diagnoses was identified by many nurses as a key element in completion of discharge planning. Nurses used their knowledge of the patients' condition and expected trajectory to monitor patients' progress and consequently plan their discharge (Benner et al., 1992; Ebright et al., 2003; Jones & Cheek, 2003; Tanner et al., 1993). Nurses said that they need time to get to know the patient so they can better identify the patient's needs and that completing discharge planning assessments was more difficult for patients with unfamiliar diagnoses (Anthony & Hudson-Barr, 1998; Armitage & Kavanagh, 1996; Bowles et al., 2003; Bull, 1994; Bull & Roberts, 2001; Foust, 2007; Jewell, 1993; Rhudy et al., 2009; Watts & Gardner, 2005).

3.3.2 Areas of lack of knowledge

Nurses' knowledge deficits in discharge planning are in the following areas; firstly, the need for planning to start early, secondly, the need to involve other team members in the process, thirdly, the need for communication with the healthcare

team (both verbal and written) and finally communication with the patient and family.

Firstly, starting discharge planning early is crucial to the whole process, especially given the drive to reduce length of stay. Yet nurses repeatedly said that they needed a date to start planning the patient's discharge, that they waited for the physicians to write the discharge orders and not knowing the discharge date meant they were not able to plan ahead (Armitage & Kavanagh, 1996; Lalani & Gulzar, 2001; Williams, 1991). This date was needed so that they had a timeframe to work within and nurses said they wanted more than 24 hours notice to start planning (Bull, 1994; Watts & Gardner, 2005). These comments indicate that nurses do not understand that the assessment they complete on admission starts the process of discharge planning and that screening of the patient's needs has to be completed early, so that all the activities are completed in a timely manner.

Secondly, nurses' lack of understanding of the need for multidisciplinary team-work in discharge planning was evident in many studies. Nurses demonstrated that they were either reluctant to involve other disciplines in discharge planning or there was uncertainty about the nurse's role within the multidisciplinary team. The reluctance to involve others was identified in the study by Day et al (2009). Nurses working in dedicated discharge coordinator roles (n=6) in six hospitals reported that they did not engage with social workers about patients' discharge plans and often felt isolated in the role (Day et al., 2009). The authors asserted that this was because the role was still developing across the six sites, so relationships between team members may not have been established.

In the study completed by Hancock et al (2003) which explored nurses' perception of discharge planning for older aged patients, nurses said that sharing the responsibility of discharge planning with other health professionals reduced their ability to complete the process to a satisfactory level. The reason for this response could be explained by nurses' responses in the studies by Atwal (2002) and Watts

and Gardner (2005). Nurses said that engaging other team members in discharge planning was time consuming and added to their workload because they could not always easily contact allied health or medical officers. For instance, nurses said that, once a social worker was involved, the social worker tended to liaise with the medical officers and not the nurses. As a consequence, nurses then had to seek out the social worker or medical officer to obtain information about the patient's discharge plan. This increased the nurse's workload (Atwal, 2002; Watts & Gardner, 2005).

The multidisciplinary team meeting was viewed sceptically by some nurses as a method of planning the patient's discharge or other care needs (Atwal, 2002; Atwal & Caldwell, 2006). This was because nurses did not regularly attend this meeting (mainly because the timing made it difficult for them to attend). When they did attend, the lack of decision-making and goal setting at the meeting reinforced their uncertainty about the value of the meeting (Atwal, 2002; Atwal & Caldwell, 2005; Lowenstein & Hoff, 1994). Foust (2006) found that actual conversations about discharge planning were rarely observed between nurses and medical officers. Nurses in this study obtained information about the patient's discharge from indirect sources, such as the medical record or from the patient themselves. However, if the patient had complex issues, nurses reported that there was more direct communication between the nurses and other team members about the patient's discharge plan (Foust, 2007).

Nonetheless, nurses were reluctant to change their approach to discharge planning. When it was suggested to a group of nurses that the coordination of discharge planning could be managed by dedicated discharge planning nurses they were not supportive of this idea (Watts & Gardner, 2005). In addition, when it was suggested to nurses in another study that they take on the responsibility of leading some patients' discharge, nurses said they didn't want this responsibility because they already had limited time and they saw it as a medical role (Anthony & Hudson-Barr, 1998).

Thirdly, nurses don't appear to understand the importance of effective communication, both verbal and written, in maintaining continuity of patients' discharge planning and in facilitating the appropriate sequencing of events. This is illustrated by the lack of documentation of admission assessments or other discharge planning activities (Armitage & Kavanagh, 1996; Bull & Roberts, 2001; Foust, 2007; Rhudy et al., 2009). For example, documentation of a complex discharge situation was described as a workflow disruption by nurses in the study by Rhudy et al (2009). Nurses in this study preferred verbal communication about patients' discharge because searching through medical records for information that was not likely to be there was seen to be too time consuming (Rhudy et al., 2009).

Finally, nurses clearly didn't understand the patient and family's role in discharge planning. This was obvious in several studies where patients and families were not identified as being involved (Anthony & Hudson-Barr, 1998; Armitage & Kavanagh, 1996, 1998; Bull & Roberts, 2001; Cannaby et al., 2003; Jewell, 1993; Lalani & Gulzar, 2001; Watts & Gardner, 2005). This is a concern because, as already identified, most patients go home from hospital and it is often the patient and family who are responsible for continuing the care at home (Australian Institute of Health and Welfare, 2009).

3.3.3 Education, experience and skill mix

One explanation for the nurses' lack of knowledge may be insufficient education or experience, which are factors that can influence behaviours (Anthony & Hudson-Barr, 1998; Benner et al., 1992; Bowles et al., 2003; Bull & Roberts, 2001; Tanner et al., 1993). Another contributing factor is the mixture of skill levels on each shift or ward. The literature examining discharge planning has found that experienced staff members were more likely to complete discharge planning than their less experienced colleagues. Less experienced nurses were unclear about their role in discharge planning and they found it more challenging to incorporate into daily activities (Anthony & Hudson-Barr, 1998; Armitage & Kavanagh, 1996; Atwal,

2002; Han, Barnard, & Chapman, 2009; Jewell, 1993; Kalisch, 2006; Watts & Gardner, 2005). For instance, junior nurses in handover were observed to not question points that they did not understand. They were also less likely to document episodes relating to discharge planning in the medical record (Atwal, 2002; Cannaby et al., 2003). Lack of experience was also found to limit nurses' capacity for completing referrals for discharge planning (Bowles et al., 2003).

In the study by Bull (1994) exploring nurses' perceptions of quality in discharge planning the effect of educational preparation through university, hospital training or college courses, was found not to influence nurses' discharge planning behaviours. Nevertheless, Bull (1994) and Anthony and Hudson-Barr (1994) determined that nurses' experience influenced their discharge planning practice, so that those nurses with more than five years experience demonstrated a more complete understanding of the elements and appropriate timing of discharge planning. However, the mixture of skill levels and experience on each ward or shift has been identified as affecting nurses' discharge planning behaviours. Junior staff identified that discharge planning is challenging to incorporate as part of daily practice and many do not understand the process (Bowles et al., 2003; Congdon, 1994; Pearson et al., 2004; Rhudy et al., 2009). Nurses have said they need experience with the process before they can complete patients' discharge planning. This indicates education in discharge planning for new or junior nurses may be lacking or is not routine.

Nurses appear to be unclear about many areas of discharge planning or are not completing the process in the ideal manner. Nurses encounter many challenges in the acute care ward that influence their behaviours and the completion of their work, including completion of patients' discharge planning and these are discussed below.

3.4 Challenges for nurses

Several challenges to nurses' completion of discharge planning have been identified in the literature. The factors affecting nurses and discharge planning are complex and are likely to be connected because discharge planning is one of many activities nurses complete on the acute care ward. These challenges have remained constant for the last two decades and include sufficient time to plan, maintaining continuity of care when there is increasing patient churn, patient complexity and nurse turnover. Further challenges include the drive to reduce length of patient stay and the relationship between nurses and medical officers. Many of these challenges have already been described in Chapter Two.

Discharge planning is one of many activities that nurses complete on the acute care ward. Although they are well positioned to coordinate the process of discharge planning, the acute care ward where nurses' work has many competing demands, which can vary and are not always predictable (Duffield et al., 2007; Ebright et al., 2003; Jones & Cheek, 2003; Redding & Robinson, 2009; Wolf et al., 2006). Each acute care ward differs and there is no typical day for nurses on these wards. Furthermore, given that patients will be cared for by staff on three different shifts there is an increased need for each nurse to communicate and document their findings to ensure continuity of care. The impact of the challenges on nurses' discharge planning activities will be more fully explored.

3.4.1 Time

Notably, each factor affecting the nurses' practice has time as a sub theme. For instance, lack of time is related to other competing demands nurses have to manage on each shift (Ebright et al., 2003; Hendrich, Chow, Skierczynski, & Lu, 2008; Jones & Cheek, 2003; Kalisch, 2006; Lalani & Gulzar, 2001). Continuity of care is affected by the lack of time to get to know the patient because of increasing churn, increasing patient diversity and nurse turnover (Anthony & Hudson-Barr, 1998; Armitage & Kavanagh, 1996; Bowles et al., 2003; Bull, 1994; Bull & Roberts,

2001; Duffield et al., 2007) . The drive to reduce patients' length of stay in hospital means there is less time available for staff to complete all the activities necessary. Potentially the nurse and medical officer relationship may be affected by available time to discuss each patients' needs (Atwal, 2002). Therefore, time is a crucial factor in discharge planning for nurses.

Nurses have competing demands in acute care wards. They are constantly reorganising and reprioritising their workload in response to patient care needs and organisation of their environment (Ebright et al., 2003; Hendrich et al., 2008; Jones & Cheek, 2003). Not surprisingly the lack of sufficient time due to competing work demands has been acknowledged by nurses as a key factor preventing them from completing discharge planning in a systematic way or completing any of the elements. Nurses reported the lack of time prevented them from completing comprehensive assessments and communicating with all key people involved, which resulted in missed referrals (Bowles et al., 2003).

Lack of time also related to lack of staff to complete all the necessary activities. This included a perception of inadequate staff to patient ratio, sick leave not replaced and unexpected heavy work demands (Anthony & Hudson-Barr, 1998; Bowles et al., 2003; Kalisch, 2006). Lalani and Galzar (2001) identified both increased workload as well as lack of time as the main reasons why nearly all the nurses (93%) did not complete discharge planning activities. When activities, such as discharge planning, were viewed as time consuming they were more likely to be left incomplete. This practice of omitting one or more of these activities then becomes a habit (Kalisch, 2006).

Another major factor acknowledged by nurses as affecting their discharge planning actions is the decreased length of stay and demand for beds which also links with the lack of available time. The push for discharge means nurses have insufficient time to comprehensively assess the patient, discuss the patients' discharge needs, make referrals and include all members of the multidisciplinary team (Anthony &

Hudson-Barr, 1998; Armitage & Kavanagh, 1996; Bowles et al., 2003; Bowles et al., 2002; Cannaby et al., 2003; Kalisch, 2006; Lalani & Gulzar, 2001; Rhudy et al., 2009). Nurses have stated that the shorter length of stay means the focus is on moving patients through the system and away from assessment and getting to know the patient. Consequently discharge planning becomes a lower priority for nurses (Bowles et al., 2003; Cannaby et al., 2003; Kalisch, 2006).

The drive to reduce length of stay has resulted in unpredictable discharges, with medical officers giving nurses little notice that the patient is going home. As a result nurses have said they have little time to prepare the patient and complete all the necessary activities (Armitage & Kavanagh, 1996; Bowles et al., 2003; Bowles et al., 2002; Bull, 1994; Cannaby et al., 2003; Day et al., 2009; Lalani & Gulzar, 2001; Rhudy et al., 2009). However, even when there is a dedicated discharge coordinator role the medical officers' unpredictable timing of discharge was a factor that affected the discharge coordinators' planning (Day et al., 2009). At the same time the pressure to discharge patients means the timing of admission and discharge, such as those patients admitted late in the week and then discharged on the weekend, can affect whether the patient's needs are missed or there is short notice of a discharge date (Bowles et al., 2003). The unpredictability and short length of stay makes it increasingly important that communication occurs between health professionals and that there is a standardised objective approach to start discharge planning early.

3.4.2 Continuity of patient care

Increasing patient movement or churn through wards was identified in Chapter Two as increasing nurses' workload because the emphasis is on moving patients through the wards. Churn resulted in a lack of time to get to know the patient, know their trajectory and complete all the activities necessary for planning patients' post-discharge care (Armitage & Kavanagh, 1996; Atwal, 2002; Bull, 1994; Bull & Roberts, 2001; Cannaby et al., 2003; Duffield et al., 2007; Jewell, 1993; Rhudy et al., 2009; Watts & Gardner, 2005). Knowing the patient has been identified by

nurses in the literature as central to completing discharge planning (Anthony & Hudson-Barr, 1998; Armitage & Kavanagh, 1996; Bowles et al., 2003; Bull, 1994; Bull & Roberts, 2001; Foust, 2007; Jewell, 1993; Rhudy et al., 2009; Watts & Gardner, 2005). Knowing the patient also improved communication between nurses and consequently continuity of care was enhanced (Atwal, 2002). Wards where nurses are familiar with the patient group and their trajectory were seen to complete discharge planning as part of every day practice. The familiarity enabled them to monitor the patient's progress and adjust the discharge plan accordingly (Foust, 2007).

Continuity of care is of even greater importance with the older aged and increasingly complex patient group coming into hospital. At the same time it is more difficult to maintain continuity of care because of the increasing patient diversity on each ward. Many of these patients have diagnoses that are unfamiliar to the nurses caring for them because the patient has been admitted to the first available bed (Duffield et al., 2007). Nurses have identified that they find it more difficult to complete assessments on patients with unfamiliar diagnoses and as a consequence these patients' discharge needs are not routinely identified (Armitage & Kavanagh, 1996; Duffield et al., 2007; Garling, 2008; Mamon et al., 1992; Pothier et al., 2005). Continuity of patient care is affected because the handover of care to the next wards health professionals' is potentially inadequate due to the lack of time to gather patient data and lack of familiarity with the patient or their condition (Armitage & Kavanagh, 1996; Duffield et al., 2007; Garling, 2008; Mamon et al., 1992; Pothier et al., 2005).

The increasing numbers of part time staff and reduction in registered nurse (RN) to enrolled nurse (EN) ratios affects continuity of patient care. For example, in NSW hospitals in the years 2001 to 2005 there has been a shift in the ratio of RNs to ENs and assistants in nursing (AIN). The ratio of RNs to ENs decreased from 83% RNs on each ward to 76% RNs. The proportion of experienced RNs to junior RNs in many wards also changed. The nurses working the most hours in a week were

RNs with eight or more year's experience, followed by ENs and then RNs with one year's experience. Many nurses with two or more years experience were working more casual or part time hours (Duffield et al., 2007). Although the part time nurses were predominately experienced, completion of discharge planning can be affected by their part time status, especially if discharge planning activities are not documented or handed over (Bowles et al., 2003; Duffield et al., 2007; Kalisch, 2006; Pearson et al., 2004; Rhudy et al., 2009). In addition, the experienced RN role becomes increasingly challenging because they are overseeing and guiding the junior RN's and EN's practice, orientating new staff, as well as being the staff member with the experience and knowledge in many areas, including discharge planning (Benner et al., 1992; Tanner et al., 1993).

Similarly, nurse turnover or churn in acute care wards affects continuity of patient care. For instance, in a short period of time, four to 17 months, the turnover of nurses in the NSW hospitals wards was found to be high. Half of the wards (n=20) that were included twice in the study by Duffield et al (2007) had more than half of their nursing staff leave and replaced and three wards had a complete change of staff during this time (Duffield et al., 2007). Communication between staff is potentially affected by this high turnover because the levels of trust required between team members to complete patients' discharge planning may be lacking. Due to staff turnover education and experience with discharge planning for specific patient groups on these wards may not be optimal. Consequently, the requisite expertise necessary to complete discharge planning may be inadequate or disorganised because of the large numbers of casual, part time or new staff.

3.4.3 Role clarity

Conflicting beliefs held by different health care professionals about the process and the policy directing each disciplines' discharge planning practice influenced nurses' discharge planning practice. The literature exploring discharge planning practice in acute care found that health professionals had a lack of understanding about the process of discharge planning and the role of each discipline (Armitage &

Kavanagh, 1996; Bowles et al., 2003; Bull & Roberts, 2001; Cannaby et al., 2003). Williams (1991) reported that allied health staff had their own polices while the medical officers believed discharge planning was based on medical data and the medical decision to discharge (Williams, 1991). Less than half of the respondents (49.7%) supported the nurse as coordinator of discharge planning while nearly one third (29.6%) elected the medical officer as the coordinator. This indicates confusion over the discipline responsible for coordinating the discharge. Nurses in this study reported that the conflicting beliefs amongst health professionals and confusion over policy and each disciplines' role in discharge resulted in them not being able to plan ahead for the patients' discharge. The completion and appropriate sequencing of the elements of discharge planning was affected (Armitage & Kavanagh, 1996; Atwal, 2002; Atwal & Caldwell, 2006; Bull & Roberts, 2001; Cannaby et al., 2003; Day et al., 2009; Jewell, 1993; Lowenstein & Hoff, 1994; Rhudy et al., 2009; Williams, 1991)

A special commission of inquiry set up to investigate the acute care public hospital system in NSW in 2008 reported similar findings of health care professionals' confusion over policy and role. The inquiry investigated areas of the health care system that were working well and those that needed improving or changing. The areas investigated included patient safety and patient care delivery systems. The inquiry involved 61 hospitals throughout the eight Area Health Services in NSW, with many people (n=628) giving evidence. Those giving evidence included patients, community members, medical officers, nurses and allied health professionals. Many other individuals and organisations also provided written submissions (n=1200). Peak bodies were also consulted, such as the Australian Medical Association and the NSW Nurses' Association. The final report from the inquiry is known as the "Garling Report". A significant finding was that no one health care specialist takes complete charge of the patient's care while in hospital. More importantly, no one person in the health care team, including the patient, carries all the information about the patient's care, social history, medications, tests or other results (Garling, 2008). This report raises the question that confusion over

role clarity, policy and issues with communication within the healthcare team may still exist in acute care hospitals which is an issue that was identified nearly 20 years ago by Williams (1991). The findings in the Garling report suggests discharge planning is still not being completed in an ideal manner.

3.4.4 The relationship between nurses and medical officers

Nurses and medical officers are the two disciplines always involved in patient care and discharge planning. To start discharge planning nurses have frequently stated that they need a discharge date from the medical officer to start the process (Armitage & Kavanagh, 1996; Bull, 1994; Cannaby et al., 2003; Lalani & Gulzar, 2001; Watts & Gardner, 2005). Although this does not reflect the ideal, it does indicate how the relationship between medical officers and nurses influences discharge planning. The nurses often indicated the relationship with medical officers was problematic. For instance, nurses said they needed to look for medical officers to get information about discharge, yet these same nurses also said that they only spoke to medical officers when something directly affected the work they were doing (Atwal, 2002). The timeliness of communication with medical officers, especially interns was noted as an issue for nurses (Anthony & Hudson-Barr, 1998). Conversely, medical officers saw nurses as being passive in ward rounds; therefore, medical officers reported that they needed to make unilateral decisions because they felt the team members could be ineffective (Atwal & Caldwell, 2006; Cannaby et al., 2003). Communication between medical officers and nurses was seen as either impeding or enhancing discharge planning processes. When relationships were strained, communication was strained and not effective (Atwal, 2002; Watts & Gardner, 2005).

To explain the relationship between nurses and medical officers further a study exploring the nurses' role in discharge decisions was investigated in a high dependency unit. Four themes emerged during the ten episodes of observation and interviews with nurses (n=4). The theme of interest is the nurses' relationship with medical officers. The author identified that there was tension between nurses

and medical officers, but this tension was never observed in communication between the two disciplines. Nurses usually couched their opinion in the form of recommendations and were seen as expressing their opinion in a passive way. The nurses were also seen as submissive and using methods to manipulate the situation in a manner that was not transparent (Brand, 2006). Brand (2006) contested that the behaviour of the nurses in her study were very similar to an early study completed by Stein (1967), where it was revealed that nurses played a game with medical officers. One of the key factors in the game was for nurses to avoid confrontation with medical officers and any recommendations that they made had to appear to come from the medical officer (Stein, 1967).

This way of working could be why nurses wait for medical officers to provide a discharge date as the medical officer is seen as the discipline in charge and the one that makes discharge decisions. Some of the medical professions' literature outlining the process and importance of discharge planning would support the nurses' perception that medical officers' are in charge of the process and make unilateral decisions about the patient's discharge (American Medical Association, 1996; Katikireddi & Cloud, 2009; Lim et al., 2009; Snow et al., 2009). Nevertheless, the consequence is that communication about discharge planning between medical officers and nurses is affected. Nurses are unclear about their role which makes it difficult for the elements of the discharge planning process to be completed.

3.5 Limitations in the literature

There are several limitations in the literature investigating nurses' perceptions of discharge planning and nurses' discharge planning behaviours in acute care wards. These are nurses' compliance with discharge planning activities or policy and their attitudes towards discharge planning. Firstly, in relation to measuring nurses' compliance with discharge planning, there are difficulties with evaluating nurses' discharge planning activities because the elements of discharge planning can be incorporated into many aspects of patient care; for example the activities that nurses most frequently perform are medication administration, patient

assessment, coordination of care, documentation and communication, most of which are elements of discharge planning (Battisto, Pak, Vander Wood, & Pilcher, 2009; Hendrich et al., 2008; Wolf et al., 2006). Nurses use informal cues to monitor the patients' progress during their acute illness and early recovery phases (Benner et al., 1992; Ebright et al., 2003; Jones & Cheek, 2003; Tanner et al., 1993). They also use informal cues to monitor the patients' discharge needs (Anthony & Hudson-Barr, 1998; Armitage & Kavanagh, 1996; Bowles et al., 2003; Bull, 1994; Bull & Roberts, 2001; Foust, 2007; Jewell, 1993; Rhudy et al., 2009; Watts & Gardner, 2005). Informal cues are difficult to measure. However, one element of discharge planning that can be measured is the discharge risk screen (DRS). The DRS will be discussed in the next section.

Secondly, there has been no study site that has measured both nurses' attitudes towards DRS and discharge planning and their behaviours. There is no measure or tool available to measure nurses' attitudes in these areas because no other study has measured attitudes to discharge planning. It is important to determine nurses' attitudes to discharge planning and the DRS component because one of the main factors influencing any persons' behaviours is the intention to perform the behaviour (Ajzen, 1991). The intention to perform the behaviour is influenced by the following factors: time; opportunity; the cooperation of other people; skills; abilities and knowledge, and peoples' perceived behavioural control over their ability to carry out the behaviour (Ajzen & Madden, 1986; Crano & Prislin, 2006). These factors correspond with the factors identified in the discharge planning literature that may influence nurses' discharge planning behaviours.

Importantly, for discharge planning to be performed, there must be a strong intention to complete it (Ajzen, 1991). The intention to carry out an aspect of patients' discharge planning is further influenced by two other personal qualities. The first is the nurses' attitude towards it and this refers to the degree to which the nurse has a positive or unfavourable opinion of discharge planning. The second personal quality is the perceived expectations by co workers to perform or not

perform the discharge planning activities. Both of these factors are used by the nurse to measure the importance of whether they should complete aspects of discharge planning for patients or not (Ajzen & Madden, 1986). Importantly, attitudes can be dependent on where or when the behaviour will be performed (Ajzen, 2001; Crano & Prislin, 2006).

Furthermore attitudes are influenced by beliefs. These beliefs are that the discharge planning will lead to a specific outcome and that completion of the activity will be met with approval or disapproval by other members of staff perceived as being important to the nurse. One more factor that influences attitude and behaviour is that the behaviour must be a conscious choice or decision, therefore the more that discharge planning is dependent on the existence of opportunities or adequate resources, such as time, funding, skills or cooperation of other people, the less the behaviour is a conscious choice (Ajzen & Madden, 1986).

3.6 Measurable areas of discharge planning policy

One area of discharge planning behavior that could be readily investigated in one site is compliance with using the discharge risk screen (DRS). To standardise the process of discharge planning brief screening tools such as DRS, (Appendix B) have been developed and mandated for use in NSW Hospitals. The DRS provides a systematic starting point for discharge planning. The DRS was developed for the Victorian Department of Human Services in 1998 to accurately identify patients in hospital who are at risk of an event at home or of readmission to hospital. These patients are then referred to post-acute care services to continue their health care at home (Thomas and Associates, 1998). The DRS is a four question screening tool that has been shown to be 86% accurate in predicting which patients are in need of services at home after discharge from hospital.

The four question tool was adopted by the NSW Department of Health in 2001 and through policy it has been mandated that all patients admitted to an acute care

ward must have this completed within 48 hours of admission (NSW Department of Health, 2007a). A “yes” response to one of the following questions; “Do you live alone?”, “Do you receive community services?”, “Are you the carer for another?”, and “Does the patient have a self-care deficit?” should result in a referral to another health professional for further investigation of the patients’ needs. When the DRS was developed, it was recognised that living alone may not always be a risk on its own and the clinicians’ judgement should be used when completing the screen and making a referral. The NSW Health policy states that the DRS can be completed by any clinician or a clerical officer in some hospitals; however, many hospitals have incorporated the DRS into the preformatted nursing admission assessment document, thereby making the nurses’ responsible for the completion of the DRS and to act on the outcome (Appendix C). The DRS is a standard identifiable item of discharge planning that can be assessed for completion.

There are very few studies that have explored nurses’ compliance with DRS in the one setting. A study that did examine compliance with discharge risk screening had an overall aim to improve discharge planning for people over 65 years (Bolch et al., 2005). At baseline only 17% of patients had a discharge risk identified on their care plan. As part of the study nurses (n = 7) were involved in the development of a patient admission form that included discharge risk screening. Compliance with discharge risk screening was measured monthly for 12 months and focus groups were held regularly to provide feedback on the audits. Discharge risk screening rates improved, with the average compliance rate reaching 58% and the percentage of patients with a discharge plan started within 48 hours of admission had improved from 40% to over 80%. The participants identified the importance of ongoing education when compliance fell. Multiple amendments to the risk screening document were made by the participants to make it applicable for clinical practice. Involvement by nurses in the process of developing and implementing the new process and admission assessment tool was found to improve the compliance rate. However, the discharge risk screening tool was not described in the study and the small size of the hospital made the data difficult to generalise to larger

metropolitan hospitals (Bolch et al., 2005). Nevertheless compliance with risk screening was still low with nearly half (42%) of the patients not screened.

In the absence of available published studies audit reports were investigated. Compliance with screening for discharge risk was investigated in all levels of public hospitals (n = 139) in Victoria, Australia, as part of larger studies in the area of discharge planning (Department of Human Services, 2002; KPMG (Klynveld, 1999, 2000). The first two studies were commissioned by the Department of Human Services, Victoria, and the third report was completed by the Department of Human Services, Victoria. The aim of the first two reports was to collect data on all aspects of discharge performance for future funding purposes, while the third report was to monitor compliance with key performance indicators. A consultancy group was engaged to audit medical records across Victoria in the first two audits (n = 12, 205 and 9, 887). The hospitals were in both rural and metropolitan areas and the categories of hospitals were acute care, sub-acute aged care, rehabilitation hospitals and Multi-Purpose Services (MPS). Compliance with discharge risk screening was low across all hospitals, with less than half of the patients having their discharge risk screen (DRS) completed (41%- 42%) in the first two reports. Metropolitan acute care facilities had a lower compliance rate than rural, aged care and rehabilitation hospitals.

In the third report, data was collected from a database specifically designed to gather the discharge planning performance indicators across Victorian hospitals. Compliance reached 65% in metropolitan acute care facilities; however, the number of patient records audited through the database was not stated (Department of Human Services, 2002). The first two reports identified that patients with complex discharge needs were more likely to have a screen for discharge risk completed. While the Victorian studies measured overall compliance with the risk screen, it was only the metropolitan hospitals that identified medical officers and nurses as the health professionals that completed the screen. However the compliance rates were for the total number of patients screened and a specific rate

of compliance with the DRS policy was not attributed to any one health professional. Therefore it is still not possible to assess nurses' compliance with DRS policy.

3.7 Research questions

The overall aim of this study is to identify acute care nurses' attitudes, behaviours and perceived barriers towards discharge risk screening and discharge planning. This aim directed the following research questions and sub questions.

1. What is the nurses' compliance rate with DRS policy?
2. What is the accuracy of nurses' screening?
3. What are the factors (of age, gender, language, admission diagnosis, co morbidities, planned admission, time of week of admission) that influence nurses' compliance with the DRS policy and other discharge planning elements?
4. What are nurses' attitudes towards DRS and discharge planning?
5. What do nurses' perceive are the main barriers to compliance with DRS policy and discharge planning?

In this study, the terms compliance and completion are used in relation to nurses' DRS and discharge planning behaviours. For the purpose of this study compliance is defined as "conformity and adherence to organisational policy" (Southeastern Louisiana University, 2009) and to complete or completion of a task or activity is "to have all its parts or elements whole" (Macquarie, 2006).

3.8 Summary

In summary, nurses are not completing discharge planning in an ideal manner. The problems exist in their knowledge of discharge planning, their actual and self-reported discharge planning and in the understanding of their role. Nurses demonstrate a lack of knowledge in key areas of discharge planning and these areas are: the need to start discharge planning early; involvement of the patient and family; the multidisciplinary process and the need for communication. The lack

of understanding may be due to the nurses' level of education or experience with discharge planning or a mixture of skill levels on each shift that may hamper nurses' completion of discharge planning. Several challenges have been identified by nurses that influence completion of discharge planning and include: competing work demands on nurses' time; the affect of increasing patient and nurse churn on continuity of care; shorter lengths of patient stay, which also reduces the time available to complete discharge planning; role clarity between members of the multidisciplinary team and the relationship between nurses and medical officers.

A small number of studies have shown that nurses can complete discharge planning as part of daily practice; however, nurses still did not document their assessments or the patient's discharge plan. The reason for this has not been investigated. In fact very few studies have explored nurses' behaviours and their beliefs about discharge planning in the same study and the same site. It is not clear what nurses' attitudes to discharge planning are because this has not been studied; therefore, the connection between attitudes and behaviours has not been measured. Nurses' compliance with discharge planning is difficult to measure. An area that could be readily investigated is compliance with the DRS. However, only one study has examined nurses' compliance with discharge risk screening. The next chapter will describe the methods used in this study to determine acute care nurses' attitudes, behaviours and perceived barriers towards DRS and discharge planning.

CHAPTER 4: METHOD

4.1 Introduction

This chapter describes the methods used to explore acute care nurses' actual and self-reported behaviours, attitudes, and perceived barriers related to discharge risk screening and planning. The study design and method, including setting and sample, instrument adaptation and testing, as well as recruitment for the study are discussed. Finally, data collection and analysis methods used are described.

4.2 Design

A cross sectional descriptive design using audit and survey techniques was chosen for this study. This design was chosen because the use of a combination of both methods is the best way to determine nurses' discharge risk screening compliance as well as elicit nurses' subjective beliefs and thoughts regarding discharge risk screening and discharge planning (Burns & Grove, 2005). The audit of 100 medical records of patients who had a length of stay of more than 48 hours was conducted first so that unbiased information about nurses' DRS compliance and discharge planning behaviours was gathered. The audit data was used to help inform the development of the self-report survey that was then used to elicit nurses' perceptions the following year.

4.2.1 Setting

The study was undertaken in two acute care wards, in a tertiary referral hospital in Sydney, Australia. These wards were located within a 600 bed tertiary-referral hospital in the southern metropolitan area of Sydney. This hospital provides a range of specialist acute and critical care services, and patients are admitted from all over Sydney, New South Wales (NSW), interstate and overseas, with an

average of 52 000 patient admissions every year. The hospital has twenty wards and units of which twelve are acute medical and surgical wards**.** The two study wards were selected on the basis that these wards were more similar than the others, having a majority of older patients with complex problems. These characteristics were identified in Chapter One and Two as increasing the need for discharge planning (Australian Institute of Health and Welfare, 2006a, 2009; DeFrances, Cullen, & Kozak, 2007; NHS Information Centre, 2005; Organisation for Economic Co-Operation and Development (OECD), 2008). Both the audit and survey were conducted in the same two wards to allow connections between nurses' behaviours and attitudes.

Overall both wards had similar patient demographics, length of patient stay, high turnover of patients and a mixture of nursing staff experience that reflect many of the issues identified in the literature. Clinical pathways were not in use on either ward in the study setting. The two wards were specialty acute care wards and the patients were predominately unplanned admissions from the emergency department. One ward primarily admitted patients with respiratory diagnoses, including chronic airways limitations, asthma and pulmonary fibrosis. The other ward primarily admitted patients with surgical diagnoses, including neurosurgical, reconstructive plastic surgery, trauma and head and neck surgery. However, consistent with the issues identified in Chapter Two, both wards frequently admitted patients with diverse diagnoses and patients with potentially unfamiliar diagnoses were common. A combination of models of patient care were in use, including patient allocation, with one RN having the sole care of five patients, and team nursing with a combination of a group of two or three nurses of different levels providing care for eight to ten patients together. Staff turnover of 25-30% was consistent for the two years between the audit and survey which was less than the turnover of up 100% identified in Chapter three (Duffield et al., 2007).

4.2.2 Sample

Audit

One hundred patients' medical records were audited for compliance with the DRS policy described in Chapter Three (Appendix B and C) in the two acute care wards. This number was chosen because the United Bristol Health Care Clinical Audit Central Office recommends this sample size to be sufficient to influence managers to make changes (United Bristol Hospital Trust, 2005). The rough sample size guide this office recommends is 20-50 records, therefore 50 notes were reviewed from each ward; for a final total of 99 medical records as one audit was incomplete.

Survey

All nurses from the two wards were considered eligible to participate in the survey if they were licensed with the NSW Nurses Registration Board and permanently employed either full or part time, by the hospital. As seven nurses were on leave during the sampling period, this meant there was a total of 68 nurses who were eligible, 35 from the medical ward and 33 from the surgical ward. All 68 eligible licensed nurses were invited to participate in the study and 64 nurses completed and returned the questionnaire. This is a 94% response rate which exceeds the recommended response rate of 80-85% for the direct method of data collection (University of Texas, 2007).

4.3 Data collection instruments

Audit

The audit tool was developed specifically for the study as no tool relevant to nurses' compliance with DRS was identified in the literature. The tool collected data on discharge risk screening compliance, basic patient sociodemographic and clinical characteristics and admission process variables to characterise the sample and to help identify the factors that may influence DRS compliance. The audit tool

was pilot tested on ten medical records, which led to small adjustments being made to the lay-out and content (Appendix D).

Survey

A survey was developed from an original questionnaire used to measure nurses' attitudes, behaviours and perceived barriers to pressure ulcer risk screening and prevention (Moore & Price, 2004), (Appendix E). This instrument was chosen because the central concepts of nurses' compliance with mandatory patient risk assessment and the factors influencing nurses' behaviours in this area can be related to discharge risk screening and discharge planning (Bick & Stephens, 2003; Cole & Nesbitt, 2004; Dempsey, 2004; Huda & Wise, 1998; Moore & Pitman, 2000; Uden, Ehnfors, & Sjostrom, 1997). This instrument was also chosen because it measured nurses' attitudes. This is an area of nurses' discharge planning that has not been measured and the influence of attitudes on nurses' discharge planning behaviours have not previously been made. Furthermore, the target audience of acute nurses being surveyed were very similar to those in the researcher's study.

The original survey was composed of four sections. The first section measured attitudes and beliefs using 11 items, with responses indicated on a five point Likert scale from strongly agree (1 point) to strongly disagree (5 points). Items one, two and six were worded negatively to prevent response bias (Burns & Grove, 2005). Scores were totalled for a sum ranging from 11 to 55, with higher scores indicating a more positive attitude. Section two measured self-reported behaviours using eight closed ended questions and the third section used three open ended questions asking respondents to rank perceived barriers to risk screening, documentation and prevention measures for pressure ulcers. The final section of the questionnaire used a mix of six open and closed ended questions to determine participants' demographics, practice and education in pressure ulcer risk screening and prevention. The original tool was pilot tested by Moore and Price (2004) on nurses and reviewed by an expert panel for face and content validity. An item

analysis on the attitudes section was completed by the researchers, Moore and Price. Permission to adapt the questionnaire for the purpose of this study was given by the author and tool developer, Zena Moore (Appendix F).

For this study the original instrument was adapted and developed using a three step process. The first step was to change the focus of the questions from pressure ulcer risk screening and prevention to discharge risk screening and planning. These changes were based on information identified in the literature in Chapters One, Two and Three and data from the audit. Specific items identified from the audit were included in the barriers section of the survey. These items were the ward was too busy on a weekday and patient clinical characteristics (an unfamiliar patient diagnosis and the patients' condition was unpredictable). The survey was then pilot-tested on ten nurses in another acute care ward at the study site. Following testing slight modifications to language and layout were made to make the instrument more suited to the Australian context. Specific changes were made to the format, instructions, grouping of questions, and responses to reflect the process of discharge risk screening and planning and mandatory requirements. A checklist was added to collect respondent demographics.

Testing of the adapted tool was then performed to ensure clarity of questions, effectiveness of instructions, completeness of response sets, time necessary to complete the tool and the relative success of data collection method (Burns & Grove, 2005). Two groups of nurses were used, one group were ward nurses (n=10) from a similar ward to the study setting, and the other an expert reference group (n= 8) familiar with survey development. The two groups tested the adapted tool and were asked to complete the survey and identify any issues with clarity, flow, readability, wording, timing and ease of completion. The expert clinicians were also asked to assess the instrument for face and content validity after being provided with the major elements of discharge planning identified in the literature and government policy documents (Association of Discharge Planning Co-ordinators of Ontario, 2009; Bull & Roberts, 2001; Carroll & Dowling, 2007;

Katikireddi & Cloud, 2009; Lim et al., 2009; NHS Direct Wales, 2009; NHS Institute for Innovation and Improvement, 2008; NSW Department of Health, 2007a). Feedback and recommendations from both groups resulted in minor changes to improve the flow, clarity of questions and instructions and readability. Following these changes the survey and procedure were tested again on eight nurses from acute wards to analyse and limit any difficulty with completing the tool and the time taken to complete the tool. Minor adjustments were made to clarify the instructions in sections two and three (Appendix G). Time taken to complete the information session and questionnaire was 15-20 minutes. The questionnaires were printed on different coloured papers to identify the ward.

Internal consistency reliability of the attitude section of the survey was measured using Cronbach's alpha. A Cronbach's alpha coefficient between 0.8 - 0.9 is regarded as acceptable when measuring the reliability of an instrument (Burns & Grove, 2005). In this study the Cronbach's alpha was 0.404 and the item analysis showed an increase to 0.536 if item 11 was removed. Therefore all results are based on ten items in the attitudes section. However, the limited reliability is noted as a limitation of the study.

4.4 Procedure

Audit

The audit was completed on discharged patients' medical records over a three week period from November to December, 2007, with charts assessed most days. Each record was logged to prevent double-entry. The researcher also completed a DRS using the information available in the medical record from the time of admission up to 48 hours after admission, to independently determine the patients' discharge risk, so that a general comparison of the researcher's and the nurses' could be completed.

Survey

Potential participants for the survey were informed of the study by Nursing Unit Managers (NUM) at ward meetings through the ward communication book and study posters (Appendix H). These were displayed in several places in both wards, two to three weeks before data collection started. Ten information sessions were provided on the ward, during double staffing times, over a period of two months, from November to December 2008, or until all eligible nurses had the opportunity to participate. This also ensured staff on leave and part time staff were informed of the research. As each participant completed an information session their name was checked off the ward roster, to ensure all nurses had been invited to participate. None were asked more than once.

Each participant was given an information sheet (Appendix I) and a consent form (Appendix J) to review during the information session and the survey to complete once the researcher left the room. Envelopes were left in the room, for the completed documents. To capture night staff input an envelope was left on the ward addressed to them inviting their participation. This envelope included the information sheet, consent form, survey and a cover sheet telling them what to do with the questionnaire and consent forms once completed.

4.5 Ethical considerations

Ethical approval was not required for the audit, as clinical audit is considered a quality activity (National Health and Medical Research Council, 2003). Consent to conduct the audit was obtained from the NUM of both wards.

Ethics committee approval for the survey component was granted from the South Eastern Sydney and Illawarra Area Health Service Central Network Human Research and Ethics Committee (HREC) on September 3rd 2008 (Appendix K and L) and by the University of Technology, Sydney (UTS) Human Research and Ethics Committee on October 14th 2008 (Appendix M).The most important ethical

considerations were informed consent, anonymity, confidentiality and freedom from coercion.

Informed consent is essential for the conduct of ethical human research and consists of four aspects, disclosure of essential information about the study, understanding by the participant, competency to make the decision to participate and voluntary participation (Burns & Grove, 2005). Information sheets and consent forms were given to each participant during group information sessions about the study. During these sessions the participants were encouraged to ask questions to ensure that they understood the purpose of the research and their role in participating. Potential participants were deemed competent to make the decision to complete the questionnaire, as decision making capacity is a standard requirement of the nurses' licensing board. Participants were informed that their involvement was voluntary and if they chose not to complete the survey it would not affect their employment, reputation, status or professional relationship with the researcher.

To maintain confidentiality and anonymity, consent forms were collected separately from the survey and the survey itself was anonymous. The small amount of demographic data collected would be used to describe the overall sample characteristics but could not be used to identify individuals.

The role of the researcher as a senior nurse and particularly in relation to discharge planning in the organisation could have created a situation where the participants felt coerced into completing the survey, therefore the researcher left the room after the information sessions. This meant that the choice of participation was not observed. Also, as the surveys were anonymous it was not known who had participated; this also meant that the option of withdrawal after completion of the survey could not be offered.

4.6 Data analysis

Data from the audit and survey were entered into, and analysed using the Statistical Package for the Social Sciences Version 15 (Pallant, 2007). Data entry was checked by 10% random double entry. A data entry error rate of < 1% of the spreadsheet was found and this was deemed acceptable. The steps of analysis for the audit and survey data were firstly descriptive analysis, followed by univariate analysis and then multivariate analysis where possible. As this was an explorative study multivariate analysis was conducted on the audit data to determine predictors of DRS compliance.

Audit and Survey

For research questions one, three, four and five the audit and survey data were described using frequencies, percentages, means, standard deviations and medians. For these questions comparison tests used chi-squared and Fisher's Exact test, were used as appropriate to determine differences in DRS compliance rates and to identify factors that influence nurses' DRS compliance in the audit. A backwards logistic regression analysis was completed using the variables of ward, age, gender, language, admission diagnosis (surgical, medical-non respiratory or respiratory), co morbidities, whether the admission was unplanned and or on a weekday versus weekend, to determine the independent predictors of DRS compliance. For research question two sensitivity and specificity analyses were used to determine the number of patients with a true positive discharge risk and those with a true negative discharge risk by comparing the outcome of the nurses' DRS to that of the researcher (Fischbach, Talaska, & Marshal, 2009). The researcher completed the discharged patients' DRS using the information available in the medical record from the time of admission up to 48 hours after admission. This was a general comparison to determine the overall accuracy of nurses' discharge risk screening.

The responses to the open questions in the survey were organised into major categories independently and then by consensus between the researcher and the

researcher's supervisor. For research questions three, four and five comparisons using chi squared, independent t-tests or ANOVA were also completed to determine which nurse characteristics influenced the nurses' attitudes, behaviours and beliefs about discharge risk screening and planning. As multiple comparisons were conducted the P level was reduced to .02 based on recommendations by Maltby, Day and Williams (2007).

4.7 Summary

In summary, the design, setting and sample, methods and tools used to investigate acute care nurses' actual and self-reported behaviours, attitudes, and perceived barriers related to discharge risk screening and planning met the objective for this research project. An audit tool was developed to reveal nurses' actual DRS compliance and discharge planning behaviours as well as the patient demographics and process of their admission to the acute care wards. The survey was developed to further reveal nurses' self-reported DRS compliance, discharge planning behaviours and perceived role in discharge planning. The survey was also used to identify the nurses' attitudes towards DRS and discharge planning as well as the perceived barriers to completing these activities. Furthermore, significant predictors of the DRS compliance were identified. The next chapter will present the results for this study.

CHAPTER 5: RESULTS

5.1 Introduction

This chapter presents the results of the study. The results have been organised into three sections to mirror the research questions posed in Chapter Four. The first section describes the sample in both phases of the study. These are the patient related characteristics, the process of admission to the wards, and the nurses' characteristics. For research questions one and two the next section describes the nurses' actual and self-reported DRS and discharge planning behaviours. The results depicted in this section are, nurses' compliance with discharge risk screening (DRS) policy, the significant predictors of DRS completion and the accuracy of nurses' screening. This section also includes the nurses' timing of discharge planning activities; timing of patient involvement in discharge planning and their actions in response to a positive screen. Nurses' DRS compliance in the audit and survey are also compared. For research question three to five the third section outlines the factors influencing nurses' DRS and discharge planning behaviours. This includes the main motivators for nurses' DRS compliance and aspects of discharge planning and their perceptions of problems patients' experience post-discharge. The nurses' attitudes towards discharge risk screening and discharge planning are outlined and comparisons between nurses' attitudes, their characteristics and behaviours are presented. Finally, the perceived barriers that prevent nurses' compliance with the DRS policy and other aspects of discharge planning are presented.

5.2 Sample Characteristics

5.2.1 Characteristics of patients in the audit

Table 1 provides detail on the sample characteristics of the patients whose charts were audited. The average age of the patients was 64 years (SD = 18.83) (range 19-92 years). The majority were English speaking (75%) and male (55%). Patients tended to have complex conditions, as 78% had at least one co morbidity in addition to their primary diagnosis. Furthermore, nearly a third had at least one other condition, such as visual or cognitive impairment; and, more than one third (38%) had a functional impairment, affecting mobility or self care.

Table 1. Sociodemographic and Clinical Characteristics of Patient Charts Audited (n = 99)

Characteristic	Frequency	%
Age (mean, SD)	64	18.83
Gender, male	54	55
Primary language, English	74	75
Primary condition on admission		
Surgical	31	31
Medical (non respiratory)	42	42
Respiratory	26	26
Co morbidities (1 or more)	77	78
Functional impairment	38	38

Table 2 describes the process by which patients were admitted to the two wards. Most patients (87%) were admitted from home. Unplanned admissions were predominant, with the majority (62%) admitted through the Emergency Department. Most patients (61%) were admitted out of business hours, on a weekday (75%) and their admission was completed by a registered nurse (RN) (63%).

Table 2. Admission Process Characteristics of Patient Charts Audited (n = 99)

Admission Process	**Frequency**	**%[a]**
Admitted from home	86	87
Unplanned admission via:		
Emergency	61	62
Transfer from another ward	10	11
Medical specialist rooms	1	1
Outside of business hours	60	61
Time of week[a]		
Weekday	74	75
Weekend	17	17
Admission documented by:		
Registered Nurse (RN)	62	63
Clinical Nurse Specialist (CNS)	11	11
Ward admitted to:		
Medical	50	51
Surgical	49	49

[a] totals may be less than 100% due to missing data

5.2.2 Characteristics of nurses surveyed

The characteristics of the nurses who completed the survey in phase two of the study are outlined in Table 3. Most of the participants were registered nurses (67%), who worked fulltime (67%) and held a Bachelor of Nursing degree (66%). There were similar numbers in the enrolled nurse (EN) (14%) and Clinical Nurse Specialist, Nurse Unit Manager and Clinical Nurse Consultant (CNS, NUM, CNC) groups (18%). Many of the nurses (63%) had been nursing for more than five years, with a median of eight years experience (range 0.3 to 30 years). Slightly less than one third of nurses reported that they had received training on discharge risk screening (30%) and this training was in the form of an in-service (16%).

Table 3. Characteristics of Nurses Surveyed (n= 64)

Characteristic	Frequency	%[a]
Designation		
Enrolled Nurse (EN)	9	14
Registered Nurse (RN)	43	67
Clinical Nurse Specialist/ Nurse Unit Manager/Clinical Nurse Consultant (CNS/NUM/CNC)	11	18
Highest Qualification		
TAFE Certificate/Diploma	6	9
General Hospital Certificate	3	5
Undergraduate Degree	42	66
Post graduate Degree/Diploma	11	17
Years of nursing experience[a]		
0- 2	14	22
2-5	9	14
5.1- 10	19	30
> 10	21	33
Work Status, fulltime	43	67
Training received on DRS	19	30
In service	10	16
On the job	3	5
Orientation	1	2
Ward		
Medical	33	52
Surgical	31	48

[a] Percentages may be < 100% due to missing cases

5.3 Nurses' Compliance with DRS Policy in the Audit and Survey

5.3.1 Nurses' compliance with DRS policy in the audit

The nurses' compliance with discharge risk screening (DRS) policy, as revealed in the audit, is detailed in Table 4. The discharge risk screen (DRS) was completed in full for 24.2% of the patients within the 48 hours mandated. However, individual questions in the DRS were completed at a slightly higher rate of 30-34%.

Table 4. Compliance with DRS policy in the audit

DRS Items Completed	Frequency	%
DRS completed in full	**24**	**24.2**
Q1. Has a self care deficit	32	32.3
Q2. Lives alone	34	34.3
Q3. Provides care for another	30	30.3
Q4. Receives community services	31	31.3

[a] Percentages may be < 100% due to missing cases

The independent predictors of compliance with DRS policy were determined by backwards logistic regression analysis using the variables of ward, age, gender, language, admission diagnosis (surgical, medical-non respiratory or respiratory), co morbidities, whether the admission was unplanned and or on a weekday or the weekend. The significant predictors final model (Wald $Chi^2 = 21.5$, $p = <.001$) is detailed in Table 5.

Patients had less chance of nurses' complying with DRS policy if they were admitted for a medical (non respiratory) or surgical condition than for a respiratory condition, and if they were admitted on a weekday. Controlling for other variables

in the model, the odds of DRS compliance decreased by 90% if admitted for a medical (non respiratory) condition in comparison to a respiratory condition, and by 87% if the patient was admitted for a surgical condition in comparison to a respiratory condition, and by 70% if admitted on a weekday versus weekend, although the latter was not statistically significant at $p = .09$.

Table 5. Significant Patient Predictors of DRS Compliance

Model statistics (Wald Chi² = 21.5, $p = <.001$, 2 log likelihood = 80.212)

Variable	Odds Ratio	95% CI[a]	*p* value
Condition admitted with:			
Medical (Non resp) Vs Respiratory	0.100	0.027 - 0.372	0.001
Surgical Vs Respiratory	0.128	0.028 - 0.593	0.009
Admitted on a weekday	0.312	0.081 - 1.202	0.091

[a] 95% confidence interval

5.3.2 Nurses' compliance with DRS policy in the survey

Nurses' self-reported compliance with DRS, outlined in Table 6, did not differ greatly from their actual behaviours described in Table 4 (24.2%). Only one third of nurses (33%) reported that they would comply with DRS policy by completing the DRS on all patients, while more than 60% reported that they would complete the DRS on some or no patients at all.

Table 6. Nurses' Self-Reported Compliance with DRS Policy

DRS Compliance	Frequency	%[a]
No patients	6	9
All patients	21	33
Some patients	36	56

[a] Percentages may be < 100% due to missing cases

Nurses' self-reported compliance with several elements of the discharge planning policy that are directly related to discharge risk screening, are described in Table 7. Few respondents (23%) indicated that they complied with all aspects of the policy. Overall, most nurses (89%) responded that they would act on a positive DRS, with 68% taking two or more actions in response to the patient having a discharge risk. Nearly two thirds (63%) reported that they completed the DRS in the admission assessment form, which is the correct location.

Table 7. Nurses' Self-Reported Compliance with all Requirements of DRS Policy

Policy requirements	Total	%[a]
DRS completed on all patients	21	33
DRS documented on assessment form	40	63
Respond to a positive DRS	57	89
All policy requirements met	**15**	**23**

[a]Percentages may equal more than 100% due to multiple response choice options

Table 8 illustrates the categories of responses to the open ended question on the actions the participants would take if the patient had a positive DRS. The most frequent action was to refer the patient to allied health (65%) and the medical team (59%). Whereas, slightly less than one third (31%) would discuss the issue with the patient or family, a small number of nurses (8%) did not respond at all to this question.

Table 8. Nurses' Actions in Response to a Positive DRS

Actions	Frequency	%[a]
Referral to allied health	44	65
Referral to medical team	38	59
Discuss with patient and/or family	22	31
Inform senior nurse	20	31
No answer	5	8

[a]Percentages may equal more than 100% due to multiple selections

The timing of nurses' behaviours in relation to discharge planning is detailed in Tables 9 and 10. Nurses could choose multiple answers in these questions. Many nurses responded that they involve themselves (50%) and the patient (75%) in discharge planning during the period of hospitalisation.However very few involved themselves (20%) or the patient (30%) in discharge planning on admission to the ward. Furthermore, the main reason for nurses to engage themselves in discharge planning was the medical officers' decision to discharge the patient (52%). Additionally nearly half of the nurses engaged themselves (44%) and the patient (44%) in discharge planning the day before discharge, while even more nurses (47%) concerned themselves with planning discharge on the day of discharge.

Table 9. Timing of Nurse Involvement in Discharge Planning

Timing of Nurse Involvement	Yes	%[a]
Once the Dr makes the decision to discharge	33	52
Any time during the patients hospital stay	32	50
On the day of discharge	30	47
On the day before discharge	28	44
On admission	13	20

[a]Percentages may equal more than 100% due to multiple response choice options

Table 10. Timing of Nurses' Discussion with Patients about Discharge Planning

Timing when Discussion Occurs	Yes	%[a]
Any time during the hospital stay	48	75
Once the Dr makes the decision to discharge	29	45
On the day before discharge	28	44
On the day of discharge	24	38
On admission	19	30

[a]Percentages may equal more than 100% due to multiple response choice options

The timing of when nurses involved patients in discharge planning was compared between nurses who did or did not comply with the DRS policy (Table 11). Only two differences were found, that is half of the nurses who did comply with the DRS policy were more likely to engage the patients (p=0.009) and themselves (p=0.013) in discharge planning on admission.

Table 11. Comparison of DRS Compliance by the Timing of Patient and Nurse Involvement in Discharge Planning

Patient and Nurse Involvement	DRS Compliance		*p*- level[a]
	Yes n =21 (33)	No n =42 (67)	
Discharge plan discussed with patients			
Anytime during the patient's hospital stay	18 (29)	30 (48)	0.167
Once the Dr makes the decision to discharge	9 (14)	20 (32)	1.000
On the day before discharge	9 (14)	19 (30)	1.000
On the day of discharge	8 (13)	16 (25)	1.000
On admission	11 (17)	8 (13)	0.009
Nurse involved in discharge planning			
Once the Dr makes the decision to discharge	11 (17)	22 (35)	1.000
Anytime during the patient's hospital stay	10 (16)	22 (35)	1.000
On the day of discharge	11 (17)	19 (30)	0.600
On the day before discharge	8 (13)	20 (32)	0.598
On admission	8 (13)	5 (8)	0.013

[a]Comparisons of categories completed using χ^2

Nurses' compliance with DRS policy requirements were compared between the audit and the survey as outlined in Table 12. There is not a substantial difference between actual compliance with DRS (24%) and self-reported compliance (33%). In addition, the difference between patients being assessed by allied health (71%) and nurses reporting they would refer to allied health for further assessment (65%) is small. However there was a difference between the nurses who said the DRS should be documented on the patient's assessment form (63%) and those that actually documented the DRS (24%).

Table 12. Comparison of Nurses' Compliance with DRS Policy Requirements by Audit and Survey

Policy Requirements	Frequency (%)	
	Audit	Survey
DRS compliance	24 (24)	21 (33)
DRS documented on assessment form	24 (24)	40 (63)
Documented referral to allied health	30 (31)	16 (25)
Patient referred to allied health	70 (71)	44 (69)

5.3.2 Nurses' accuracy of screening in the audit

Nurses' screening of patients' discharge risk was relatively accurate when a general comparison to the researchers' screening was completed. Of the patients that had the DRS completed by the nurse, 37% had a positive discharge risk. Of the patients who had a positive discharge risk, 75% were true positives, and of the patients who had a negative discharge risk, 83% were true negatives. Levels of 80% or higher are considered desirable for specificity and sensitivity of a screening tool, although a range of 70-80% is also considered acceptable (Westerlund, Berglund, & Eriksson, 2006). However, nearly half of the patients (44%) who had not had their DRS completed were identified by the researcher as having a positive

discharge risk. Only 31% of the patients had a referral to allied health documented by a nurse in their medical record. However, most patients (71%) had an assessment documented by allied health in the medical record.

5.4 Factors Influencing Nurses' Compliance with DRS Policy and Discharge Planning

Table 13 compares patients' characteristics according to whether their DRS was completed. The patients admitted with a respiratory condition were more likely to have their DRS completed, compared to patients admitted with a medical (non respiratory) or surgical condition. Patients' gender, co morbidity and functional impairment were not significantly different between the groups.

Table 13. Comparison of DRS Compliance by Patient Characteristics

Characteristic	Frequency (%)		*p* value[a]
	DRS compliance Yes (n = 24)	No (n= 75)	
Male	15 (28)	39 (72)	0.481
Primary language English	21(28)	53 (72)	0.172
Primary condition on admission			<0.001
Surgical	4 (13)	27 (87)	
Medical (non respiratory)	6 (14)	36 (86)	
Respiratory	14 (54)	12 (46)	
Co morbidities (1 or more)	18 (24)	59 (76)	0.775
Functional impairment	9 (24)	29 (76)	1.000

[a] χ^2 used as appropriate

The comparison between the patients' process of admission and nurses' DRS compliance is portrayed in Table 14. Patients admitted on a weekend and those admitted to the medical ward were more likely to have nurses' comply with the DRS policy, than those admitted on a weekday and to the surgical ward. There were no significant differences between the groups if they were admitted from home, had an unplanned admission, were admitted out of business hours or admitted by an RN compared to a Clinical Nurse Specialist (CNS).

Table 14. Comparison of DRS Compliance by Patient Admission Process Characteristics

	Frequency (%)		
Admission Process	**DRS Compliance Yes (n = 24)**	**No (n= 75)**	***p* value**
Admitted from home	22 (26)	64 (74)	0.729
Unplanned	20 (28)	52 (72)	0.292
Outside of business hours [a]	14 (23)	46 (77)	0.954
Time of week[a]			0.022
Weekday	15 (20)	59 (80)	
Weekend	8 (47)	9 (53)	
Admission documented by:			0.939
RN	14 (23)	48 (77)	
CNS	2 (18)	9 (81)	
Ward admitted to:			0.022
Medical	17 (34)	33 (66)	
Surgical	7 (14)	42 (86)	

[a]totals maybe < 100% due to missing data.

Several distinguishing characteristics of nurses were compared between those nurses who comply with DRS policy (33%) and those that did not (67%). These are described in Table 15. There were no differences identified.

Table 15. Comparison of DRS Compliance by Nurses' Characteristics

Characteristic	Frequency (%) DRS Compliance Yes n = 21 (33)	No n =43 (67)	*p*-value[a]
Designation			0.311
EN	1(2)	8 (13)	
RN	16 (26)	27 (43)	
CNS/NUM/CNC	4 (6)	7 (11)	
Highest Qualification			0.246
TAFE/Certificate	1 (2)	8 (12)	
Undergraduate Degree	15 (24)	27 (44)	
Post graduate Degree/Diploma	5 (8)	6 (10)	
Years of nursing experience			0.880
0 -2	5 (8)	9 (14)	
2-5	3 (5)	6 (10)	
5.1 -10	5 (8)	14 (22)	
> 10	8 (13)	13 (21)	
Work status			0.780
Full time	15 (24)	28 (44)	
Part time	6 (10)	14 (22)	
Training received on DRS			0.385
Yes	8 (13)	11 (17)	
No	13 (20)	32 (50)	
Ward			0.601
Medical	12 (19)	21 (33)	
Surgical	9 (14)	22 (34)	

[a]Comparisons of categories completed using χ^2

5.4.1 Motivation for DRS compliance and discharge planning

The top three motivators identified by nurses to comply with the DRS policy and check the patients' risk level are described in Table 16. In these questions participants could choose multiple responses. The majority of nurses (81%) reported that they complied with the DRS policy because it is an essential part of their practice, whereas very few nurses' (23%) felt the policy motivated them to do so. The patients' condition was also important in terms of the patients' discharge risk level, whether they had developed a risk (51%) or there was a change in their condition (56%). Furthermore, only just over half (58%) of the participants thought they were the discipline responsible for completing the DRS.

Table 16. Top Three Motivators Identified by Nurses for DRS Compliance and Discharge Planning

Category and Motivator	Yes	%[a]
To DRS compliance		
Because it is an essential part of practice	52	81
Nurses' are the discipline responsible for DRS	36	56
Because of policy	15	23
To check the patient's discharge risk level		
Because of a change in the patients' condition	36	56
Because the patient has developed a risk	33	51
To review the discharge plan	32	50

[a]Percentages may equal more than 100% due to multiple response choice options

In Table 17 nurses' motivation to comply with the DRS policy was compared between nurses who did and did not comply with the policy. Only one motivator differed, so that nurses who believe DRS is an essential part of nursing practice were more likely to comply with the DRS policy (p =0.007).

Table 17. Comparison of DRS Compliance by Top Motivators for DRS Compliance and Discharge Planning

Motivator	Frequency (%)[a]			*p*-level [b]
		DRS Compliance		
	All	Yes n = 21 (33)	No n =43 (67)	
Because of policy	15 (23)	4 (6)	11 (17)	0.562
To review the discharge plan	32 (50)	14 (22)	18 (28)	0.109
The patient develops a discharge risk	33 (51)	12 (19)	21 (33)	0.532
A change in the patient's condition	36 (56)	11 (17)	25 (39)	0.790
Nurses' are the discipline responsible for DRS	37 (58)	12 (19)	25 (39)	1.000
Because the DRS is an essential part of practice	52 (81)	21 (33)	31 (48)	0.007

[a]Percentages may equal more than 100% due to multiple response choice options. [b] Comparisons of categories completed using χ^2

Nurses were asked in an open ended question what problems they thought patients' experienced after discharge. The categories of these responses are detailed in Table 18. All nurses responded to this question. The main problem nurses' thought patients had following discharge home was lack of support (45%). The remaining categories, except one, related to the impact of their ongoing health needs. Of note, nearly one fifth (18%) of the nurses' thought patients were discharged too early, as medically they were not well enough or other social issues had not been resolved.

Table 18. Nurses' Perceptions of Problems Patients' Experience Post-Discharge

Problem categories	Frequency	%[a]
Lack of appropriate support	30	45
Adjusting to changed ability to manage	19	28
Relapse of health condition	18	27
Managing ongoing healthcare treatment	18	27
Discharged with unresolved clinical and social issues	12	18
Risk of injury due to fall or new equipment	12	18

[a]Percentages may equal more than 100% due to different response choices in different questions

5.4.2 Nurses' attitudes towards discharge risk screening and discharge planning

Nurses' attitudes towards discharge risk screening and planning were measured using a survey of which the first ten questions related to attitude. The possible score range for the ten questions was from 10 to 50, with 50 indicating a more positive attitude. The nurses completing the questionnaire demonstrated an overall positive attitude to DRS and discharge planning, with the mean 35.6 (SD 4.1) (range 32-46). To determine if nurses' attitudes differed according to any of the respondents' characteristics, DRS compliance or discharge planning behaviours, various comparisons were completed. Firstly, comparisons of the samples' characteristics to their attitude, detailed in Table 19 revealed the medical ward (36.39) had a slightly more positive attitude towards discharge risk screening and planning than the surgical ward (34.65), however this was not statistically significant (0.096). There were no other differences identified.

Table 19. Comparison of Nurses' Attitudes towards DRS and Discharge Planning by Nurse Characteristics

Characteristic	Mean (SD)	*p*-value[a]
Designation		0.313
EN	36.00 (2.8)	
RN	35.05 (4.2)	
CNS/NUM/CNC	37.18 (4.9)	
Highest Qualification		0.196
TAFE/Certificate	35.22 (4.9)	
Undergraduate Degree	35.29 (3.6)	
Post graduate Degree/Diploma	37.73 (4.7)	
Years of nursing experience		0.920
0 -2	35.64 (2.9)	
2-5	35.11 (4.2)	
5.1 -10	36.11 (5.1)	
> 10	35.29 (4.4)	
Work status		0.844
Full time	35.63 (4.3)	
Part time	35.40 (4.2)	
Training received on DRS		0.228
Yes	36.53 (4.5)	
No	35.13 (4.0)	
Ward		0.096
Medical	36.39 (4.9)	
Surgical	34.65 (3.0)	

[a] Independent t tests and ANOVA used as appropriate

The comparison of nurses' attitude scores according to whether they complied with DRS policy is presented in Table 20. Nurses who comply with the DRS policy had a more positive attitude by nearly three points (p = 0.032) than respondents who did not comply with the DRS policy. No other significant differences between the groups occurred.

Table 20. Comparison of DRS Compliance by Nurses' Attitudes

Policy Requirements	All	Attitude Mean (SD) Compliance Yes	Compliance No	*p-l*evel[a]
DRS completed on all patients	21	37.14 (3.6)	34.77 (4.2)	0.032
DRS completed on assessment form	40	35.93 (3.7)	34.92 (5.0)	0.356
Response to a positive DRS	57	35.42 (4.4)	36.57 (2.4)	0.498
Full compliance with policy	15	37.00 (4.4)	35.10 (4.1)	0.126

[a] Independent t tests used as appropriate

5.4.3 Perceived barriers to DRS and discharge planning

Nurses were asked to rank the top three barriers in these three areas; complying with the DRS policy, their actions that resulted from a positive DRS and overall discharge planning (Table 21). The nurses could choose from nine responses or include one of their own. The barrier that received the top ranking in all three areas was that the ward was too busy on weekdays. The second most frequently ranked barrier was that the patient was unable to communicate. Two other patient related issues that received top rankings were that the patient was too sick and the patients' condition was unpredictable. Only one other top ranking barrier prevented nurses from referring and documenting a positive DRS: this was the lack of skilled staff. Several items were not identified as barriers and these were related to

nurses' attitude and availability of family. The top ranked responses can be grouped into barriers associated with organisational processes occurring during the week and barriers created by the patients' condition. However, it was the weekday organisational processes that were definitely perceived as the major barrier in all areas.

Table 21. Top Ranked Barriers to DRS Compliance and Discharge Planning for Nurses (Rank 1-3)

Barriers	Frequency (%)[a]		
	Assess & record DRS within 48 hours	**Refer & record for positive DRS**	**Overall discharge planning**
Too busy on weekdays	**24 (38)**	**32 (50)**	**29 (45)**
Patient unable to communicate	**11 (17)**	**5 (8)**	1 (2)
Patient too sick	**6 (9)**	1 (2)	**8 (13)**
No one takes notice	5 (8)	4 (6)	3 (5)
Family not available	3 (5)	2 (3)	1 (2)
Not a priority on this ward	3 (5)	1 (2)	0
Diagnosis unfamiliar	3 (5)	1 (2)	0
Not enough skilled staff	2 (3)	**5 (8)**	3 (5)
Patient condition unpredictable	1 (2)	**5 (8)**	**9 (14)**
Allied health unavailable	0	1 (2)	0

[a]Percentages may equal more than 100% due to different response choices in different questions

5.4 Summary

In summary, the majority of patients audited were older, with a mean age of 64 years, and many had complex health care issues. Very few of these patients (24%) had a DRS completed within the mandatory timeframe. The significant predictor of DRS policy compliance was the condition the patient was admitted with (a respiratory condition). Nurses' self-reported compliance with DRS was also low at 33% and very few complied with all aspects of DRS policy (23%). There is little difference between actual and self-reported compliance with DRS. Most nurses acted on a positive DRS (89%), nonetheless few would discuss it with the patient or family (31%) and very few nurses involve themselves (20%) or the patient (30%) in discharge planning on admission. However, when nurses did complete the DRS their screening was accurate.

Most of the nurses surveyed were RNs, with an undergraduate degree and more than five years experience. None of the nurses' characteristics except attitude influenced their compliance with the DRS policy. Nurses had an overall positive attitude to DRS and discharge planning. But none of the nurses' characteristics measured in this study affected their attitudes. Those with a more positive attitude towards DRS and discharge planning were more likely to comply with DRS policy and start planning early. Importantly, the nurses who involved themselves or the patient in discharge planning on admission were significantly more likely to comply with DRS policy. Nurses identified that the main problem patients experienced following discharge home was a lack of support. Finally, the top ranked barrier for nurses in all areas of DRS and discharge planning was that the ward was too busy on a weekday, the next highest ranking barrier was the patients' ability to communicate, followed by the patient's condition.

CHAPTER 6: DISCUSSION

6.1 Introduction

This chapter discusses the main findings of the study and considers them in the context of the literature reviewed in Chapters one, two and three. Patients coming into acute care hospitals all need discharge planning because the implicit aim is for all of them to leave the acute care setting once their acute health care episode has either resolved or the long term plan is obvious. Discharge planning is the process that makes this aim explicit. However, the acute care setting is a system under stress with many economic, demographic and patient safety factors that influence how hospitals and the health system works overall including how discharge planning is completed. To ensure discharge planning is completed for patients in an ideal manner it is important to identify nurses' discharge planning behaviours and the factors that influence the behaviours, as they have a pivotal role in discharge planning.

The overall aim of this study was to identify nurses' DRS compliance and to investigate acute care nurses' attitudes, behaviours and their perceived barriers toward discharge risk screening and discharge planning. This chapter discusses nurses' compliance with DRS and discharge planning, nurses' accuracy of screening and identification of factors associated with DRS compliance, in particular the link between nurses' attitudes and behaviours. The challenges preventing nurses from completing the DRS and discharge planning are discussed and include lack of time and the barriers created by patient complexity and unpredictability of their condition. The inconsistency in nurses' understanding of discharge planning and their role from findings in the audit and the survey are considered and the influence of education and experience on understanding is outlined. Finally, the influence of nurses' characteristics on their discharge planning

behaviours and the importance of patient safety are discussed. The implications for practice are briefly touched on and limitations of the study design and method are outlined. The implications of these findings for nursing practice and patients and recommendations for future research will be addressed more fully in Chapter seven.

6.2 Discharge planning behaviour

Acute care nurses' attitudes, behaviours, actual and self-reported, and perceived barriers to discharge planning in one setting have been identified in this study. There is a clear difference between the ideal of discharge planning, which includes compliance with the DRS policy, and the reality. Nurses' compliance with screening for discharge risk is low. The three main influences on compliance of the DRS component and discharge planning activities are attitude, (identified in the survey) and workload organisation issues and patient characteristics (identified in both the audit and the survey). The nurses' understanding of discharge planning and their role is inconsistent even though many of the nurses are experienced. Nevertheless, nurses know many patients are complex, vulnerable and potentially at risk after discharge. This means discharge planning is vital to patient safety following discharge.

6.2.1 Compliance with DRS policy

Discharge planning is difficult to measure because many of the elements in the process are also part of nurses' daily practice and not exclusively related to planning patient discharges. Therefore it is not easy to expose nurses' discharge planning behaviours. The DRS is an area of practice that can be readily investigated as an example of discharge planning behaviour. In this study, actual and self-reported DRS compliance was very low, with only 24% of patients' records audited having a DRS completed and only 33% of nurses reporting they would comply with the DRS policy in the survey. Self-reported compliance with the specific components of DRS policy was also low with only 23% of nurses reporting

they would complete all the elements according to policy. One aspect of policy compliance was high and this was the nurses' action in response to a positive DRS (89%), suggesting an inconsistency in their understanding of DRS policy. Nevertheless, nearly half of the patients (44%) identified by the researcher to have a positive risk screen in the audit were missed by nurses' failure to complete the DRS.

The finding of low compliance rates is consistent with the studies by Bolch et al (2005) and the Victorian audit reports (Department of Human Services, 2002; KPMG (Klynveld, 1999, 2000). However, comparisons are difficult with both studies. Firstly, the Bolch et al (2005) setting was a small rural hospital and was part of a project to improve screening levels. Secondly, the audit reports were completed across a number of different hospital settings and it was not clear which healthcare worker was responsible for the DRS in these reports. Nevertheless, compliance was lower in acute metropolitan hospitals compared to rural or rehabilitation facilities. This is the only study that has specifically measured nurses' DRS compliance in acute care. Thus further investigation of nurses' DRS compliance in acute care settings is needed to be able to compare findings.

It was not clear in this study why nurses had such a low rate of compliance with this government and hospital policy. A limited number of studies have explored nurses' compliance with policy. However, a study that investigated nurses' (n=54) compliance with ward based policies in acute care wards (n=4) identified issues with nurses' compliance. Compliance rates for the use of malnutrition screening tools ranged from 4% on two wards through to 70%. Nurses reported that their compliance was influenced by competing nursing duties and that patient risk screening for falls, wounds and nutrition were a lower priority for them compared to the completion of patients' observations and medication charts (Raja et al., 2008). The barriers nurses identified in that study were communication with the patient, because the patient was confused and unable to communicate or the patient was non-English speaking. Access to interpreters and family were difficult for staff.

Other barriers identified was that the tool was difficult to complete and that there was a lack of education about the tool. The authors identified the following barriers: workload, individual work ethics, the number of temporary staff and staff supervision. Some of these barriers have been identified in this study and other literature as influencing compliance. However, patient assessment on admission, inclusive of mandatory risk screening tools, is considered a core competence and standard practice for registered and enrolled nurses in Australia (Australian Nursing and Midwifery Council, 2005, 2007). Further investigation of nurses' compliance with policy is needed to understand nurses' behaviours in this study.

6.2.2 Factors influencing behaviours

Just as specific elements of discharge planning are difficult to measure, so are the specific factors influencing completion of the process. This study demonstrated two factors in the audit that influenced nurses' compliance with DRS policy. These are the time of the week the patient was admitted and the patients' diagnosis. This is consistent with existing literature on nurses' perceptions of discharge planning (Armitage & Kavanagh, 1996; Bowles et al., 2003; Jewell, 1993; Mamon et al., 1992; Rhudy et al., 2009; Watts & Gardner, 2005), but the influence of these factors have not been measured in these studies.

Patients admitted to either ward between Monday and Friday were less likely to have their DRS completed compared to those patients admitted on the weekend. This is not surprising considering most audited patients (75%) were admitted on a weekday. This proportion of patients is greater than the numbers admitted on a weekday reported in the State of our Public Hospitals Report (2010), which identified that on average twice the number of patients are admitted to wards between Monday and Friday than on the weekend (Australian Government, 2010). The audit results suggest nurses had more time on the weekend to complete the DRS. Even though the staffing levels are usually lower on the weekend, fewer patients are admitted and there are less disruptions to work; that is tests, procedures and other allied health assessments are uncommon because most

medical and allied health interventions are completed when the majority of health professionals are working during office hours Monday to Friday (NSW Department of Health, 2007a).

The top ranked barriers reported by nurses as affecting their DRS compliance and discharge planning practice were the busyness of the ward and patient characteristics. Most patients in this study were admitted through the emergency department (62%). Duffield et al (2007) subscribes to this as a factor that increases patient churn and subsequently nurses' workload. Therefore, nurses have to prioritise their workload to manage the competing demands on their time and, as with previous studies, once the focus is on moving patients through the system discharge planning is not a priority for nurses (Armitage & Kavanagh, 1996; Atwal, 2002; Bull, 1994; Bull & Roberts, 2001; Cannaby et al., 2003; Jewell, 1993; Rhudy et al., 2009; Watts & Gardner, 2005). Furthermore, nearly half of the patients (42%) in this study had a medical diagnosis that was potentially unfamiliar to the nurses. Nurses have said it takes longer to get to know unfamiliar patient groups, which also adds to their workload and decreases the likelihood that assessments for discharge planning occur or because nurses are less able to anticipate patients' trajectories (Benner et al., 1992; Tanner et al., 1993).

Patients admitted with a respiratory diagnosis were significantly more likely to have their DRS completed compared to patients with a surgical or medical diagnosis. It is not clear why more of this patient group had their DRS completed. It could be because they have a more routine trajectory, that there is a coordinated approach to their care in the study setting or that they are more able to negotiate their own health care needs. Nurses in other studies were more likely to complete assessments and subsequently monitor discharge planing needs for patients with a familiar clinical trajectory. However, in those studies the assessment was completed informally and discharge planning activities were not documented, which makes these studies difficult to compare with this study (Armitage & Kavanagh, 1996; Foust, 2007; Pearson et al., 2004; Rhudy et al., 2009).

Another reason why respiratory patients were significantly more likely to have their DRS completed could be that there is a coordinated process in place for these patients in the study setting. This may give the nurses more confidence and motivation to comply with the DRS policy. The coordinated process includes specialist support in the hospital from the respiratory CNC, as well as coordinated care from the respiratory coordinated care program (RCCP). This team is based on the ward and provides ongoing interventions in the community. These services could make discharge planning easier for the nurses because they are aware of the services available and are therefore confident in making referrals. Several authors have shown that nurses who knew what services were available following discharge and how to access them were more likely to complete patients' discharge planning (Anthony & Hudson-Barr, 1998; Bowles et al., 2003; Bull, 1994). Understanding resources in the community is essential for nurses to be able to complete discharge planning activities (Arenth & Mamon, 1985; Carroll & Dowling, 2007; Clausen, 1984; Rorden & Taft, 1990). However, this was not measured in this study.

It could be that the respiratory patients are proactive with managing their own illness as many patients with chronic respiratory disease are encouraged to monitor changes in their health and manage the changes themselves (Lorig & Holman, 2003; Monninkhof et al., 2003). Lorig & Holman (2003) identified that one of the skills taught to patients with a chronic disease is to accurately report on the trends of their disease, make informed choices about treatment and be able to then discuss these with health professionals. This ability to discuss their disease could in turn make them better able to direct the nurses to their needs early in the acute care setting. However, because it is not clear why respiratory patients in this study were significantly more likely to have a DRS completed, it is important that further exploration of the respiratory patients' characteristics and the system in place in the study setting is undertaken. Then potential factors that may be influencing

nurses' DRS compliance can be identified and used to improve early screening for all patients.

6.2.3 Measuring compliance in the audit and the survey

Measuring nurses' compliance with overall discharge planning is difficult as indicated by the limited number of studies investigating nurses' compliance with elements of discharge planning (Bolch et al., 2005; Lalani & Gulzar, 2001). Importantly, the use of audit and survey in this study has revealed actual and self-reported behaviours of one element of discharge planning in the one study site. More frequently self-report surveys or interviews have been the methods used to determine nurses' behaviours in either single or multiple study sites, making it difficult to make connections between behaviours and the potential factors influencing the behaviours (Anthony & Hudson-Barr, 1998; Armitage & Kavanagh, 1996; Lowenstein & Hoff, 1994; Rhudy et al., 2009; Watts & Gardner, 2005; Williams, 1991). This study and previous studies identified that nurses are completing discharge planning in an inconsistent manner; however, this study has not only identified the actual level of compliance, but has been able to compare the audit results to the nurses' self-reported behaviours. Notably, an equivalent proportion of nurses that did comply with the DRS policy in the audit, also reported in the survey that they would comply with policy. This finding indicates that the method used in the survey was reasonable. Therefore associations can be made between nurses' behaviours and other factors, including attitudes, which no other study has made.

6.3 Discharge planning attitudes and behaviours

Nurses' overall attitude to discharge planning and discharge risk screening in this study was positive with scores ranging from 32-46. The possible score range was between 10 and 50, with 50 being the highest possible attitude score. It is not possible to compare these results because the tool used in this study is newly developed. Furthermore, attitudes have not previously been measured in other

studies. Nurses in previous studies have given a range of responses that suggest they have varying attitudes to discharge planning, for example while some nurses have said it is part of their role, that it is important and should start early, discharge planning is often seen as a lower priority than patients' clinical needs and nurses' perceive it as time consuming (Anthony & Hudson-Barr, 1998; Armitage & Kavanagh, 1996; Atwal, 2002; Cannaby et al., 2003; Hancock et al., 2003; Jewell, 1993; Lalani & Gulzar, 2001; Watts & Gardner, 2005). The literature presents an unclear picture of the nurses' attitude towards discharge planning, so this finding that nurses have a positive attitude overall is important because it can be linked to behaviours of the nurses.

A connection has been made between nurses' attitudes and behaviours in this study because the nurses' attitude to the DRS was the only nurse characteristic linked to DRS compliance in the survey. Nurses in the survey who said they would comply with the DRS policy had a more positive attitude by three points in comparison to those who said they would not comply. Therefore, measuring attitude is important because the link can be made between nurses' attitudes and DRS compliance. It is legitimate to make this connection in the one setting because the proportion of nurses complying with DRS policy in the audit was similar to the number who said they would comply. Two other elements of nurses' behaviours have been identified in this study that may also be linked to attitudes. The first, an area that has not previously been investigated, is nurses' accuracy of screening, which was mostly high. While DRS compliance levels were low, nurses with a more positive attitude were more likely to complete the DRS. The potential of the more positive attitude and high level of screening accuracy means that patients are more likely to have their discharge risks identified early, making the DRS a useful tool for nurses. However, the screen only identifies discharge risk, not patients' discharge needs. This still begs the question what nurses do with a completed score. Nevertheless, this information may be used to influence nurses' compliance with DRS policy in the future.

Secondly, nurses who reported they would comply with the DRS policy also reported they were more likely to start discharge planning early and discuss patients' discharge needs with the patient on admission. This is a significant finding because it suggests that nurses' attitudes may also influence their willingness to start planning early. Similarly, Bolch et al (2005) reported that patients who were screened early for discharge risk also had a discharge plan started early. More positive attitudes were linked to a higher level of nurses' compliance with clinical guidelines for nurses working in general practice (Puffer & Rashidian, 2004). Importantly, the connection between nurses' attitude and behaviours in discharge planning has not been made in the literature. If nurses' attitudes to discharge planning can be understood and influenced then nurses' discharge planning behaviours may be improved. Further investigation of nurses' attitudes towards the DRS and other aspects of discharge planning is vital, as attitude is the only nurse characteristic in this study that is associated with nurses' behaviours. One way to do this is to test and develop the new tool further and measure nurses' attitudes at other sites.

6.4 Challenges to discharge planning for nurses

Not surprisingly, the main challenges to completing discharge planning identified both in the audit and the survey are lack of time and patient characteristics. A further factor influencing discharge planning identified in the survey was the relationship between nurses and medical officers. The three areas investigated in the survey were compliance with the discharge risk screening policy, documentation of the DRS and referral for further assessment and overall discharge planning. Overwhelmingly, nurses' ranked workload, "the ward was too busy during the week', as the top barrier to all three areas of discharge planning. The audit results and the nurses' responses in the survey are in accord that the ward was too busy during the week. This finding is consistent with the literature, in which workload and lack of time were acknowledged by nurses as being the main challenges to completing discharge planning (Anthony & Hudson-Barr, 1998; Armitage & Kavanagh, 1996; Atwal, 2002; Bull, 1994; Bull & Roberts, 2001;

Cannaby et al., 2003; Duffield et al., 2007; Jewell, 1993; Kalisch, 2006; Lalani & Gulzar, 2001; Rhudy et al., 2009; Watts & Gardner, 2005).

Patient factors were the next top ranked barriers to discharge planning in the survey. These factors were the severity of illness, the patients' ability to communicate and the unpredictability of the patients' trajectory. The audit supports the nurses' perceptions because the patients were of older age, many had one or more co morbidities (78%), more than a third had a functional impairment (38%) and nearly half (42%) were patients with medical conditions that may have been unfamiliar to the nurses. In addition, a quarter of the patients were from a non English speaking background which, as identified in Chapter Two, can impact on communication. This means the patients were likely to be complex with unpredictable trajectories and many may have had unfamiliar diagnoses to the nurses caring for them; all of which are factors that make discharge planning essential for the patient, but also more difficult for nurses (Armitage & Kavanagh, 1996; Atwal, 2002; Bowles et al., 2003; Hancock et al., 2003; Jewell, 1993; O'Connell, 1998; Rhudy et al., 2009; Watts & Gardner, 2005). Atwal (2002) asserted, if information was difficult for nurses to obtain on admission because of the patients' condition or ability to communicate, then it was often forgotten or left incomplete. The complexity of patients and problems with their ability to communicate is unlikely to change; so, further investigation of nurses' DRS compliance is necessary to promote a more consistent approach to early identification of patients' discharge needs. Future implications for practice relate to imbedding a standardised use of the DRS tool into nurses' every day practice, which should already be occurring. However, involving nurses in the development of a guideline and implementation of a tool has been shown to increase compliance (Bolch et al., 2005).

The relationship between nurses and medical officers appears to play a role in nurses' discharge planning behaviours in this study. Just over half of the nurses (52%) reported in the survey that they were most frequently involved in discharge

planning when the medical officer made the decision to discharge the patient. An almost equal proportion of nurses also said they were involved close to the day of discharge indicating a lack of understanding about discharge planning and their role. This is consistent with the literature discussed in Chapter Three that established nurses most frequently started discharge planning once discharge appeared imminent or when the medical officer had made their decision. In fact, nurses in the literature often said they needed the medical officer to provide this date before they could start planning (Armitage & Kavanagh, 1996; Bull, 1994; Lalani & Gulzar, 2001; Watts & Gardner, 2005; Williams, 1991). This also indicates nurses are unclear about the process of discharge planning, the need to start early and their role.

6.5 Nurses' understanding of discharge planning

An inconsistent understanding of discharge planning was evident in this study. Nurses in this study revealed similar contradictory views in the survey and behaviours in the audit as identified by previous studies investigating nurses' perceptions of discharge planning (Armitage & Kavanagh, 1996; Atwal, 2002; Atwal & Caldwell, 2006; Bull, 1994; Bull & Roberts, 2001; Foust, 2007; Lalani & Gulzar, 2001; Lowenstein & Hoff, 1994; Rhudy et al., 2009; Watts & Gardner, 2005; Williams, 1991). For example, the lack of understanding that discharge planning needed to start early was evident in the audit and survey because very few nurses' documented the DRS or said they would complete it. This behaviour was further supported by the limited number of nurses (20%) who said in the survey that they started discharge planning on admission. This is despite the majority of nurses (81%) saying the DRS component is an essential part of practice. Confusion over responsibility and how to complete the DRS was also obvious because only just over half of the participants (58%) thought nurses were the discipline responsible and a similar proportion of participants (56%) would only complete the DRS on some patients. Williams (1991) identified a similar level of confusion over responsibility for discharge planning; however, Williams' (1991)

study was asking health care staff about responsibility in general terms not in relation to a specific element of discharge planning.

On the other hand, nurses in this study knew that the process was multidisciplinary because in the question that required nurses to generate a response most nurses (89%) said they would act on a positive screen by referring the patient to another team member. The most frequently nominated multidisciplinary team members were allied health (65%), followed by the medical team (59%) or a senior nurse (31%). All are appropriate and in line with the policy (NSW Department of Health, 2007a). The audit supported the nurses' self-reported behaviours because most patients requiring further assessment by allied health were reviewed by the appropriate member of the multidisciplinary team. In contrast, in previous studies nurses were sceptical about involving other members of the multidisciplinary team and nurses were the discipline least likely to refer to allied health (Atwal, 2002; Atwal & Caldwell, 2006; Bowles et al., 2003; Day et al., 2009).

Documentation of the referral to allied health team members was lacking in this study. As with the documentation of the DRS in this study few nurses' (31%) documented referrals to allied health and few nurses (25%) also reported in the survey that they documented referrals to allied health in the patient's medical record. This again highlights the lack of understanding nurses have about discharge planning and the need for clear and timely documentation to ensure the appropriate sequencing of events which is consistent with the limited studies that reviewed nurses' discharge planning documentation (Bull & Roberts, 2001; Foust, 2007; Lalani & Gulzar, 2001).

Nurses were equally unclear about when to communicate with the patient about discharge and the role of the patient and family in discharge planning. Even though some nurses (30%) would discuss discharge plans with the patient on admission, most said patients were involved close to the day of discharge or when the medical officer decided the discharge date. The literature investigating patients' perceptions

of discharge planning is consistent with the nurses' response in this study. They are involved close to discharge, further indicating the relationship between nurse and medical officers is an influencing factor (Armitage & Kavanagh, 1998; Cannaby et al., 2003; Jewell, 1993; McMurray et al., 2007; Victor & Vetter, 1988). Notably, only 31% of nurses in this study would discuss a positive discharge risk with the patient or the family, which limits the capacity for appropriate discharge planning.

It is not clear why most nurses would not discuss the patient's discharge issues with the patient or family. Nurses in this study did not identify the lack of family availability as a barrier to DRS compliance and discharge planning in the survey. The time when communication with the family is vital is when the patient is unable to communicate or is too unwell, because the family are the people with the most current information about the patient's ability to manage their own care, their existing home situation, medical history and other factors that may influence patient care planning and discharge planning (Carroll & Dowling, 2007; Clausen, 1984; Katikireddi & Cloud, 2009; Lim et al., 2009; Rorden & Taft, 1990). Nurses in previous studies either did not mention the patient or if patients were identified as being involved, nurses were observed not to include them in discharge planning (Anthony & Hudson-Barr, 1998; Armitage & Kavanagh, 1996, 1998; Bull & Roberts, 2001; Cannaby et al., 2003; Jewell, 1993; Lalani & Gulzar, 2001; Watts & Gardner, 2005).

Education and experience in general and specific to DRS did not influence nurses' self-reported DRS compliance and discharge planning behaviours in this study. Many of the nurses were experienced with nearly two thirds (63%) having more than five years experience and the majority having an undergraduate degree or post graduate degree (83%). Despite low numbers (30%) saying they had received education on the DRS, none of the nurses' characteristics, including the level of DRS education received, predicted which nurses did or did not complete the DRS component of discharge planning. In contrast, other studies have identified nurses' years of experience did influence their knowledge of the elements and timing of

involvement in discharge planning (Anthony & Hudson-Barr, 1998; Bull, 1994). Therefore, other ways of influencing nurses' discharge planning attitude and practice need to be found.

6.6 Nurses' role in discharge planning

Nurses in this study sample held similar contradictory beliefs about discharge planning that were identified in the literature investigating nurses' perceptions of discharge planning. However, in comparison to the literature, many of the nurses in this study were experienced and most had an undergraduate degree (66%) or post graduate degree (17%), so it is not obvious why they held these beliefs. Atwal (2002) reported that nurses learn the process of discharge planning when they start working on a ward. Many nurses in this study should have had the requisite experience to complete discharge planning. However, appropriate role models or role modeling behaviours may not have been demonstrated in the study wards. Additionally, many of the nurses' worked fulltime and the overall skill mix indicated a high ratio of experienced RNs to junior RNs and ENs. This suggests that decreasing RN to EN ratios and increasing proportions of experienced part-time staff, described in the study by Duffield et al (2007) as influencing nurses' workload, should not have been a factor that influenced DRS completion in this study.

Despite the challenges, nurses have a pivotal role in identifying patients' discharge needs early because the nurses' admission assessment is the key time to identify patients' existing home situation and start the discharge planning process (Bull & Roberts, 2001; Rorden & Taft, 1990; Watts & Gardner, 2005). Ongoing monitoring of patients' progress is usual practice for nurses as they are the discipline in most constant contact with the patient (Clausen, 1984; McGinley et al., 1996; Schlemmer, 1989). Yet this study is consistent with the literature that nurses are unclear about the process of discharge planning and their role and that these factors as well as insufficient time, and patient characteristics continue to influence nurses' practice in this study.

Importantly, in contrast to previous studies, the participants in this study were aware that patients were complex and going home in vulnerable states. Nurses must consider that patients may have safety issues following discharge. This implies that nurses do think about the patient at home after discharge and the role of discharge planning in patient safety. However in this study there was a lack of early screening by the nurses. This is an important deficit to note because the patient sample had many of the hallmarks of patients at risk of a post-discharge event including older age, presence of co-morbidities and functional impairment. As discussed at the beginning of this thesis, these characteristics identify a group of patients who are likely to have more complex discharge planning and coordination requirements and therefore more time is required to accommodate this planning.

This study confirms that discharge planning is important because the patients accessing health care are complex and need a safe transition to home. It is even more important that discharge planning starts early and is completed in a timely way because the drive to reduce length of stay in hospital reduces the time available for planning. Other impacts, such as an increasing number of patients accessing health care and increasing patient diversity on each ward make screening tools, such as the DRS, even more vital. Nurses in this study have shown they can use the DRS to accurately screen patients for discharge needs in a quick and simple manner. Discharge planning must start early in the patients' admission and be completed for all patients in a standardised manner to ensure that appropriate support is arranged for their ongoing health and domestic care needs at home. This is especially important considering the fewer numbers of family members available to support patients at home and the mismatch between the demand and availability of services in the community. The findings of this study suggest a number of recommendations to improve nurses' DRS compliance and discharge planning practice in acute care wards, in particular investigating ways to

influence nurses' attitudes is key to improving DRS compliance and discharge planning. The implications for practice will be discussed in the next chapter.

6.7 Limitations

There are several limitations to this study. Firstly, the survey had not previously been used and there was limited internal consistency reliability, and possibly content and face validity. The survey tool needs to be further developed to ensure nurses' attitudes towards discharge planning and the factors that influence their attitudes are more reliably measured and fully explored. This would include using exploratory interviews and focus groups to increase the content and face validity of the tool. A further limitation of the survey is that the self-report method can limit the depth of the responses and bias the results because the responses are subjective (Burns & Grove, 2005). However, the participants' self-reported and actual behaviours were very similar, suggesting nurses in this study provided responses that reflected their actual behaviours.

A second limitation was that the audit of the patients' medical record focussed on the first 48 hours of the admission and it is possible that the DRS was complete after this time, but that would then be outside the policy timeframe. A further limitation of this study is that objective data of nurses' admission assessment behaviours as well as other interactions with the patient and other health professionals was not completed. Observation of these interactions and activities would potentially have provided a more complete view of the ward environment, nurses' actual discharge planning behaviours and the factors influencing nurses' behaviours.

A further limitation was the comparison of the researcher's DRS to the nurses' recorded DRS. While it is reasonable to expect the researcher's ability to conduct the DRS would be superior to that of the nurses on the wards, the nurses had the advantage of a live patient, whereas the researcher only had what was written in

the patients' medical records. In future, true accuracy of nurses' discharge risk screens needs to be completed on the same live patients at the same time.

While the study size and sample are larger than any previously published work that used a combination of methods to explore nurses' discharge planning behaviours, the small sample size ultimately limited the types of statistical analyses that could be performed. The study needs to be repeated in another organisation with a larger sample size. Additionally, as the study was completed in one organisation this may limit the generalisability of the results. The study setting admitted a patient population that was representative of the patients identified in the literature who are currently accessing acute care hospitals nationally and internationally. If the study was completed in several organisations, the potential for different organisational factors or nurse characteristics to emerge may have provided some different data to promote changes to the way discharge planning is completed in acute care.

6.8 Summary

This study has presented new and significant findings in relation to nurses' DRS compliance and discharge planning and the factors that influence the completion of these activities. Evidence has been presented that responds to the gaps identified in the literature, especially in relation to the nurses' DRS compliance, their overall attitude to DRS, and discharge planning, accuracy of screening, the perceptions of their role and lack of understanding about discharge planning. Nurses' compliance with the discharge risk screening component was low, both in the audit and the survey.

An important finding was the link between nurses' attitudes and their behaviours, as no other study has measured nurses' attitudes or made connections between the two. Nurses' screening was accurate and nurses with a more positive attitude were more likely to start planning early, suggesting a further link between attitude and behaviours. Nurses' experienced challenges to discharge planning which were lack of time due to the ward being too busy, patient factors and the relationship

between nurses and medical officers. Time and patient factors were identified in the audit and survey.

Nurses demonstrated an inconsistent understanding of the DRS component of discharge planning. The reason for this was not clear because none of the nurses' characteristics, except attitude, were found to influence their compliance with DRS policy. Nurses knew to refer to other team members if the patient had a positive risk screen and they knew the patients were complex and at risk of an event at home after discharge.

Importantly nurses have many activities to complete on the acute care ward, including discharge planning. There are many obstacles to completion of discharge planning. However, nurses are pivotal in the discharge planning process because they are the discipline who is in the best position to monitor the patient's ongoing progress and thus early discharge planning.

This study shows that a focus on patient safety is even more vital because the patients are older aged and more complex and many have unpredictable trajectories. Nurses knew patients were at risk post-discharge. Discharge planning is important because it is the process that promotes a safe transition to the next care setting. However, it is clear that the way discharge planning is completed in acute care is not ideal. The implications for practice, future research and conclusions are presented in the next chapter.

CHAPTER 7: CONCLUSION

7.1 Introduction

The conclusions and recommendations from this study focus on several areas. Firstly, the importance of the systematic use of screening tools early to start the process of discharge planning. This includes promoting nurses' use of a systematic approach to discharge planning to support the organisation of time and workload around issues such as patient churn. To support this process regular auditing of compliance with the process and regular feedback of results is necessary. Secondly, further investigation of nurses' actual discharge planning behaviours in acute care and attitudes is needed to better understand their practice. This includes the nurses' involvement of the patient and family in discharge planning and their perception of the intention and role of policy. Thirdly, review of communication methods is necessary to improve the process of discharge planning. This includes clarifying nurses' and medical officers' roles in discharge planning, in particular the development of clear processes and role delineation for nurses in discharge planning. This should be supported by their involvement in the development and implementation of the processes and discharge planning tools. This would include a review of multidisciplinary team meetings and nurse involvement in these meetings and regular auditing of the new process and feedback of results. Finally, further investigation of key areas such as a review of system issues and nurses' discharge planning education needs to be completed before roles are clearly defined and criteria implemented. This review would include the influence of a coordinated approach to patient care on specific patient groups.

7.2 Conclusion and recommendations

Completion of discharge planning is important for the safe transition of patients from one care setting to the next. Early screening of patients for risk of an event at

home following discharge from hospital is an effective way to initiate discharge planning processes early in acute care settings. When the screening process is hampered and thus compliance with DRS is poor, timely referral to healthcare professionals does not occur. Improving compliance requires that patient care units ensure a systematic approach to patient assessment in the early stages of admission. This approach would ideally promote organisation of the nurses' time and workload to ensure all patients are screened as mandated by policy and recommended by researchers (Association of Discharge Planning Co-ordinators of Ontario, 2009; Carroll & Dowling, 2007; Day et al., 2009; Katikireddi & Cloud, 2009; Lim et al., 2009; NHS Institute for Innovation and Improvement, 2008; NSW Department of Health, 2007a; Parker, 2005; Rorden & Taft, 1990). Furthermore, DRS needs to be reinforced as a priority when global issues of increased nursing workload, unfamiliar patient diagnoses, shorter length of stay, and increased patient turnover or churn mean that there are many competing demands for nursing time (Duffield et al., 2007). Nursing practice should incorporate a systematic approach to discharge planning as a whole, from the time of admission to the time of discharge.

Before a systematic approach to discharge planning can be implemented a greater understanding of nurses' discharge planning practice in acute care wards is needed. A key area that requires further investigation is the nurses' attitudes towards discharge planning and the factors influencing their attitudes. This will require further development of the survey tool and investigation of nurses' attitudes and behaviours in other sites. Nurses' actual discharge planning behaviours also requires exploration. This includes the nurses' use of informal cues to identify patients' discharge needs and the nurses' involvement of the patient and family in discharge planning, because the patient and family are central to the whole process of discharge planning. It is important to explore these areas so that appropriate methods to improve nurses' existing practice can be developed or a clear set of discharge planning processes can be implemented that build on existing practice. Other areas requiring investigation are the identification of

connections between nurses' usual patient care activities and discharge planning activities. While bedside nurses may not be to able to coordinate the patient's discharge plan, they remain key to the identification of patients' needs and abilities. This information must be communicated in a more systematic and explicit way. Understanding nurses' discharge planning practices and the barriers preventing them from completing discharge planning activities means that customised interventions can be implemented that can assist with overcoming identified barriers to change (Baker et al., 2010).

Greater incorporation of discharge planning activities into nurses' daily practice may also occur if nurses are involved in the development and implementation of the discharge processes and then provided with education and regular feedback on monthly audit results (Bolch et al., 2005). Nurses are more likely to be motivated to use a screening tool early, document a discharge plan and implement the plan when they understand the implications for patient safety and are involved in the implementation of the tool into practice. The use of audit and feedback of recommended practice is key to the improvement of nurses' compliance levels (Jamtvedt, Young, Kristoffersen, O'Brien, & Oxman, 2006). Greater compliance can be achieved with more intensively delivered feedback (Jamtvedt et al., 2006). Other methods that build on existing practice or use a strength-based approach to practice development may also make discharge planning a more explicit and valued aspect of nursing practice.

Communication in discharge planning and methods of communication in hospitals are big issues (Garling, 2008). Electronic medical records are in their infancy in Australia. There is an opportunity to include the DRS and other discharge planning communication tools as mandatory fields on the electronic medical records during their development. However, communication with patients, their family members and the multidisciplinary team is vital and must start early and be explicit. Planning the patient's care post-discharge should be completed in line with their medical trajectory as much as possible. Methods to improve this communication need to be

explored so that patients, their families and the multidisciplinary team are clear about the patients' treatment goals and possible timeframe in hospital. This would include review of the multidisciplinary team meetings, involvement of the nurse in these meetings, and methods of improving discharge planning documentation by nurses.

Clarification of nursing roles and development of clear guidelines, criteria or processes in relation to discharge planning is necessary to increase nurses' completion of discharge planning activities and overall discharge planning (Lane et al., 2009; Maramba et al., 2004). The use of practice guidelines can reduce variations in patient care and can provide structure when introducing new processes (Thomas et al., 1999). Guidelines that have clear recommendations and are based on evidence-based practice are more likely to be adhered to (Grol et al., 1998). The development of local guidelines, consistent with health department policy may result in higher levels of compliance. Guidelines can be adapted to allow for identified barriers in each organisation (Johansson, Pilhammer, Khalaf, & Willman, 2008; Baker et al 2010). For example, a distinct role for nurses in discharge planning with clear criteria to support this role may help promote nurses' knowledge and motivation to be involved in discharge planning (Maramba et al., 2004).

The process of role clarification, as part of the guideline development, would need to include medical officer involvement to ensure both disciplines are working together using the same framework and criteria. Medical officers and nurses in particular need to develop clear methods of communication with each other and with the patients and family members. This will require that both disciplines clarify their roles, responsibilities and expectations of each other and implement clear criteria to guide the process of communication, multidisciplinary team working, patient participation and overall discharge planning activities (American Medical Association, 1996; Lim et al., 2009; Snow et al., 2009).

The process of coordinating discharge planning must be reviewed and may include identifying the role and position of a coordinator. There is a consistent view amongst researchers, governments and peak medical bodies that a member of the multidisciplinary team needs to coordinate the patient's discharge planning and that it must start early (American Medical Association, 1996; Garling, 2008; Jack et al., 2009; Mukotekwa & Carson, 2007; NSW Department of Health, 2007a). However, there appears to be limited consultation between all of these groups about each discipline's role, the role of coordinator and coordinated discharge planning processes.

Before criteria or processes are developed that are aimed at improving nurses' discharge planning behaviours, further investigation and review of several key areas is necessary. These include firstly, reviewing the process of discharge planning education for nurses at the following levels; the university or college, health care organisation and at the ward level. Secondly, review of the system issues that impact on all health care staff's completion of discharge planning activities. This includes the impact of a coordinated approach, such as the one for the respiratory patients in this study, on nurses' discharge planning behaviours. The review of organisational systems also needs to include the process of patient admission and how this can be better managed to reduce patient movement through the wards and increasing patient diagnostic diversity on each ward (Duffield et al., 2007; Garling, 2008; Lim et al., 2009; Mukotekwa & Carson, 2007; NSW Department of Health, 2007a).

7.3 Implications for practice

The recommendations to improve nurses' DRS compliance and discharge planning practice in acute care wards are:

- further development of the survey tool used in this study and further investigation of nurses' actual discharge planning behaviours and attitudes towards discharge planning at other study sites using this tool, observation and audit methods;

- investigate methods to implement a systematic approach to discharge planning that includes early screening, using the DRS and
- implement a process of regular auditing of compliance with the systematic approach and regular feedback of results;
- development of clear guidelines, criteria or processes for discharge planning that include agreed upon roles for all members of the multidisciplinary team, in particular the nurses' role;
- involvement of nurses in the development of guidelines and implementation of the systematic approach;
- a review of the process of coordinating discharge planning;
- a review of methods of communication in discharge planning;
- a review of the process of educating nurses about discharge planning, and,
- a review of organisational systems, including the influence of a coordinated approach for specific patient groups.

7.4 Conclusion

This is the first study that combines the results of an audit and a survey of nurses' discharge planning behaviours in the same study site. It is also the first study to measure nurses' compliance with DRS policy and their attitudes towards DRS and major aspects of discharge planning. Additional key contributions of the thesis are the identification of the factors that influence these behaviours in the one study setting, in particular the connection between nurses' attitudes and behaviours, as this was the only nurse characteristic that was found to influence nurses' DRS compliance.

It is vital that clear processes or criteria for discharge planning are developed and implemented and that role delineation is clarified to ensure the timely completion of discharge planning activities by the appropriate health care professional. This includes implementation of a systematic approach to discharge planning and the early and ongoing involvement of the patient and family in discharge planning. To support the criteria, a review of education and orientation to discharge planning is

recommended as well as a review of the process of patient admission to acute care wards and other organisational factors impacting on discharge planning.

This information provides a base from which government policy developers and hospital administrators, especially nurse managers and educators, can review the discharge planning process, in particular the nurses' role. This needs to be done at both an organisational and a ward level to promote the safe transfer of patients to the next care setting. This is essential in the current climate of increasing patient complexity and cost constraints, which has resulted in shorter length of stay for sicker patients and the shift of more complex care to the community because effective discharge planning is the process that promotes a safe transition for the patient to the next care setting.

APPENDICES

Appendix A Publication

DISCHARGE RISK SCREEN—a "Yes" response for 1 or more of the below items indicates a discharge risk and requires referral to appropriate healthcare professionals.

Does the patient have a self-care deficit or potential?	**Yes** ☐	**No** ☐
Do you live alone?	**Yes** ☐	**No** ☐
Do you care for another person?	**Yes** ☐	**No** ☐
Frail aged person ☐ Disabled person ☐ Baby/children ☐		
Other.....		
Did you use any community/ambulatory services?	**Yes** ☐	**No** ☐
Home care ☐ Community nurses ☐ Meals-on-wheels ☐		
Ambulatory services (eg, COPS, HFS, RCCP)_____ Please notify services of admission (COPS: Cancer Outreach Program Service; RCCP: Respiratory Co-ordinated Care Program; HFS: Heart Failure Service)		

Figure 1. Discharge risk screen (DRS). The DRS tool is based on the model developed for the Victorian Department of Human Services and Health. The rights to the DRS are retained by South Eastern Sydney and Illawarra Area Health Service and the New South Wales Department of Health, Australia.

predicts the patient's need for help at home after discharge.[10] Patients are considered to have a positive DRS if any question has a "yes" response. A positive discharge risk then triggers nurses to make referrals to other healthcare professionals for further assessment of discharge needs.

Nurses are well placed to identify discharge risk and have a key role in discharge planning. Nurses' admission assessment is pivotal in the development of patients' discharge plans as it provides the starting point for discharge planning.[1,11] Studies show that there is general agreement by nurses that discharge planning is important for patients' transition to home, and it is the nurse's responsibility to coordinate patients' discharge in the acute care area.[8,11-13] More specifically, nurses identified that patients require assessment early in their admission to trigger appropriate discharge planning.[11-13]

Despite these stated beliefs, nurses' actual behaviors were found to differ so that the discharge planning process may be chaotic, disjointed, or ad hoc.[13] Only 40% of nurses participated in any aspect of discharge planning, with even less (30%) stating that discharge planning started early in patients' admission.[8] Nurses stated that lack of time, interest, and motivation decreased efforts to complete discharge planning assessments. Importantly, more than half of the patients identified that lack of appropriate discharge planning resulted in the need for more, unplanned healthcare after discharge.

There have been few studies that have investigated specifically nurses' compliance with DRS policy. One study reported compliance with screening for discharge risk in 139 public hospitals as part of a larger study of discharge planning.[14] This study found that less than half (42%) of the 9887 patients' medical records screened included a fully completed DRS. Compliance was lower in metropolitan acute care hospitals but was better for patients with higher intensity discharge needs. Similar rates of compliance (58%) were found in a study following implementation of an intervention that aimed to improve discharge planning for people older than 65 years.[15] Although this rate of compliance was an improvement from a baseline of 17%, nearly half of the patients were still not being screened.

In addition, it is not clear whether DRS tools are completed accurately or factors other than the complexity of patients' needs influence completion. Given the outcomes of the literature review, the aims of this study were to measure nurses' compliance with DRS policy, determine the accuracy of screening, and identify factors associated with its completion.

METHODS

Design, sample, and setting

The study used an audit of 100 medical records of patients who had a length of stay of

more than 48 hours in 2 acute care wards in a tertiary referral hospital in Sydney (Australia). Wards were selected on the basis that most patients were older and had complex problems, as these are the characteristics of many patients accessing hospitals internationally.[2-5] One ward primarily admitted patients with respiratory diagnoses whereas the other ward primarily admitted patients with surgical diagnoses, including neurosurgical, reconstructive plastic surgery, trauma, and head and neck surgery. However, both wards frequently also admitted patients with medical diagnoses other than respiratory. Furthermore, there were additional differences between the wards other than patient diagnoses. The surgical ward had more patient turnover, shorter length of stay, fewer specialized nurses, and more new graduate nurses than the medical ward.

One hundred medical records were audited because the United Bristol Healthcare Clinical Audit Central Office recommends this sample size to be sufficient to influence managers to make changes.[16] The rough sample size guide that this office recommends is 20 to 50 records. As the 2 wards differed, 50 notes were reviewed from each ward, with a final total of 99 medical records (1 audit was incomplete). The DRS tool audited in this study has been mandated for use in New South Wales' public hospitals. This 4-question risk screen was developed and validated to accurately predict service needs of patients postdischarge from acute care hospitals.[10]

Standard practice for patient admission to a ward in the hospital, where the research was conducted, includes completion of an admission assessment on patients' arrival or up to 48 hours after admission. This assessment, which is documented in a structured hard copy form that includes the DRS, is completed by the nurse admitting the patient to the ward. Any risks identified by the nurse are handed over to the nurse clinical coordinator or directly to other healthcare professionals. The coordinator role includes coordination of patients' discharge, bed management, and patient flow; general organization of the ward environment; and regular case conferences with the multidisciplinary team.

Instrument

The audit tool was developed specifically for the study as no relevant tool to audit nurses' compliance with DRS was identified in the literature. The tool collected data on DRS completion as well as patient-related information and admission process variables that help identify the factors that influence completion of the DRS. The audit tool was developed by pilot testing on 10 medical records, which led to small adjustments being made to the layout and content. The final content of the audit is listed in Table 1.

Procedure

Consent to conduct the audit was obtained from the nurse unit manager of both wards. Ethical approval was not required as

Table 1. Data collected by audit tool

Patient characteristics
Age
Gender
English speaking
Patients' usual residence
Presenting symptoms
Presence of functional impairment (eg, inability to walk, manage own hygiene, or eat)
Comorbidities (eg, heart disease, diabetes, obesity, or arthritis)
Concurrent conditions (eg, deaf, visual/cognitive impairment)
Admission process characteristics
Admission:
Time
Day
Unplanned
via emergency department
via internal transfer
DRS documentation
DRS questions 1-4 (DRS completed in full)
Outcome of DRS Positive or negative
Researcher assessment of DRS positive or negative risk screen

Abbreviation: DRS, discharge risk screening.

the audit is considered a quality activity.[17] Discharged patients' medical records were checked against the admission and discharge logbook most days, over a 3-week period from November to December 2007. Each record was logged to prevent double entry. The researcher also completed a DRS, using the information available in the medical record from the time of admission up to 48 hours after admission, to independently determine the patient's discharge risk.

Data analysis

Data from the audit were entered into and analyzed using the Statistical Package for the Social Sciences (SPSS), version 15.[18] Descriptive statistics were used to summarize the data. Sensitivity and specificity analyses were used to determine the number of patients with a true positive discharge risk and those with a true negative discharge risk by comparing the outcome of the nurses' DRS with that of the researcher's.[19] Comparison tests used χ^2 and Fisher exact test, as appropriate, to determine differences in DRS completion for each variable. A backward reduction logistic regression model was used to determine the independent predictors of DRS completion by using the variables of ward, age, gender, language, admission diagnosis (surgical and medical—nonrespiratory or respiratory), comorbidities, whether the admission was unplanned, and the day of the week admitted.

RESULTS

Patient characteristics

The average age of the patients in the audit was 64 years (SD, 18.83; range, 19–92 years), the majority were English speaking (74%) and men (55%), and most patients (86%) were admitted from home. Patients had complex needs: 77% had at least 1 comorbidity in addition to their primary diagnosis; nearly a third had at least 1 other condition, such as visual or cognitive impairment; and more than one-third (38%) had a functional impairment affecting mobility or self-care. Patients' gender, admission from home, comorbidity, and functional impairment were not significantly different between the groups. Unplanned admissions were predominant, with the majority (72%) admitted via the emergency department (62%). Most patients (61%) were admitted out of business hours on a weekday (75%), and their admission was completed by a registered nurse (RN 63%).

DRS compliance and accuracy

The DRS was completed in full for 24.2% of the patients within the 48 hours mandated. However, individual questions from the DRS were completed at a slightly higher rate of 30% to 34%. Of the patients who had the DRS completed by the nurse, 37% had a positive discharge risk. Of the patients who had a positive discharge risk, 75% were true positives, and of the patients who had a negative discharge risk, 83% were true negatives. In addition, 44% of patients who had not had their DRS completed were identified by the researcher as having a positive discharge risk.

The independent predictors of DRS completion were determined by backward logistic regression analysis. The final model (Wald $\chi^2 = 21.5$, $P \leq .001$) is detailed in Table 3. Patients had less chance of having a DRS completed if they were admitted for a medical (nonrespiratory) or surgical diagnosis than for a respiratory diagnosis and if they were admitted on a weekday. Controlling for other variables in the model, the odds of a DRS being completed decreased by 90% if the patient was admitted for a medical (nonrespiratory) diagnosis than when admitted for a respiratory diagnosis, by 87% if admitted for a surgical diagnosis than for a respiratory diagnosis, and by 70% if admitted on a weekday than on weekend, although the latter was not significant ($P = .09$).

DISCUSSION

Compliance with DRS by nurses in this study was poor (24%) and lower than reports from previous studies.[14,15] Screening was not always accurate, with 17% of patients being incorrectly identified as not having a

Table 2. Admission characteristics for completion of discharge risk screening

Characteristics	DRS completed		
	Yes (%), $n = 24$	No (%), $n = 75$	P^a
Unplanned	20 (28)	52 (72)	.292
Outside of business hours	14 (23)	46 (77)	.954
Time of week			
Weekday	15 (20)	59 (80)	
Weekend	8 (47)	9 (53)	.022
Documented by[b]			
Registered nurse	14 (23)	48 (77)	
Clinical Nurse Specialist	2 (18)	9 (81)	.939
Ward			
Surgical	7 (14)	42 (86)	
Medical	17 (34)	33 (66)	.022
Admission diagnosis			<.001 (overall)
Surgical	4 (13)	27 (87)	
Medical (nonrespiratory)	6 (14)	36 (86)	
Respiratory	14 (54)	12 (46)	

[a] χ^2 or t test used as appropriate.
[b] Totals may not equal 100% due to missing data.

discharge risk. Furthermore, many patients with a positive discharge risk (44%) were not screened on admission. Consequently, patients with a positive discharge risk were not being identified early, which meant that their discharge needs might have been missed. Patients were then at risk of a delayed discharge or an untoward event at home, because their needs were not identified early enough to be adequately prepared for discharge to home, including the arrangement of appropriate postdischarge services. These findings are important because these patients have the potential for having complex needs because of comorbidities, concurrent conditions, and functional impairments.

Two factors influenced compliance with DRS policy: the admission diagnosis of the patient and day of the week admitted. The patients most likely to have their DRS completed were patients with a respiratory diagnosis. It is likely that patients with respiratory diagnoses receive a much more systematic approach to their care, with a focus on safe discharge and prevention of readmission, especially if the respiratory disorder is chronic. In the study context, patients with chronic respiratory disease receive a specialized

Table 3. Significant predictors of discharge risk screening completion[a]

Variable	Odds ratio	95% confidence interval	P
Admission diagnosis			
Medical (nonrespiratory) vs respiratory	0.100	0.027–0.372	.001
Surgical vs respiratory	0.128	0.028–0.593	.009
Admitted on weekday	0.312	0.081–1.202	.091

[a] Model Statistics (Wald $\chi^2 = 21.5$, $P \leq .001$, 2 log likelihood = 80.212).

coordinated care approach, overseen by a respiratory clinical nurse consultant and supported by an outpatient multidisciplinary team. As a result, patients and staff become familiar with early identification of issues and the need for referral, which is the basis of DRS. This is consistent with previous reports that patients with chronic or more obvious functional impairments were more likely to have a formal or informal screening for discharge needs by nurses.[20, 21]

Although patients with a specific and common surgical diagnosis may have a coordinated discharge following a pathway, there may not be a focus on early assessment. In contrast, patients with complex or uncommon medical diagnoses and no support team will be more unfamiliar to staff, and therefore staff will be less likely to anticipate or understand postdischarge care needs. In the current climate of high staff turnover and reduction in ratios of RNs, development of this expertise may be limited.[6]

Although high nurse turnover and nursing skill mix may contribute to failure to screen patients for discharge risk, it is also likely that patient turnover is a contributor, as patients were less likely to have their DRS completed on a weekday rather than on the weekend. In the study context, patient flow on weekdays was much higher than that on the weekend. The movement of patients from the emergency department to wards, between wards, and to and from tests has been identified as "churn," a factor that increases nurses' workload.[6] A perceived lack of available time has been identified as a factor impeding nurses' screening for discharge risks.[8,11,12] In addition, patient "churn" decreases the availability of patients' records and time to get to know the patient and family in order for the screening questions to be answered accurately.

Limitations

The DRS completed by the researcher versus that completed by the admitting nurse may not completely correspond, as the information available about the patients' condition and social situation may have differed at the time when each screening was completed. Only 2 wards were audited, and it is likely that wards with different specialty diagnoses may have had different results.

Implications for practice

Screening patients for risk of untoward events postdischarge is an effective way to initiate discharge-planning processes early in acute care settings. However, this process is hampered when compliance with DRS is poor, interfering with timely referral to healthcare professionals. Improving compliance most likely requires that patient care units ensure a systematic approach to patient assessment in the early stages of admission. Furthermore, DRS needs to be reinforced as a priority when worldwide issues of increased nursing workload, unfamiliar patient diagnoses, shorter length of stay, and increased patient turnover mean that there are many competing demands for nursing time.[6] Therefore, nursing practice should incorporate a systematic approach to discharge planning as a whole from the time of admission to the time of discharge.

Clarification of nursing roles and development of a clear protocol in relation to discharge planning may contribute to an increased compliance with the DRS policy.[22,23] For instance, a distinct role for nurses in discharge planning with an explicit protocol to support this role may help promote nurses' knowledge and motivation to be involved in discharge planning.[22] Greater compliance may also occur if nurses are involved in the development and implementation of the protocol and then provided with education and regular feedback on monthly audit results.[15] In this way, nurses are more likely to be motivated to use a tool when they understand the implications for patient safety and are involved in the implementation of the tool into practice. Further research into nurses' attitudes and beliefs about DRS is warranted and should include investigation of the influence of nursing experience, position, and qualifications on completion of the DRS.

Further compliance could be enlisted through the inclusion of the DRS as a

Appendix B Discharge risk screen (DRS)

DISCHARGE RISK SCREEN- a "yes" response for 1 or more of the below items indicates a discharge risk and requires referral to appropriate health care professionals.
Does the patient have a self care deficit or potential? **Yes** ☐ **No** ☐
Do you live alone? **Yes** ☐ **No** ☐
Do you care for another person? **Yes** ☐ **No** ☐
Frail aged person ☐ Disabled person ☐ Baby/children ☐
Did you use any community/ambulatory services? **Yes** ☐ **No** ☐
Home Care ☐ Community Nurses ☐ Meals on Wheels ☐
Ambulatory services (eg COPS, HFS, RCCP)_____Please notify services of admission
Other…….
(COPS: Cancer Outreach Program Service; RCCP: Respiratory Co-ordinated Care Program; HFS: Heart Failure Service)

Appendix C Admission assessment form with DRS

Appendix D Measurement instrument: Audit pages 1 and 2

Appendix E Measurement instrument: Original survey tool, Moore and Price (2004)

Section 4: Details About Your Practice

(23) Is there a pressure sore **risk assessment tool** in use in your practice?

yes ☐
no ☐

If yes, please state the name of the tool: _____

(24) Is there a pressure sore **grading tool** in use in your practice?

yes ☐
no ☐

If yes, please state the name of the tool: _____

(25) Have you received any **formal training** on pressure sore prevention & management since you qualified as a nurse?

yes ☐
no ☐

If yes, please specify: _____

(26) How long have you been you qualified as a nurse?

less than 2 years ☐
2-5 years ☐
6-10 years ☐
more than 10 years ☐

(27) What area of practice do you work in?

Medical ☐
Orthopaedic ☐
ICU ☐
Burns ☐
Other, please specify _____

Surgical ☐
Age Related Health Care ☐
CCU ☐
Plastics ☐

(28) How long have you been employed as a permanent Staff Nurse in your hospital?

less than 2 years ☐
2-5 years ☐
6-10 years ☐
more than 10 years ☐

Thank you for taking the time to complete this questionnaire. Your contribution is greatly appreciated. Please put the questionnaire in the envelope provided and place it in the collection box located at the nurses station.

Appendix F Measurement instrument: Permission for use of original survey tool

Appendix G Measurement instrument: Survey

Discharge Risk Screening Survey

Section 1: Discharge risk screening and discharge planning

Please tick the box that most closely reflects your answers to the following questions. If you accidentally tick the incorrect box, please put an 'X' through the box and then tick the correct box: Thank you for taking the time to complete the following questionnaire.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
1. All inpatients' are at potential risk of adverse events after discharge home					
2. **Discharge risk screening** is time consuming to carry out					
3. In my opinion, patients tend not to need **discharge planning**					
4. I do not need to concern myself with **discharge planning** as part of every day practice					
5. Clinical work is a greater priority than **discharge planning**					
6. Regular assessment of patients will give an accurate picture of their discharge risk					
7. Most health problems after discharge can be avoided					
8. I am less interested in **discharge planning** than other aspects of nursing care					
9. My clinical judgement is better than any **discharge risk screening** tool available					
10. In comparison to other areas of nursing care, **discharge planning** is a low priority					
11. **Discharge risk screening** should be regularly carried out on all patients during their stay in hospital					

Section 2: Discharge risk screening and discharge planning practice

For questions 12 -14 please tick one box only

12. Do you carry out discharge risk screening:

on all patients'	[ ]
on some patients'	[ ]
on no patients'	[ ]

13. When do you carry out discharge risk screening?

on admission only	[ ]
daily during the patients' stay in the hospital	[ ]
only when I think the patient has a discharge risk	[ ]
when I remember to	[ ]
when I get time	[ ]

14. When do you check patients' level of discharge risk?

daily	[ ]
weekly	[ ]
less often	[ ]
never	[ ]

15. When do you update the patients' discharge plan on the care plan or in the clinical notes?

daily during the patient's stay in hospital	[ ]
only when the patients' condition changes	[ ]
when I remember to	[ ]
never	[ ]
other – please specify:	

For questions 16 - 20 you may tick as many options as required

16. When do you **most often** discuss the discharge plan with the patient?

On admission	[ ]
During their hospital stay	[ ]
On the day before discharge	[ ]
On the day of discharge	[ ]
Once the doctor makes the decision to discharge	[ ]
Never	[ ]

17. When are you **most often** involved in the patients' discharge plan?

On admission	[ ]
During their hospital stay	[ ]
On the day before discharge	[ ]
On the day of discharge	[ ]
Once the doctor makes the decision to discharge	[ ]
Never	[ ]

Section 3: Factors influencing completion of the discharge risk screen and discharge planning

18. Why do you carry out discharge risk screening?

because it is an essential part of nursing practice [ ]
because I see other nurses doing the same [ ]
because other nurses expect me to [ ]
because the hospital policy states that I should [ ]
other – please specify_____

19. Why do you check patients' discharge risk level?

to review the discharge plan [ ]
because there is a change in the patients' condition [ ]
because the patient has developed a discharge risk [ ] (i.e. changes at home)

other – please specify:_____

20. Where do you document/record the patients' discharge risk screen?

on the assessment form [ ]
in the patients' notes [ ]
on the handover sheet [ ]

21. When you have identified a patient has a discharge risk, what do you do?

22. Please indicate which staff you see as having the **major responsibility** for discharge risk screening of patients' in the hospital? **(please tick one box only)**

Medical staff [ ]
Nursing staff [ ]
Social workers [ ]
Other, please specify
_____

23. Have you received any **training** on discharge risk screening & management of the discharge risk since you qualified as a nurse?

yes [ ] If yes, please specify:_____
no [ ]

24. What problems do you think patients' most often have once they are discharged home from your ward?

25. Please **rank in order, the top three (3) factors** that prevent you from **assessing and documenting the patients' discharge risk screen,** within 48 hours of admission: (one (1) being the top)

This is not a priority on this ward	_____	Patients' condition is unpredictable	____
Not enough skilled staff	_____	Not familiar with the patients' illness	____
Too busy on weekdays	_____	Patient too sick	____
No one takes any notice if it is documented	_____	Unable to communicate with the patient	____
Other_____	_____	Family not available to ask	____

26. Please **rank in order, the top three (3) factors**, that prevent you from **making** and **documenting referrals**, once you identify a patient has a **positive discharge risk screen:** (one (1) being the top)

This is not a priority on this ward	_____	Patients' condition is unpredictable	____
Not enough skilled staff	_____	Not familiar with the patients' illness	____
Too busy on weekdays	_____	Patient too sick	____
No one takes any notice if it is documented	_____	Unable to communicate with the patient	____
Other_____	_____	Family not available to ask	____

27. Please **rank in order, the top three (3) factors** that would prevent you from **planning the patients' discharge** during their stay in hospital**:** (one (1) being the top)

This is not a priority on this ward	_____	Patients' condition is unpredictable	____
Not enough skilled staff	_____	Not familiar with the patients' illness	____
Too busy on weekdays	_____	Patient too sick	____
No one takes any notice if it is documented	_____	Unable to communicate with the patient	____
Other_____	_____	Family not available to ask	____

Please complete:

How long have you been nursing? _____

Please tick:

Work status: Full time [ ] Part time [ ]

Current Nursing position: TEN [ ] EN [ ] RN [ ] CNS [ ] CNC [ ] NUM [ ]

Highest Nursing Qualification: TAFE [ ] Hospital Certificate [ ] Certificate [ ]
Bachelor of Nursing [ ] Post Graduate [ ] Masters degree [ ]
other _____

Appendix H Study poster

Date_____

To the nurses of ward _____

You are invited to take part in a study that is investigating discharge risk screening and the nursing role in acute hospital wards.

In the next few weeks your NUM will be letting you know more about this study and how you can take part.

- Participation is voluntary
- It involves a short information session and then you will be asked to complete a questionnaire
- The questionnaire takes 15-20 minutes to complete and
- Your responses are anonymous

Nurses who work night duty or week ends will be invited to participate during their normal work hours.

The planned start date for the study is_____

If you would like more information about this study, please contact Jane Graham, on 9113 2370, on page 180 or via email on jane.graham@sesiahs.health.nsw.gov.au

Jane Graham is a Masters of Nursing (Honours) student at the University of Technology, Sydney. The results of the study will be used to gain her Masters of Nursing (Honours) degree.

Appendix I Information sheet

HREC Approval No: 08/STG/82

PARTICIPANT INFORMATION STATEMENT

Title of study: Discharge risk screening and nursing role in acute hospital wards

You are invited to participate in a study investigating nurses' role in discharge risk screening.

If you decide to participate, I will ask you to sign the consent form enclosed and then complete a questionnaire. The questionnaire takes approximately 15-20 minutes to complete. An envelope will be provided for you to put the questionnaire into after completion. The questionnaire does not identify you by name.

The aim of the questionnaire is to investigate what helps you to complete the discharge risk screen, when a patient is admitted to your ward, or what prevents you from completing it. The aim of the study is to better understand the nurses' role in discharge risk screening and discharge planning in acute care. You were selected as a possible participant in this study because discharge risk screening is most often completed by nurses in the acute care ward.

I am a Masters of Nursing (Honours) student at the University of Technology, Sydney. The results of the study will be used by to gain my Masters of Nursing (Honours) degree.

Your nurse unit manager (NUM) has given support for this project to be completed on your ward. This time has been allocated for you to be fully involved in the project, should you agree to complete the questionnaire. There is the potential, though slight, that you may become uncomfortable about answering questions about your discharge risk screening practices. If you become upset or distressed as a result of being involved in the research, the researcher has provided you with a contact name and number at the university to discuss your concerns. The NUM will also be informed, if requested by the participant, of any discomfort caused by involvement in the research project.

Information obtained in this study is anonymous. The wards and hospital will be described in general terms, as will nurses' characteristics. A presentation of the study results will be provided to your ward after the information from the completed questionnaires has been analysed. If you give us your permission by signing this document, we plan to discuss/publish the results as a thesis through the University of Technology, Sydney and potentially as a journal article. Your decision whether or not to participate will not affect your future relations with the Hospital or the researcher. If you decide to participate, please complete the questionnaire and place it in the envelope and box provided. The researcher will leave the room after the information session. You can then choose to complete the questionnaire, after the information session, at another time, or not at all. If you choose to complete the questionnaire at a later date, the questionnaires will be collected at the end of each day from the box provided.

Complaints may be directed to the Executive Officer of the South Eastern Sydney and Illawarra Area Health Service Human Research Ethics Committee - Central Network, St. George Hospital, Gray St., Kogarah 2217. Telephone: 9113 2481 or 9113 2987.

If you have any questions, please ask during the session or you can contact me after the session through the hospital paging system, on page number 180 If you have any additional questions about the research you may contact my supervisor, Associate Professor Robyn Gallagher of the University of Technology, Sydney (ph 9514 4833).

You will be given a copy of this form to keep.

Appendix J Consent form

PARTICIPANT CONSENT FORM

Title of study: Discharge risk screening and nursing role in acute hospital wards

You are making a decision whether or not to participate. Your signature indicates that you have decided to participate having read the information provided above.

_____

Signature of subject

_____

Please PRINT name

_____

Date

_____

Signature(s) of Investigator(s)

_____

Please PRINT Name

Appendix K Approval to conduct research from South eastern and Illawarra area health service (SESIAHS) ethics committee

Appendix L Approval to conduct research from Central Network (SESIAHS) ethics committee

Appendix M Approval to conduct research from UTS ethics committee

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23 October 2008

Associate Professor Robyn Gallagher
CB10.07.214
Nursing, Midwifery and Health
UNIVERSITY OF TECHNOLOGY, SYDNEY

Dear Robyn,

UTS HREC 2008-278 – GALLAGHER, Associate Professor Robyn, BOTHE, Ms Janine (for GRAHAM, Ms Jane, Honours student) – "Acute care nurses' attitudes, behaviours and perceived barriers towards discharge risk screening"
[External Ratification: South Eastern Sydney and Illawarra Area Health Service Health Central Network Human Research Ethics HREC approval –08/STG/82 from 3 September 2008 – 3 March 2009].

At its meeting held on 14/10/2008, the UTS Human Research Ethics Committee considered the above application, and I am pleased to inform you that your external ethics clearance has been ratified.

Your UTS clearance number is UTS HREC REF NO. 2008-278R

Please note that the ethical conduct of research is an on-going process. The *National Statement on Ethical Conduct in Research Involving Humans* requires us to obtain a report about the progress of the research, and in particular about any changes to the research which may have ethical implications. This report form must be completed at least annually, and at the end of the project (if it takes more than a year). The Ethics Secretariat will contact you when it is time to complete your first report.

I also refer you to the AVCC guidelines relating to the storage of data, which require that data be kept for a minimum of 5 years after publication of research. However, in NSW, longer retention requirements are required for research on human subjects with potential long-term effects, research with long-term environmental effects, or research considered of national or international significance, importance, or controversy. If the data from this research project falls into one of these categories, contact University Records for advice on long-term retention.

If you have any queries about your ethics clearance, or require any amendments to your research in the future, please do not hesitate to contact the Ethics Secretariat at the Research and Innovation Office, on 02 9514 9772.

Yours sincerely,

Production Note:

Signature removed prior to publication.

Professor Jane Stein-Parbury
Chairperson,
UTS Human Research Ethics Committee

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