CHAPTER I

INTRODUCTION

1.0 Overview

This study investigated improving the quality of nursing care for patients over the age of 65 during acute hospital care. The main focus was to improve the quality of nursing care for older acutely hospitalised medical patients through surveying perceived needs of older patients, their family members/carers and their nursing staff and to develop, implement and evaluate a new model of care employing a participatory action research (PAR) process.

1.1 Introduction and background

One of the challenges of nursing in Australia today is to meet the health care needs of the growing older population. Quality of nursing care is important for acutely ill older people, who are the largest group of patients in terms of hospital admissions, as reported by the Australian Institute of Health and Welfare (AIHW) (1999). The two main contributing factors to this growing older population are declining birth rates and longer life expectancy (AIHW, 2002). Nurses’ influence on the older hospitalised patients’ care is likely to be significant, as nurses spend more time on patients’ hospital care than do any of the other professionals. Research suggests, however, that many nurses are confused about their nursing role, particularly whether it is their responsibility to attend to some of the less acute nursing needs, such as answering general telephone enquiries from family and friends, and
domestically oriented work tasks, such as the provision of meals services (Pearson, 2003; Scott, 1998).

Complaints about the quality of nursing care for older patients in Australia are frequently expressed through letters to the media and hospital administrators (Higgins, Fiveash, Parker, Lay, Rutter, Wamsley, Narcarrow, & Henderson, 1997). Research evidence was needed to verify these complaints. Therefore, two research studies were initiated to investigate these claims regarding the quality of care for older patients in an acute care hospital setting (Courtney, Tong, & Walsh, 2000; Reed & Clarke, 1999). Both studies reported a gap in nursing expertise in this area of care, suggesting more research was required to understand the nursing expertise necessary to care for older patients. Another study set out to identify nurses’ knowledge base and attitudes towards older people and ageing (Wilkes, LeMiere, & Walker, 1998). Significant gaps were found in nurses’ knowledge in regard to older peoples’ needs and the ageing process itself. In addition, attitudes towards older patients were found to significantly influence nurses’ practice and the health outcomes of older patients (Ahmad, 1998). Therefore, if nurses are to address the gaps between their perceptions and the perceptions of older patients, it is important to consider what quality of nursing care means to older patients, which again suggests more research is required in this area.

The study endeavoured to improve the quality of nursing care for older patients in the acute care setting through an action research process and the development of a nursing model over a two-year period. A mixed method triangulated approach was conducted in three stages that involved administering questionnaires in five acute
medical wards during stage 1, and recording minutes of meetings, field notes and evaluation instruments during stages 2 and 3 participatory action research (PAR) process. More specifically, the study evaluated the aspects of nursing care needs considered most important for older patients in the acute care setting from the perspective of the older patients, their family members/carers and their nurses, and the degree to which these were provided during stage 1. Once this information was analysed, stages 2 and 3 were conducted concurrently. The researcher collaborated with nursing staff from one medical ward, who volunteered to participate to develop and implement a new model of care that addressed the findings from stage 1 and proceeded to evaluate the new model to determine whether the implementation resulted in increased patient satisfaction and improved health care for older patients.

This study of improving the quality of care for older patients is timely, given the health system’s problems, such as shortage of nurses, which have been well publicised (Armstrong, 2002; AIHW, 2002). The particular educational preparation of nursing staff and the greater expectations placed on them to improve their productivity within tight economic policy present difficulties for nurses when caring for older patients in an acute medical ward setting. Therefore, identifying the perceptions of older patients, their family members/carers and their nurses regarding important aspects of nursing care for older acutely hospitalised populations is significant, and provides the first step in improving the quality of nursing care provided.
CHAPTER II
LITERATURE REVIEW

2.0 Overview

The care of older people in hospital is complex, and action is needed to improve the quality of nursing care for people over the age of 65 in the acute care setting. This chapter will provide an overview of issues identified in the existing literature related to care of the older person in the acute hospital setting.

The current profile of the older population and the impact of the increasing older population during hospitalisation, including the older patients’ characteristics and the skill levels of nurses caring for them, are discussed. This profile is discussed to highlight the complexity of the care needs and the importance of quality of care for this portion of the population. It is useful to consider the perceptions of quality of care held in the acute hospital setting. It is also useful to consider quality of care experiences and attitudes of nurses towards older patients in the acute hospital setting, together with the perceptions of, and priorities for, quality of care held by older patients, their family members/carers and their nurses, in order to propose new models of nursing care. This chapter also identifies difficulties associated with researching older patients’ needs and levels of satisfaction with nursing care. Finally, the methods employed by nurses to improve the quality of care during hospitalisation, as well as models of care appropriate for older patients, are discussed.
2.1 The current profile of the older population

The increasing proportion of older people in the population is a worldwide trend. The two main contributing factors are declining birth rates and longer life expectancy (AIHW, 2002). This global demographic trend has prompted health services to address the needs of older people as a priority (Department of Health and Aged Care (DHAC), 2001). In Australia, the Department of Health and Aged Care predicts that by 2051, about 5 million people, more than 20 percent of the population, will be aged 65 years and over (DHAC, 2001). Australian national population estimates have indicated that people aged 65 years and over represented 11.3 percent of the total population in 1991, compared to 12.4 percent in 2001. The New South Wales population estimates for 2001 indicated this segment represented 12.9 percent of the State’s population (Australian Bureau of Statistics (ABS), 2002).

In Australia, as it is throughout the more developed regions of the world, the ageing population is a major focus for social and economic planners and policy makers (ABS, 1999; AIHW, 2002). Therefore, there is an increasing need for health systems to change their focus to more closely assess strategies used in managing the acutely ill older hospital population (NSW Health, 1999). According to a recent Australian report, the older population is increasing in size and, as a consequence, a proportionally larger number of older patients are admitted to the acute hospital setting than in previous years (Buchanan & Considine, 2002). This population group also tends to enter hospital in an acutely ill state (AIHW, 2002). Furthermore, the increase in the proportion of this population group will affect hospital services, not only for older Australians, but for younger groups, who will be called upon to support the older population. The overall
impact of this increase in the ageing population raises several issues relevant to health issues and health care economics.

A significant component of the impact of this increase in the aged proportion of the population in Australia and the increase in admissions of this group to the acute care setting is the rising levels of comorbidity, that is, concurrent chronic illnesses among older patients, which have resulted in an increase in the intensity of nursing care activity (Buchanan & Considine, 2002). Common comorbidities include cardiovascular problems, chronic respiratory conditions, diabetes and arthritis. However, this increase in nursing care activity has not been matched by a corresponding increase in nursing staff numbers (Buchanan & Considine, 2002). Rather, the situation has arisen whereby there is now greater stress and pressure placed on nursing staff because staffing levels have not been adjusted to match this increased demand for nursing care activities (Buchanan & Considine, 2002; Janiszewski Goodin, 2003). This suggests the characteristics of older patients and their increasing incidence of comorbidities need to be taken into consideration when caring for them. The impact of the increasing number of older patients in the acute hospital setting needs to be considered when researching the issues in order to improve the quality of their care.

2.2 The impact of hospitalisation and older patients’ characteristics

According to social theorists, health is described as a desirable state that is highly valued because it is essential for the smooth running of society (Short, Sharman, & Speedy, 1993). Health is the desirable norm, and illness is an undesirable form of
deviance that has the potential to disrupt the status quo of social organisation by preventing people from carrying out their usual activities (Parsons, 1951 cited in Short et al., 1993). The World Health Organization (WHO) (1946) defines health as ‘a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity’. Health and illness are linked to health care, hospital and medical beliefs, values and ideologies and to its economic, social and political structures (Short et al., 1993). Therefore, health and illness cannot simply be reduced to a physical or pathological level. Health and illness need to be viewed in a social context associated with the broader social network of older patients, which includes their economic, social and supporting services.

The literature suggests that for frail and acutely ill older people, hospitalisation does not necessarily result in an improvement in their health (Covinsky, Palmer, Kresevic, Kahana, Counsell, Fortinsky, & Landefeld, 1998). Hospitalisation can add new experiences of illness, such as dependence on nursing staff for assistance with activities of daily living for older patients who are away from their family and regular social network. Admission to hospital involves a process of socialisation into a new social status and, for most people in an acute medical ward setting, this happens when they are quite ill. This can be a very anxious time for older patients, as they are vulnerable in their interaction with others (Short et al., 1993).

Complications can arise as a result of the older person being admitted to the acute hospital setting (Johnson, 1987; Williams & Botti, 2002). For example, when multiple treatments are required for comorbidities, issues concerning medication adherence and the side effects of such therapy can be more problematic than the treatments themselves.
Research suggests nurses pay little attention to the complexity of managing older patients with their comorbidities in the acute care setting (Williams & Botti, 2002). However, it is an important consideration for nurses because, periodically, older patients may require acute hospital care where the complexity of care needed is greater than that required for younger adults. In these cases, hospitalisation can represent the beginning of a functional decline and increased dependency, leading to long-term admission to an aged care facility (Covinsky et al., 1998).

These problems can occur where a management priority is to reduce patient bed days and the overall length of hospital stay, in line with the Department of Health guidelines (NSW Health, 1999). According to Short et al. (1993), it is rare for a hospital to place the needs and interests of the patients first, as much of what is implemented serves the interests of health service managers. This type of priority is of particular concern to older patients if it results in a loss of opportunity for rehabilitation or convalescence, which focuses on promoting optimal recovery and preparing older patients for a safe discharge (Metersky, Tate, Fine, Petrillo, & Meehan, 2000; Reedy & Bragg, 2000). Structural management issues are identified as one reason for the inappropriate length of hospital stay for older patients and nursing staff shortages that create a mismatch between supply and demand (Armstrong, 2002).

Doctors have a major influence on health care costs due to their control over the rate of admission and length of hospital stay (NSW Health, 1999). In 2000, the Department of Health commissioned a study to identify the growing number of older patients’ needs during hospitalisation (DHAC, 2001). The findings indicate older patients’ needs are not being met in the hospital system, with ‘patients being discharged too early without
their needs being assessed' (Reedy & Bragg, 2000). This is a direct result of cost efficiencies: that is, cost savings, structural management issues involving length of hospital stay, and staffing levels, which result in patient care taking a lower priority, leading to less than optimum care, with the patients and families left at the mercy of the health care system. An American study by Sager and colleagues assessed the functional outcomes of acute hospitalisation and older patients, and reported a high incidence of functional decline after acute hospitalisation, often due to the short length of stay imposed upon older patients (Sager, Franke, Inouye, Landefeld, Morgan, Rudberg, Siebens, & Winograd, 1996). Their research and Miller's (2002) study identified the need for health services to reconceptualise the way care is prioritised and delivered, because the number of older patients admitted to acute care wards is increasing and these patients are likely to have a spectrum of needs, including physiological, psychosocial, functional and financial issues, that will affect their response to illness and the acute care experience itself.

It is apparent the nurse staffing structures and length of hospital stay decisions in the existing Australian health care system have made it difficult to meet the needs of older patients with comorbidities in the acute care setting (Williams & Botti, 2002). This is a major issue for nurses, who expect to be able to provide quality care to the increasing older patient population (Irurita, 1999). When an older person with comorbidities is admitted to an acute care ward, the coordination of care requires careful consideration of the older patient's concurrent illnesses and knowledge of the relevant research into nursing care needs for older patients, in order to guide nursing practice (Williams & Botti, 2002). However, the literature reports the relevant level of knowledge and consideration for the care of older patients apparently does not exist in some situations.
in practice, as there is evidence to suggest older hospitalised patients are at an increased risk of poor outcomes, such as increased re-admissions, functional decline and iatrogenic complications, as compared with other age groups (Hart, Birkas, Lauchmann, & Saunders, 2002).

2.3 Skill levels of nurses caring for older hospitalised patients

Improving the quality of care for special health populations, such as children, has resulted in the provision of speciality care units, which have resulted in improved health outcomes (Hart, Birkas, Lachmann, & Saunders, 2002). However, health care systems have yet to acknowledge and respond to the unique needs of older patients across hospital services (Parke & Stevenson, 1999). This was confirmed in a study that reported the acute care setting, such as general medical wards, did not segregate older patients into speciality areas (Miller, 2002). Internationally and locally, there is growing concern regarding the lack of nursing expertise in the acute care of older patients (Courtney, Tong, & Walsh, 2000; Reed & Clarke, 1999; Williams & Botti, 2002). Several studies have found that nurses lack the knowledge and skills necessary to care for older people in the acute care settings (Miller, 2002; Walkem, 1995; Wilkes, LeMiere, & Walker 1998).

These concerns are confirmed by the Health Advisory Service 2000 (1998) in the United Kingdom, which reported the specific needs of older people on acute wards in general hospitals were not being adequately identified or addressed, and important aspects of nursing care were not adequately provided. The report specifically
emphasised the poor image and profiles of this older group, and noted the skills of the people providing services for this group need to be addressed at every level of the health and social care system. This is consistent with Nolan and Tolson’s (2000) study in the United Kingdom, which highlighted some of the tensions that currently exist in the context of the acute care setting as under-funding, poor care environments and lower staffing levels for the care of older patients.

Nurses have traditionally been seen by patients as a mother surrogate, or the nurse-patient relationship viewed in the same way as the mother-child relationship, with the skills of nurses thought to flow naturally (Short et al., 1993). In relation to the doctor’s role, nurses were defined in the role of the handmaiden, obedient, uncritical and unquestioning. Skill in this context was defined as the ability to carry out doctors’ orders (Willis, 1994). In the health care arena, the politics of nursing skills is organised around the idea of medical dominance, which is the major feature of health service delivery (Willis, 1994). Doctors, due to their professional dominance, have largely controlled the skills of nurses by defining what constitutes skill. The implications of this control over nurses is that nurses often lack the power to change certain situations within their practice.

In previous studies that have specifically investigated nurses’ skills, nurses are reported as not adequately employing appropriate skills to identify or address the specific nursing care needs of older patients (Grimmer, Gill, & Moss, 1999; Williams & Botti, 2002). Specific nursing care needs often revolve around the patient’s diminished functional independence, poor mobility and falls, which are common to older patients (Creditor, 1993). Importantly, it has been identified that specialist nursing care skills are
required to meet the multiple, and indeed unique, nursing needs of older patients.

Increased sensitivity to the frailty of the older patient can help improve care standards
and nursing expertise (Cox, 1999). However, these may only be addressed in a climate
that supports patient-centred care as determined by nurses. Therefore, a goal to alter this
situation by nurses may be for nurses to restructure their thinking and focus on
individual patient care with early assessment of potential problems and to promote
patients’ functional mobility (Jacelon, 1999).

The need for nursing expertise in older patients’ care was also confirmed in a study
where patients with comorbidities were noted to be at risk of being neglected in the
acute care setting, predominantly because the health care environment did not
adequately recognise the specific needs of these older patients (Sager et al., 1996).
Nurses need to be aware that older patients may also be affected by specific age-related
changes present during hospitalisation, which can affect their ability to hear, see and
speak, yet these sensory losses may not be taken into account when providing nursing
care (Heath, 1997). As a result, older patients are usually more dependent on nurses to
provide their care than are younger patients, and they commonly take a longer time to
rehabilitate from illness or injury (Covinsky et al., 1998).

Researchers have identified the significance of determining what nurses and older
patients believe are important aspects of nursing care in order to improve the patient’s
health outcomes (Ahmad, 1998; Helmuth, 1995). It is equally important to determine
what family members/carers see as priorities in the nursing care for older patients, as
they have expressed negative views in the past to the media and hospital administration
about the nursing care older family members have received (Higgins et al., 1997).
Therefore, ascertaining the perceptions of older patients, their family members/carers and their nurses may assist in identifying issues related to nursing care which require improvement. To fully understand the perceptions of care by these three groups, older patients, their family members/carers and nurses, it is necessary to examine the concept of quality of care in the nursing context.

2.4 Perceptions of quality of care in the hospital setting

The current focus of most hospital programs in Australia has been on improving hospital efficiency (Duckett, 2000). According to Duckett, the changes in technology, such as advances in anaesthesia, pharmacology and complex surgery in health care systems over the last two decades in Australia underline numerous issues of change in hospital practice that will drive many aspects of hospital reform. In more recent times, hospitals have changed in response to the move from historical to casemix funding in the public sector in most Australian states. Addressing this issue means attention is placed on hospital performance, such as measurement of quality of care (Duckett, 2000). While there is no universally agreed definition of quality of care (Ambler-Peters, 1991), at its most basic level, quality of care is underpinned by state and territory regulation to ensure appropriate design and cleanliness in health care services (Duckett, 2000). Definitions of quality involve the perceptions of different groups, such as health staff and patients.

In the literature, Donabedian (1988) is often acknowledged as having formulated the conceptual model of quality of care. He recognized that the term ‘quality of care’ was used in many contexts and the meaning was often misunderstood. A patient’s perspective of quality of care may differ considerably from that of the hospital provider.
A framework for the definition of quality of care, according to Donabedian (1988), should include a combination of one or more of the following: structural measures, satisfaction measures, process measures and outcome measures. Structural measures refer to the attributes of the health care settings. This involves material, human and financial resources and organisational structure. Satisfaction measures indicate the patient’s perception of the relative benefits of treatment on their quality and quantity of life, balanced by the difficulty of undergoing the necessary treatment. Process measures denote what is actually done in giving and receiving care; and outcome measures evaluate functional status, mortality and hospitalisation which results from the treatments provided (Donabedian, 1988). Another view by Wilde-Larsson (1999) defines quality of care as caregivers’ focus on individual patient characteristics. Kadandara (1993) suggests quality of nursing care should begin with the nurse-patient relationship. A widely implemented definition has been put forward by NSW Health (1999), which has developed a framework for managing the quality of health services focusing on multiple dimensions of quality. These dimensions include: effectiveness (was it the right thing to do?); appropriateness (was the right thing done?); safety and performance (was the right thing done properly and well?) and outcome (was the outcome satisfactory?).

However, a framework put forward by several researchers focusing on understanding patients’ and nurses’ perceptions of quality of care may be more appropriate for the acute care setting. This framework has the advantage of including the level of importance and satisfaction with the nursing care provided, including the nurse/patient views on what aspects of nursing care are important and the perceived reality or satisfaction with the care received (Duckett, 2000; Larsson, Wilde-Larsson & Munck,
1998; White, 1972; Wilde, Larsson, Larsson, & Starrin, 1995). This framework permits a comparison of what the nurse and patient perceive as being the most important aspects of care delivery, as well as their satisfaction with care provided. This framework of quality of care considers the perceptions of nursing care held by all groups, patients, family members/carers and nurses involved in the care of older patients. According to Brown & Draper (2003), one of the factors that seem to influence the perceptions of the way in which nurses care for older patients is the attitude nurses hold towards older people and this is discussed in the following section.

2.5 Quality of care experiences and attitudes of nurses towards older patients

There is a stereotype of older people as being infirm, dependent and a burden (Short et al., 1993). However, the literature suggests most ‘older people are not a burden to anyone. They are independent and resourceful. Even among those 75 years or more, incapacitating illness and disability are the exception rather than the norm’ (Short et al., 1993, p. 153). Nurses’ attitudes towards older patients are reported to be deteriorating and reflecting the influence of ageism, that is, the use of chronological age as a basis to deny resources to older people (Brown & Draper, 2003). Older patients are also generally perceived as being an unattractive group to work with (Armstrong-Esther, Sandilands & Miller, 1989). Additionally, older patients are often labelled with derogatory terms in the hospital setting, such as ‘old fogey’ and ‘old bag’, with these stigmatising labels reflecting the devaluation of older patients as less useful or intelligent than younger patients (Short et al., 1993). In the hospital setting, the relationship between nurses and patients is frequently characterised by an unequal
division of power: nurses tend to possess power, and patients to lack it (Brown & Draper, 2003). This situation places older patients in a vulnerable position during their hospital stay, where they are powerless to change the care provided to them.

Stigmatising sick people is one of society’s ways of controlling their actions and activities (Goffman, 1963). Older patients may also feel stigmatised because of their illness on admission to the acute care setting, for example, due to their comorbidities, or they may have overheard staff describing them as the ‘weak’ or ‘sickly’ patient (Goffman, 1963). Within the hospital setting itself, stigma also plays a role in determining attitudes towards older patients. Simply being ill can attract a patronising attitude. This is often a result of the bureaucratic nature of the health care system concerning medical dominance, in which doctors and other staff seek to control patients (Short et al., 1993). Older patients may feel a lack of power in this situation in the hospital setting and when invited to participate in research, they may misinterpret this request as another form of medicine imposing power and control over them (Short et al., 1993).

Nurses’ attitudes when caring for older patients may affect the quality of care provided and, because the older population is experiencing an increase in life expectancy and a commensurate increase in the number of older patients being admitted to the acute care setting, this issue needs to be addressed (Courtney et al., 2000). Nurses work in a complex hospital social system with established patterns of working, explicit or implicit priorities, and constraints and limitations on resources (Brown & Draper, 2003). Therefore, it is not surprising nurses report the time they can spend with patients is extremely limited, which inhibits the development of the nurse-patient relationship and
also reduces the quality of care provided (Irurita, 1999). If, as Kadandara (1993) suggests, the quality of nursing care begins with the nurse-patient relationship, then in the current health care system, the time nurses can spend with their patients has a key impact on developing relationships and perceptions of the quality of care delivered. Insufficient time, because of inadequate staffing levels and physical resources, has been cited as the main reason for the inability to consistently provide quality nursing care (Duffield & Lumby, 1994; Fagin, 2001; Janiszewski Goodin, 2003; Williams, 1998).

Reducing the length of hospital stay, thereby, reducing the time nurses can spend with their patients, can also impact on nurses’ attitudes towards the quality of care and their perceptions of opportunities to provide quality nursing care for older patients (Williams & Botti, 2002). Currently in Australia, the major focus of the NSW Institute of Clinical Excellence (ICE) is to give health professionals better skills to ensure care is safer, more appropriate, more effective and patient focused (NSW Health, 2004). With this in mind, there is a need to study older patients’ perceptions of what quality of care means to them in the acute care hospital setting and whether these perceptions are being met, so that health services can focus on satisfying actual consumer demand (Higgins et al., 1997; Irurita, 1999). In addition, in a climate of time and cost restraints, it is important to provide staffing and models of care to enable nurses to prioritise care according to the patient’s perceived needs.

2.6 Patients’ perceptions of quality of nursing care

Several major studies are reported in the literature regarding the general quality of nursing care (Ekman, Lundman, & Norberg, 1999; Grimmer, Gill, & Moss, 1999; Hart et al., 2002; Health Advisory Service 2000, 1998; Higgins et al., 1997; Wilde-Larsson,
1999). While many studies have been conducted into the quality of care for various groups, such as general surgical, orthopaedic, cancer, critical care and rehabilitation patients, they have not specifically focused on older patients. Nones-Cronin and Harrison (1998) found that critical care patients perceived nursing actions focusing on physical care and monitoring their condition were the most important caring activities, thereby constituting important dimensions in quality of care ratings.

Another qualitative study that looked at the perceptions of nursing care needs of 75 hospitalised patients (not necessarily older patients) was conducted in Finland (Fagerstrom, Eriksson, & Bergbom Engberg, 1998). This study found that the subjects’ confidence in the competence of the nurses, followed by comfort, guidance, conversation and closeness were considered to be the most important aspects of care. The findings of the study also suggested that nursing competence, that is, knowledge and understanding, clinical and technical skills, such as managing infusions, medications, wound care and respiratory care, was the major priority for patients generally, whatever the age group.

Although few studies present the older patients’ descriptions of their role expectations of nurses, Santo-Novak (1997) found older people expected the nurse to be caring, knowledgeable and attentive. The majority of research involving older patients’ nursing care needs relates mostly to residential care. One of these studies found that residents expressed the need to feel safe and secure as the most important aspect when providing their nursing care. In this study, safety related mostly to nursing competence (Chenoweth, 1993). Tolson, Smith and Knight (1999) employed qualitative and quantitative methods (triangulation) to investigate nursing practice for patients with an
episode of dementia that coincided with their acute illness. Forty-one patients, who recovered from their acute episodes of dementia, were included in the study, as well as their main hospital visitor. These participants identified four major themes that reflected the most valued aspects of nursing care. These involved promoting settling in; feeling able to demonstrate bonding between the patient and family; visitors and nurses all being able to connect with each other or ‘reaching me, reaching you’; and understanding the patient’s condition as embracing the acute illness, existing health problems and the chronic confusional state. Tolson and colleagues concluded that for this population, acute nursing care is deemed only at its best when it is delivered in combination with dementia care.

A study conducted in Western Australia in an acute care setting by Irurita (1999) was designed to explore Australian patients’ perceptions of quality of care in the acute care setting. This study identified the different views of nurses and patients on what constituted quality of care. It also found patients perceived there were different levels in care quality. Differences in perceptions between patients and nurses in Irurita’s (1999) study depended on certain contextual factors. These factors, which were not well explained, included background issues and intervening conditions pertaining to the environment and the organisation, and personal nature, the personality of the nurse and patient. Variations in patient satisfaction and patients’ feelings of vulnerability were found to be related to the level of care they received. These different perceptions of quality of care are important, because if a conflict in perspective is present, there may be decreased patient satisfaction, leading to a lack of patient compliance in treatment regimes and failure to look for prompt medical attention (Greeneich, Long, & Miller, 1992).
A comparison of younger versus older patients in terms of nursing care priorities yielded mixed findings. A study conducted in general medical clinics of veterans’ hospitals in the United States using 243 subjects, assessed patients’ desires and satisfaction, employing a request for services questionnaire. It found younger patients had a greater desire for psychological assistance than older patients (Joos, Hickam, & Broders, 1993). These patients were all chronically ill, so it is difficult to generalise these findings to the acute care environment. Another study conducted in Sweden with 86 cancer and surgical care patients, using a Swedish version of a care instrument, called the CARE-Q or free rating scale, found no age-related differences regarding evaluations of the subjective importance of different aspects of caring behaviour (Von Essen & Sjoden, 1991).

Several studies have confirmed that older patients, their family members/carers and their nurses do not necessarily hold the same perceptions of the quality of care (Burney, Purden, & McVey, 2002; Chadha & Young, 2002; Jacelon, 2002), and that these differences in perspective can lead to the patients’ and/or family members’/carers’ dissatisfaction with the quality of care provided. Chadha and Young (2002) reported that older patients, their caregivers and nurses do not necessarily have the same perceptions of treatment goals; Burney and colleagues (2002) found nurses and patients have different perceptions concerning the information patients need during hospitalisation; and Jacelon’s study (2002) found a difference in perceptions between nurses and older patients was about the role nurses played in promoting health.

A number of studies have been conducted on older patients’ perceptions of care priorities in the hospital setting (Ekman, Lundmand, & Norberg, 1999; Grimmer et al.,
1999; Jacelon, 2002; Wilde, Larsson, Larsson, & Starrin, 1995). Internationally, older patients reported lower satisfaction levels with the quality of nursing care they received during hospitalisation than patients of younger ages (Wilde et al., 1995). Wilde and colleagues surveyed 428 Swedish older patients’ perceptions of the importance and reality of various aspects of nursing care needs employing ‘the quality of care from the patient’s perspective’ scale. The results indicated medical-technical competence of the caregivers and the physical-technical conditions of the care environment were the most important aspects of nursing care. Psychological issues, such as being personal, showing trust and understanding, were not as important. However, only 51 participants were from an acute care setting, with some from nursing homes or receiving home nursing services; therefore, it is difficult to generalise these findings to the acute care setting (Wilde et al., 1995). In a more recent study by the same researchers, it was reported that patients found the quality of nursing care was erratic and inconsistent. The study recommended caregivers needed to focus on the individual patient’s characteristics when looking at quality of care from a patient perspective. This study also reflected that generalisations based on age alone tends to be misleading (Wilde, Larsson, & Larsson, 1999).

Another study conducted with older patients in Sweden reported they experienced acute hospital care as unpredictable due to nursing care being erratic and inconsistent (Ekman, Lundman, & Norberg, 1999). Another negative perception held by older patients in acute hospital care in the United States was that the nurses were controlling and directive (Jacelon, 2002). However, this study also noted that when patient-centred care was given and the nurses’ attitudes were positive, incorporating care that involved attentiveness, friendliness and respectfulness, patients’ perceptions of the care given
improved (Jacelon, 2002). It is possible to suggest, then, that improved care practices are initiated partly by the nurse clinician. Whatever the reason, it is apparent nursing care in acute medical wards tends to be critically assessed by the patients, and this type of assessment may assist ward staff to highlight the acute medical ward’s strengths and weaknesses in order to implement quality of care actions.

In 1999, Grimmer and colleagues reported that older patients perceived acute hospital wards in Australia as busy environments with nursing staff always in a hurry or absent a lot of time (Grimmer et al., 1999). This suggests the pace of nursing work, that is staffing workloads and patient acuity, is too fast in this area of practice and may have an impact on the perceived quality and scope of care provided for older patients. While the findings of the studies discussed above are inconsistent, generally the available literature suggests hospitalised older patients perceive physical care needs as most important, together with the competency of the nurse. However, in order to establish the perceived needs and satisfaction of older patients in relation to nursing care, well-controlled research employing quantitative and qualitative methods with larger sample sizes of older patients is required.

To focus on understanding patients’ and nurses’ perceptions of quality of care, there has been a growing interest in understanding the factors that affect patient satisfaction, how to measure satisfaction and how to improve it (Duckett, 2000). White’s (1972) American study into the quality of care employed a quantitative approach using the Caregiving Activities Scale (CAS). This five-point Likert-style questionnaire containing 50 selected nursing activities was presented to 300 hospitalised adults and 100 professional nurses involved in their care in three metropolitan hospitals in America.
The selected nursing activities listed on the questionnaire are grouped into four categories: physical care, psychosocial care, implementation of doctor’s orders and discharge planning. Patients in this study were more concerned than nurses about meeting physical care needs, while nurses had a greater concern than patients for satisfying psychosocial aspects of care. Psychosocial care, for example, required the nurse to consider the patient’s personal preferences when caring for them or encouraging the patient to take more responsibility for their own care while in hospital. Nurses and patients consistently agreed on the importance of the nurse carrying out the doctor’s orders. Activities related to discharge planning were of relatively little importance to both patients and nurses. The information gained from this CAS questionnaire could enable the researcher to plan improved care delivery services. It would be useful to employ the CAS in the current Australian acute care setting in the same way as several researchers have done previously in other care settings (Von Essen & Sjoden, 1991; Wilde-Larsson, 1999).

An alternative or concurrent approach to the evaluation of quality of care for older patients involves qualitative methods, which may reveal more in-depth information regarding the perceptions of quality care priorities (Morse & Field, 1996). A qualitative research approach in the United Kingdom was undertaken by Atree (2001) who interviewed 34 acute medical patients and seven of their relatives. The findings contrast with the results of Von Essen and Sjoden’s (1991) quantitative study in Sweden, which found patients placed greater emphasis on the technical aspects of care. The qualitative study (Attree, 2001) found patients placed greater emphasis on the nature of the care provided and interpersonal aspects of caring, where good quality care was characterised as individualised, patient-focused and related to need. These differences in research
findings demonstrate that interviews may provide a different perspective on the patients’ and family members’ experiences and perceptions of the quality of care provided, which may not be captured through surveys alone.

Hyrkas and Paunonen (2000) employed different data sets to investigate the importance of, and satisfaction with, quality of nursing care in Finland. This study surveyed 30 patients aged 19 to 78 in three different hospital wards, and then interviewed them to probe the themes arising from the survey. The concluding comments confirmed patient satisfaction surveys were important, as information provided by them could be used as a basis for quality improvement procedures. The authors stated the advantage of a triangulation approach was that it provided multiple views of the phenomenon of patient satisfaction. Further research employing data triangulation methods are needed in the Australian context to identify the perceptions of quality of care for older patients.

2.7 Family members’/carers’ perceptions of quality of care

Several studies have assessed family members’/carers’ perceptions of care priorities for older patients (Attree, 2001; Covinsky et al., 1998; Higgins et al., 1997). Generally, family members/carers give negative reports to the media and hospital administration suggesting hospitals may be providing inadequate care for older patients, resulting in a deterioration in health during hospitalisation (Covinsky et al., 1998; Higgins et al., 1997). A study conducted in an acute medical ward in the United Kingdom (Attree, 2001) reported family members explained inadequate quality of nursing care to be care that is routine, unrelated to needs and delivered in an impersonal manner by nurses who
did not understand the patients and did not involve their patients in care decisions.

Alternatively, quality care is perceived to be individualised, patient-focused, related to
patient needs, and to be provided through a caring relationship by nurses who
demonstrate involvement, commitment and concern. Further research is also needed in
the current Australian context to review family members’/carers’ perceptions of and
priorities for quality of nursing care.

2.8 Nurses’ perceptions of quality of nursing care

Many studies have investigated nurses’ perceptions of quality of care and care priorities.

Time constraints, budget cuts and nursing staff shortages have all emerged as the main
themes constraining nursing practice, with nurses being frustrated by their reduced
ability to provide quality nursing care (Courtney, Tong & Walsh, 2000; Grimmer et al.,
Reedy & Bragg, 2000; Scully, 1995). Nurses have suggested difficulties in meeting
older patients’ needs and expectations to be mainly due to inadequate staffing levels
(Grimmer et al., 1999; Jones & Cheek, 2003). Nurses also claim that, due to staffing
levels, they are only able to provide the most essential nursing care needs, such as
medications and other prescribed treatments, fluid replacement and patient monitoring
(Grimmer et al., 1999; Janes, Wells & Daly, 1997). This is consistent with Jacelon’s
study where interactions between nurses and older patients ‘ranged along a continuum
from behaviours that were patient centred or focused on the elder to staff-centred or
aimed towards meeting the institution’s needs’ (Jacelon, 2002, p. 228).

These constraints and staffing issues are also acknowledged in the Australian National
Review of Nursing Education (2002), which emphasises the constraints currently placed
on nurses’ time and their inability to meet patients’ expectations and needs. For example, although nurses perceive nutritional care to be important for older patients, many nurses find difficulty raising this priority above other nursing care activities as a result of time constraints and structural, multi-tasking issues, such as medication rounds and patient transfers (Kowanko, Simon, & Wood, 1999). While this is a vexed issue at the present time, thinking critically about ways of addressing these issues to change work practices could assist nurses to control their limited resources, in order to empower themselves to improve their perceptions of the quality of care they are able to provide to their patients.

2.9 Summary of the perceptions of quality of nursing care

At the present time it appears that, although patients, family members/carers and nurses generally hold negative perceptions about the quality of the nursing care that is and can be provided for older patients, there are several important issues regarding the anomalies in perceptions of nursing care among these three groups (older patients, their family member/carers and their nurses). Older patients’ perceptions indicate the quality of nursing care is unpredictable, due to the erratic and inconsistent manner in which it is provided, and this is often due to the busy acute care environment where the pace of nursing work is too fast. Family members/carers also perceive inadequate care is being provided and this is often confirmed by the deterioration in health experienced by the older patients during hospitalisation. Nurses argue that difficulties in meeting older patients’ needs are mainly due to time constraints, budget cuts and nursing staff shortages (Courtney et al., 2000; Grimmer et al., 1999; Jones & Cheek, 2003; Kowanko, et al., 1999; Millis & Tattam, 1994; Reedy & Bragg, 2000; Scully, 1995).
These findings suggest structural issues, such as lack of staff and excessive workloads, are the main reasons for nurses’ inability to meet older patients’ expectations and needs. A study is needed to examine the perceptions and priorities of older patients, their family members/carers and their nurses as a basis for improving the quality of hospital care provided for older patients. Finally, changes need to be implemented to improve the increasing older population’s satisfaction with the quality of care provided and improve their health care outcomes.

2.10 Difficulties with researching older patients’ perceptions

While the methods described previously have proven useful, conducting research with older patients to identify their perceptions of the quality of care is complex and, at times, problematic, due to the difficulties of comorbidities and the tendency for complications to occur following admission as discussed above. It is also more difficult to recruit older patients, as they can be suspicious of research studies (Harris & Dyson, 2001). They often feel defenceless because of their age or previous experiences with research studies (Joy, Carter, & Smith, 2000; Uman & Urman, 1990).

Participating in research is also difficult for some older patients because of cognitive impairment. For example, they may be admitted to hospital with delirium, or may develop this as a result of hospitalisation (Francis, Martin, & Kappor, 1990). Delirium (acute disturbance of consciousness accompanied by a change in cognition involving memory impairment, disorientation, or language disturbance) and dementia (memory failure, progressive organic mental disorder) are common in older people who need
acute care and these problems can mean the episode of hospital care may be
disorientating and threatening, leading to the development of acute confusion (delirium)
(Creditor, 1993; Tolson, Smith, & Knight 1999). The prevalence of delirium in older
post-operative patients is high (Levkoff, Cleary, Liptzin, & Evans, 1991) and therefore,
recruiting them for research may be problematic.

One of the consequences of older patients’ vulnerability and poor state of health is that
it is not always possible to speak with them about their perceptions and experiences of
care while they are in hospital. For example, the researcher would need to wait until the
confusion had subsided before attempting to interview the patient. Researchers may
need to use a longer time frame to gather information than they would in the case of
younger adults. Therefore, surveys can only be employed if the patient has sufficient
vision, hearing and cognition and is able to provide informed consent.

Surveys generally enable researchers to collect large amounts of information from a
large geographic population (Brink & Wood, 1998). However, with an older population,
this is not a simple task. Lynn and McMillen (1999) employed the Patient’s Perception
of Quality Scale, Acute Care Version, to compare older patients’ and nurses’
expectations of nursing care. This study reported that, when patients and nurses were
compared regarding individual items, it was found older patients tended to rank items as
more important than did the nurses. Nurses appeared to underestimate the value patients
place on a variety of elements of nursing care activities, including those that involved
the physical environment.
As previously mentioned, White's (1972) CAS questionnaire is a measure of what constitutes the important elements of nursing practice from the perspective of patients, family members/carers and nurses. This scale has also been successfully employed and found to be a valid and reliable tool by other researchers when surveying older patients (Hudson & Sexton, 1996; Johnson, 1987). Validity and reliability are assured so long as the patients are able to read, write and respond to the questions posed. When the patient is not able to read or write, the researcher needs to read the questions to the patient and complete the questionnaire for the patient, in order to gain their perceptions of nursing care, and then use that information to improve the health of this older group.

2.11 Methods employed by nurses to improve quality of care

Improving quality of care, according to Duckett (2000, p. 138), 'is a cyclical process involving collection of data, analysis, action to improve performance and evaluation'. Therefore, methods applied in nursing to improve the quality of care and reprioritise care issues during hospitalisation need to be examined. Nurses are increasingly acknowledging that conceptual models or frameworks and theories of nursing care described in the following section can provide a means through which nursing practice can change to meet patient needs (Chinn & Kramer, 1991; Fawcett, 1995; Fitzpatrick & Whall, 1989; Meleis, 1997; Orem, 1995; Pearson, Vaughan, & Fitzgerald, 1996; Slevin & Basford, 1999; Stevens-Barnum, 1998; Walsh, 1998).

One of the reasons for inconsistencies in research findings and in nursing care delivery is that individual nurses may be operating from different conceptual models,
frameworks or theories of nursing care (Pearson, Vaughan, & Fitzgerald, 1996). For example, one nurse may focus on providing care from a medical model perspective, which focuses on symptoms rather than holistic health issues, while another may place more value on the psychosocial aspects of care. In more recent years, nurses have learnt how, through knowledge and reflection, to create changes in their practice by developing and implementing models of care that improve care provided for patients (Cavanagh, 1991; McKenna, 1993; Nurses Improving Care to the Hospitalised Elderly (NICHE) Project Faculty, 1994; Torakis & Smiglielski, 2000; Vasquez, 1992). The implications of this are that nurses can use this knowledge to examine the unchallenged social, political and economic values and beliefs that underpin the current health care system in order to change it (Short et al., 1993).

Nurse education currently emphasises holistic approaches to care which include psychological and social aspects as well as physical care (Department of Education, Science and Training (DEST), 2001; Nolan & Hazelton, 1996). Holistic care promotes patient autonomy and requires nurses to critically reflect on their practice in order to make independent decisions, to act as patient advocates and to empower patients as well as themselves (Short et al., 1993). This care philosophy aims to address to some degree the dominant medical and economic ideologies that shape health services in the current economic climate. However, if some nurses are operating from a different model of care from this, inconsistencies in the focus of nursing may lead to conflict between staff and reduced levels of care within a nursing team (Pearson, Vaughan, & Fitzgerald, 1996). It is therefore important to examine some of the different models of care which can inform nursing practice in the acute care setting.
2.12 Models of nursing care

The following section provides a broad overview of several conceptual models, frameworks and theories of nursing care appropriate for the care of older patients in the acute medical ward setting in the current health care system. Firstly, this section will present the features of a conceptual model of care, framework and theory, and secondly, a broad overview of several international models of care that are relevant to the care of older patients.

Many authors have developed various views for analysis and evaluation of conceptual models of care and theories, and those of Chinn and Kramer (1995), Fawcett (1993), Fitzpatrick and Whall (1989) and Meleis (1997) are well known. The features of a conceptual model of nursing care, according to Fawcett (1984, p. 2), are defined as concepts:

\[
\begin{align*}
&\text{which are words describing mental images of phenomena, and propositions,} \\
&\text{which are statements expressing the relations between concepts. A conceptual} \\
&\text{model, therefore, is designed as a set of concepts and the statements that} \\
&\text{integrate them into a meaningful configuration.}
\end{align*}
\]

Similarly, Fitzpatrick and Whall (1989) define a conceptual model as an essential structure in which a group of ideas is united to reflect a large general idea. Conceptual models present global ideas or concepts and are highly abstract, very general and are not directly observable in the real world (Fawcett, 1993). The term conceptual model is often used synonymously with conceptual framework by a number of authors (Fawcett, 1989; Meleis, 1997).
According to Fawcett (1993), nursing theory is less abstract than a conceptual model and she emphasises that, while theories are related more closely to particular individuals, groups, situations, or events, they address phenomena with much greater specificity than conceptual models. Fawcett consistently states that a conceptual model is not the same as a theory and describes theories as more specific and concrete than conceptual models.

Another view of conceptual models and theories by Meleis (1991, p165) states that:

*In some usage, models correspond more to reality: they are less abstract than theories; they contain all variables of the subject matter; and they describe reality more fully.*

Meleis uses the term theory in a different way from Fawcett in that she does not differentiate between theory, conceptual models or frameworks and rejects the narrow view of theory as a term reserved for research-verified propositions. However, confusion arises when the term conceptual model is applied by some authors interchangeably with conceptual framework and by others interchangeably with theory. For example, Fawcett (1989, p. 205) describes ‘Orem’s self-care framework’ while Meleis (1991, p. 392) describes ‘Orem’s self-care theory’. A number of authors have attempted to differentiate between conceptual models and theory on such criteria as the level of abstraction, degree of explication and degree to which concepts and assumptions are defined (Fawcett, 1993; Fitzpatrick & Whall, 1989; Meleis, 1991).

While Fawcett (1993) states conceptual models assist towards theory development, other authors question the necessity of conceptual models or frameworks for development of theory, and argue that conceptual models are not necessary steps to promote theory development (Meleis, 1991). Chinn and Kramer (1995) comment that
Theories can be used to challenge existing practice, create new approaches to practice and modify the structure of rules and principles. Chinn and Kramer (1995) justify the use of nursing theory by stating that, generally, the nursing goal is achieved by using theory or portions of theory to guide nursing practice.

As a review of the literature reveals, there are many and varied views concerning conceptual models or frameworks and theories of nursing care. It also reveals there is no consistent definition of a model of care. While Pearson and Vaughan (1987, p. 8) argue that:

*A model of care is made up of components or ideas which go towards making up nursing – what it is, the beliefs, the values, and the theories and the concepts on which it is built.*

The researcher's stance in this study is that conceptual models or frameworks and theories of different scope are of interest because, irrespective of the level of abstraction, they may serve to improve the quality of nursing care provided. Despite the fact that not all nursing conceptual models, frameworks or theories will give direct answers to the question of how to improve the quality of care for older people, it is important to review these assumptions. In this study, the concept model of care is used to include components or ideas which go towards making up nursing care practice, what it is, the beliefs, the values, and the conceptual models, frameworks and theories of nursing care in an abstraction, to reflect one general concept. The following is a broad overview of several international models of care and the theorists who have developed them.
Many conceptual models, frameworks, theories and models of care are accepted for use in nursing today and have been developed and validated by North American nurses, including: Transcultural Care Model – Madeleine Leininger; Model of Human Care – Jean Watson; Promoting Adaptation – Sister Callista Roy; Science of Unitary Human Beings – Martha Rogers; Psycho Dynamic Interpersonal Theory – Ida Jean Orlando; General Systems Framework – Imogene King; Holistic System Model – Betty Neuman and Self-care Model – Dorothea Orem (Chinn & Kramer, 1991; Fawcett, 1995; Fitzpatrick and Whall, 1989; Orem, 2001; Slevin & Basford, 1999; Stevens-Barnum, 1998; Walsh, 1998). However, as previously discussed, there is confusion regarding the analysis and evaluation of conceptual models, frameworks and theories in practice (Chinn & Kramer, 1995; Fawcett, 1993; Fitzpatrick & Whall, 1989; Meleis, 1991).

These conceptual models, frameworks and theories focus on nursing and endeavour to guide nursing practice. In the current health care setting, it is not an easy task to implement a new model of care to change practice because of the pressure from the dominant medically-controlled health care system, economic issues and the nursing shortage which constrain what autonomy nurses might hold (Short et al., 1993). However, nursing models of care based on conceptual models, frameworks and theories provide structure for nursing practice by providing nurses with knowledge to improve nursing practice, in addition to describing and predicting situations that will empower nurses to create change in their clinical practice.

Nurses may be empowered by selecting a model of care appropriate for the ward setting and through reflection on the model processes. These processes may involve the nurses reflecting on the clinical ward situations in which they find themselves, and then taking
action based on a nursing model of care to change these situations. Research, however, indicates the relationships between theory and research, theory and practice, and research and practice, often place an emphasis on the importance of research, at times to the exclusion of theory (Slevin & Basford, 1999). In some instances, there is no recognised theory informing practice and similarly, research often takes place in isolation without a theoretical model or theory (Slevin & Basford, 1999). According to Meleis (1991), theory helps to identify the goals of nursing practice and the implementation of common theories in practice; theories will improve communication, increasing autonomy and accountability to care. Meleis says 'all these in turn bring about further refinements of theory and better relationships between theory, research and practice' (Meleis, 1991, p. 22).

A model of care may therefore be more likely to assist nurses in improving care delivery, compared to no recognised nursing model of care informing the practice. Nevertheless, structural issues need to be examined by clinical nurses prior to the implementation of a model of care if the implementation is to change existing nursing practice (Duckett, 2000). One of the difficulties for nurses is gaining and maintaining autonomy over their own practice and, consequently, the power to change their practice for the betterment of patients and themselves. Participatory action research (PAR) is described by Wadsworth (1997, p. 79) as an approach 'to improving social practice by changing it and learning from the consequences of change'.

This is an ideal way of implementing a model of care in practice. Nursing staff collaborate in a fully participatory way to identify the issues they wish to address, they
discuss how to go about this process, and then select those strategies that best fit their work environment to change their work practice.

The collaboration of nurses in the selection of a model of care, for example, has been shown to influence the direction of the nursing care provided, and to guide decision and policy making based on evidence (Pearson et al., 1996; Pearson, 2001). As Chinn and Jacobs (1983) indicate, employing nursing theory is a source of internal control for a profession, providing a basis for power and control. But implementing theory in practice and basing nursing care on a chosen theoretical model, framework or theory requires processes of change which are empowering in themselves. For example, nursing management, if not already involved in the model of care, will need to be informed of the model development and implementation strategies prior to the model of care being discussed at ward level. Once nursing management is informed, the clinical ward nurses will need to be informed of the strategies to be employed to introduce the model of care in practice. The outcome of this approach will depend on the individual ward setting, such as the acute care environment, the individual ward philosophy and, most importantly, the nursing staff involvement in selecting the model of care appropriate for their ward setting (Pearson et al., 1996). If staff are involved in the selection of the model of care to change nursing practice, they will generally be willing to accept and implement the model into their nursing practice. The assumption here is that empowering nurses will create a key motivational force to the development and implementation of the new model of care in practice (Gibb, 1998). Nursing care models that have been employed with some success in the clinical setting with older patients are discussed below.
2.13 Models of care appropriate for older patients

Two conceptual models of nursing care, one proposed by Betty Neuman, and one by Dorothea Orem, which advocate patient-centred approaches to care, are relevant to the care of older people in the hospital setting, and have been widely applied to the nursing care of older patients (Cavanagh, 1991; Fawcett, 1995; Marriner-Tomey & Alligood, 2002; Meleis, 1997; Orem, 2001; Torakis & Smigielshi, 2000). Binnie and Titchen’s (1999) patient-centred philosophy of care is also relevant to the care of older patients in the acute care setting, and has been implemented successfully in the United Kingdom. The Acute Care for Elders (ACE) model, developed by the Nurses Improving Care to the Hospitalised Elderly (NICHE) project faculty (1994), is also a suitable model to consider for the acute care setting, as it addresses the multiple clinical problems (comorbidities) common to older patients and has been implemented in several United States hospitals with improved care outcomes (Palmer, Landefeld, Kresevic & Kowal, 1994; Panno, Kolcaba, Holder & Hunt, 2000; Turner, Lee, Fletcher, Hudson & Barton, 2001). These models are discussed in more detail below.

2.13.1 Acute Care for Elders (ACE) model

The ACE model was developed by the NICHE project faculty (1994) and has been implemented by several researchers (Palmer et al., 1994; Panno et al., 2000). The ACE model approach implemented by Panno and colleagues (2000) was evaluated using a randomised controlled trial with 161 patients admitted to an ACE ward, or to the usual care on a medical ward where 165 patients were admitted. The ACE model process created a specialty ward to provide care using a collaborative team approach that supported the implementation of the model. The team designed the physical layout of
the ward, paying special attention to the physical needs of the older patients. For example, door handles were replaced with levers for easy access, patients’ rooms contained recliners and low beds with automatic lights, an activity room was provided for group meals, and visiting and music therapy areas were included in the overall design.

The ACE ward clinical nurse specialist (CNS) coordinated the team of nurses, a geriatrician, pharmacist, social worker, community nurse, dietician and physiotherapist. A facilitator presented an educational program designed for nursing staff to inform them of the theory supporting the model principles, which involved eight hours of specialised geriatric education. Kolcaba’s (1994) Theory of Comfort was used to support holistic care within the model. This theory encourages nurses to identify physical, psychospiritual, social and environmental comfort needs of their patients (Stevens Barnum, 1998). NICHE (1994) research-based clinical practice protocols, which reflected the standards of nursing practice over 14 geriatric syndromes, were also used. Two of these protocols are a medication assessment protocol, entitled ‘Ensuring Medication Safety for Older Adults’, and a falls protocol, called ‘Preventing Falls in Acute Care’. These protocols facilitated the nurses’ implementation of the model and were applicable to the acute care setting. The goal of the model was to return the patient to their home, where the patient came from home. The physicians, nurses and patients in this study reported higher satisfaction levels with the care delivered on the ACE ward. In addition, patients who received the ACE intervention were more functional at discharge than patients discharged from the traditional ward (Panno et al., 2000).
The benefits of this model of care include the implementation of clinical practice protocols, such as the medication regime protocol ‘Ensuring Medication Safety for Older Adults’. This instrument may assist nursing staff to become more familiar with older patients’ interactions and reactions with medications. A major limitation to the implementation is the financial assistance required to re-design the ward to include the specially designed older patient environment. In the current Australian health care system, constraints due to nursing staff shortages and other structural management issues including budget constraints (Armstrong, 2002) may mean few clinical ward areas would be able to implement this model of care in its entirety. Nevertheless, they may be able to implement parts of this model into their own model of care.

2.13.2 Patient-centred care models

Another approach to the care of older patients is the patient-centred care model or philosophy, which states that the ‘focal point for the health professional is the patient’ and takes the individual perceptions, concerns and circumstances of each patient as its starting point, rather than those of the ward itself (Nolan & Hazelton, 1996, p. 146). Patient-centred care acknowledges the acceptance of the patient as a partner in care, who participates in discussing health care issues (Lambert, Street, Cegala, Smith, Kurtz & Schofield, 1997). Examples of patient-centred models follow.

2.13.2.1 Neuman’s System Model

Neuman’s System Model (1972) employs a patient-centred approach to care, incorporating a complex holistic system of physiological, psychological, socio-cultural, developmental and spiritual variables. Neuman identifies approaches by which the patient, alone or assisted by the carer, can manage or cope with the stress of illness
(Chinn & Kramer, 1991). When employing Neuman’s model, researchers found clinical nurses on the ward did not accept this model in practice until the ward documentation was revised to reflect the model process (Torakis & Smigielski, 2000). This process involved the five variables Neuman employed to describe the patient: physiological, psychological, socio-cultural, developmental and spiritual being used as categories for patient assessment questions on admission. The nurses finally accepted Neuman’s System Model when reinforcement of the theory was provided through ongoing in-service training sessions (Torakis & Smigielski, 2000).

The benefit gained from implementing Neuman’s model in the Torakis and Smigielski study was that it provided a framework for objective recording of the effects of the nursing care provided and focused on the patient as a whole, aiming to achieve and maintain the patient’s physical, emotional and spiritual stability. One of the limitations faced in adopting the Neuman’s System Model, as noted earlier, was the inconsistency between this model and the existing documentation system (Torakis & Smigielski, 2000). Although substantial education by way of in-service training was provided as a strategy to implement the model, the clinical nurses were unable to relate the components of the model to their practice without visual reminders of its use. This highlights the difficulties clinical nurses have in employing some nursing models in their daily practice, and supports the criticism of nursing theory that so much of it is inadequately developed or conceptualised (Pearson et al., 1996). However, this model is useful for implementation on acute care wards if the documentation reflects the five variables outlined in Neuman’s model and if there are on-going educational sessions for nurses regarding the model’s process.
2.13.2.2 Binnie and Titchen’s Patient-centred Care philosophy

Binnie and Titchen (1999) applied action research and a patient-centred care philosophy in their United Kingdom study to develop patient-centred care nursing in an acute medical setting. The strategies employed to facilitate change involved assisting nurses to research their own practice, utilising a participatory action research (PAR) process and facilitating a reflective practice. Reflective practice enabled the nurses to analyse and transform situations in which they found themselves on the ward. This meant reflection could not be understood without reference to the context in which it occurred on the ward.

The strategies employed to implement this patient-centred care philosophy model involved openly valuing basic care, such as the use of bedside handovers and discussions regarding the patient’s care. The psychological aspects of care were demonstrated by listening, explaining, reassuring, encouraging and supporting, and it was emphasised this aspect of care would not compete for time with essential technical tasks. It was demonstrated that the tasks themselves, bathing, turning, walking around the bed, could often provide opportunities for patient-centred care. Another important strategy was teaching the skill of prioritising nurses’ work. This strategy involved role modelling the skills of prioritising the workload according to the particular needs of the patients. If nurses appeared harassed, the senior nurse would help them to stop and think through their priorities, to control their own work and make time for what they felt was most important for their patients. Another strategy was asking future-oriented questions involving potential problems, future plans, or long-term strategies.
Role modelling was another strategy employed to implement the philosophy of care model. The senior nurse would take a full patient load to demonstrate the art of patient-centred care nursing. By sharing both the successes and failures in this work, the senior nurse was able to make visible and accessible the process of managing a therapeutic relationship for the nurses. One more strategy was being there for the nurses. The senior nurse learned to fine-tune her style of working with the nurses so that her presence in the ward was experienced as challenging, yet supportive (Binnie & Titchen, 1999).

Open discussion, involving reflection on nursing actions in practice, was encouraged. The senior nurse, gently nudging the ward nurses forward into a more advanced practice, gave encouragement and reassuring feedback. The intention of the senior nurse was to empower the ward nurses in order for change in their practice to take place. The final strategy involved storytelling and theorising. The senior nurse used her time in the ward collecting data as an opportunity to help the nurses to learn from their practice experiences. By reflecting with them upon their stories, she helped them to gain new insights into the details of their work practice. By helping them to theorise their practice, she helped them to a broader understanding of specific clinical issues (Binnie & Titchen, 1999).

The outcome of this collaborative study to change nursing practice, supported by the John Radcliffe Hospital and the National Institute for Nursing in the United Kingdom, was a major change from traditional, standardised nursing to a patient-centred care philosophy of nursing over the duration of the four-year project (Binnie & Titchen, 1999). The benefits of this philosophy involved focusing on what illness meant to the patients, their family members/carers, including nursing strategies to assist the patient to
deal with the discomforts of illness. This philosophy included changes to the nurses’
practice philosophy, so that care focused on individual patient issues and the
implementation of the strategies to address these issues as discussed above. These
included the application of PAR incorporating reflective nursing practice that
encouraged nurses to critically analyse what happened in practice, examining the factors
that influenced their understandings and actions, and thinking about what they were
doing. This reflective nursing practice may have enabled the nurses to identify needs
and to develop strategies for the enhancement of individual patient’s care (Kemmis &
McTaggart, 1992).

A limitation to the implementation of this model of care philosophy is, however, the
challenge to clinical nurses on the acute care ward to implement this patient-centred
care philosophy in a busy acute care environment, and to ensure staff have the necessary
skills, beliefs, motivation and support from their colleagues to individualise care needs
and priorities of all patients. Unfortunately, in the current Australian health care system,
only limited time for reflection by clinical nurses may be possible due to structural
management issues, such as staffing levels, time constraints and budget cuts within the
health systems (Courtney et al., 2000; Grimmer et al., 1999; Jones & Cheek, 2003;
Kowanko, Simon, & Wood, 1999; Millis & Tattam, 1994; Reedy & Bragg, 2000;
Scully, 1995). So once again, only partial implementation of this model of care may be
possible.

2.13.2.3 Orem’s Self-care Model

Orem’s Self-care Model 1971 (2001) is a patient-centred care approach that places
emphasis on the person’s need for self-care, incorporating those activities an individual
practises for the purpose of maintaining life, health and wellbeing. This model incorporates Orem’s Self-care Deficit Theory, a theory composed of three related sub-theories consisting of the Self-care Theory, the Self-care Deficit Theory and the Theory of Nursing Systems (Orem, 2001). These three sub-theories are briefly described below.

The Theory of Self-care states that self-care of dependent persons is learned behaviour individuals initiate and perform on their own behalf to maintain life, health and wellbeing, such as bathing, eating, and exercising. The nurses’ role is to provide assistance to influence the patient’s development in achieving optimal self-care. The ability to perform self-care in Orem’s model is called Self-care Agency (actions) (Orem, 2001).

The second sub-theory, the Theory of Self-care Deficit, assumes people benefit from nursing because nurses are able to address health-related limitations in self-care. Limitations in self-care may result from illness, injury or from the effects of medical tests or treatments. Self-care deficit refers to the relationship between self-care agency, that is, the capability of an individual to perform their own self-care to meet the everyday requirements for care, and therapeutic self-care demands, which are the measure of care required to meet existing needs (Orem, 2001).

According to Orem (2001), there are three broad categories of self-care demands: universal, developmental and health deviation. Universal self-care demands are those required of all individuals in order to maintain human functioning. Developmental self-care demands are those that affect development through the life span. They promote conditions that support growth and development and prevent or modify conditions
adversely affecting that process. Health deviation self-care demands are those that occur as a result of disease, injury, disfigurement or disability, and require changes be made in the person's routine of self-care, depending upon the nature and extent of the demands. Self-care activity is deliberate action; it is goal-directed, self-initiated and self-directed and is affected by the person's values and goals (Orem, 2001). A limitation to this sub-theory is that Orem (2001) does not specifically indicate how particular data should be associated with particular universal self-care requisites, and this can be problematic. For example, should pain and pain relief be documented? Orem does not state how this is achieved, which illustrates an important issue that arises in many of the international nursing models. Very few models are developed sufficiently to meet all nursing care circumstances (Pearson et al., 1996). Without specific guidelines, it is easy to imagine nurses will hold a multitude of different perceptions of the model, which may restrict continuity of nursing care. Therefore, all nurses employing Orem's model must share a common understanding of the main concepts of this model for it to be effective, as is the requirement for all models of care (Cavanagh, 1991).

The third sub-theory is the Theory of Nursing Systems. This system is designed to meet the individual's self-care requirements according to the extent to which self-care action is disrupted. This nursing system is a helping system where nurses assess and select suitable ways of helping individual patients. A plan of care is developed where the nurse helps the patients by acting, doing, guiding, supporting psychologically or physically, and providing an environment that enhances personal development and education. Orem identifies three systems of nursing activities that are designed to meet the individual's self-care requirements, according to the extent to which self-care action is disrupted: a) the wholly compensatory system; b) the partially compensatory system;
and c) the supportive/educative system. The nurse either does everything for the patient (wholly compensatory), assists the patient with some activities (partially compensatory) or supports and educates the patient to be independent (supportive/educative). The supportive/educative system is used when the individual is capable of performing, or learning to perform, those measures necessary to accomplish their self-care demands, but for which they need assistance in the form of support, guidance and education (Orem, 2001).

Orem’s self-care model may be beneficial to many aspects of nursing practice, and has been widely adopted within the United Kingdom, Europe, parts of USA and parts of Asia as a means of organising the knowledge, skills and motivation of nurses needed to deliver quality nursing care (Cavanagh, 1991). The benefits of this model are that it provides a process by which the nurse can assess, plan, implement and evaluate the patient’s care by focusing on the functional capacity of older patients, which is a key concept of older patients’ care. The model promotes patient self-care empowerment by guiding and supporting physical and psychological needs, and providing an environment that enhances personal development and education. It promotes the patient’s self-care skills and the move towards being as independent as possible or appropriate for that particular patient.

Orem’s nursing system theory, when employed in practice, may cause some difficulties in terms of deciding whether care should be wholly compensatory, partially compensatory or supportive/educative. The reality is that it may be extremely difficult to decide upon a system of care for older patients. For example, to place an individual in a wholly compensatory nursing system because of physical needs alone, when that
patient still has some decision-making ability, seems problematic. As a patient’s condition improves, the move from wholly to partially compensatory becomes a matter of judgement. The nurse in this situation must make a decision based upon education and experience when continually assessing and planning care. This sub-theory assumes the nurse has knowledge of the patient’s ability in varying situations. Limitations to the implementation of the Orem’s model in practice include structural management issues, such as staffing levels, nurses’ time constraints and budget cuts imposed in the current health care systems (Courtney et al., 2000; Grimmer et al., 1999; Jones & Cheek, 2003; Kowanko et al., 1999; Millis & Tattam, 1994; Reedy & Bragg, 2000; Scully, 1995). However, as with other nursing models, parts of this model may be achievable in clinical practice in the current health care climate.

To implement Orem’s model in practice, according to Cavanagh (1991), the nurse’s role in caring for patients involves compensating for their self-care deficits (inabilities) and helping them to meet their universal self-care requisites (needs). Nursing assistance is required to support and protect the patient while allowing any existing abilities to be encouraged and, wherever possible, encouraging new activities. Orem suggests nurses can initiate a wide range of activities to assist the patient to improve their functional activities, towards a position where they can take a more active role in their own care. The patient’s initial care may require a wholly compensatory nursing system, with nurses performing many care activities for the patient and, in general, acting on the patient’s behalf. Nursing actions will need to be addressed towards acting or doing for the patient or, in some situations, guiding or directing the patient to attend to their own care. The patients will need to be encouraged to help themselves in any way possible. Additionally, a requirement of this model is that psychological and spiritual support will
need to be offered. An important aspect of the patient’s care plan is finding a suitable balance of environmental needs. Nursing activities will be reviewed in response to the patient’s progress in taking more responsibility for their own care. There may be a move away from nurses simply performing care for the patient towards their offering more guidance and direction for the patient to perform some of their own self-care activities. This nursing assistance must take place within an appropriate environment, and with suitable psychological support (Cavanagh, 1991).

A brief overview of studies evaluating Orem’s model in practice is discussed as follows. Vasquez (1992) implemented Orem’s self-care model in the United States and reported that delivery of patient care based on theoretical principles can promote a successful practice. The author stated Orem’s self-care theory offered direction for nurses and promoted self-care as soon as possible, which was the nursing goal in the study setting. The nurses assisted the patients by acting for, educating, guiding, supporting and providing a developmental environment to provide quality nursing care. As demonstrated in this study, conceptual models, frameworks and theories allow for the continued generation and production of nursing-specific knowledge, and assist with developing nursing as a profession by giving nurses power, status and prestige associated with professionalism (Fawcett, 1995; Meleis, 1997; Nolan & Hazelton 1996; Orem 2001; Pearson, 2003).

Another study demonstrated the feasibility of adopting Orem’s self-care model in Australia in a large metropolitan Sydney hospital. Goodwin (1990) identified the benefit of this model as a cost-effective strategy, as the model encourages a more responsible and independent patient population. However, quite often older patients,
especially on arrival to the acute care setting, feel weak and unwell and may not be as responsible and independent as younger patients. During hospitalisation, patients can be encouraged to be self-caring by employing the Theory of Nursing System, for example, the supportive/educative approach to be more responsible and independent when the appropriate opportunity arises or when their condition improves sufficiently to allow them time to adjust to their situation. Goodwin (1990) identified limitations to the implementation of Orem’s model as being, firstly, the commitment required, particularly in terms of money and nurses’ time, to change attitudes and behaviours, and secondly, the educational programs required to explain Orem’s theory within nursing practice to staff. Nevertheless, as suggested previously in the patient-centred care philosophy by Binnie and Titchen, employing PAR to encourage nurses’ collaboratively to plan, observe, take action, reflect on their actions and replan nursing practice to improve care may change attitudes and behaviours, and assist to educate nurses regarding Orem’s theory in practice.

### 2.14 Summary of the implementation of models of care

It is important before introducing a model of care in practice to inform clinical nursing staff how the model is applied to practice. Nurses may be empowered by suggesting they select, develop and implement a model of care, with the assistance of a facilitator, to address their nursing care issues and to improve nursing practice for themselves and their patients. In the current health care system, nurses’ workloads often are dictated by staffing levels and other structural management issues, which determine how much time a nurse can spend with their patients.
In order to facilitate the development and implementation of a model of care in the acute care hospital setting, it is also important to focus on the role of nursing staff and to introduce a variety of strategies to assist and support them to achieve their goal (Chinn & Kramer, 1995; Redman & Jones, 1998). In selecting a model of care appropriate to their ward’s needs and environment, clinical nurses may need to be presented with a selection of international models of care relevant to their individual nursing practice. These models of care will give nurses guidance and renewed insight into thinking and feeling about their nursing practice actions. Clinical nurses will require the support of nursing management and colleagues, that is, the support of the majority of clinical nursing staff on the participating ward to introduce and sustain the model in practice.

2.15 Participatory Action Research (PAR):

A method for implementing models of care in the acute care setting

PAR is appropriate to nursing, not only because of its reflecting, planning, actions in practice, observing, reflecting and replanning process to create change, but also for its similarity to the nursing process through the steps of assessment, planning, implementation, evaluation and replanning (Nolan & Hazelton, 1996). Action research is also appropriate because it has successfully been employed to facilitate change and improve service provision in education and more recently in health care (Greenwood, 1994; Hart & Bond, 1995; Kemmis & McTaggart, 1992; Titchen & Binnie, 1999).
The role of PAR is to empower nurses through the construction of their own knowledge in a process of action and reflection (Kemmis & McTaggart, 1992). However, in this study, nurses' knowledge was enhanced by the researcher presenting a selection of models of care for their review. Acceptance of a reflective nursing practice to develop a model of care requires nurses at all levels to address issues of power and control, and to ask questions arising from critical social theory, such as: 'Why am I doing this in such a particular way? Who says I should do this? Whose interests are being served by my doing this: the patient's? the doctor's? manager's? relative's? And finally, on the basis of my nursing experience, how do I think this care should be provided?' (Short et al., 1993, p. 72). These reflective questions combine action with models of nursing care to create changes to implement more appropriate nursing care practices.

One appealing aspect of employing PAR is the knowledge that change evolves from those most affected by it (Kemmis & McTaggart, 1988). Organisational change is a positive move for any organisation, including hospitals. However, change within any organisation requires commitment to change and a change of culture. Changes within a ward or hospital need a catalyst. People who act as catalysts and assume the responsibility for managing the change process may be called change agents (Robbins, Bergman & Stagg, 1997). The change agent can be a non-manager, such as clinical nurses practising on the ward. Internal members of the ward who act as change agents may be more thoughtful, because they must live with the consequences of their actions (Robbins et al., 1997). Change agents should be motivated to initiate change because they are concerned with improving their ward's effectiveness.
Organisational change can be a threat to nurse managers and clinical nursing staff. Ward nursing staff may resist change by demonstrating a lack of interest in new procedures, even if that change might be beneficial. One cause of resistance is the fear of losing something already possessed. Change threatens the investment nurses have already made in the existing ward environment. The more nurses have invested in the current system, the more they are likely to resist change. This may occur because they fear the loss of status, authority, personal convenience or other benefits they value (Robbins et al., 1997). This could explain why permanent long-term members of the ward appear to resist change more than new members of staff (Torakis & Smigielshi, 2000).

Resistance can be reduced through communicating with staff to help them see the logic of a change. This approach assumes the source of resistance lies in misinformation or poor communication, and if staff receive the full facts and have their misunderstandings resolved, their resistance will subside (Robbins et al., 1997).

2.16 Justification for the research study

The literature identifies the worldwide increasing older population and issues related to the quality of nursing care for older hospital patients internationally and nationally. Reports of inadequate levels of care provided for patients over 65 years of age in the current Australian health systems are a reflection of the limited time nurses can spend with their patients and, therefore, deterioration in nurse-patient relationships and quality of care priorities. The literature confirms this situation by referring to the issues raised by family members/carers and by
nurses regarding the nursing care able to be provided. These issues have been addressed internationally through the successful implementation of models of nursing care, with a resultant improvement in quality of care for older patients.

Despite the above issues relating to the perceptions and priorities of the quality of care provided for older patients, there are very few Australian studies that focus on implementing models of care to address older patients’ care priorities in the acute care setting. Nonetheless, there are studies that consider nurses’ perceptions of care priorities. Hence, it is relevant to identify care priorities from the point of view of older patients, their family members/carers and their nurses. Many and varied models of care relevant to the needs of older patients have been implemented, mainly in the United States and United Kingdom. Some of these models can in part be applied to the acute care hospital setting in Australia. Until older patients’, their family members’/carers’ and their nurses’ perceptions and priorities of quality of care are identified, the foundation of improving the quality of care for older patients will not be truly addressed, or be sensitive to the specific needs of the older patient population. Consequently, nursing care for older patients in the acute care setting will fall short of its potential.

This study addresses these issues by exploring the perceptions of quality of care priorities of older patients, their family members/carers and nurses caring for them in several medical wards, and by developing, implementing and evaluating a model of care that addresses older patients’ specific issues in the acute medical ward setting. At the same time, the researcher acknowledges the
structural constraints of a health system dominated by staffing levels and budget cuts, which have the potential to limit reforms in nursing care. These issues need to be considered fully within the PAR process and worked through, with staff themselves leading the way and identifying new strategies of negotiating their way through the system.

This study employed a mixed method triangulated approach involving the use of quantitative and qualitative methods through PAR methodology, in order to establish an evidence-base for the model of care. PAR has been chosen because it is a process of collaboration and reflection that can achieve a positive organisational change by involving all nursing staff on the selected ward to identify those aspects of a model of care that are appropriate for their individual ward environment. The advantage of encouraging nurses to participate in the selection of a model facilitates empowerment to create change (Hart & Bond, 1995). The model in this study will consider the issues and priorities identified by older patients, their family members/carers and their nurses regarding the quality of care provided, based on the findings of stage 1. This study aims to evaluate this model using triangulation, thereby establishing an evidence-base for models of care. As stated in the literature by Pearson, ‘a move towards model-based practice is the most important target for change today. It precedes all other innovations.’ (Pearson 1986, as cited in McKenna, 1993, p. 43).

2.17 Study aim and objectives

The main aim of this study is to improve the quality of nursing care for older acutely ill hospitalised medical patients through surveying perceived needs of
older patients, their family members/carers and their nursing staff, and
developing, implementing and evaluating a new model of care using a
participatory action research (PAR) process. The specific objectives are:

1. To evaluate which aspects of nursing care are considered most important for
   older medical patients during acute hospitalisation from the perspective of
   older patients, their family members/carers and their nurses, and their
   satisfaction with aspects of care provided; and

2. To develop and implement a model of care that addresses the identified
   nursing care needs and priorities of older patients through a participatory
   action research (PAR) process; and

3. To determine whether the implementation of the chosen model of nursing
   care, employing PAR, addresses the identified nursing care needs and
   priorities, and whether this results in increased patient satisfaction and
   improved health care for older patients.
CHAPTER III

METHODOLOGY

3.0 Overview

This section outlines the procedures employed in conducting the study. It includes the study design, research sites, study sample, sample selection, ethical considerations, research instruments, data collection procedures, research process and methods of data analysis.

3.1 Study design

This study was conducted in three stages over two years and employs data triangulation, including questionnaires and field notes within a participatory action research (PAR) process. Stage 1 employed questionnaires administered to older patients, their family members/carers and their nurses. Some qualitative data were also obtained through open-ended questions to augment the questionnaire data. Stages 2 and 3 were conducted concurrently and employed staff in-service meetings, reference group meetings and field notes through action research. Patient questionnaires were then employed to evaluate the outcomes of the selected medical ward practice change.

3.2 Research ethics

Ethics approval for the complete study was obtained from the human research ethics committees of the two relevant universities and two metropolitan area health services involved in this study. Conducting research with this vulnerable population required the research team to be extremely vigilant in protecting their rights (Burns & Groves, 1997)
by maintaining their self-determination, privacy, anonymity and confidentiality,
ensuring fair treatment and protection from discontent or harm (National Health and
Medical Research Council of Australia, 2001).

Therefore, substantial preliminary work was carried out by the research team in
collaboration with the two area health services, to ensure the patients and their family
members/carers would be protected from harm during this study. Several meetings
occurred with the nurse unit managers (NUMs), clinical nurse consultants (CNCs),
directors of nursing (DONs), and divisional directors and principal directors of nursing
(PDONs), to gain their input and discuss practical issues related to implementing the
study on the selected medical wards.

All the requests made by the five human research ethics committees in regard to
protecting the rights of the study participants and data collection and storage were
complied with. Examples of how patients' ethical rights were maintained are provided
in section 3.10.

3.3 **Pilot study**

Several measures were taken to ensure the validity and reliability of the research
instruments and to ensure the study design was able to achieve the research aims and
objectives. Once all relevant research ethics approvals were obtained, a pilot study was
conducted to test the suitability of the research instruments to be employed to identify
any difficulties in recruiting the study participants (Baker, 1994; Polit, Beck, &
Hungler, 2001), and to determine the most effective way to involve patients, their
family members/carers and their nursing staff in the study.
In the first instance, the questionnaire to be administered to patients, their family members/carers and their nurses was piloted. The questionnaire was found to be appropriate to use with older patients, their family members/carers and their nurses. The team identified two problems that needed to be addressed: firstly, the font size of the questions, and secondly, the patients’ low energy levels. The font size was enlarged to 16 point to address eyesight problems and a large print ‘yes’ and ‘no’ card was developed for the patients to point to if they were not feeling well enough to respond verbally to each of the 50 questions.

During the pilot, the research team found recruiting participants was sometimes problematic as the patients’ health was variable. Therefore, in some instances, they needed more than one period of time to answer all the questions. The process of identifying a patient’s eligibility for participation just prior to administering the questionnaire was found to be a more efficient use of time for the research team and also the ward staff who assisted in the process. As a result of the pilot study, an efficient recruitment and questionnaire procedure was developed, and this proved to be less intrusive for patients and staff. Once these difficulties were addressed, it was possible to proceed with the study in a modified form.
STAGE 1

3.4 Objective of stage 1

The objective of stage 1 was:

- To evaluate which aspects of nursing care are considered most important for older medical patients during acute hospitalisation from the perspective of older patients, their family members/carers and their nurses, and their satisfaction with aspects of care provided.

3.5 Research sites

The study sites for stage 1 included five medical wards in five public teaching hospitals within the Sydney metropolitan region. These sites volunteered to participate, as they were interested in staff developing and implementing a new model of nursing care for older patients. Meetings with nursing staff identified that older patients’ health needs were more difficult to meet because of structural constraints and poor knowledge of their specific priorities in care.

One possible limitation of this study is that findings may be confounded by the fact that five different hospitals were used, with possibly different models of care in operation and different environmental contexts and management structures. Nevertheless, if each individual hospital were analysed separately, statistical power to detect significant findings would be compromised. One of the advantages of using five hospitals is that the findings could be considered to be a broad reflection of consumer and nurse perceptions in a large area of the study city.
3.6 Study sample

The study sample in stage 1 included consenting hospital patients 65 years and older (n = 153), their family members/carers who cared for them at home and/or who visited them regularly during their hospital stay (n = 54), and registered nurses caring for these patients in the acute care setting (n = 53). All older patients were being treated in medical wards, and were able to provide written informed consent. The mini-mental scores were rated by experienced nursing staff as discussed in the research instrument section 3.10.1.

3.7 Study setting

The five medical wards involved in stage 1 of the study were managed by NUMS and supported by a clinical nurse co-ordinator, clinical nurse specialist or clinical nurse educator. The staffing level for morning, afternoon and night shift depended on the individual ward patient numbers. Generally, the staffing level for the average medical ward of 30 beds for morning shift consisted of the NUM, clinical nurse co-ordinator, three registered nurses and three enrolled nurses. Specialist and intern medical staff attended all wards. Allied health staff included physiotherapists and physiotherapist assistants. Dieticians, speech pathologists, occupational therapists, social workers, psycho-geriatric clinical nurse consultants and discharge planners were available to attend all wards when paged. Other specialists, such as podiatrists, diabetes educators and bereavement counsellors, were available as required. Most of the older patients who were eligible to participate in the study were ambulatory, normally lived in their own homes, and were returning to home in the majority of cases.
3.8 Sample selection

3.8.1 Patients

The selection criteria for older patients included: those who were 65 years of age or older; admitted for an acute illness to a medical ward, that is, not to a rehabilitation or palliative care ward; willing and able to give informed consent to participate in the study; hospitalised for at least two days; and meeting cognitive selection criteria of having no more than the early stage of dementia, confusion/delirium or mental illness. One hundred and fifty three subjects participated in the study. Fifty-two patients were ineligible to participate due to dementia, confusion or mental illness, or because they were a long-term rehabilitation patient. Twenty-five of the potential participants did not consent because they were undergoing procedures or were too unwell or tired at the time of assessment as judged by the patient, nursing staff or visitors. The major diagnoses included chronic airways limitations (CAL) or chronic obstructive airways disease (COAD), chest infection, pneumonia, congestive cardiac failure (CCF), chest pain for investigation, ischaemic heart disease and stabilisation of diabetes.

3.8.2 Family members/carers

The selection criteria for family members/carers included: the main family member caring for the patient in his or her own home; the family member/carer spending the most time at the patient’s bedside during acute hospitalisation in a selected medical ward; and being willing and able to give informed consent to participate in the study.
3.8.3 Nurses

The selection criteria for nurses included registered permanent staff members of the selected medical wards who were willing and able to give informed consent to participate in the study. Agency nurses were not eligible to participate in this study.

3.9 Recruitment and research participants’ consent

A selection criteria checklist was used to assist the researcher in determining whether older patients were eligible to participate in the study (Appendix 1). The process of recruiting older patients and obtaining their consent was lengthy, as all participants involved in the data collection process were mindful of the vulnerability of this population group (Harris & Dyson, 2001). Consideration was given to the vulnerability of the older patients, and their ability to participate was initially assessed by the NUM or CNC on each of the wards, using the selection criteria form. Older hospital patients, their family members/carers and their registered nurses were invited to participate in the study, and provided with an information sheet (Appendix 2) explaining the nature and purpose of the research and the procedures involved, prior to participating. Following an opportunity to clarify any questions or concerns about the study, each patient was then asked to sign a consent form (Appendix 3). For those older patients unable to sign because of sensory or physical impairment, their verbal consent was obtained and witnessed, after the information sheet and consent form were read aloud to them. Maintenance of the participants’ confidentiality was a priority at all three stages of the research.
Once the patients provided informed consent, they were assessed for cognitive function with the Mini-Mental State Examination (Folstein, Folstein, & McHugh, 1975, see below). If the score was nineteen or greater, the patient’s functional capacity was assessed with the Barthel Activity of Daily Living (ADL) index, and the patient was then asked to complete the questionnaire. Assistance was given to the patient (if needed) to complete the questionnaire. Many required assistance due to their hearing problems or other impairments, and often the questions needed to be repeated more than once. In several instances, patients were too tired or unwell to complete the questionnaire, whereupon the procedure was ceased immediately and the questionnaire was completed at a later time that day or the next day.

3.10 Research instruments

The research instruments employed in stage 1 included the Mini-Mental State Examination (MMSE) (Folstein, Folstein, & McHugh, 1975), Barthel Activities of Daily Living (ADL) index (Mahoney & Barthel, 1965), and the Caregiving Activities Scale (CAS) questionnaire (White, 1972).

3.10.1 Mini-Mental State Examination

The Mini-Mental State Examination (MMSE) (Folstein, Folstein, & McHugh, 1975) was used to determine whether patients had sufficient cognitive ability to be eligible to participate in the study. The MMSE is a valid and widely used bedside instrument, which has been validated and extensively used in both clinical practice and research. An expert panel and the research team agreed that any patients who scored less than 19 on the MMSE at the time of interview would not be included in the study. However, if a
patient had a transient confusional episode such as delirium that subsided while still in hospital, the patient would subsequently be invited to participate. The MMSE form consists of 11 questions and has a total score of 30. See Appendix 4 for a copy of the MMSE scale.

3.10.2 Barthel Activities of Daily Living (ADL) index

The Barthel Activities of Daily Living (ADL) index, developed by Mahoney and Barthel (1965), is a patient assessment instrument. This instrument is valid and is used widely to determine a patient’s functional capacity. In stage 1, the Barthel’s ADL index was used to measure the patient’s functional capacity on admission, and again prior to discharge from the medical ward. The index consists of 10 items for assessment of levels of function in activities of daily living between admission and discharge from the medical wards. It has a total score of 20, with patient scores depending on their functional capacity to carry out activities of daily living. The functions assessed include bowels, bladder, grooming, toileting, feeding, transfer, mobility, dressing, stairs and bathing. See Appendix 5 for a copy of the Barthel index.

3.10.3 Caregiving Activities Scale (CAS) questionnaire

Three similarly worded validated CAS questionnaires (for patients, family members/carers and nurses) were adapted from White’s (1972) Caregiving Activities Scale questionnaire (Appendix 6). The questionnaires focused on the older patients’, their family members’/carers’ and their nursing staffs’ perceptions of and priorities with nursing care levels, and their satisfaction with the care currently provided. In developing the instrument, White (1972) used a theoretical framework based on literature reviews,
statements of nursing leaders and health organisations, and nursing function studies on what constitutes nursing practice. White’s (1972) CAS questionnaire has been successfully used and found to be a valid and reliable instrument by other researchers (Hudson & Sexton, 1996; Johnson, 1987). For this study, experts in aged care, including nursing clinicians in four hospitals, health consumers, geriatricians, a professor of multicultural health and two medical anthropologists, were engaged to assess the questionnaire. They considered the questions appropriate and well structured. The advantage of employing the questionnaire was to eliminate interviewer bias, as well as providing participant anonymity (Brink & Wood, 1998). White’s questionnaire was chosen for this study as it allowed evaluation of what the patients, their family members/carers and their nurses considered to be important and their degree of satisfaction regarding nursing care.

The importance and satisfaction components of White’s (1972) CAS questionnaire were employed in stage 1. This instrument was based on a four-part framework, or four categories of nursing care, that included:

- Twenty-one physical care questions related to rest and sleep, physical comfort and cleanliness, food, fluids, positioning, environment and exercise;
- Thirteen psychosocial care questions related to emotion, support, spiritual and diversional activities;
- Nine implementation of doctors’ orders questions related to observing, reporting and implementing medical care;
- Six discharge planning questions related to preparing for discharge and home care.
The questionnaire consisted of 50 questions, using a five-point Likert-style scale for importance and satisfaction. There was a prompt question following each item, which stated, ‘If not provided, then why do you think this was the case?’ Additionally, there were two open-ended qualitative questions at the end of the questionnaire, giving a total of 52 questions. The first open-ended question asked, ‘If there are other aspects of nursing care you think are important for nurses to provide, please describe below.’ The second question asked, ‘If there are other aspects of nursing care that nurses provide that you think are unimportant, please describe below.’

The three similarly worded questionnaires were administered to older patients, family members/carers and nurses in five medical wards in five metropolitan hospitals during stage 1. Participants were then asked to rate the importance and satisfaction of these nursing activities on a five-point Likert scale. Nursing staff were asked to rate the degree to which they had the opportunity to provide these aspects of nursing care, rather than their satisfaction with delivery of nursing care.

3.11 Data Collection Procedures

3.11.1 Patients

The following sequential steps in patient data collection procedures were followed. First, the patient was given a brief overview of the study. If the patient was willing to participate, a detailed information sheet about the study was given. Following informed consent, patients were assessed for cognitive function with the MMSE instrument. If the score was greater than or equal to nineteen, the patients’ functional capacity was then assessed with the Barthel ADL Index. The patient was asked to complete the CAS
questionnaire. Assistance was given to the patient (if needed) to complete the
questionnaire. The patient’s data collection instruments were coded, with all
instruments for the same patient containing the same code. The patient’s discharge date
was entered in a computer program (Microsoft Excel), to assess if the patient was re-
admitted within 28 days of discharge.

All data collection instruments in stage 1 were collected and placed in a locked cabinet
in the researcher’s office, filed in numerical order according to their patient, family
member/carer or nurse code number.

3.11.2 Family members/carers

Family members/carers were given a brief overview of the study. If they were willing to
participate, a detailed information sheet about the study was given. Following informed
consent, they complete the CAS questionnaire (family version, see appendix 6) during
their hospital visit or when convenient. They were given a self-addressed, stamped
envelope to post the completed questionnaire back to the researcher, or were asked to
place it in the locked research box on each participating ward.

3.11.3 Nurses data collection procedure

Nursing staff were asked to give informed consent and to complete the nurses’ CAS
questionnaire in their own time and to place completed questionnaires in the locked
research box in the participating wards.
3.12 Data Management and Analysis

3.12.1 Quantitative data analysis

In stage 1, the data from the Barthel’s ADL index were stored in a locked cabinet until required for data entry and analysis during stages 2 and 3. The CAS questionnaires were entered into a computerised spreadsheet which enabled follow-up of the patients’ history, such as re-admittance within 28 days. Data were analysed using SPSS (Statistical Package for the Social Sciences Inc., 2001).

Mean scores and standard deviations were calculated for each item in the CAS questionnaire and then rank-ordered to determine the level of importance and satisfaction as perceived by patients, family members/carers and nurses. The individual items on the questionnaire comparing patients’ perceptions with those of the nurses were also listed for the top 10 priorities for importance, as well as the top 10 items patients and nurses were most satisfied with. Individual items for areas of importance that patients were not satisfied with were also listed. The scores of answers pertaining to the four categories of questions in the CAS questionnaire were summarised to provide a mean score for each. Between subjects analysis of variance (ANOVA) tests were performed to determine:

1. Significant differences between patients, family members/carers and nurses on the four categories of the CAS questionnaire; and

2. Significant differences between the three groups on overall importance and satisfaction levels with nursing care on the CAS questionnaire.

The level of significance (alpha) was set at $p < 0.05$. To avoid committing a type 1 error, a Bonferroni correction was applied of $p=0.01$ to follow-up F-tests ($0.05$ divided
by the number of dependent variables). Post-hoc comparison of means using the Scheffé procedure was used to identify the variables involved if the ANOVA test revealed significant effects. This conservative test lowered the likelihood of committing a type 1 error (Scheffé, 1953). An ANOVA test was also performed to determine the between group differences for young-old (65 years to 80 years) and old-old (over 80 years) for the four categories of importance and satisfaction.

3.12.2 Qualitative data analysis

In stage 1, the qualitative data arising from the CAS questionnaire, that is, the short answers if entered below the fifty questions and the answers to the two open-ended questions that followed the fifty questions, were analysed by creating a text file to employ a sorting and classifying process. Content analysis (Morse & Field, 1996) was applied to the transcribed comments and recurring remarks concerning the CAS questionnaire.
STAGES 2 and 3

3.13 Objectives of stages 2 and 3

The objectives of stages 2 and 3, which were conducted concurrently, were:

- To develop and implement a model of care that addressed the identified nursing care needs and priorities of older patients through a participatory action research (PAR) process; and
- To determine whether the implementation of the chosen model of nursing care, employing PAR, addressed the identified nursing care needs and priorities, and resulted in increased patient satisfaction and improved health care for older patients.

3.14 Research site

The study site for stages 2 and 3 was one of the medical wards that participated in stage 1. The ward staff volunteered to participate in the PAR process to develop, implement and evaluate a model of care that would address older patients' issues that were identified from the questionnaire findings during stage 1 of the study.

3.15 Study sample

The study sample included a new group of patients in the medical ward who volunteered to participate in stages 2 and 3. The sample consisted of consenting medical patients 65 years and older (n=60), and registered nurses caring for these patients in the selected medical ward (n=13).
3.16 Study setting

The medical ward that volunteered to participate was managed by two part-time NUMs and clinically managed by one clinical coordinator who was also the ward’s CNS. At the time of the data collection, there were 29 beds on the ward. Specifically, the ward was divided into five rooms of four beds, one room of two beds, and seven single rooms with toilet and shower facilities. There were also four separate bathrooms with showers, including two toilets, one with a bathtub. The staffing levels for morning shift during the week include the NUM, clinical coordinator, three registered nurses and three enrolled nurses. This setting was typical of that described in section 3.7.

3.17 Sample selection

The selection criteria for older patients and nurses followed the same selection criteria as discussed during stage 1 of this study. Sixty subjects participated in stages 2 and 3 of the study. Nineteen patients were ineligible to participate due to dementia, confusion or mental illness. Twelve of potential participants did not consent because they were undergoing procedures, or were too unwell or tired at the time of assessment as judged by the patient, nursing staff or visitors.

3.18 Research process: Participatory Action Research (PAR)

The benefits of utilising the PAR method were in encouraging participation by nurses through ongoing steps in a cycle of reflecting, planning, action, observing, reflecting and replanning as necessary, leading to the nurses as a group initiating decision-making and actions on the ward to improve the nursing care provided. The researcher acted as a
facilitator for the key reference group (KRG) participants, to facilitate effective ways of creating opportunities for change that the nurses identified as desirable and achievable.

Action research is a process of:

*Collective, self-reflective inquiry undertaken by participants in social situations in order to improve the rationality and justice of their own social ... practices, as well as their understanding of these practices and the situations in which these practices are carried out (Kemmis & McTaggart, 1988, p. 5).*

Grundy (cited in Kemmis and McTaggart, 1992, p. 354) stated:

*The intention of action research is to give persons the power to act to bring about change (action) by generating knowledge through rational reflection on personal experience (research).*

In searching the literature for an application of action research stating the process clearly for clinical nurses to follow, Wadsworth's (1997) Action Evaluation Research Process was chosen. The process was presented succinctly in a 'wall chart' accompanying the text. The wall chart provided an excellent visual prompt for the nurses to guide the ongoing cycles with the research process. Hence, it was considered the most useful model for this study.

Wadsworth (1997) identified the six steps in the PAR cycle in the following way: *reflecting* on the findings, *planning* (design) the actions, implementing these *actions* in practice (fieldwork), *observing* the outcomes of these actions (analysis and conclusions), *reflecting* on these outcomes (feedback) and *replanning* to maintain or
further develop the model of care in a continuous cycle of improvement. These steps were clearly identified and explained on the wall chart (appendix 7).

This process was able to be used practically to achieve collaboration and support between the researcher, older patients and their nursing staff, to achieve the goal of development, implementation and evaluation of a model of care to improve the quality of nursing care for older patients. This research process values the nurses' experiences and knowledge, and provides an opportunity for nurses to examine the context of their working environment and to work collaboratively with the researcher. The role of the researcher is to facilitate the process.

3.19 Research instruments and data collection procedures

A mixed method triangulation approach to data collection was considered appropriate in the PAR process. The advantage of using several methods to examine the same phenomenon is that it provides more in-depth information on the participants’ experiences and feelings (Morse & Field, 1996). Research instruments for stages 2 and 3 included patient evaluation assessment instruments, including a modified version of Barthel’s ADL index, medication regime assessment and the satisfaction only component of the CAS questionnaire. Other sources of data collection included researcher field notes recorded continuously during the PAR process, and minutes of meetings (nursing staffs in-service meetings and KRG meetings).

3.19.1 Barthel Activities of Daily Living (ADL) index modified

The KRG modified the Barthel ADL index (Mahoney & Barthel, 1965) used in stage 1 to incorporate Orem’s self-care requisites (Orem, 2001) during the model of care PAR
process in stages 2 and 3. The modified index was used to determine the patient’s functional capacity pre admission, on admission and prior to discharge in order to assess the older patients’ self-care activities. The first 10 items on the index were similar to the 10 items on the Barthel ADL index employed in stage 1. Only minor word changes were applied to incorporate Orem’s requisites. Item 11 was added from Orem’s self-care requisites, which states: ‘Balance solitude and social interaction’, where a score of 0 indicates ‘not able to communicate concerns clearly’, a score of 1 indicates ‘willing to discuss concerns with nursing staff/family’, and a score of 2 indicates ‘independently seeks information and solitude’. See Appendix 8 for a copy of the modified Barthel ADL index.

3.19.2 Medication Regime Assessment

The Medication Regime Assessment was designed by the KRG to be employed by ward clinical nurses to determine the patient’s knowledge of medications on admission, and again prior to discharge from the selected medical ward during the model of care PAR process. This assessment instrument incorporated the Nurses Improving Care to Health System Elders (NICHE) (1994) medication protocol, and was used in conjunction with the Pharmacy Summary Card (PSC) given to patients the day of admission or the next day. This instrument consists of seven items for assessment of levels of knowledge on a four-point Likert scale in administration of medications by older patients. It has a total score of 28. See Appendix 9 for a copy of the assessment.
3.19.3 Caregiving Activities Scale (CAS)

The satisfaction component only of White’s (1972) CAS questionnaire (Appendix 10) was administered to patients and nursing staff, to determine their levels of satisfaction with the care currently provided during the model of care process. The ward nursing staff administered the questionnaires to older patients prior to discharge from the selected ward. Nursing staff were asked to complete the questionnaire in their own time during the last two weeks of the model of care process on the selected ward.

3.19.4 Field notes

The researcher documented field notes during the model of care PAR process on one medical ward that volunteered to participate. Field notes are descriptive accounts in which the researcher objectively records what is happening in the study setting (Morse & Field, 1996). As it is difficult to remember many details following an observation, the following processes were used:

- The field notes were documented as soon as possible after the researchers left the ward following periods of observation and participation in the staff in-service and KRG meetings on the selected ward;

- These records were maintained throughout the development, implementation and evaluation of the model of care; and

- The notes documented observations of staff processing, including why the model of care was needed, how the model of care was developed, what concerns were to be addressed, where the model of care would take place, and over what period of time, and how these issues would be addressed and evaluated during the model of care PAR process.
3.19.5 Minutes of meetings

Staff in-service meetings and KRG meetings were conducted during the PAR process to record the exchange of information, ideas and issues raised by nurses regarding ways of improving nursing care for older patients. They were also used to identify the patients’ and their family members’/carers’ issues regarding the nursing care provided on the selected medical ward (Wadsworth, 1997).

3.19.5.1 Staff in-service meetings

The staff in-service meeting procedure was informal, although focusing on key issues pertaining to the care of the older patients. The researcher facilitated the meetings, covering issues such as the findings from stage 1, presentation of the PAR process and presentation of several models of care for the nurses’ discussion. A record of these in-service meetings was placed in a minutes of meetings folder held in the ward. The minutes of the in-service meetings contained a record of nurses’ attendance, agenda items and issues relating to the care of older patients, any actions taken and by whom.

3.19.5.2 Key Reference Group (KRG) meetings

The KRG meetings were conducted and attended by three or four members of the group, as shift-work allowed. Minutes were documented as in the in-service meetings. The KRG meeting procedure was conducted informally, with meetings focused specifically on key directions in planning, implementing and evaluating the model of care and in developing the evaluation instruments. The researcher facilitated the meetings by asking questions, listening rather than talking, and taking a passive rather than a directive role. The nurses reflected on their actions in subsequent meetings and in this way, analysed any discrepancies, and sought more answers to their issues. They
were encouraged to think about their issues and to reach conclusions about what they 
and other members of the ward thought about the required changes to improve nursing 
care, and what they would prefer to change to improve the quality of nursing care for 
older patients. Finally, they considered future issues and acted on those issues to 
implement change to improve the quality of care.

The following is an example of a typical key reference group meeting:

**Agenda Item 1:** Recruitment of patients. **Action:** KRG to recruit patients if possible 
during week. **Responsibility:** all members of KRG. **Resolution:** to continue to recruit 
patients, date noted.

**Item 2:** PSCs. **Action:** continue to administer cards, give education and check both card 
and medication chart for discrepancies. **Responsibility:** all nursing staff members. 
**Resolution:** to continue to check PSCs and medication charts, and document educational 
session with patients on the medication regime assessment form, date noted.

**Item 3:** Documentation of model of care framework. **Action:** continue to remind staff 
to complete all forms (ADL and medication) on discharge. **Responsibility:** all nursing 
staff. **Resolution:** to continue to remind staff to document discharge process on all 
forms, date noted.

**Item 4:** Management support issues. **Action:** management consulted and stated they are 
happy and very interested in the model of care process. **Responsibility:** all staff, 
especially KRG members, to continue to inform management of model of care process. 
**Resolution:** continue to inform management of process, date noted.
3.20 Implementing the PAR process

3.20.1 Gaining nursing staff’s consent to participate

The findings from stage 1 were presented to nursing staff in the selected medical ward. On completion of this presentation, the nursing staff were invited to participate in the development, implementation and evaluation of a model of care to address the issues arising from stage 1 findings in order to improve nursing care for older patients. A reference group was formed from those staff who were willing to participate in the model. This included three nurses out of 15 permanent nurses on the ward, with the researcher as facilitator.

3.20.2 Recruitment of patients

The recruitment process in stages 2 and 3 was as follows: On arrival at the ward, the researcher consulted with the KRG member or permanent staff member of the ward to identify patients who were eligible within the selection criteria to participate in the study. The patients were given a brief overview of the model of care study. If interested in participating, they were given a detailed information sheet and were asked to provide written, informed consent.

3.21 Strategies used to implement the PAR process

Following Wadsworth’s recommendations, the following strategies were used to implement the PAR process or cycle with nursing staff and patients who consented to participate. The first step in the cycle involved reflection by the researcher on the findings from stage 1 to identify issues of older patients relating to their perceptions and
priorities regarding the nursing care provided. Second, the researcher’s role was to plan weekly half-hour in-service meetings with nursing staff. It was considered three in-service meetings over a three-week period would be adequate to cover all ward permanent nursing staff attendance. The researcher presented the findings to nursing staff for reflection. A presentation was also given to describe Wadsworth’s (1997) PAR process. The nurses were then asked to plan which issues they wished to address in their model of care. They were also encouraged to plan who was going to participate in the KRG, when it would be appropriate for the study to commence on their ward, and what timeframe should be allowed for the PAR process to develop, implement and evaluate the model of care. The nurses were given a timeframe of three weeks to plan the above issues. The nurses’ plans were presented to the third in-service meeting.

3.21.1 Issues to be addressed in the model

There were two issues the nurses wished to address from the stage 1 findings. The first issue was the patients’ request to ‘teach me about the medications that I will be taking at home’. Nursing staff also decided to include medications taken in the hospital setting, in order to increase the older patients’ knowledge levels during hospitalisation. The second issue addressed was the patients’ request to ‘encourage me to take more responsibility for my own care while in hospital’. The nursing staff stated at the in-service meeting that three nurses had volunteered to participate in the KRG, which was to be facilitated by the researcher to formally introduce the model into practice in the medical ward.

Reflection on the progress in the early steps in the cycle assisted the participant nurses to decide on goals and actions in following the steps in the cycle (Wadsworth, 1997). According to Wadsworth (1997), an essential feature in the ongoing steps in the cycle is
critical reflection on what is happening at each step in the evolving cycle, so the research process reflects the decision-making of the participants each step of the way. As such, this PAR process is an ideal approach for nurses to look more closely at their caring activities and ways of improving the quality of nursing care for older patients.

The third step in the action research cycle involved implementing these plans in action (action in practice), with the fieldwork on the ward being facilitated by the KRG members in collaboration with all ward nursing staff, and the recruitment of patients. The researcher facilitated the KRG members’ actions by encouraging them to identify older patients’ issues through questioning, discussing and exploring the meaning of the feedback from the findings of stage 1, where the patients had identified their issues.

During this step in the cycle, further in-service ward meetings were conducted over a three-week period to present several models of care appropriate for the care of older patients for the nurses’ consideration. For example, they were presented with the ACE Model developed by the NICHE project faculty (1994), a Patient-centred Care philosophy implemented by Binnie and Titchen (1999), and Patient-centred Models – Neuman’s System Model, 1972 (Chinn & Kramer, 1991) and Orem’s Self-care Model, 1971 (Orem, 2001). These in-service presentations by the researcher gave the nurses information in order to increase their knowledge of nursing models, to make a more informed decision regarding the choice of which nursing model or portion of a model of care to select, from which to develop their model of care.

At these in-service meetings, nurses were encouraged to act by identifying for themselves a model that addressed the issues of older patients and was compatible with their clinical environment. The nurses collaborated and identified their chosen model of
care. The researcher then presented in-service meetings on how to apply this model of care in practice (action). The model selected as a process to guide their nursing practice was a Patient-centred Care philosophy, based on Orem's Self-care Model plus the NICHE (1994) project faculty medication protocol concepts.

3.21.2 Assessing effectiveness of the model

The KRG scheduled weekly meetings, initially to identify how the group planned to take action to assess the effectiveness of this model with older patients and discuss how to incorporate a patient-centred care philosophy based on Orem's self-care model, which included the NICHE medication protocol. For example, they discussed the evaluation instruments that would be appropriate during the implementation process, including how to assess older patients' level of knowledge regarding administration of medications and their ability to attend to self-care activities. Additionally, the group discussed an overall evaluation instrument for the model of care and, in consultation with all ward nursing staff, a decision was reached on how to measure the older patients' and nursing staff's satisfaction with the care provided during the model of care process.

Additional instruments were required to evaluate what the nurses identified as issues to be addressed during the PAR process, such as an activities of daily living assessment instrument to assess the patients' functional capacity, as well as an instrument to assess the patients' knowledge level and administration of medications.

The KRG reviewed and revised existing evaluation instruments to promote consistent nursing care. After collaboration with all nursing staff and review of the findings from
stage 1, the KRG concluded they would use the existing Barthel’s ADL index with modifications. The modified Barthel’s ADL index would incorporate concepts of self-care requisites from Orem’s self-care model (Orem, 2001). These concepts incorporated a balance of activity and rest, solitude and social interaction and promotion of normalcy, designed to enable the nurse to evaluate a picture of the older patient’s self-care needs. The nurse caring for the patient would suggest changes, such as encouraging self-care abilities. An example is deep breathing and coughing exercises, and walking several times a day around the ward corridor if appropriate for the individual patient.

The KRG, in collaboration with all ward nursing staff, further discussed the evaluation instruments for the older patients. An evaluation instrument to measure the patient’s knowledge levels regarding administration of medications was designed. This instrument incorporated the NICHE (1994) medication protocol concepts, and was used to assess a patient’s level of knowledge regarding the administration of their medications during hospitalisation and prior to discharge. A complete copy of the NICHE medication protocol, entitled Ensuring Medication Safety for Older Adults, was given to nursing staff for their information. A member of the KRG consulted with the hospital pharmacist to print pharmacy summary cards (PSCs) for all older patients participating in the model of care study on admission, or the next day, and prior to discharge. Normally, the PSCs were only given if a patient had two or more medications, and was only given on discharge (by the hospital pharmacist). The group emphasised the PSCs were to be administered by the pharmacist to all patients in their model of care study and printed in large type. These would include the relevant self-care pharmacy fact sheets appropriate for individual patients. The nurses also collaborated on an overall evaluation instrument for the model, and decided the satisfaction component
of the CAS questionnaire applied in stage 1 would be an appropriate outcome measure of the model’s efficacy with older patients. The modified Barthel’s ADL index, medication regime assessment and satisfaction component of the CAS questionnaire allowed patient information to be evaluated continuously during stages 2 and 3 over a period of three months.

3.21.3 Data collection procedure for patients

The data collection procedure during stages 2 and 3 was similar to stage 1. The patients’ functional activities of daily living (ADL) were assessed on admission to discuss and document their pre admission activities, on admission activities and reassessed prior to discharge with the modified version of the Barthel ADL index. The patients’ knowledge levels of administration of medications were also assessed on admission, and again prior to discharge from the selected medical ward with the medication regime assessment instrument. This instrument included a section at the base of the form to indicate the pharmacist was informed of the patient’s need for a PSC. The PSC was given to all patients participating in stages 2 and 3. This card assisted with the educational sessions by nurses when administering medications. These educational sessions were documented on the medication regime assessment instrument. Red dots were placed on patient charts and a red sheet on the front of the bed chart kept at the end of the patient’s bed, to alert staff members that the patient was participating in the model of care study.

Prior to discharge from the selected ward, the patient was asked to complete the satisfaction CAS questionnaire, to determine whether the implementation of the model of care that was considered to address older patients’ identified nursing care issues had resulted in increased patient satisfaction and improved patient care, such as improved
satisfaction with the quality of nursing care received. Assistance, if required, was given to the patient to complete the questionnaire, although few patients required assistance in this medical ward. All instruments employed in the PAR process were placed in a folder in the in-service room on the ward, and filed in numerical order according to their patient code number.

3.21.4 Data collection procedure for nurses

During the last two weeks of the model of care implementation, the nurses were asked by the KRG members to give informed consent and to complete the satisfaction CAS questionnaire in their own time and, when completed, to return it to one of the group members in a supplied sealed envelope.

3.21.5 Further steps in the PAR cycle

The fourth step in the action research cycle was *observing outcomes of these actions* (analysis and conclusions) on the ward. The KRG observed the older patients’ functional capacity by attending to activities of daily living (ADLs) and measuring patients’ knowledge levels and administration of medications during the model. They reflected on these observations during their weekly meetings, discussing what was and was not working well, and why. For example, the KRG discussed the interaction of patients walking around the corridor of the ward with their walking frames and other walking aids, and how the medication PSCs had assisted patients to increase their knowledge levels regarding their medication regimes. Essentially, the KRG drew conclusions and explanations regarding the model of care process during their weekly meetings.
The fifth step in the action research cycle was feedback, *reflecting on these outcomes* (observations) of the model of care in action, and checking throughout the entire process that older patients, nursing staff and management were comfortable with the implementation of the model. The KRG needed to reflect and ensure the model was on schedule according to their planning decisions, and was addressing the issues identified by older patients in the findings from stage 1. The purpose of the fifth step was to give feedback to all nursing staff and management on the findings from the satisfaction CAS questionnaire evaluation instrument.

The sixth and final step involved reflecting on these findings and *replanning* by the KRG members to maintain or further develop the model of care. This enabled them to plan what would be the best way to go next, what form it would take, and what actions would be required to place these actions in practice. Therefore, the steps in the action research cycle began again.

### 3.22 Data management and analysis

#### 3.22.1 Qualitative data analysis - meeting minutes and field notes

The meeting minutes and field notes were recorded throughout the PAR process during the development, implementation and evaluation of the model of care. Various analytical methods and processes were applied to the data. Content analysis was conducted according to the protocol set out by Morse and Field (1996) and Sarantakos (1995).
Analytical process

As Morse and Field (1996) and Sarantakos (1995) explain, when conducting content analysis, the researcher reads the entire data set and identifies several important topics or concepts. These key concepts then become the primary concepts. These primary concepts were initially broad, so that a large amount of data was sorted into a few categories. This analytical process permitted key concepts to emerge over time with increasing clarity. The process also facilitated the constant comparison of the concepts which Morse and Field (1996) identify as essential to the development of the research propositions.

The qualitative data arising from the nurse in-service ward meetings, key reference group (KRG) meeting minutes, and field notes were transcribed verbatim and analysed by creating a text file to employ a sorting and classifying process. Consistent words and phrases reflecting the model of care process were identified. The headings for the columns during this process included text, quote key concept and meaning of key concept. The text recorded the details of the date, time, context and participants of each observation, interaction or experience. This involved recording the exact details of the experience as it happened, without any judgements made in the description, including quoting the key concept and determining the meaning of this quote by asking what was actually happening in this experience.

Wadsworth’s (1997) steps in the cycle and questions related to the PAR were incorporated in the analysis process. The first step in the PAR cycle was to reflect on and identify the key concepts by asking the following:

- Are we noticing discrepancies?
- Have we got a problem?
For example, the researcher analysed the key concepts relating to the initial in-service meeting minutes, to identify whether the nurses were noticing discrepancies in care from what the patients considered to be important, and whether they were being met by nurses. The nurses reflected on those and identified whether they had issues to be addressed from the findings of stage 1. The initial set of meanings of these key concepts was refined and condensed through constant comparison within the data and across the meeting minutes and field notes.

The second step in the PAR cycle was to analyse how the participants worked together to plan the processes to gain and maintain staff co-operation to develop and implement a model of care by asking the following:

- How can we find out?
- What do others think?

For example, the researcher facilitated the nurses' decisions when developing, implementing and evaluating the chosen model, and how they would include other nursing staff members' thoughts on this. The meanings of these key concepts were refined and condensed following the analytical process.

The third step in the PAR cycle was to analyse the actions implemented by the nursing staff, to determine what factors were found to enhance the nurses' capacity to implement the model of care by asking the following questions regarding what the nurses were doing:

- Why is it like this?
- How did it come to be like this?
In this stage of analysis, the process found to be the most empowering for nursing staff when seeking to change practice was sought. For example, the researcher analysed the key concepts during the action plan step in the cycle, to see what factors were found to increase the nurses’ capacity to implement the model. The meanings of these key concepts were refined and condensed following the analytical process.

The fourth step in the PAR cycle was to analyse the observations of these outcomes in action (analysis and conclusions) on the ward. For example, the researcher analysed the key concepts relating to observations of these outcomes on the ward, to understand why the nurses changed their practice in the way they did. The meanings of these key concepts were refined and condensed following the analytical process.

The fifth step in the PAR cycle was to analyse the feedback, reflecting on these outcomes by asking the following:

- What do people think of all this?
- Did we get it right?

For example, the researcher analysed the key concepts that arose from the KRG meeting minutes where there had been reflection from previous meeting minutes during the model of care process, including the field notes to reflect on whether the model of care had improved the quality of nursing care and whether the nurses were satisfied with the care they had agreed to provide. The meanings of these key concepts were refined and condensed following the analytical process.

The sixth and final step in the PAR cycle was to analyse the replanning by asking the following:
• What would be the best way to go next?
• What would it look like?

For example, the researcher continued to facilitate the KRG members in their meetings and their reflections on the findings from the evaluation instruments of the model of care and their planning of the next step in the action research cycle.

3.22.2 Quantitative data analysis CAS questionnaire

The procedure for quantitative analysis in stages 2 and 3 was similar to that of stage 1. Between subjects, ANOVA tests were performed to determine significant differences between stage 1 and stages 2 and 3 patient and nurse groups as follows:

1. Overall satisfaction scores of the CAS questionnaire for:
   a) patients;
   b) nurses; and
   c) nurses versus patients.

2. Differences between the four categories of physical and psychosocial care, implementation of doctors’ orders and discharge planning of the CAS questionnaire for:
   a) patients;
   b) nurses; and
   c) nurses versus patients.

A repeated measures ANOVA test was then performed to determine whether the implementation of the model of care resulted in improved ADL from admission to discharge. Patient ADLs from stage 1 group were compared with patients from the stages 2 and 3 group on ADL scores over time, that is, from admission to discharge.
A paired t-test was performed to assess medication knowledge levels based on medication regime assessment scores on the stages 2 and 3 group, to determine whether implementation of the model resulted in improved knowledge levels of patients' medication administration regime from admission to discharge. It was not possible to compare stage 1 group in this instance with the stages 2 and 3 group, as the medication regime assessment was not in place during stage 1.
CHAPTER IV
RESULTS

4.0 Overview

The results are presented according to the stages of the study:

- Stage 1 CAS questionnaire results; followed by
- Stages 2 and 3 development, implementation and evaluation of the model of care PAR process, which were conducted concurrently.

4.1 Stage 1 results

Stage 1 results of the CAS questionnaire are presented for importance and satisfaction with aspects of nursing care. The items within each of the four categories of the CAS questionnaire were summed to provide a mean score for each of the four categories. Data were analysed using a one-way multivariate analysis of variance (MANOVA), to determine between group differences on the combined four categories of the CAS questionnaire. One-way ANOVAs were also performed within groups to determine the relative importance of, and satisfaction with, each category. Post hoc comparison of means using the Scheffé procedure were used to identify the variables involved when the ANOVA revealed significant effects. This conservative test lowers the likelihood of committing a type I error (Scheffé, 1953). Patients’ and nurses’ comments to clarify their CAS questionnaire responses are also presented.
4.2 CAS questionnaire results

4.2.1 General findings

All groups (patients, carers and nurses) rated care activities associated with doctors’ orders as most important, with mean ratings reflecting very high importance. The importance of physical care activities was the next highest category. Psychosocial care and discharge planning were rated least important. Therefore, all groups agreed aspects of care related to technical competence and furnishing basic needs were the main priorities.

4.2.2 ANOVA results for importance overall

Table 1 (see below) shows the means, ranges and standard deviations for the four categories of importance for each group. A one-way multi-variate ANOVA test was performed to determine whether there were significant differences between patients, carers and nurses on the four categories of importance (physical, psychosocial, implementation of doctors’ orders and discharge planning) combined. Results demonstrated significant differences between the three groups on importance overall (Wilks’ Lambda=0.79, df=8,508, p<0.001). Follow-up one-way ANOVA tests were then performed to determine in what categories significant differences occurred between the three groups (see Table 2 below for a summary of the results).
4.2.2.1 Between group differences for importance

a) Physical care

There were significant differences between the three groups (patients, carers and nurses) on the importance of physical care \((p<0.05\), see Table 2 for summary of results\). However, post-hoc tests showed no significant differences between groups on the importance of physical care. Table 1 shows all 3 groups thought this was an important aspect of nursing care.

b) Psychosocial care

There were significant differences between the three groups on psychosocial importance \((p<0.05\), see Table 2 for summary of results\). Post-hoc tests showed nurses gave significantly higher ratings for psychosocial importance compared with patients \((p<0.01\), but similar ratings to carers. As seen in Table 1, nurses and carers both rated this category highly in terms of importance, while patients rated it as moderate to high.

c) Doctors’ orders

There were significant differences between the three groups on the importance of nurses implementing doctors’ orders \((p<0.001\), see Table 2 for summary of results\). Post-hoc tests showed significant differences between patients and nurses. As seen in Table 1, patients rated doctors’ orders higher than nurses. Carers had similar ratings to nurses. All groups rated this category very highly.

d) Discharge planning

There were significant differences between the three groups on the importance of discharge planning \((p<0.05\), see Table 2 for summary of results\). As seen in Table 1,
patients rated discharge planning as moderately important, which was significantly lower than nurses’ ratings (p<0.05). Therefore, nurses rated discharge planning highly in terms of importance, whereas patients rated it moderately important. Carers’ ratings were between nurses and patients.

Table 1 Means, range and standard deviations for the four categories of importance for the three groups, stage 1.

<table>
<thead>
<tr>
<th>Variable</th>
<th>mean</th>
<th>min</th>
<th>max</th>
<th>sd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical care</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient (n=153)</td>
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<td>2.29</td>
<td>5.00</td>
<td>.70</td>
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<td>5.00</td>
<td>.59</td>
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<td>.65</td>
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<td></td>
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<td>Doctors’ orders</td>
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</tr>
<tr>
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<td>5.00</td>
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<tr>
<td>Discharge planning</td>
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<td>3.80</td>
<td>.00</td>
<td>5.00</td>
<td>1.38</td>
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Table 2 Summary of ANOVA results comparing differences between the three groups on the four categories on importance and satisfaction

<table>
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<tr>
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<th>MS Effect</th>
<th>df</th>
<th>MS Error</th>
<th>F</th>
<th>P</th>
</tr>
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<tbody>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importance</td>
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<td>2,257</td>
<td>.45</td>
<td>4.41</td>
<td>0.013*</td>
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<tr>
<td>Satisfaction</td>
<td>5.04</td>
<td>2,257</td>
<td>.53</td>
<td>9.45</td>
<td>0.000**</td>
</tr>
<tr>
<td><strong>Psychosocial care</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importance</td>
<td>2.63</td>
<td>2,257</td>
<td>.43</td>
<td>6.13</td>
<td>0.002**</td>
</tr>
<tr>
<td>Satisfaction</td>
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<td>2,257</td>
<td>.53</td>
<td>0.90</td>
<td>0.406</td>
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<td><strong>Doctors’ orders</strong></td>
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</tr>
<tr>
<td>Importance</td>
<td>1.43</td>
<td>2,257</td>
<td>.19</td>
<td>7.44</td>
<td>0.000**</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>2.52</td>
<td>2,257</td>
<td>.37</td>
<td>6.81</td>
<td>0.001**</td>
</tr>
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<td><strong>Discharge planning</strong></td>
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</tr>
<tr>
<td>Importance</td>
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<td>2,257</td>
<td>1.26</td>
<td>3.65</td>
<td>0.027*</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>8.08</td>
<td>2,257</td>
<td>1.77</td>
<td>4.54</td>
<td>0.011*</td>
</tr>
</tbody>
</table>

* significant at p<.01; ** significant at p<.001

4.2.2.2 Within group comparisons for importance

a) Patients

As seen in Table 3, there were significant differences within the patient group on their ratings of importance on physical and psychosocial care, implementation of doctors’ orders and discharge planning [F (3,456)=104.88, p<0.001]. Post-hoc comparisons showed that implementation of doctors’ orders were rated highest and were rated significantly higher than physical care (p<0.001), psychosocial care (p<0.001) and discharge planning (p<0.001). Physical care, the second highest rating, was significantly higher than the psychosocial care (p<0.001) and discharge planning categories (p<0.001). Psychosocial care and discharge planning were rated similarly, reflecting
moderate importance. Doctors’ orders were rated of great importance, with physical care important, as seen in Table 1.

b) Nurses

Table 3 shows there were significant differences within the nurses’ group on their ratings of importance for the four categories ($F(3,156)=16.99$, $p<0.001$). Doctors’ orders were rated most highly, and were significantly higher than physical care ($p<0.001$), discharge planning ($p<0.001$) and psychosocial care ($p<0.001$). Psychosocial care was rated as least important, but was only slightly lower than doctors’ orders. Physical care and discharge planning were rated similarly. As all categories were rated over a mean score of 4, they were all considered important, with the implementation of doctors’ orders rated the highest.

c) Carers

There were significant differences within the carers’ group (table 3) on their ratings of importance for the four categories of care giving activities ($F(3,159)=16.01$, $p<0.001$). Mean comparisons showed that implementation of doctors’ orders was rated as most important, and this category was significantly higher than physical care ($p<0.001$), psychosocial care ($p<0.001$) and discharge planning ($p<0.001$). Physical care was rated significantly lower than doctors’ orders ($p<0.01$) but higher than discharge planning ($p<=0.05$). Table 1 shows doctors’ orders were rated of great importance and discharge planning was the least important. Psychosocial care and discharge planning were rated similarly as having moderately high importance.
Table 3 Summary of ANOVA results comparing differences within each group on the four categories on importance and satisfaction

<table>
<thead>
<tr>
<th>Source</th>
<th>MS Effect</th>
<th>df</th>
<th>MS Error</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient</td>
<td>40.74</td>
<td>3,456</td>
<td>.38</td>
<td>104.88</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td>Nurse</td>
<td>1.96</td>
<td>3,156</td>
<td>.11</td>
<td>16.99</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td>Carer</td>
<td>7.89</td>
<td>3,159</td>
<td>.49</td>
<td>16.01</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td>Satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient</td>
<td>71.34</td>
<td>3,456</td>
<td>.52</td>
<td>136.15</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td>Nurse</td>
<td>7.33</td>
<td>3,156</td>
<td>.17</td>
<td>42.72</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td>Carer</td>
<td>17.11</td>
<td>3,159</td>
<td>.56</td>
<td>30.50</td>
<td>&lt;0.001*</td>
</tr>
</tbody>
</table>

* significant at p<.001

4.2.3 ANOVA results for satisfaction overall

A one-way multi-variate ANOVA test was performed to determine whether there were significant differences between patients, carers and nurses on the four categories of satisfaction with care giving activities (physical, psychosocial, implementation of doctors' orders and discharge) combined. Although patients and carers were asked to rate satisfaction, nurses’ measure of satisfaction was in terms of opportunities to provide care for each item. Results demonstrated significant differences between the three groups on satisfaction overall (Wilk’s Lambda=0.80, df=8,508, p<0.001). Follow-up one-way ANOVA tests were therefore performed on each subcategory, to determine whether there were group differences in the individual categories.
4.2.3.1 Between group differences for satisfaction

a) Physical care

As seen in Table 2, significant differences were found between the three groups on physical care satisfaction ratings ($p<0.001$). Comparison of means showed nurses reported significantly more opportunities to provide physical care compared with patients’ satisfaction scores ($p<0.05$) and carers ($p<0.001$). Table 4 shows patients and carers gave similar satisfaction ratings. Carer and patient ratings reflect moderate levels of satisfaction, with nurses’ scores reflecting moderately high ratings.

b) Psychosocial care

There were no significant differences between the three groups on psychosocial satisfaction ratings. All groups gave moderate ratings of satisfaction in this category (see Table 4).

c) Doctors’ orders

There were significant differences between patients and carers on satisfaction with nurses’ implementation of doctors’ orders ($p<0.01$, see Table 2). Carers and nurses had similar ratings. All three groups rated doctors’ orders highly in terms of satisfaction, as seen in Table 4.

d) Discharge planning

There were significant differences between the three groups on satisfaction for care activities related to discharge planning ($p<0.01$, see Table 2 for summary of results). Patient ratings were significantly lower than nurses’ ($p<0.05$) but not carers’. Carers’ and nurses’ ratings were significantly different, carers less satisfied with the care
provided than nurses (p<005). Mean satisfaction ratings for the three groups on
discharge planning were low to moderate, with patients and carers giving a low rating,
as seen in Table 4.

Table 4 Means, range and standard deviations for the four categories of satisfaction
for the three groups, stage 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>mean</th>
<th>min</th>
<th>max</th>
<th>sd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical care</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient (n=153)</td>
<td>3.48</td>
<td>1.67</td>
<td>5.00</td>
<td>.78</td>
</tr>
<tr>
<td>Nurse (n=53)</td>
<td>3.98</td>
<td>2.62</td>
<td>4.86</td>
<td>.51</td>
</tr>
<tr>
<td>Carer (n=54)</td>
<td>3.58</td>
<td>1.81</td>
<td>5.00</td>
<td>.75</td>
</tr>
<tr>
<td>Psychosocial care</td>
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<td></td>
</tr>
<tr>
<td>Patient (n=153)</td>
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<td>.74</td>
</tr>
<tr>
<td>Nurse (n=53)</td>
<td>3.60</td>
<td>2.23</td>
<td>4.85</td>
<td>.66</td>
</tr>
<tr>
<td>Carer (n=54)</td>
<td>3.42</td>
<td>1.77</td>
<td>4.92</td>
<td>.77</td>
</tr>
<tr>
<td>Doctors’ orders</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient (n=153)</td>
<td>4.52</td>
<td>1.89</td>
<td>5.00</td>
<td>.62</td>
</tr>
<tr>
<td>Nurse (n=53)</td>
<td>4.29</td>
<td>3.11</td>
<td>5.00</td>
<td>.47</td>
</tr>
<tr>
<td>Carer (n=54)</td>
<td>4.19</td>
<td>2.67</td>
<td>5.00</td>
<td>.68</td>
</tr>
<tr>
<td>Discharge planning</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient (n=153)</td>
<td>2.88</td>
<td>.00</td>
<td>5.00</td>
<td>1.38</td>
</tr>
<tr>
<td>Nurse (n=53)</td>
<td>3.48</td>
<td>1.00</td>
<td>4.83</td>
<td>.84</td>
</tr>
<tr>
<td>Carer (n=54)</td>
<td>2.82</td>
<td>.00</td>
<td>5.00</td>
<td>1.56</td>
</tr>
</tbody>
</table>

4.2.3.2 Within group comparisons for satisfaction

One-way ANOVA tests were performed on individual groups to determine whether they
gave significantly higher satisfaction ratings on some categories (see Table 3 for a
summary of the results).
a) Patients

As seen in Table 3, significant differences were found within categories for patient satisfaction ratings (p<0.001). Doctors’ orders was rated most highly in terms of satisfaction (see Table 4) and was rated significantly higher than the other three categories (p<0.001). Discharge planning was rated lowest, and was significantly lower than the other three categories (p<0.001). Satisfaction with discharge planning was significantly lower than physical care (p<0.05).

b) Nurses

As seen in Table 3, significant differences were found for nurses in terms of opportunities to provide care (p<0.001). Care activities related to carrying out doctors’ orders were rated the highest (see Table 4), with Table 3 showing that this rating was significantly higher than the other three categories (p<0.001). Physical care was the next highest rating, and was rated significantly higher than psychosocial and discharge (p<0.001). Psychosocial care was also rated significantly lower than doctors’ orders (p<0.001) and physical care (p<0.001). Therefore, nurses reported they had the most opportunities to provide activities to implement doctors’ orders, followed by physical care activities. They had the least opportunities to provide discharge planning activities followed by psychosocial care.

c) Carers

As seen in Table 3, significant differences were found for carers (p<0.001). Carers were most satisfied with care activities related to implementation of doctors’ orders (see Table 4), which Table 3 shows was rated significantly higher than the other three categories (p<0.001). Physical care was rated the next highest, which was rated
significantly higher than discharge planning (p<0.001), but similar to psychosocial care. Carers were the least satisfied with discharge planning, and this was significantly lower than the other three ratings (p<0.001).

4.2.4 ANOVA results for importance/satisfaction between aged groups

Young-old group (65 years to 80 years) versus Old-old group (over 80 years)

4.2.4.1 Between group differences for aged groups for importance

a) Physical care

There were significant differences between the two groups (young-old versus old-old) on physical care importance (F (1,151)=10.97, p<.001), with the older group rating physical care activities higher than the younger group. However, Table 5 shows both groups thought this was an important aspect of nursing care.

b) Psychosocial care

There were significant differences between the two groups on psychosocial care importance (F (1,151)= 4.70, p<0.05), with the older group rating psychosocial care activities higher than the younger group. As seen in Table 5, however, the two groups both rated this category moderately in terms of importance.
c) Doctors' orders

There were no significant differences between the two groups on the importance of implementation of doctors' orders. As seen in Table 5, the two groups rated doctors' orders highly for importance.

d) Discharge planning

There were significant differences between the two groups on discharge planning importance (F (1,151)=4.33, p<.05). As seen in Table 5, the younger group rated discharge planning as moderately important, which was significantly lower than the older group's rating of importance.

As seen in Table 5, the older group gave higher importance ratings than the younger group overall on the four categories.

Table 5 Means, range and standard deviations for the four categories of importance for the two groups, young-old and old-old, stage 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>mean</th>
<th>min</th>
<th>max</th>
<th>sd</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical care</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Young-old (n=112)</td>
<td>3.82</td>
<td>2</td>
<td>5</td>
<td>.72</td>
</tr>
<tr>
<td>Old-old (n=41)</td>
<td>4.23</td>
<td>3</td>
<td>5</td>
<td>.58</td>
</tr>
<tr>
<td><strong>Psychosocial care</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Young-old (n=112)</td>
<td>3.67</td>
<td>2</td>
<td>5</td>
<td>.67</td>
</tr>
<tr>
<td>Old-old (n=41)</td>
<td>3.92</td>
<td>2</td>
<td>5</td>
<td>.52</td>
</tr>
<tr>
<td><strong>Doctors' orders</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Young-old (n=112)</td>
<td>4.72</td>
<td>2</td>
<td>5</td>
<td>.45</td>
</tr>
<tr>
<td>Old-old (n=41)</td>
<td>4.86</td>
<td>4</td>
<td>5</td>
<td>.19</td>
</tr>
<tr>
<td><strong>Discharge planning</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Young-old (n=112)</td>
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<td>1.17</td>
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<td>Old-old (n=41)</td>
<td>3.91</td>
<td>1</td>
<td>5</td>
<td>.94</td>
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</table>
4.2.4.2 Between group differences for aged groups for satisfaction

a) Physical care

There were significant differences between the two groups on satisfaction with physical care activities \( [F (1,151) = 5.64, p < 0.05] \), with the older group more satisfied than the younger group. Table 6 shows both groups were moderately satisfied with this aspect of nursing care.

b) Psychosocial care

There were no significant differences between the two groups on psychosocial care satisfaction \( [F (1,151) = 0.01, p = 0.93] \). As seen in Table 6, both groups rated this care giving activity category moderately in terms of satisfaction.

c) Doctors’ orders

There were no significant differences between the two groups on the satisfaction with implementation of doctors’ orders \( [F (1,151) = .61, p = 0.44] \). As seen in Table 6, both groups rated implementation of doctors’ orders highly for satisfaction.

d) Discharge planning

There were no significant differences between the two groups on discharge planning satisfaction \( [F (1,151) = .03, p = 0.85] \). As seen in Table 6, both groups rated discharge planning in the lower range for satisfaction during stage 1. Also seen in Table 6, there were significant differences between the two groups on satisfaction with physical care, with the older group more satisfied than the younger group. However, in the categories of psychosocial care, doctors’ orders and discharge planning, the ratings showed no significant differences between the two groups for satisfaction.
Table 6 Means, range and standard deviations for the four categories of satisfaction for the two groups young-old and old-old, stage 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>mean</th>
<th>min</th>
<th>max</th>
<th>sd</th>
</tr>
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<tr>
<td>Young-old (n=112)</td>
<td>3.39</td>
<td>2</td>
<td>5</td>
<td>.79</td>
</tr>
<tr>
<td>Old-old (n=41)</td>
<td>3.72</td>
<td>2</td>
<td>5</td>
<td>.71</td>
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<tr>
<td><strong>Psychosocial care</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Young-old (n=112)</td>
<td>3.46</td>
<td>2</td>
<td>5</td>
<td>.72</td>
</tr>
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<td>Old-old (n=41)</td>
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<td>1</td>
<td>5</td>
<td>.81</td>
</tr>
<tr>
<td><strong>Doctors’ orders</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Young-old (n=112)</td>
<td>4.54</td>
<td>2</td>
<td>5</td>
<td>.58</td>
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<td>2</td>
<td>5</td>
<td>.74</td>
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<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>Young-old (n=112)</td>
<td>2.86</td>
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<td>1.47</td>
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<tr>
<td>Old-old (n=41)</td>
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<td>0</td>
<td>5</td>
<td>1.14</td>
</tr>
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</table>
### 4.2.5 Comparison of most and least important individual items

**Table 7** Patient top 10 individual items for importance compared to nurse top 10 individual items for importance, stage 1

<table>
<thead>
<tr>
<th>Patient top 10 individual items for importance, stage 1</th>
<th>Nurse top 10 individual items for importance, stage 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Provide me with a clean, comfortable bed</td>
<td>1. Notice when I am in pain and give me medications if ordered</td>
</tr>
<tr>
<td>2. Carry out doctors' orders</td>
<td>2. Take special care of my skin so it does not become sore</td>
</tr>
<tr>
<td>3. Notice changes in my condition and report them</td>
<td>3. Provide privacy during my bath and treatments</td>
</tr>
<tr>
<td>4. Make me feel you are happy to care for me</td>
<td>4. Notice changes in my condition and report them</td>
</tr>
<tr>
<td>5. Notice when I am in pain and give me medications if ordered</td>
<td>5. See that the bed pan or urinal are provided when needed</td>
</tr>
<tr>
<td>6. Observe the effects of treatments ordered by the physician</td>
<td>6. Help me maintain or restore normal elimination</td>
</tr>
<tr>
<td>7. Be sure that I have the necessary equipment – glass, towel, soap etc</td>
<td>7. Carry out doctors’ orders</td>
</tr>
<tr>
<td>8. Give prescribed medications on time</td>
<td>8. Change my position frequently</td>
</tr>
<tr>
<td>9. See that the unit is clean and tidy</td>
<td>9. Observe the effects of treatments ordered by the physician</td>
</tr>
<tr>
<td>10. Tell my doctor that I am worried about my condition</td>
<td>10. Help me to assume a comfortable or appropriate position</td>
</tr>
</tbody>
</table>

As seen in Table 7, patients and nurses both rated individual aspects of care activities associated with carrying out doctors' orders, noticing changes in the patients' condition, noticing when the patient is in pain and observing the effects of treatments, as most important individual aspects of care. These individual items are listed under the category of doctors' orders on the CAS questionnaire, and were rated within the top 10 items for importance by both groups.
Table 8 Individual items nurses perceived as important but less important to patients compared to individual items patients perceived as important but less opportunities for nurses to provide, stage 1*

<table>
<thead>
<tr>
<th>Items NURSES perceived as important but less important to PATIENTS</th>
<th>Items PATIENTS perceived as important but less opportunities for NURSES to provide care</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Take special care of my skin so it does not become sore</td>
<td>1. Provide a comfortable pleasant environment</td>
</tr>
<tr>
<td>2. See that the bed pan or urinal are provided when needed</td>
<td>2. Explain about diagnostic tests ahead of time so that I will know what to expect</td>
</tr>
<tr>
<td>3. Change my position frequently</td>
<td>3. Be understanding when I am irritable and demanding</td>
</tr>
<tr>
<td>4. Assist me with meals</td>
<td>4. Take time to listen to me</td>
</tr>
<tr>
<td>5. Ask the dietician to serve me soft foods that I am able to chew</td>
<td>5. Teach me about the medications that I will be taking at home</td>
</tr>
<tr>
<td>6. Talk with my family about my illness and the care I will need at home</td>
<td>6. See that my food is served properly</td>
</tr>
<tr>
<td>7. Arrange for a community nurse to visit me at home</td>
<td>7. Encourage me to take more responsibility for my own care while in hospital</td>
</tr>
<tr>
<td>8. Help me in and out of bed</td>
<td>8. Plan my care so that I will be able to rest while in hospital</td>
</tr>
<tr>
<td>9. Help me make arrangements for my care at home</td>
<td>9. Consider my personal preferences when caring for me</td>
</tr>
<tr>
<td>10. Assist me with the care of my mouth and teeth</td>
<td>10. See that I have food and/or fluids between meals</td>
</tr>
</tbody>
</table>

* Items scoring greater than 4 were rated as important

As seen in Table 8, nurses prioritised individual discharge planning items more highly than patients; for example, talking with the patient's family about their illness, arranging for a community nurse to visit and helping the patient make arrangements for care at home. Patients, however, prioritised physical care (e.g., numbers 1, 6, 8, and 10
in table 8) and psychosocial care (for example numbers 3, 4, 7 and 9 of table 8) individual items more highly than nurses.

**Table 9** Individual items on the CAS questionnaire both patients and nurses agreed were not important, stage 1 *

<table>
<thead>
<tr>
<th>Items both PATIENTS and NURSES agree are not important (Calculated on bottom 10 listed by both, mean score &lt;4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Help me with grooming, such as care of my nails, hair and/or shaving</td>
</tr>
<tr>
<td>2. Make it possible for me to observe my religious practices in the hospital</td>
</tr>
<tr>
<td>3. Arrange for my priest, minister or rabbi to visit (clergy)</td>
</tr>
<tr>
<td>4. Help me understand how to plan the diet I will need at home</td>
</tr>
<tr>
<td>5. Plan some diversion or recreation for me</td>
</tr>
</tbody>
</table>

*Based on bottom 10 listed by both groups, mean score less than 4.

As seen in Table 9, patients and nurses believed that items related to personal grooming, religion, dietary needs at home and diversional or recreational therapy were not important aspects of nursing care.
### 4.2.6 Comparison of most and least satisfied individual items

Table 10 Patient top 10 individual items most satisfied with compared to nurses top 10 items most satisfied with opportunities to provide care, stage 1

<table>
<thead>
<tr>
<th>Patient top 10 individual items satisfied with</th>
<th>Nurse top 10 individual items satisfied with</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Take my temperature and pulse</td>
<td>1. Notice changes in my condition and report them</td>
</tr>
<tr>
<td>2. Provide me with a clean comfortable bed</td>
<td>2. See that the bed pan or urinal are provided when needed</td>
</tr>
<tr>
<td>3. See that the unit is clean and tidy</td>
<td>3. Provide privacy during my bath and treatments</td>
</tr>
<tr>
<td>4. Provide privacy during my bath and treatments</td>
<td>4. Carry out doctors’ orders</td>
</tr>
<tr>
<td>5. Carry out doctors’ orders</td>
<td>5. Provide me with a clean comfortable bed</td>
</tr>
<tr>
<td>6. Make me feel you are happy to care for me</td>
<td>6. Notice when I am in pain and give me medications if ordered</td>
</tr>
<tr>
<td>7. Be sure that I have the necessary equipment – glass, towel, soap etc</td>
<td>7. Take special care of my skin so it does not become sore</td>
</tr>
<tr>
<td>8. Give prescribed medications on time</td>
<td>8. Take my temperature and pulse</td>
</tr>
<tr>
<td>9. Notice when I am in pain and give me medications if ordered</td>
<td>9. Give or assist me with a daily bath</td>
</tr>
<tr>
<td>10. Provide a comfortable, pleasant environment</td>
<td>10. Assist me with meals</td>
</tr>
</tbody>
</table>

As seen in Table 10, patients and nurses on the individual activities of care items were satisfied with items related to: taking temperature and pulse, noticing when in pain and giving medications if ordered, providing a clean comfortable bed and carrying out doctors’ orders. These individual items covered the overall categories of implementation of doctors’ order and physical care activities.
Table 11 Means scores for individual items on the CAS questionnaire for areas of importance for patients that they were not satisfied with, stage 1 (patient importance versus patient satisfaction)*

**Items PATIENTS noted to be IMPORTANT but were NOT SATISFIED with**

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Question</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>Help me maintain or restore normal elimination</td>
<td>3.97</td>
</tr>
<tr>
<td>22</td>
<td>Encourage me to take more responsibility for my own care while in hospital</td>
<td>3.96</td>
</tr>
<tr>
<td>11</td>
<td>Help me to assume a comfortable or appropriate position</td>
<td>3.93</td>
</tr>
<tr>
<td>39</td>
<td>Take time to talk with my family and answer their questions</td>
<td>3.65</td>
</tr>
<tr>
<td>24</td>
<td>Teach me about the medications that I will be taking at home</td>
<td>3.64</td>
</tr>
</tbody>
</table>

* Calculated by comparing patient importance scores above a mean of 4 to satisfaction scores below a mean score of 4.

Table 11 shows patients identified individual aspects of nursing care that were important items, but were rated low in satisfaction concerning the nursing care provided. These individual items included activities across the categories of physical and psychosocial care and discharge planning on the CAS questionnaire. All CAS questionnaire findings were presented to nursing staff on the five selected medical wards involved in the data collection process at the conclusion of stage 1.
4.2.7 Comments on the CAS questionnaire

Many patients and family members/carers and nurses gave comments to clarify their CAS responses. Several patients' and family members'/carers' reasons for giving lower importance and satisfaction ratings for discharge planning were that they did not consider discharge planning to be a nurse's role, but the role of either the family member/carer or other members of the health care team. Furthermore, some patients had only been hospitalised for a few days, and did not see the importance of discharge planning at what they considered to be an early stage of their treatment. They saw this as a process that should be performed at the end of their hospital stay. Others remarked that they had already had community nursing and other assistance in place prior to their admission, therefore, planning for discharge was not required by hospital nurses.

One of the major recurring comments by all groups (patients, nurses and carers) relating to individual items on the CAS questionnaire concerned the overwhelming time constraints on nurses that prevented them from providing all aspects of care. Several nurses remarked that time constraints and shared roles by other health staff were the main factors for their inability to provide certain aspects of care to a high level of satisfaction. Specific items several patients commented on concerning time limitations included the patient's request to have the necessary equipment, such as a glass, towel and soap, giving prescribed medications on time and seeing the unit was clean and tidy. Nurses also made comments regarding the unit, including there was not enough time to clean the unit, and that such cleaning would depend on staff levels on any particular shift. Another comment made by nurses was that cleaning the unit was not a nursing duty.
Some nurses commented they did not rate provision of some aspects of physical care highly because they believed it was important to encourage patients, who were able to perform self-care activities, to maintain and/or develop this level of independence in order to prepare for discharge.

Patients’ and family members’/carers’ comments regarding psychosocial aspects of care included explanations that decision-making about care and follow-up treatments were the doctor’s domain. They also felt items on recreational and spiritual activities were not part of the nurse’s role, and that nurses were too busy to attend to what patients and family members/carers considered to be non-acute matters.

4.3 Stages 2 and 3 results

The minutes of meetings and field notes recorded during the PAR process (Wadsworth, 1997) during the development, implementation and evaluation of the model of care were analysed by applying a variety of analytical methods and processes as discussed in the method section 3.22.1. The findings are presented in order of the PAR process, the steps in the action research cycle, followed by the evaluation instrument results.

4.3.1 The first step in the PAR cycle: Reflection

Nurses’ reflections on the findings from stage 1

The nurses were given the findings regarding the patients’ perceptions of care provided during their hospital stay and whether they were satisfied with the care provided. In some areas of their nursing care, patients were not satisfied with the care provided. As the findings were presented at the in-service meetings, there were non-verbal gestures, for example, head nodding, suggesting most nurses agreed with these findings. That is,
what patients thought was important was consistent with what nurses thought patients
would say. However, some issues arose.

The nurses related that they had noticed discrepancies between their ratings of the
importance of the care they provided and what the patients considered to be important.
For example, the patients had considered five issues to be important that they were not
satisfied with. These were:

- *Teach me about the medications that I will be taking at home;*
- *Help me to assume a comfortable or appropriate position;*
- *Encourage me to take more responsibility for my own care while in hospital;*
- *Help me maintain or restore normal elimination; and*
- *Take time to talk with my family and answer their questions.*

Some of these inconsistencies in nursing care were addressed to improve care for older
patients in the *plan* step in the action research cycle.

**Key concept: Barriers to change**

At the in-service meetings, several comments were made that represented barriers to
change. These related to time constraints and nursing staff levels to perform these
nursing care procedures. For example,

- *There is not enough time;*
- *The ward is too busy; and*
- *There is not enough staff to spend time sitting and talking with patients.*
Key concept: Enthusiasm to change practice

Several comments were made that gave the researcher an impression of enthusiasm within the group. One nurse related her perception of how to control work time issues. For example:

As a group, we can focus on one or two issues to change our nursing care.

Another nurse commented:

We need to educate patients regarding their medications and self care capabilities prior to discharge so as they don’t become frequent flyers.

This statement referred to patients who were frequently re-admitted to this medical ward within a month or two of discharge.

As the in-service meeting progressed, another nurse volunteered to present the findings from stage 1 to night staff:

I am very happy to present the findings from stage 1, in order to assist in any way to improve nursing care for our older patients.

Comments from nursing staff during the next in-service meeting showed many of the nursing staff were:

Very enthusiastic about the implementation of a model of care to improve nursing care provided for their older patients.

4.3.2 The second step in the PAR cycle: Plan

Key concept: Collaboration in planning

There was evidence the nurses were willing to collaborate as shown by their eagerness to participate in a reference group. For example, one nurse remarked that she and another staff member:
... wouldn't mind being involved in a group to improve care.

This resulted in a discussion regarding the reference group. The nurses agreed the reference group should include the researcher to facilitate the group, and to include several clinical nursing staff to facilitate the development, implementation and evaluation of the chosen model. One nurse immediately volunteered to participate in the KRG:

*I would like to be in the group.*

This nurse then volunteered to collect names of other nurses willing to participate in the group during the following week.

The outcome of this action was the researcher and three clinical ward nurses would form the KRG. The participants within the group were encouraged by the researcher to have a voice within the group, both as individuals and as a KRG member. Discussion during these group meetings was encouraged by the researcher to be directed towards improving nursing care for their older patients, as well as posing questions designed to stimulate thought and reflection on the issues identified to be addressed in the model. The KRG members collaborated and planned to continue weekly meetings throughout the model process as discussed in section 3.21.

As the nurses reflected on the findings from stage 1, they identified two nursing care issues to be addressed in their model of care. The nurses commented:

*We feel that it would be impossible to address more than two issues to improve care in the current ward working conditions.*

There was a general discussion related to time constraints and patients' acuity. The nurses stated:
The two issues we are addressing in our model of care are the patient request to:

- Teach me about the medications that I will be taking at home, and
- Encourage me to take more responsibility for my own care while in hospital.

The nurses also said:

*The first issue would incorporate medications taken during their hospital stay to improve the patients' knowledge level of their medication regime.*

**Key concept: Empowerment in planning**

The researcher presented three consecutive sessions describing Wadsworth’s (1997) PAR process and several validated models of nursing care for the nurses to select a model to address their individual ward issues. The nurses listened and asked questions regarding each of these models, and discussed the models in detail with the researcher.

For example, one nurse commented,

*Neuman’s system model seems very complex and may take a long time to implement. I don’t think this one will work on our ward. I would prefer a patient-centred care approach.*

Another nurse commented,

*The ACE model NICHE practice protocol concepts sound good. Can we include the one to do with medications in our model?*

During further meetings, the nurses indicated that they ‘really liked’ the idea of a patient-centred care approach, but thought this process may be too broad to follow, and may require a more structured framework for this model to work on their ward. The
researcher suggested Orem's self-care model (Orem, 2001), as this model has a patient-centred care approach and would assist in addressing their second chosen issue, to encourage the patient to take more responsibility for their own care while in hospital.

The outcome of these discussions and reflections on the model presentation was a comment at the conclusion of the session relating

*We have chosen a Patient-centred Care philosophy based on Orem's Self-care Model, and also to include the ACE Model NICHE medication practice protocol as a framework to guide the model.*

Planning then focused on how to develop, implement and evaluate the chosen model of care. The KRG initially designed the medication assessment regime instrument incorporating the NICHE project faculty (1994) practice protocol concepts, followed by the Barthel's ADL (Mahoney & Barthel, 1965) modified index instrument that incorporated Orem's (2001) self-care concepts to address the two issues identified by nursing staff. They also designed the educational sessions for the patients, and incorporated the evaluation of these sessions in the evaluation instruments. The overall evaluation instrument for the model process was discussed in detail, with the nurses agreeing the 'satisfaction only' component of the CAS questionnaire be employed during this step in the PAR cycle of the model, as discussed in section 3.21.2.

Issues regarding the process of administration of the model of care evaluation instruments and other forms, such as patient selection criteria, consent and information forms to patients, were also discussed in detail. Further evidence of organisation, enthusiasm and planning was expressed when one KRG member said:
I will organise three folders containing 20 sets of coded patient forms to be kept in the in-service room for easy access during the implementation and evaluation process.

The date to commence the model and the timeframe of the implementation process were discussed in detail and documented by the KRG, as presented in section 3.21.

4.3.3 The third step in the PAR cycle: Action

The researcher enhanced the KRG nurses’ capacity to implement their model of care plans on the ward by encouraging the KRG members to ensure all nursing staff were aware of the implementation process. The nurses reflected on the effectiveness of the model in the weekly KRG meetings, and collaborated with other members of staff to inform them of the progress of the model.

Key concept: Expanding knowledge

Expanding nurses’ knowledge

One consistently recurring observation on the ward was the sharing of knowledge and experience of nursing staff with other staff. For example, one KRG member explained one of the strategies employed to implement the model in action on the ward to another staff member by saying:

Orem’s self-care model is incorporated into the Barthel’s ADL modified index form and should promote self-care activities when appropriate for that individual patient, because we ask the patient for details about their pre-admission activities of daily living before assessing and planning their current activities.
Expanding patients’ knowledge

Another observation by the researcher was the benefits of the educational sessions related to the new model of care that emerged during the administration of the medication assessment regime and Barthel ADL modified index evaluation procedures for the patients. The patients were asked questions to ascertain knowledge levels regarding their medication regimes and functional activities of daily living; for example:

Mrs X, is the medication dose on the pharmacy summary card the same as you were taking at home?

Mr X, do you know when to take this medication?

Mr X, were you able to walk without the support of your walking frame prior to coming into hospital?

Several nurses noted the overwhelming need to repeat educational sessions with the patients regarding their medication regime and encouraging activities of daily living. For example:

I have repeated Mr X’s medication regime with him during every medication round on my shift for the last two days.

Other common observations noted on many occasions involved nurses sharing knowledge by encouraging self-care activities and explaining why these activities were important. For example, a nurse was observed encouraging one of her patients by saying:

Mr X, it would be good if you could walk around the ward corridor, as this exercise may help your circulation.

Sharing information also included handover to the next shift when staff recorded:

Mrs X is in our model of care study.
Many patients and nurses considered the implementation of the pharmacy summary cards, designed to increase the older patients’ knowledge levels of their medications during hospitalisation, a very useful instrument to educate the patients while in hospital and prior to discharge. This was demonstrated by an example of a patient’s comment:

This card is really good and very helpful; it lets you know what medication you are taking in hospital.

Safety issues also emerged during these educational sessions. For example, on at least four occasions observed by the KRG members, older patients noted that what was written on their pharmacy summary cards was not what they had been taking at home. One patient informed the nurse:

At home, I usually take Lasix. This is not written on my pharmacy card and I have not been given this tablet since I came in two days ago.

This educational session identified a discrepancy in the patient’s medication orders that resulted in an unexpected safety benefit for all concerned. The doctor was informed of the discrepancy, and the medication chart and pharmacy summary card amended accordingly. One nurse also expressed how beneficial she felt the pharmacy summary cards were for their older patients:

These pharmacy summary cards given during the patients’ hospital stay are really good, because the patient is aware of what medication they are taking in hospital and can let us know if it is different from what they were taking at home. In fact, why don’t we do this for the younger patients as well?

This comment was an indication of the nurse’s desire to continue the model of care process once the steps in the first PAR cycle had been evaluated.
One observation made during the implementation of the model of care which gave the researcher a sense of affirmation that the model was accepted by older patients on the selected ward was when a patient asked:

*Nurse, can I be included in your model of care study?*

The way the nurses integrated the model into their practice encouraged other patients to ask to be involved in their model of care study. This patient had observed other patients in his room being recruited by nurses for the model of care study. After the nurse had left the room, he discussed the pharmacy summary cards with them. He decided he would like one of these cards as well, and as soon as the nurse returned to the room, he asked if he could be in their model of care study.

During periods of participant observation on the ward, it was noted that the KRG members, on many occasions, took the opportunity to expand knowledge within the multidisciplinary team. For example, the ward’s two part-time nurse unit managers, allied health staff including the pharmacist, physiotherapists, speech pathologist and general staff, such as the ward clerk and wards persons, were included in the model of care. For example, a KRG member related:

*I discussed the pharmacy summary cards with the head pharmacist today, and he remarked that his department is very happy to produce the cards in large print on admission or the next day for older patients in our model of care study.*

Another nurse said:

*I discussed the model with two of the part-time physiotherapists, as well as the second part-time nurse unit manager today.*

The researcher also observed the wards person saying:
I will collect the pharmacy summary cards from pharmacy.

This was an indication of multidisciplinary participation in the model of care study.

4.3.4 The fourth step: Observing outcomes of these actions

The researcher observed the outcomes in action on the ward to understand why the nurses changed their practice in the way they did to accommodate structural constraints such as staffing levels involving time constraints in this medical ward setting.

Key concept: Empowerment to change practice

Several recurring comments expressed the nurses’ perception of the need to control time issues, such as the medication rounds. The nurses collaborated to incorporate the medication assessment regime educational sessions into their time schedule when administering the patients’ medications. For example:

I will give you your medications now Mrs X. Could you please look at your pharmacy summary card and check if it is the same as what I am giving you?

Could you please take out your pharmacy card and check if your new medication has been added?

The nurses also sought to incorporate the activities of daily living educational sessions into their time schedules when attending physical activities, especially during the morning shower activities. Nurses were observed encouraging, assisting and, most importantly, informing the patients as to why they needed to attend to these activities themselves, such as walking to the shower assisted by their walking frame to increase their functional capabilities prior to discharge home. For example:
Mrs X, you are doing really well, keep walking slowly. This is a good exercise for your legs and may help increase your circulation to prevent blood clots.

Mr X, could you try taking some deep breathing and coughing exercises please? Do you remember the exercises the physio explained to you yesterday? These may help to make it easier for your lungs to breathe.

Another constraint was the time required to address aspects of care issues the patients reported they were not satisfied with. The researcher observed this was overcome when the reference group member’s agreed to focus on work time issues to change the nursing care practice. The data suggested the sharing of information in the weekly KRG meetings through reflection assisted the nurses to collaborate and understand the model of care procedures, including the evaluation instruments clearly. An example was the administration of the evaluation instrument for medications, that is, the medication regime assessment incorporating educational sessions with patients, during the medication rounds, as discussed in section 3.21.

4.3.5 The fifth step: Reflection on these outcomes

Key concept: Evaluating practice

The KRG reflected on the model of care outcomes to ensure the model was on schedule in addressing two of the issues older patients had identified as aspects of nursing care they were not satisfied with in the findings from stage 1. The group also reflected on whether the model had improved the quality of nursing care in these two areas of care, and whether the nurses were satisfied with the care they had agreed to provide.
The KRG noted they were on schedule according to their planning decisions, and that they had addressed two of the issues identified by patients with which they were not satisfied. Comments by the KRG nurses confirmed other nurses on the ward were satisfied with the model. For example:

The staff were very enthusiastic about the implementation of the model. They have all been attending the educational sessions and documenting these procedures on the evaluation instruments.

Another KRG nurse member expressed:

The nurses were happy with the recruitment of patients to date and the educational sessions used to implement the model.

A member of the KRG gave affirmation to the researcher by stating:

I will present the findings of the model evaluation instruments to all nursing staff and management.

The KRG gave feedback to all nursing staff and management on the findings from the evaluation instruments incorporating the Barthel ADL modified index, medication assessment regime and the satisfaction CAS questionnaire. These instruments showed an overall significant difference between the stage 1 and the stages 2 and 3 patient group, with the stages 2 and 3 patient group being more satisfied overall with the care they received, as discussed in section 4.4.

4.3.6 The sixth and final step in the PAR cycle: Replanning

Key concept: Planning for sustainable change

The researcher encouraged the KRG members to continue their meetings to reflect on the previous steps and to plan the next step in their model of care PAR cycle. This
concept of critical reflection was emphasised at every step during the model of care PAR process. The nurses were very pleased with the findings of increased satisfaction in the areas of care they had addressed during their model of care study, and indicated they would continue this process. For example:

*These findings are really good.*

*We have decided to continue the pharmacy summary card administration on admission or the next day, as well as encouraging and informing older patients of why they need to attend to activities of daily living for themselves while in hospital when appropriate.*

4.3.7 Follow up: Effectiveness of the PAR process

The researcher contacted the KRG members six months post PAR implementation of the new model of care, to reflect with them on the model of care outcomes. The group related that the nursing staff had reflected on the findings from the model outcomes, and collaborated with all ward nursing staff to continue the use of the pharmacy summary cards, as well as encouraging self-care activities of daily living when appropriate with all patients on their medical ward. This demonstrated the nurses’ commitment to continuously learning from reflection on their practice to improve care.

4.4 CAS questionnaire results

Stage 1 results of the CAS questionnaire are presented for importance and satisfaction, while the stages 2 and 3 results are presented for the satisfaction component only. A between groups ANOVA was performed, comparing satisfaction scores on each subcategory for stage 1 patient group and stages 2 and 3 patient group. This also
occurred for nurses. Between group comparisons were also made between nurses and patients on satisfaction.

A comparison of mean scores for patients and nurses for satisfaction regarding the four categories, doctors’ orders, physical care, psychosocial care and discharge planning, indicates both nurses and patients were highly satisfied with the implementation of doctors’ orders (see Table 13, for mean scores) during stages 2 and 3. Physical care was rated highly by patients, nurses rated their opportunity to provide physical care as most satisfied. Regarding psychosocial care, patients indicated they were highly satisfied during stages 2 and 3, whereas nurses were moderately satisfied. As shown in Table 13, discharge planning was rated highly by patients but nurses were only moderately satisfied with the care they were able to provide during stages 2 and 3.

4.4.1 ANOVA results for CAS questionnaire

Stage 1 and stages 2 and 3 patient group differences on satisfaction

Significant differences were found on the four categories overall, comparing stage 1 and stages 2 and 3 patient groups (Wilks’ Lambda = 0.016, df = 4,208, p<0.001). Significant differences were found between the two patient groups (stage 1 and stages 2 and 3) on satisfaction for all categories except doctors’ orders, with stages 2 and 3 group more satisfied than stage 1 group (p<0.001), as shown in Table 14. Tables 12 and 13 show mean score ratings were generally moderate to high, although ratings were in the lower range for discharge planning in stage 1.
Stage 1 and stages 2 and 3 nurse group differences on satisfaction

No significant differences were found between nurses' perceptions of opportunities to provide care during stage 1 compared with stages 2 and 3 on any categories (see Table 14 for summary of results). Table 13 shows means scores for both groups were generally high, although ratings were moderate for psychosocial care and discharge planning.

Table 12 Means, range and standard deviations for the four categories of satisfaction for the two groups, stage 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>mean</th>
<th>min</th>
<th>max</th>
<th>sd</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical care</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient (n=41)</td>
<td>3.35</td>
<td>2.00</td>
<td>5.00</td>
<td>.71</td>
</tr>
<tr>
<td>Nurse (n=14)</td>
<td>4.07</td>
<td>3.00</td>
<td>5.00</td>
<td>.60</td>
</tr>
<tr>
<td><strong>Psychosocial care</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient (n=41)</td>
<td>3.87</td>
<td>3.00</td>
<td>5.00</td>
<td>.71</td>
</tr>
<tr>
<td>Nurse (n=14)</td>
<td>3.82</td>
<td>2.00</td>
<td>5.00</td>
<td>.67</td>
</tr>
<tr>
<td><strong>Doctors' orders</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient (n=41)</td>
<td>4.79</td>
<td>4.00</td>
<td>5.00</td>
<td>.37</td>
</tr>
<tr>
<td>Nurse (n=14)</td>
<td>4.14</td>
<td>3.00</td>
<td>5.00</td>
<td>.59</td>
</tr>
<tr>
<td><strong>Discharge planning</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient (n=41)</td>
<td>2.80</td>
<td>0.00</td>
<td>5.00</td>
<td>1.55</td>
</tr>
<tr>
<td>Nurse (n=14)</td>
<td>3.86</td>
<td>2.00</td>
<td>5.00</td>
<td>.77</td>
</tr>
</tbody>
</table>
Table 13 Means, range and standard deviations for the four categories of satisfaction for the two groups stages 2 and 3

<table>
<thead>
<tr>
<th>Variable</th>
<th>mean</th>
<th>min</th>
<th>max</th>
<th>sd</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical care</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient (n=60)</td>
<td>4.70</td>
<td>4.00</td>
<td>5.00</td>
<td>.30</td>
</tr>
<tr>
<td>Nurse (n=13)</td>
<td>4.03</td>
<td>3.00</td>
<td>5.00</td>
<td>.58</td>
</tr>
<tr>
<td><strong>Psychosocial care</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient (n=60)</td>
<td>4.46</td>
<td>3.00</td>
<td>5.00</td>
<td>.45</td>
</tr>
<tr>
<td>Nurse (n=13)</td>
<td>3.85</td>
<td>3.00</td>
<td>5.00</td>
<td>.56</td>
</tr>
<tr>
<td><strong>Doctors’ orders</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient (n=60)</td>
<td>4.76</td>
<td>4.00</td>
<td>5.00</td>
<td>.34</td>
</tr>
<tr>
<td>Nurse (n=13)</td>
<td>4.40</td>
<td>4.00</td>
<td>5.00</td>
<td>.42</td>
</tr>
<tr>
<td><strong>Discharge planning</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient (n=60)</td>
<td>4.80</td>
<td>3.00</td>
<td>5.00</td>
<td>.44</td>
</tr>
<tr>
<td>Nurse (n=13)</td>
<td>3.77</td>
<td>3.00</td>
<td>5.00</td>
<td>.81</td>
</tr>
</tbody>
</table>
Table 14 Summary of ANOVA results comparing differences between patients’ stage 1 and stages 2 and 3, and nurses’ stage 1 and stages 2 and 3 on the four categories of satisfaction

<table>
<thead>
<tr>
<th>Source</th>
<th>MS Effect</th>
<th>df</th>
<th>MS Error</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patients</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>44.96</td>
<td>1,100</td>
<td>0.26</td>
<td>174.4</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td>Psychosocial care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>8.52</td>
<td>1,100</td>
<td>0.32</td>
<td>26.41</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td>Doctors’ orders</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>1.38</td>
<td>1,100</td>
<td>0.13</td>
<td>0.11</td>
<td>0.74</td>
</tr>
<tr>
<td>Discharge planning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>97.22</td>
<td>1,100</td>
<td>1.083</td>
<td>89.79</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td><strong>Nurses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>1.73</td>
<td>1,65</td>
<td>0.27</td>
<td>0.06</td>
<td>0.80</td>
</tr>
<tr>
<td>Psychosocial care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>.64</td>
<td>1,65</td>
<td>0.41</td>
<td>1.55</td>
<td>0.22</td>
</tr>
<tr>
<td>Doctors’ orders</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>.12</td>
<td>1,65</td>
<td>0.22</td>
<td>0.57</td>
<td>0.45</td>
</tr>
<tr>
<td>Discharge planning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>0.88</td>
<td>1,65</td>
<td>0.70</td>
<td>1.26</td>
<td>0.27</td>
</tr>
</tbody>
</table>

* significant at p<.001
Comparison of nurses versus patients

As seen in Table 14, ANOVA results demonstrated significant differences between nurses and patients on their ratings of satisfaction on all groups and categories in stages 2 and 3. Mean scores (see Table 12) show patients gave higher ratings than nurses.

Table 15 shows a summary of ANOVA results, comparing differences between nurses and patients on satisfaction during stages 2 and 3. For all four categories, there were significant differences between nurses’ and patients’ ratings (p<0.001, see Table 15 for summary of results). As seen in Table 13, mean scores were higher for patients than nurses.

<table>
<thead>
<tr>
<th>Source</th>
<th>MS Effect</th>
<th>df</th>
<th>MS Error</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical care</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>4.92</td>
<td>1,72</td>
<td>.13</td>
<td>37.22</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td><strong>Psychosocial care</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>4.03</td>
<td>1,72</td>
<td>.22</td>
<td>18.28</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td><strong>Doctors’ orders</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>1.41</td>
<td>1,72</td>
<td>.13</td>
<td>10.96</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td><strong>Discharge planning</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>11.41</td>
<td>1,72</td>
<td>.28</td>
<td>41.56</td>
<td>&lt;0.001*</td>
</tr>
</tbody>
</table>

* significant at p<.001

129
**Comparison of individual items on the CAS questionnaire**

**Table 16** Patients’ top 10 individual items most satisfied with compared to nurses’ top 10 individual items most satisfied with opportunities to provide care

<table>
<thead>
<tr>
<th>Patient top 10 individual items most satisfied with during acute hospital care</th>
<th>Nurse top 10 individual items satisfied with opportunities to provide care</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ask the dietician to serve me soft food that I am able to chew</td>
<td>1. Carry out doctors’ orders</td>
</tr>
<tr>
<td>2. Take my temperature and pulse</td>
<td>2. Take the patients temperature and pulse</td>
</tr>
<tr>
<td>3. Give or assist me with a daily bath</td>
<td>3. Notice changes in patient’s condition and report them</td>
</tr>
<tr>
<td>4. Provide privacy during my bath and treatments</td>
<td>4. Allow the patients to make decisions about their own care</td>
</tr>
<tr>
<td>5. Help me with grooming, such as care of my nails, hair and/or shaving</td>
<td>5. Notice when the patients are in pain and give them medications if ordered</td>
</tr>
<tr>
<td>6. Change my position frequently</td>
<td>6. Change the patients position frequently</td>
</tr>
<tr>
<td>7. Teach me about the medications that I will be taking at home</td>
<td>7. Observe the effects of treatments ordered by the physician</td>
</tr>
<tr>
<td>8. Be sure I have a copy of my diet</td>
<td>8. See that the bed pan or urinal are provided when needed</td>
</tr>
<tr>
<td>9. Notice when I am in pain and give me medications if ordered</td>
<td>9. Help the patients in and out of bed</td>
</tr>
<tr>
<td>10. Help me in and out of bed</td>
<td>10. Tell the patient’s doctor that the patient is worried about their condition</td>
</tr>
</tbody>
</table>

As seen in Table 16, patients and nurses both rated individual care activities associated with the CAS questionnaire categories of implementation of doctors’ orders and physical care activities within the top 10 items for most satisfied individual items. Compared to the findings presented in the individual items during stage 1 (see section 4.2.5), there was an increase in patient satisfaction for physical care activities. Care with which both patients and nurses were most satisfied included: take my temperature and
pulse; change my position frequently; notice when I am in pain and give me medication if ordered; and help me in and out of bed.

4.5 Changes in Barthel (ADL) index scores on admission to discharge

A repeated measures ANOVA was performed on results from patients’ stage 1 to stages 2 and 3, to determine whether implementation of the model resulted in improvements in Barthel ADL index scores from admission to discharge. The ANOVA showed significant differences overall between stage 1 and stages 2 and 3 patient groups on Barthel ADL scores (p<0.001) (see Table 17, for summary of results). There were significant differences between Barthel ADL scores from admission to discharge overall (p<0.001) within the groups. There was also a significant interaction between groups and Barthel ADL scores (p<0.001). That is, differences in Barthel ADL scores over time were dependent on the particular group. Post-hoc Scheffé tests showed differences in Barthel ADL scores from admission to discharge overall were significant only for stages 2 and 3 group (p<0.001). However, an inspection of mean scores shows stages 2 and 3 group had significantly lower Barthel ADL scores on admission, compared with the stage 1 group. Notwithstanding this difference, their functional independence improved to similar levels of the stage 1 group. However, the stage 1 group patients were relatively more independent on admission.
Table 17 ANOVA results for mean differences between stage 1 and stages 2 and 3 groups on Barthel ADL Index scores from admission to discharge

<table>
<thead>
<tr>
<th>Source Main effect</th>
<th>MS Effect</th>
<th>df</th>
<th>MS Error</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groups</td>
<td>377.4</td>
<td>1.98</td>
<td>16.36</td>
<td>23.1</td>
<td>&lt;.001*</td>
</tr>
<tr>
<td>Barthel</td>
<td>1154.4</td>
<td>1.98</td>
<td>16.36</td>
<td>100.8</td>
<td>&lt;.001*</td>
</tr>
<tr>
<td>Interaction (Groups*Barthel)</td>
<td>614.9</td>
<td>1.98</td>
<td>11.45</td>
<td>53.7</td>
<td>&lt;.001*</td>
</tr>
</tbody>
</table>

* significant at p<.001

4.6 Medication regime assessment of knowledge levels

A paired t-test was performed to determine whether implementation of the model of care resulted in improved medication regime knowledge levels of older patients. This test was conducted for the stages 2 and 3 patient group, and demonstrated significant improvements occurred in patients’ knowledge levels from admission to discharge (t= -18.78, df=59, p<0.001), as seen in Table 18.

4.7 Comparison of patient re-admissions stage 1 to stages 2 and 3

A comparison of patient re-admission rates of stage 1 group to stages 2 and 3 group is reported to determine the impact of the new model of care on re-admission rates. For stage 1 group, 6 out of 41 patients (15%) from the medical ward where the model of care was implemented were readmitted, while 5 out of 60 (8%) were re-admitted during stages 2 and 3. A chi squared analysis showed these frequencies were not significantly different ($\chi^2 = 2.41, df = 1, p = .12 = \text{NS}$) thereby suggesting that the implementation of the model of care did not significantly reduce the numbers of re-admissions.
CHAPTER V
DISCUSSION

5.0 Overview

The main aim of this study was:

- To improve the quality of nursing care for older acutely ill hospitalised medical patients through surveying perceived needs of older patients, their family members/carers and their nursing staff, and implementing and evaluating a new model of care using a participatory action research (PAR) process.

The discussion will follow the stages of the study by first discussing stage 1 and subsequently stages 2 and 3 PAR process.

5.1 Stage 1 CAS questionnaire for importance and satisfaction

In stage 1, the main objective was:

- To evaluate which aspects of nursing care were considered most important for older medical patients during acute hospitalisation from the perspective of the older patients, their family members/carers and their nurses, and their satisfaction with aspects of care provided.

Not all aspects of care were perceived as equally important, as documented on the CAS questionnaire.
5.1.1 Importance of care activities

A comparison of the three research cohorts on the CAS questionnaire indicated the three groups (older patients, their family members/carers and their nurses) gave a high rating of importance to the implementation of doctors' orders. Nurses and carers rated physical care, psychosocial care and discharge planning activities as more important aspects of care than did patients. Therefore, patients' expectations (as indicated by their mean score ratings) of the importance of care activities were generally not as high as those of nurses and carers for all categories, except for the implementation of doctors' orders. All cohorts rated implementation of doctors' orders as most important, with mean ratings reflecting very high importance for this activity. Nurses generally are responsible for ensuring the patients receive prescribed treatments so that their health status is maintained or improved as a result of their care, and it is a reasonable expectation this category would be rated highly by nurses. Generally, patients perceived the implementation of doctors' orders was the nurses' main role when providing nursing care. Due to the age of the patients and the majority of their family members/carers, and the commonly held view of older Australians that doctors play a major role in health care decisions on their behalf (Byles, 2000), it is not surprising that patients and their family member/carers still perceived the main responsibility of nurses to be following doctors' orders.

The provision of physical care activities was the next highest scored category on the CAS questionnaire, with the preparation for discharge planning and psychosocial care activities the least important category for all groups. All cohorts agreed that aspects of care relating to implementation of doctors' orders (technical aspects) and physical care
(attending to activities of daily living) were the main priorities. These results are consistent with findings from other research with older patients and nursing staff (Jacelon, 2002; Johnson, 1987; Reedy & Bragg, 2000; Von Essen & Sjoden, 1991).

5.1.2 Importance compared to satisfaction with care activities

A review of the findings of the importance of aspects of nursing care activities to satisfaction with those aspects indicates the mean scores for the provision of physical aspects of care were rated highly in terms of importance, but rated only moderately in terms of satisfaction. This finding is also consistent with earlier studies (Johnson, 1987; Von Essen & Sjoden, 1991). Carers and patients were less satisfied, compared with nurses’ ratings of opportunities to provide physical care. There are, therefore, some inconsistencies in this category between expectations related to the importance of the provision of physical care and the satisfaction with that care. Nurses seemed to feel they were providing a relatively high level of physical care activities; however, patients’ and carers’ expectations did not appear to have been met for this aspect of care.

Patients were highly satisfied with the implementation of doctors’ orders, with carers and nurses less satisfied, but it was still rated highly according to the mean scores on the questionnaire. This category was also rated highly in terms of importance, suggesting nurses are meeting patients’ needs in this area of nursing care. All three groups gave similar satisfaction ratings for psychosocial care and were moderately satisfied. Psychosocial care was generally not rated highly in terms of importance; therefore, when psychosocial care was not rated highly in terms of satisfaction, it was not an issue for the three groups. This lower rating may be explained by the qualitative data (the
comments written on the questionnaires) suggesting nurses were too busy to provide for non-acute aspects of nursing care due to time constraints involving staffing levels.

As nursing care issues are often cited in the media as a measure of the quality of care and hospital service (Higgins et al., 1997), this is an important concern for nurses. An Australian workforce study concerning nurses’ activities identified high levels of stress in nurses due to their heavy workloads resulting from staff shortages in the acute care setting (Reedy & Bragg, 2000). In response to this issue, the NSW Nurses’ Association commissioned a specific report prepared by Buchanan and Considine (2002) to explain why NSW nurses were leaving the nursing profession. One of the recommendations was a campaign directed at improving the conditions and nature of work performed by nurses in NSW public hospitals. This campaign was to ‘build on the widespread commitment to improving the quality of service provided in the NSW public health system’ (Considine & Buchanan, 2002, p. 48) within two years. Several short-term recommendations involved NSW nurses’ pay be increased, and ‘that extra resources, especially specialised nurse education resources, be devoted as a matter of urgency to improving levels of on-the-job training and support provided for new recruits in their first year of employment’ (Buchanan & Considine, 2002). The Australian Nursing Federation, the Australian Nursing Council, the Royal College of Nursing and the Australian Council of Deans of Nursing have called on the Federal Minister for Education to fund an additional 800 undergraduate nursing places over the next two years. One of the recommendations of the National Review of Nursing Education was to address the predicted 30,000 nursing vacancies in hospitals over the next four years, thereby reducing the heavy workload of nurses (Armstrong, 2002).
The findings that lower priorities were allocated to the category of psychosocial care activities may also be explained by patients’ perceptions that their doctors, and not they themselves or nurses, were responsible for decisions relating to their care. Jacelon’s (2002) findings are consistent with these findings that older patients perceived doctors were the main influence in providing their health care needs, while nurses’ responsibilities were mostly concerned with implementation of doctors’ orders and providing physical care activities. However, nurses are trained to take a holistic approach to the care of patients, encompassing the physical, psychosocial and spiritual components of health (Nolan & Hazelton, 1996). Evidence is growing about the link between physical and psychological health care, and that a change in one may affect a change in the other. Therefore, an increase in the nurse-patient relationship due to the nurses increasing their educational sessions regarding a patient’s functional capabilities may increase the patient’s psychosocial perceptions of the care provided for them.

All three groups allocated a rating to their discharge planning satisfaction at a moderate or low range, suggesting discharge planning needs improvement. However, this aspect of care was not rated highly by patients and carers in terms of importance, indicating expectations met the needs for these groups. One possible explanation for the lower priority given by patients for discharge planning activities that emerged from the qualitative data findings was that many patients do not see the relevance of this aspect of nursing care in the early stages of their hospitalisation. They consider this as the domain of other health staff, such as community-based staff or the role of their family members/carers closer to the discharge date. These findings are consistent with those of Reedy and Bragg (2000), who identified these commonly held perceptions of older Australians in their discharge planning survey of Australian family carers. Nurses were
the only group who rated discharge planning relatively highly in terms of importance, yet their satisfaction ratings indicated they were only moderately satisfied with the care they were able to provide in this category. Time constraints and the shared nature of this role of discharge planning were cited as the reasons for the lower satisfaction ratings. These time constraints may be explained by factors such as inadequate staffing levels, increased complexity of care (comorbidities) and lack of funding (Duffield & Lumby, 1994; Fagin, 2001; Williams, 1998).

Incongruencies between the level of importance with aspects of care activities and the level of satisfaction with those activities were also recognised by identifying high levels of importance and low levels of satisfaction. A detailed examination of the individual items showed some discrepancies between the relative importance of a number of the care activities and the satisfaction with the care provided. For example, patients listed aspects related to medication as important, but they were not satisfied with the care provided. This was also the case with some aspects related to physical care activities discussed earlier. It is important to have congruence between importance and satisfaction, because if the patient’s perception is that a particular aspect of care is important and they are not satisfied with this aspect, it may lead to a lack of compliance in treatment regimes and failure to seek prompt medical attention (Greeneich, Long, & Miller, 1992). It is equally important that congruence between nurses and patients occurs in terms of satisfaction. Nurses’ satisfaction with their clinical practice on the ward and the care they are able to provide for their patients is directly related to their satisfaction with nursing care (McGillis Hall, Doran, Baker, Pink, Sidani, O’Brien-Pallas, & Donner, 2001). Therefore, it is reasonable to presume the nurses’ satisfaction
with nursing care may influence patient outcomes, as nursing care practice influences the quality of care interactions with patients (McGillis Hall et al., 2001).

5.1.3 Influence of age on importance and satisfaction ratings

Patient CAS questionnaire responses were also analysed according to age: the young-old group were aged 65 to 80 years, and the old-old group were aged over 80 years. The older group gave higher importance ratings than the younger group overall on the four categories of care activities. One possible reason is that older people generally require more assistance with physical care, such as bathing and toileting. They may also have chronic multiple illnesses (comorbidities) and be more dependent on nurses for physical care. Therefore, due to their vulnerability and sensitivity to receiving assistance with physical care, this component of care may be a greater priority for the old-old group compared with the young-old group. There were significant differences between the two groups on satisfaction with physical care, with the older group more satisfied than the younger group. These findings also reflect those of other research, which suggests older patients may be less critical of the care they receive than younger patients (Wilde-Larsson, 1999). However, it may also reflect that nursing staff are more aware of the dependence needs of older patients, and may have given less intensive care to the younger patients, who were possibly more independent. Satisfaction ratings with psychosocial care, implementation of doctors’ orders and discharge planning activities showed no significant differences between the two age groups.
5.2 Stage 1 implications and recommendations for nursing practice

Generally, nurses were providing high quality of care in the four categories of care activities that they, family members/carers and patients perceived as important activities. However, the findings from stage 1 indicate that older patients and their family members/carers were only moderately satisfied with the provision of physical care activities. This finding suggests this aspect of care is in need of improvement, particularly for patients 65 to 70 years, who were less satisfied, possibly because they did not understand the reasons for encouraging independence. Patient education, by encouraging and providing the reasons for self-care activities, and the place of self-care activities in improving functional activities prior to discharge, may also assist in changing expectations regarding the provision of physical care activities. Previous studies have found nurses need to ensure they fulfil a greater role as educators when providing nursing care in the hospital setting (Ryan & Chambers, 2000; Stevenson, 1999).

Nurses often believe change to their practice is not possible because of constraints, such as time, to perform certain activities due to staffing levels and the increased pressure for early discharge concerning the patient’s length of hospital stay (Buchanan & Considine, 2002).

One recommendation to address the findings from stage 1 is to routinely provide patients with education and assistance with their physical care activities during their acute hospital stay. This may improve the quality of care provided by nurses as well as
improve the patients’ health care outcomes, including their perception of satisfaction with the nursing care provided. Additionally, the increased verbal interaction due to educational sessions provided to the patient may result in increased psychosocial satisfaction.

The PAR process is also recommended to encourage and support nursing staff to review their practice and to plan, implement and evaluate a new model of care in order to improve the quality of nursing care provided for older patients in the acute care setting.

5.3 Stages 2 and 3 of the PAR process

In stages 2 and 3, which were conducted concurrently, the two main objectives were:

- To develop and implement a model of care that addressed the identified nursing care needs and priorities of older patients through a PAR process; and

- To determine whether the implementation of the chosen model of nursing care, employing PAR, addressed the identified nursing care needs and priorities, and resulted in increased patient satisfaction and improved health care for older patients.

The purpose of action research is to implement change and generate new knowledge (Hart & Bond, 1995; Holter & Schwartz-Barcott, 1993). The PAR process in this study brought together the researcher and nurses to reflect on the stage 1 findings and identify potential issues, to plan to improve the quality of care, to take action to address these identified issues, to reflect on these outcomes and to replan the nursing care provided.
The evaluation of the model of care in this study during the PAR process (through minutes of meetings and field notes) yielded qualitative data that provided thick, rich descriptions from which several key concepts emerged, while the Barthel ADL modified index, medication assessment regime and the satisfaction CAS questionnaire findings yielded quantitative data. A discussion of the qualitative data from stages 2 and 3 is now presented, followed by a discussion of the quantitative data, that is, the evaluation instruments from stages 2 and 3.

5.3.1 PAR meeting minutes and field notes

The findings of the qualitative data from the meeting minutes and field notes indicated the nurses reflected on the findings from stage 1, and noted several issues the patients were not satisfied with regarding the nursing care provided during their acute hospital stay. The key concepts that emerged from the PAR process for nurses were: barriers to change, enthusiasm for change, collaboration in planning, empowerment in planning, expanding knowledge, empowerment to change practice, evaluating practice and planning for sustainable change. These key concepts are discussed within Wadsworth’s (1997) six steps in the action research cycle, as presented in section 3.18.

5.3.1.1 The first step of the PAR cycle: Reflection

The key concept of barriers to change emerged with the nurses’ perception of their current nursing practice environment, with several members of the nursing staff stating their concerns. These nurses’ comments covered issues concerning time constraints and nursing staff levels that reduced their ability to perform nursing care procedures. The data suggested they were not confident about their ability to change their nursing care practice, and this may have been a reflection of these particular nurses’ tendency to
resist change. Time constraints to perform procedures were also noted as a major restriction in a recent study by Gerrish and Clayton (2004) in achieving evidence-based practice changes. Insufficient time has been identified consistently throughout the literature (Duffield & Lumby, 1994; Fagin, 2001; Gerrish & Clayton, 2004; Janiszewski Goodin, 2003; Williams, 1998) as a major obstacle to changing practice. Considering the high dependency of many older patients with their comorbidities and rapid patient turnover, as well as the current staff shortage (Janiszewski Goodin, 2003), the situation is unlikely to change in the short term.

The challenge for this study was to develop various strategies, whereby the nurses were supported in changing their nursing care practice to improve the quality of care provided as part of their clinical ward practice. Gerrish and Clayton’s (2004) findings indicated nurses perceived their various colleagues not to be particularly supportive of changing practice, with managers being seen as the least supportive. However, on this particular medical ward, the managers were very supportive, and encouraged the clinical nurses to create changes to their practice. Robbins and colleagues attribute resistance to change to the nurse’s fear of losing something already possessed (Robbins et al., 1997). Change may also threaten the investment the nurse has already made in the existing ward setting. The more the nurse has invested in the current ward setting, the more resistance to change may occur because of the fear of loss of status, authority, personal convenience or other benefits of value (Robbins et al., 1997). Other barriers to change may include, ‘decreased resources, lack of support, poor communication mechanisms, or pressures to get the day-to-day work done’ (Grossman & Valiga, 2000, p. 151).
The nurses needed encouragement and support to be enthusiastic in order to change their nursing care practice. The meeting minutes and field notes suggest the nurses were encouraged by the KRG members to reflect on the nursing care they were providing, to plan the issues to be addressed to improve care, and to take action to develop and implement this change in their nursing care practice.

Lewin (1951) described planning change in practice as a three-stage change process:

- **Unfreezing, in which people are preparing for change;**
- **Moving, in which people have accepted the need for a change and actually engage in the change; and**
- **Refreezing, where the new change is integrated into the system and becomes part of the new culture or norm** (as cited in Grossman & Valiga, 2000, p. 150).

Unfreezing or planning for change in this instance involved giving the nurses encouragement and support to move toward change through strategies such as creating a reflective practice, that is, a PAR process to identify issues to be addressed (Wadsworth, 1997). The nurses worked through unfreezing (planning), moving (action) and refreezing (observing outcomes of these actions) phases of organisational change (Lewin, 1951). This change process was achievable on this medical ward because the nurses worked through ways to deal with them, and resistance to change was relatively minimal. According to the emerging data, several nurses on this particular medical ward were very enthusiastic about organising a group to plan new strategies to improve nursing care for their older patients.
The next concept that emerged from the data demonstrated this enthusiasm. This key concept involved the nursing staff’s enthusiasm to change the nursing care provided for their older patients. This concept emerged during meetings when the nurses related their perceptions of how to control work time issues. For example: ‘As a group we can focus on one or two issues to change our nursing care.’ The nurses agreed to form a reference group to facilitate the PAR process to develop, implement and evaluate changes to improve nursing care for their older patients. Kemmis & McTaggart (1988) say one appealing aspect of employing PAR is the knowledge that change evolves from those most affected by it. The nurses initiated the changes in their practice through collaboration and reflection as a group. Therefore, the group ownership of the process enhanced the change process. Group action to change practice was consistent with Robbins and colleagues’ discussion, which described the ability of internal members of a group who act as change agents as more thoughtful, because they must live with the consequences of their actions (Robbins et al., 1997). Group leaders, such as those who volunteered to participate in a reference group, need to ‘help others see the need for change, work with others to implement the change, evaluate the effect of change, and participate in each stage of the change process’ (Grossman & Valiga, 2000, p. 149).

5.3.1.2 The second step of the PAR cycle: Plan

The key concept of collaboration in planning was evident when three nurses agreed to participate in the KRG facilitated by the researcher to collaborate to change the way they practised to improve nursing care. The formation of the KRG to develop, implement and evaluate the new model of care empowered the nurses through reflection and collaboration to focus on the issues identified in stage 1 that needed to be addressed, in order to improve the quality of nursing care. This plan was consistent with
Wadsworth (1997) and Tripp’s (1990) recommendation to adopt a collaborative question-raising, problem-solving style when working in or with a reference group, because usually only a group is sufficiently powerful to effect change.

It emerged from the data that the nurses reflected on the findings from stage 1 to identify two issues to be addressed in their model, stating it would be impossible to address more than two issues in the current ward environment. Berwick, Godfrey and Roessner (1990) and Nelson, Mohr, Batalden and Plume (1996) propose clinical nurses can achieve rapid improvements in results by making a series of limited changes and by carefully selecting process and outcome measures, which evaluate the impact of these changes. The KRG members collaborated to focus on how to evaluate the impact of their new model of care and, as a group, they designed the evaluation instruments in consultation with other clinical nursing staff on the selected ward.

A further key concept that emerged from the data during the plan step was empowerment in planning. This was manifested when the researcher presented several validated models of care for the nurses to select a model to address their individual ward issues, and was consistent with Redman and Jones (1998) suggestions to present a variety of strategies to assist and support the nurses to achieve their goals. In a recent United Kingdom study, Gerrish and Clayton (2004) also suggest the presentation of multiple strategies for the nurses to consider, to facilitate and promote changes to their practice. Following this presentation, the nurses made the decision that they preferred a patient-centred care philosophy based on Orem’s self-care model (2001), and to include the NICHE faculty project (1994) medication practice protocol as a framework to guide their model. The KRG nurses’ decision of the model of care, and their knowledge and
planning for the implementation and evaluation of the study, provided direction and established a common set of goals for the ward nurses to focus on. This plan was consistent with Wadsworth’s (1997) and Tripp’s (1990) suggestion that the reference group apply direction to identify the interests of those who are meant to be served by the actions being planned, provided or evaluated.

5.3.1.3 The third step of the PAR cycle: Action

This action step in the PAR cycle is consistent with Lewin’s (1951) ‘moving’ phase, where the nurses accepted the need for change and actually engaged in the change process. The key concept of expanding knowledge emerged as a frequently recurring concept. The nurses were consistently sharing their knowledge with other nurses on their ward concerning the model of care implementation strategies, as discussed in section 4.3.4. This is consistent with the view of Gaventa and Cornwall (2001, p. 73) that the role of PAR was ‘to empower people [nurses] through the construction of their own knowledge’. The nurses were also consistently sharing their knowledge with their patients during the educational sessions (see section 4.3.4). Orem’s theory of nursing systems was consistent with this action where a supportive/educative system was developed. It emerged from the data that patients required repeated education, encouragement, reassurance and reinforcement of their activities of daily living where appropriate to regain their self-care activities during their acute medical ward stay. The data from the meeting minutes and field notes indicated all nurses became more focused on their patients throughout the model of care process and subsequently, became more involved in their individual patient care needs, ultimately providing a patient-centred philosophy of care (Binnie and Titchen, 1999) based on Orem’s self-care model (Orem, 2001).
5.3.1.4 The fourth step: Observing outcomes of these actions

The *observing outcomes of these actions* step in the PAR cycle is consistent with Lewin’s (1951) ‘refreezing’ phase, where the change (new model of care) has been integrated into the system or clinical ward practice. The key concept of empowerment to change practice emerges from the data. This data assisted in understanding why the nurses changed their practice in the way they did. The nurses demonstrated their willingness to change practice and to control work time issues by incorporating the educational sessions into the medication rounds, and encouraging self-care physical activities during the activities of daily living sessions.

The nurses changed their practice to a more patient-centred care approach by encouraging the patients to assist in planning their own care, by participating in the assessment of their ADL, and by asking them to demonstrate their knowledge levels of their medication regime on admission and prior to discharge. For example, patients were asked to relate their pre admission activities of daily livings on admission, then asked what activities they were able to achieve at admission and were assessed again prior to discharge. It emerged from the data that by permitting the patient to take an active part in the plan of care, nurses were able to support the patient’s role in their acute care recovery, and allow the patient to feel they were an integral part of the team involved in the care plan. The data suggest the relationships between nurses and older patients were generally very agreeable, and the nurses spoke positively about the support they offered the patients in helping them to manage their activities of daily living and education regimes regarding the administration of medications.
5.3.1.5 The fifth step in the PAR cycle: Reflection on these outcomes

The key concept that emerged in this step was evaluating practice. The data suggest the KRG members reflected on outcomes of the implementation of the model of care to ensure the model of care was on schedule, according to their decision to address two of the issues older patients had identified as aspects of nursing care they were not satisfied with in the findings from stage 1. This was consistent with Binnie & Titchin’s (1999) patient-centred philosophy, where they specifically included a reflective practice to encourage nurses to critically analyse what happened in practice. The reference group also reflected on the model of care process, to determine whether the model had improved the quality of nursing care and whether the nurses were satisfied with the care they had agreed to provide. This action was consistent with Wadsworth’s (1997) and Tripp’s (1990) suggestion that the perspective of the reference group involves a profound respect for those who belong to the group and recognition of their viewpoint, feeling, beliefs, ideas, opinions and attitudes. As the emerging data revealed, the KRG members leading the changes in the nursing care were not in a position of authority, but through the PAR process, they were able to influence change. The group action involved during the PAR process appeared to assist the nurses in identifying their strengths and increasing their self-confidence to overcome barriers to change their nursing care practice. As stated by Kemmis and McTaggart (1982, p. 15) ‘the importance of the group in action research cannot be over emphasised’.

The PAR process to develop and implement the new model of care allowed the nurses as a group to evaluate the older patient’s needs by completing the modified Barthel’s ADL index to evaluate their functional capacity, by asking what activities they were able to attend prior to their admission to hospital, on admission and prior to discharge,
and the medication regime assessment to evaluate the patient’s knowledge levels and administration of medications on admission and prior to discharge. These evaluation assessment instruments also allowed the nurses to form a holistic perspective of the patient, providing the nurse and older patient with an opportunity to develop a relationship and negotiate on the type of care that would meet the patient’s self-care needs, ultimately incorporating a patient-centred care philosophy based on Orem’s self-care model.

The data confirm Orem’s belief that a supportive-educative nursing intervention can increase an individual’s self-care ability (Orem, 2001). The intervention, based on a patient-centred care philosophy and Orem’s self-care model incorporating the ACE model NICHE faculty project medication practice protocol, guided the support and education given to older patients during the model process, and provided an opportunity for the nurses to assess self-care activities when appropriate during their acute medical ward stay. The nurse-patient relationship was strengthened when the nurses assisted the patient by educating, guiding, supporting, and providing a developmental environment for the patient. The underlying strategy guiding the intervention was that nurses allowed each older patient the time to express their individual capabilities regarding functional activities of daily living and medication knowledge levels, as they attended to the modified Barthel’s ADL index and the medication assessment regime evaluation instruments. The data suggest the KRG members reflected on the model of care and agreed it had produced changes to their practice on the ward, which generally represented benefits to the older patients and increased clinical ward nursing staff’s satisfaction with the care they were able to provide.
The emerging data also supported the utility of this new model of care in enhancing satisfaction levels with nursing care activities during acute hospitalisation for older patients. Consequently, the added focus on individual care promoted more positive feedback from older patients. Overall, the emerging data from the meeting minutes, and recordings made by the researcher from the field notes relating to the development, implementation and evaluation of the model of care, confirm that older patients and nursing staff were more satisfied with the care provided during the implementation of the new model of care study. Specifically, the implementation of educational sessions during the model of care PAR process not only improved the older patient’s functional activities and knowledge levels of their medication regime prior to discharge, but by repeatedly explaining procedures, nurses became more involved with their individual patient’s care, developing a patient-centred care relationship.

5.3.1.6 The sixth and final step in the PAR cycle: Replanning

The key concept emerged as planning for sustainable change. The emerging data indicated the researcher encouraged KRG members to continue their meetings to reflect on the previous steps and to plan the next step in their model of care PAR cycle. Wadsworth (1997) and Tripp (1990) recommend reference groups continually reflect on previous group meetings to replan further actions for change. This concept of critical reflection was emphasised at every stage during the model of care PAR process. The KRG members’ plan was to continue to administer the pharmacy summary cards, not only to older patients but to include all patients admitted to their medical ward, if the staff considered the patient eligible to participate.
5.3.2 Stages 2 and 3 CAS questionnaire for satisfaction

The findings of the CAS questionnaire indicated a significant increase in patient satisfaction with physical care and discharge planning during the stages 2 and 3 evaluation process. Patients rated physical care activities highly, while nurses rated their opportunity to provide physical care as most satisfied. Discharge planning was rated highly by patients, but nurses were only moderately satisfied with the care they were able to provide in stages 2 and 3. However, this was an improvement when compared to the findings from stage 1, where nurses rated satisfaction with discharge planning as low to moderately satisfied with the care they were able to provide.

It was not surprising that satisfaction with activities related to doctors’ orders did not significantly improve, as patients were satisfied with this in stage 1. Patients and nurses rated implementation of doctors’ orders during stages 2 and 3 as highly satisfied, suggesting there were high levels of satisfaction with this indicator before and after the implementation of the model of care. This indicates nurses are consistently meeting older patients’ needs in this area of care, and is consistent with findings from other research with older patients and nursing staff (Jacelon, 2002; Johnson, 1987; Reedy & Bragg, 2000; Von Essen & Sjoden, 1991).

In relation to satisfaction with psychosocial care in stages 2 and 3, patients rated this category as highly satisfied, while nurses gave a rating of moderately satisfied. However, in stage 1, it was rated moderately by both groups, suggesting an improvement in satisfaction with psychosocial care by patients in stages 2 and 3. This improvement is consistent with the implementation of a conceptual model of care, where the PAR process encouraged nurses to focus on particular aspects of care, which
resulted in an improvement in satisfaction in areas that were lacking. It could be that increased communication between the nurse and patient occurred as a result of the educational sessions with the patients regarding their medication regimes and their activities of daily living sessions, where the nurses encouraged and explained why they should be more independent during their hospital stay and which resulted in an increased rapport between the patient and nurse, thereby increasing their perceptions of psychosocial support. Perhaps nurses did not realise the positive impact they were having on patients’ perceptions of psychological support through communication that occurred as part of the educational sessions, which could be why their satisfaction was lower than patients. This seemingly simple intervention had better than expected results. As stages 2 and 3 results section demonstrates, patients were more satisfied with the care provided, and nurses had more opportunity to provide nursing care.

5.3.3 Barthel ADL index stage 1 and modified index stages 2 and 3

There were overall significant differences between stage 1 and stages 2 and 3 groups on Barthel ADL scores, with only the stages 2 and 3 group showing significant improvements in ADLs between admission and discharge. These findings support the efficacy of the model in terms of its emphasis on physical care needs and knowledge regarding activities of daily living, with a resultant increase in older patients’ activities of daily living during their acute hospital stay. This is consistent with previous findings, which indicate the need for an initial assessment of functional activities of daily living on admission and the importance of adopting an educative focus when caring for older patients, because of the resultant increase in activities of daily living prior to discharge from hospital (Covinsky et al., 1998; Stevenson, 1999). The findings also demonstrate
how nurses’ commitment to actively encouraging activities of daily living, as well as stating a rationale for this activity, can have a positive effect on functional outcomes.

5.3.4 Medication regime assessment stages 2 and 3

The medication regime assessment instrument was used to assess medication knowledge on admission to the ward and prior to discharge during stages 2 and 3 only. Significant improvements in knowledge about medication regimes occurred during the period of hospitalisation. This provides support for the use of the model of care education regime to improve patient satisfaction by increasing the knowledge levels of their medication regime during their acute hospital stay. Again, this is consistent with a previous study to assess individual patient’s medication knowledge levels by Ryan and Chambers (2000), who reported participants scored higher on the medication test after an educational program compared to the pre-test results. It may help patients to feel they have more control over their health when they understand their medication regime. This hypothesis needs further testing.

5.4 Re-admission of patients: Stage 1 to stages 2 and 3

A comparison of patient re-admission rates during stage 1 to re-admission rates following stages 2 and 3 showed no significant reduction in the number of re-admissions to this selected medical ward during the model of care study. This could be due to a number of factors, including the complexities of older patients’ medical conditions, their multiple comorbidities, or because the model of care did not focus on enough aspects of nursing care to have a significant influence on issues related to re-admissions. Structural factors, such as pressure to discharge early, staffing levels and
nurses’ time constraints imposed by the current health care systems (Short et al., 1993),
may have influenced the re-admission rate of patients to this medical ward. Another
contributing factor could be the relatively low sample size during the implementation of
the new model of care on one medical ward.

5.6 Implications for nursing practice

If nurses focus on educating patients regarding their need to perform certain activities
while simultaneously providing other aspects of nursing care, it can lead to improved
patient knowledge, improved functional outcomes and improved patient satisfaction.
More satisfied patients may lead to more satisfied nurses, which may improve their
ability to cope with role stress and may ultimately improve the quality of care provided
(McGillis Hall et al., 2001). Although these nurses were clinically stretched to their
capacity on this busy medical ward, they collaborated through the PAR process to
reflect on the findings from stage 1 and plan how they could improve certain aspects of
care without compromising other aspects of care. This was demonstrated by increased
levels of satisfaction with their opportunities to provide care, as measured by the CAS
questionnaire evaluation instrument.

The model of care employed a PAR process, which incorporated educational sessions
for older patients concerning their medication regime and physical self-care activities.
These educational sessions increased the patient knowledge levels of their medication
regimes and improved their self-care activities of daily living as indicated by the
findings of the CAS questionnaire. These educational sessions were also considered
beneficial to individual patients, because they may have increased the older patient’s
sense of responsibility, independence and autonomy, which in turn may have increased
their satisfaction with psychosocial aspects of care provided, resulting in increased satisfaction with the quality of care provided.

Although only two issues were focused on in the model of care study, there were more than two issues with which patients were not satisfied during their acute hospital stay. Therefore, there is a need to address these issues in future studies to improve the quality of nursing care provided.

Another implication is that clinical nurses may improve the quality of care provided for their older patients if a structured approach, such as the PAR process, is applied in the ward setting. The PAR process may have improved nursing care in this study because:

- There was a group of nurses who wanted to effect change, that is, it did not come from management;
- The KRG members took it upon themselves to encourage other nurses on the ward to be involved in the model of care study. They motivated and communicated clearly how, when and where the model of care would be applied to their clinical practice;
- Most nurses employed on this medical ward were consistently employed during the model of care study;
- Nurses took ownership of the model of care. The researcher facilitated their ability to find solutions to the issues they wished to address;
- The model of care was built on evidence-based data gathered in stage 1; and
- The ward nurses had an incentive to see the model of care study through to completion, as they were aware that the effectiveness of the model would be measured during stages 2 and 3.
5.6 Limitations of the study

The study results, while encouraging, must be interpreted with care:

- The findings from this study do not apply to acutely ill older patients with confusion, mental illness or more than an early stage of dementia, or to non-acute hospital settings;

- The findings were confounded by the fact that five different hospitals were involved during stage 1 data collection. These hospitals had different models of care in operation and different settings and management structures. However, participant sample numbers averaged approximately 30 per hospital and, if each individual hospital were analysed, statistical power to detect significant findings would be compromised. One of the advantages of involving five hospitals was that the findings can be considered to be a broad reflection of the consumer and nurse perceptions in a large area of the study city;

- During stages 2 and 3, the model of care was developed, implemented and evaluated in only one acute medical ward which had volunteered to participate;

- This new model of nursing care was limited in that it was only able to address two of the patients’ issues identified as care they were not satisfied with during their acute hospital stay;

- The model of care did not reduce the re-admission rate of older patients significantly to the selected medical ward, perhaps due to the patients’ chronic and complex comorbidities, and structural issues, such as length of hospital stay, staffing levels and nurses’ time constraints imposed in the current health care systems (Short et al., 1993; AIHW, 2002; Buchanan & Considine, 2002);
- Also, the relatively small sample size may limit generalisability, which involved only one acute medical ward where there was a small, though not a significant, reduction in patient re-admission rates; and
- The model was only evaluated three months post implementation; therefore, there is a need to evaluate this model over one year to determine sustainability.

5.7 Conclusions

Results provided evidence for the efficacy of a model of care employing a PAR process, with increased patient knowledge levels regarding medication regimes, increased functional activities of daily living outcomes and increased satisfaction with the nursing care provided. Nurses were also more satisfied with opportunities to provide nursing care. They also demonstrated that a seemingly simple intervention (such as patient education on medication regime and ADL) could produce better than expected results.

This study was significant because it demonstrated the potential new models of care have to improve the quality of nursing care, such as for older patients in the acute medical ward setting, by acknowledging the perceptions of quality of care by older patients, their family member/carers and their nurses. While the PAR process during stages 2 and 3 of the study was challenging, the process addressed several issues raised by the older patients, their family members/carers and their nurses, and most outcomes were successfully achieved. Through the creation of the new model of care on the selected medical ward, the nurses were empowered to address the identified nursing care needs, and to take action to meet the needs of the older patients.
A patient-centred care philosophy based on Orem’s self-care model (2001) was demonstrated to be an appropriate conceptual model to address the issues of the perceptions of quality of care, providing successful improvements in the quality of care for older patients on this selected medical ward and improved older patients’ satisfaction with the care provided. As discussed previously, while increased patient satisfaction has the potential to lead to better patient outcomes, it is also likely that nurses who have satisfied patients are also likely to obtain greater nursing practice satisfaction, leading to superior quality of care. This study is significant because of its involvement of consumers, the older patients and their family members/carers, as well as their nurses. This follows the new public health approach, where consumers are encouraged to be more active participants in their own health care, and which considers that disadvantaged groups, like the older population, need better representation within the health care systems (AIHW, 2002).

5.8 Recommendations for future research

The present study suggests many ideas for further research:

- It recommends that the findings of this study be applied to develop guidelines for acutely hospitalised medical patients, particularly for issues relating to educational sessions, to increase the patient’s functional activities and knowledge levels of their medication regimes prior to discharge;

- It is further recommended that future research should focus on other issues older patients identified during the stage 1 findings as aspects of care they were not satisfied with during their acute hospital stay; and

- Future research should focus on issues of the sustainability of models of care.
Appendix 1

Selection Criteria for Patients
Elderly hospitalised patients needs study: patient information

Insert MRN sticker here

Current date:
Diagnosis:

Criteria for patient selection

1. Patient has more than mild dementia

2. Patient has a psychiatric illness (eg psychosis, depression)

3. Rehabilitation patient

4. Patient consented

YES   NO
Please tick one
Appendix 2

Information sheet – Patients, family members/carers and nurses
Patient information sheet for project titled

Nursing care for elderly patients during hospitalisation

You are invited to participate in this research project, as you are over 65 years and currently in hospital and receiving treatment for an illness. The study seeks your opinion of the nursing needs of elderly patients by completing a questionnaire asking you to rate the importance of various aspects of your nursing care. There are no right or wrong answers. Some people may think all of the behaviours are important, while others may believe few are important. You will also be asked to indicate your satisfaction with which these aspects of nursing care were provided during your hospital stay, and possible reasons for certain aspects of care not being provided (if this is the case).

There are no hazards involved in your participation in this project. A counsellor will be available should you become distressed during administration of the questionnaire. If the answering of this questionnaire reveals any treatment you consider inappropriate or poor quality and you wish to report it, please contact the Client Liaison Officer at Nepean Hospital (ph 4734 2286). Completion of the questionnaire should take no more than 45 minutes. If at any stage you feel unwell or too tired to answer questions, the interview process will cease immediately and resume at a more convenient time.

This is a research project and the information will be coded so that your responses are anonymous. Results will be analysed and published. It is important that you give frank answers. Your responses will be used to set priorities for nursing care and therefore improve the quality of care and satisfaction of both patients and staff.

The following are the names and contact details of the heads of the research team:
Associate Professor Esther Chang, Director of International and Entrepreneurial Developments, University of Western Sydney (UWS). Ph (02) 4570-1930
Dr Lynn Chenoweth, Professor of Aged Care Nursing, South Eastern Sydney Area Health Service and UTS Ph (02) 9639-0288

The following is the name and contact details of an independent person for queries/complaints:

Research and Ethics officer, Court Building, Nepean Hospital, P.O. Box 63, Penrith, NSW 2751. Tel (02) 47343441, Fax (02) 47343485
Carer information sheet for project titled

Nursing care for elderly patients during hospitalisation

You are invited to participate in this research project, as your family member is over 65 years and currently in hospital receiving treatment for an illness, and you spend the most time at the patient's bedside. The study seeks your opinion of the nursing needs of elderly patients by completing a questionnaire asking you to rate the importance of various aspects of nursing care. There are no right or wrong answers. Some people may think all of the behaviours are important, while others may believe few are important. You will also be asked to indicate your satisfaction with which these aspects of nursing care were provided during your family member's hospital stay, and possible reasons for certain aspects of care not being provided (if this is the case).

There are no hazards involved in your participation in this project. A counsellor will be available should you become distressed during administration of the questionnaire. If the answering of this questionnaire reveals any treatment you consider inappropriate or poor quality and you wish to report it, please contact the Client Liaison Officer at Nepean Hospital (ph 4734 2286). Completion of the questionnaire should take no more than 45 minutes.

This is a research project and the information will be coded so that your responses are anonymous. Results will be analysed and published. It is important that you give frank answers. Your responses will be used to set priorities for nursing care and therefore improve the quality of care and satisfaction of both patients and staff.

The following are the names and contact details of the heads of the research team:
Associate Professor Esther Chang, Director of International and Entrepreneurial Developments, University of Western Sydney (UWS). Ph (02) 4570-1930
Dr Lynn Chenoweth, Professor of Aged Care Nursing, South Eastern Sydney Area Health Service and UTS Ph (02) 9639-0288

The following is the name and contact details of an independent person for queries/complaints:
Ms L Lucas, Research and Ethics officer, Court Building, Nepean Hospital, P.O. Box 63, Penrith, NSW 2751. Tel (02) 47343441, Fax (02) 47343485
Nurse information sheet for project titled

Nursing care for elderly patients during hospitalisation

You are invited to participate in this research project, as you are a nurse who cares for elderly patients as part of your role. The study seeks your opinion of the nursing needs of elderly patients by completing a questionnaire asking you to rate the importance of various aspects of nursing care. There are no right or wrong answers. Some people may think all of the behaviours are important, while others may believe few are important. You will also be asked to indicate the opportunities you have to provide these aspects of care. If you are unable to provide some of these aspects of care, then please give possible reasons.

There are no hazards involved in your participation in this project. Completion of the questionnaire should take no more than 45 minutes.

Should the administration of this questionnaire reveal any treatment you consider inappropriate or poor quality, please contact the Client Liaison Officer at Nepean Hospital (ph 4734 2286).

This is a research project and the information will be coded so that your responses are anonymous. Results will be analysed and published. It is important that you give frank answers. Your responses will be used to set priorities for nursing care and therefore improve the quality of care and satisfaction of both patients and staff.

The following are the names and contact details of the heads of the research team:
Associate Professor Esther Chang, Director of International and Entrepreneurial Developments, University of Western Sydney (UWS). Ph (02) 4570-1930
Dr Lynn Chenoweth, Professor of Aged Care Nursing, South Eastern Area Health Service and UTS Ph (02) 9639-0288

The following is the name and contact details of an independent person for queries/complaints:
Ms L Lucas, Research and Ethics officer, Court Building, Nepean Hospital, P.O. Box 63, Penrith, NSW 2751. Tel (02) 4734441, Fax (02) 4734483
Appendix 3

Consent form – Patients, family members/carers and nurses
PATIENT CONSENT FORM

NAME OF STUDY: Important aspects of nursing care as judged by elderly patients, their carers and nurses during hospitalisation

PRINCIPAL INVESTIGATOR(S):

Associate Professor Esther Chang, Director of International and Entrepreneurial Developments, University of Western Sydney Hawkesbury (UWSH). Ph (02) 4570-1930
Dr Lynn Chenoweth, Professor of Aged Care Nursing, South Eastern Sydney Area Health Service and university of Technology, Sydney Ph (02) 9639-0288

I..........................................................................................................................................................................
of..........................................................................................................................................................................

1. voluntarily give my consent to participate in the Study and acknowledge that I may withdraw from the Study at any time and that my refusal to take part in the Study will not affect my usual medical care;

2. understand that the Study will be conducted in a manner conforming with ethical and scientific principles set out by the National Health and Medical Council of Australia;

3. that the study will be carried out as described in the attached information sheet and I acknowledge that I have read and understood the information-sheets about the Study which was provided to me before I signed this consent and that I have received a copy of this consent form and information sheet;

4. that the general purpose, method and demands and the possible risks, inconveniences and discomforts which may occur to me during the Study have been explained to be by .................................................................

5. I understand that I will not be identified in any way, and my personal results will remain strictly confidential to the extent permitted by the relevant privacy laws.

6. I have been given the opportunity to have a member of my family or a friend present while the Study was explained to me.

7. I have been advised that the study has been approved by the Wentworth Area Health Service and South Eastern Sydney Area Health Service's Human Ethics & Research Committee, and the UWS Ethics Committee.

8. I understand that if I have any complaints or concerns, I may contact the Research and Ethics Officer, Ms S Bernays on (02) 47343441, (02) 47343485 quoting Registration No 2000/15

DATED ..................................................

Participant's Signature ......................................................................................

Witness Signature ...............................................................................................

Witness Name (printed)........................................................................................
FAMILY MEMBER CONSENT FORM

NAME OF STUDY: Important aspects of nursing care as judged by elderly patients, their carers and nurses during hospitalisation

PRINCIPAL INVESTIGATOR/S:
Associate Professor Esther Chang, Director of International and Entrepreneurial Developments, University of Western Sydney Hawkesbury (UWSH). Ph (02) 4570-1930
Dr Lynn Chenoweth, Professor of Aged Care Nursing, South Eastern Sydney Area Health Service and University of Technology, Sydney Ph (02) 9639-0288

I, ................................................................................................................................................................. of .................................................................................................................................................................

1. voluntarily give my consent to participate in the Study and acknowledge that I may withdraw from the Study at any time and that my refusal to take part in the Study will not affect my family member’s usual medical care;

2. understand that the Study will be conducted in a manner conforming with ethical and scientific principles set out by the National Health and Medical Council of Australia;

3. understand that the study will be carried out as described in the attached information sheet and I acknowledge that I have read and understood the information sheet about the Study which was provided to me before I signed this consent and that I have received a copy of this consent form and information sheet;

4. that the general purpose, method and demands and the possible risks, inconveniences and discomforts which may occur to me during the Study have been explained to be by ..............................................................................................................................................

5. I understand that I will not be identified in any way, and my personal results will remain strictly confidential to the extent permitted by the relevant privacy laws.

6. I have been given the opportunity to have a member of my family or a friend present while the Study was explained to me.

7. I have been advised that the study has been approved by the Wentworth Area Health Service and South Eastern Sydney Area Health Service’s Human Ethics & Research Committee, and the UWS Ethics Committee.

8. I understand that if I have any complaints or concerns, I may contact the Research and Ethics Officer, Ms L Lucas on (02) 47343441, (02) 47343485 quoting Registration No 2000/015

DATED .................................................................................................................................

Participant’s Signature .................................................................................................................................

Witness Signature .................................................................................................................................

Witness Name (printed) .................................................................................................................................
NURSE CONSENT FORM

NAME OF STUDY: Important aspects of nursing care as judged by elderly patients, their carers and nurses during hospitalisation

PRINCIPAL INVESTIGATOR/S:
Associate Professor Esther Chang, Director of International and Entrepreneurial Developments, University of Western Sydney Hawkesbury (UWSH).
Ph (02) 4570-1930
Dr Lynn Chenoweth, Professor of Aged Care Nursing, South Eastern Sydney Area Health Service and university of Technology, Sydney Ph (02) 9639-0288

I. ..........................................................................................................................................................................................................
of ...........................................................................................................................................................................

1. voluntarily give my consent to participate in the Study and acknowledge that I may withdraw from the Study at any time and that my refusal to take part in the Study will not affect my treatment as a member of the nursing staff;
2. understand that the Study will be conducted in a manner conforming with ethical and scientific principles set out by the National Health and Medical Council of Australia;
3. that the study will be carried out as described in the attached information sheet and I acknowledge that I have read and understood the information sheet about the Study which was provided to me before I signed this consent and that I have received a copy of this consent form and information sheet;
4. that the general purpose, method and demands and the possible risks, inconveniences and discomforts which may occur to me during the Study have been explained to be by .................................................................
5. I understand that I will not be identified in any way, and my personal results will remain strictly confidential to the extent permitted by the relevant privacy laws.
6. I have been given the opportunity to have a member of my family or a friend present while the Study was explained to me.
7. I have been advised that the study has been approved by the Wentworth Area Health Service and South Eastern Sydney Area Health Service's Human Ethics & Research Committee, and the UWS Ethics Committee.
8. I understand that if I have any complaints or concerns, I may contact the Research and Ethics Officer, Ms L Lucas on (02) 47343441, (02) 47343485 quoting Registration No 2000/15

DATED .....................................................

Participant’s Signature .................................................................

Witness Signature ........................................................................

Witness Name (printed)
Appendix 4

Mini-Mental State Examination
Mini-Mental State Examination (MMSE)

<table>
<thead>
<tr>
<th>Orientation</th>
<th>Score</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What is the</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year?</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Season?</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Date?</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Day?</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Month?</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>2. Where are we?</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>State?</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Country?</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Town or city?</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Hospital?</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Floor?</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

Registration
3. Name three objects, taking one second to say each. Then ask the patient all three after you have said them. Give one point for each correct answer. Repeat the answers until the patient learns all three

Attention and calculation
4. Ask for serial sevens. Give one point for each correct answer. Stop after five answers.
Alternate: Spell WORLD backwards

Recall
5. Ask for names of three objects learned in question 3. Give one point for each correct answer.

Language
6. Point to a pencil and a watch. Have the patient name them as you point.

7. Have the patient repeat "No ifs, ands, or buts"

8. Have the patient follow a three-stage command: "Take the paper in your right hand. Fold the paper in half. Put the paper on the floor."

9. Have the patient read and obey the following: "CLOSE YOUR EYES". (Write in large letters).

10. Have the patient write a sentence oh his/her own choice. (The sentence should contain a subject and a verb and should make sense. Ignore spelling errors when scoring).

11. Have the patient copy the figure below:
    (Give one point if all sides and angles are preserved and if the intersecting sides from a quadrangle)

Total score

[Diagram of a figure to be copied]
Appendix 5

Barthel Activities of Daily Living (ADL) Index
# BARTHEL ADL INDEX (BAI)

<table>
<thead>
<tr>
<th>FUNCTION</th>
<th>SCORES</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>O/A</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOWELS</td>
<td>□ 0</td>
<td>□ 0 Incontinent (or needs to be given enema)</td>
</tr>
<tr>
<td></td>
<td>□ 1</td>
<td>□ 1 Occasional accident (once a week)</td>
</tr>
<tr>
<td></td>
<td>□ 2</td>
<td>□ 2 Continent</td>
</tr>
<tr>
<td>BLADDER</td>
<td>□ 0</td>
<td>□ 0 Incontinent, or catheterised and unable to manage</td>
</tr>
<tr>
<td></td>
<td>□ 1</td>
<td>□ 1 Occasional accident (max. once per 24 hours)</td>
</tr>
<tr>
<td></td>
<td>□ 2</td>
<td>□ 2 Continent (for more than seven days)</td>
</tr>
<tr>
<td>GROOMING</td>
<td>□ 0</td>
<td>□ 0 Needs help with personal care: face, hair, teeth, shaving</td>
</tr>
<tr>
<td></td>
<td>□ 1</td>
<td>□ 1 Independent (implements provided)</td>
</tr>
<tr>
<td>TOILET USE</td>
<td>□ 0</td>
<td>□ 0 Dependent</td>
</tr>
<tr>
<td></td>
<td>□ 1</td>
<td>□ 1 Needs some help but can do something alone</td>
</tr>
<tr>
<td></td>
<td>□ 2</td>
<td>□ 2 Independent (on and off, wiping, dressing)</td>
</tr>
<tr>
<td>FEEDING</td>
<td>□ 0</td>
<td>□ 0 Unable</td>
</tr>
<tr>
<td></td>
<td>□ 1</td>
<td>□ 1 Needs help in cutting, spreading butter etc.</td>
</tr>
<tr>
<td></td>
<td>□ 2</td>
<td>□ 2 Independent (food provided within reach)</td>
</tr>
<tr>
<td>TRANSFER</td>
<td>□ 0</td>
<td>□ 0 Unable -no sitting balance</td>
</tr>
<tr>
<td></td>
<td>□ 1</td>
<td>□ 1 Major help (physical, one or two people), can sit`</td>
</tr>
<tr>
<td></td>
<td>□ 2</td>
<td>□ 2 Minor help (verbal or physical)</td>
</tr>
<tr>
<td></td>
<td>□ 3</td>
<td>□ 3 Independent</td>
</tr>
<tr>
<td>MOBILITY</td>
<td>□ 0</td>
<td>□ 0 Immobile</td>
</tr>
<tr>
<td></td>
<td>□ 1</td>
<td>□ 1 Wheelchair independent, including corners etc.</td>
</tr>
<tr>
<td></td>
<td>□ 2</td>
<td>□ 2 Walks with help of one person (verbal or physical)</td>
</tr>
<tr>
<td></td>
<td>□ 3</td>
<td>□ 3 Independent</td>
</tr>
<tr>
<td>DRESSING</td>
<td>□ 0</td>
<td>□ 0 Dependent</td>
</tr>
<tr>
<td></td>
<td>□ 1</td>
<td>□ 1 Needs help but can do about half unaided</td>
</tr>
<tr>
<td></td>
<td>□ 2</td>
<td>□ 2 Independent (including buttons, zips, laces etc)</td>
</tr>
<tr>
<td>STAIRS</td>
<td>□ 0</td>
<td>□ 0 Unable</td>
</tr>
<tr>
<td></td>
<td>□ 1</td>
<td>□ 1 Needs help (verbal, physical, carrying aid)</td>
</tr>
<tr>
<td></td>
<td>□ 2</td>
<td>□ 2 Independent up and down</td>
</tr>
<tr>
<td>BATHING</td>
<td>□ 0</td>
<td>□ 0 Dependent</td>
</tr>
<tr>
<td></td>
<td>□ 1</td>
<td>□ 1 Independent (Bath: must get in and out unsupervised and wash self. Shower: unsupervised, unaided)</td>
</tr>
</tbody>
</table>

**SCORE:** [ ] [ ]
Appendix 6

Caregiving Activities Scale (CAS) Questionnaire
Patients, family members/carers and nurses
Patients

Caregiving Activities Scale (CAS) Questionnaire

Please rate how important you believe it is for nursing staff to provide care in the following areas during your hospital stay, and your satisfaction that this care was provided. If your satisfaction was low then please give possible reasons for this care not being provided.

<table>
<thead>
<tr>
<th>Importance</th>
<th>Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Little</td>
<td>Poor</td>
</tr>
<tr>
<td>Great</td>
<td>N/A</td>
</tr>
</tbody>
</table>

1. Take my temperature and pulse
   If Not provided, then why do you think this was the case?
   Importance: 1 2 3 4 5
   Satisfaction: 1 2 3 4 5

2. Give or assist me with a daily bath
   If Not provided, then why do you think this was the case?
   Importance: 1 2 3 4 5
   Satisfaction: 1 2 3 4 5

3. Assist me with the care of my mouth and teeth
   If Not provided, then why do you think this was the case?
   Importance: 1 2 3 4 5
   Satisfaction: 1 2 3 4 5

4. Provide me with a clean, comfortable bed
   If Not provided, then why do you think this was the case?
   Importance: 1 2 3 4 5
   Satisfaction: 1 2 3 4 5

5. Help me with grooming, such as care of my nails, hair and/or shaving
   If Not provided, then why do you think this was the case?
   Importance: 1 2 3 4 5
   Satisfaction: 1 2 3 4 5

6. Be sure that I have the necessary equipment – glass, towel, soap, blanket etc.
   If Not provided, then why do you think this was the case?
   Importance: 1 2 3 4 5
   Satisfaction: 1 2 3 4 5

7. Provide privacy during
   Importance: 1 2 3 4 5
   Satisfaction: 1 2 3 4 5
<table>
<thead>
<tr>
<th>Importance</th>
<th>Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Little</td>
<td>Great</td>
</tr>
</tbody>
</table>

8. Take special care of my skin so it does not become sore. *If Not provided, then why do you think this was the case?*

   1 2 3 4 5

   1 2 3 4 5

9. See that the unit is clean and tidy. *If Not provided, then why do you think this was the case?*

   1 2 3 4 5

   1 2 3 4 5

10. Allow me to make decisions about my care. *If Not provided, then why do you think this was the case?*

    1 2 3 4 5

    1 2 3 4 5

11. Help me to assume a comfortable or appropriate position. *If Not provided, then why do you think this was the case?*

    1 2 3 4 5

    1 2 3 4 5

12. Notice when I am in pain and give me medications if ordered. *If Not provided, then why do you think this was the case?*

    1 2 3 4 5

    1 2 3 4 5

13. Change my position frequently. *If Not provided, then why do you think this was the case?*

    1 2 3 4 5

    1 2 3 4 5

14. Observe the effects of treatments ordered by the physician. *If Not provided, then why do you think this was the case?*

    1 2 3 4 5

    1 2 3 4 5
<table>
<thead>
<tr>
<th></th>
<th>Importance</th>
<th>Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Little</td>
<td>Great</td>
</tr>
<tr>
<td>15</td>
<td>Consider my personal preferences when caring for me</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td></td>
<td>If Not provided, then why do you think this was the case?</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>See that the bed pan or urinal are provided when needed</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td></td>
<td>If Not provided, then why do you think this was the case?</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Help me maintain or restore normal elimination</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td></td>
<td>If Not provided, then why do you think this was the case?</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Check on bowel functioning and report problems to the doctor</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td></td>
<td>If Not provided, then why do you think this was the case?</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Help me in and out of bed</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td></td>
<td>If Not provided, then why do you think this was the case?</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Help me get necessary exercise while I am in the hospital</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td></td>
<td>If Not provided, then why do you think this was the case?</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Discuss with me the amount and type of activity I should have at home</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td></td>
<td>If Not provided, then why do you think this was the case?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Importance</td>
<td>Satisfaction</td>
</tr>
<tr>
<td>---</td>
<td>-------------</td>
<td>--------------</td>
</tr>
<tr>
<td>22</td>
<td>Encourage me to take more responsibility for my own care while in the hospital. <em>If Not provided, then why do you think this was the case?</em></td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>23</td>
<td>Give prescribed medications on time. <em>If Not provided, then why do you think this was the case?</em></td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>24</td>
<td>Teach me about the medications that I will be taking at home. <em>If Not provided, then why do you think this was the case?</em></td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>25</td>
<td>Plan my care so that I will be able to rest while in the hospital. <em>If Not provided, then why do you think this was the case?</em></td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>26</td>
<td>Provide a comfortable, pleasant environment (proper temperature, free from odours and disturbing noises). <em>If Not provided, then why do you think this was the case?</em></td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>27</td>
<td>Relieve my anxiety by explaining reasons for my symptoms. <em>If Not provided, then why do you think this was the case?</em></td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>28</td>
<td>Make me feel you are happy to care for me. <em>If Not provided, then why</em></td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>
Patient Questionnaire: Nursing care during hospitalisation.

<table>
<thead>
<tr>
<th>Importance</th>
<th>Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Little</td>
<td>Great</td>
</tr>
</tbody>
</table>

29. Arrange for my priest, minister or rabbi to visit me. If not provided, then why do you think this was the case?
   - Importance: 1 2 3 4 5
   - Satisfaction: 1 2 3 4 5

30. Make it possible for me to observe my religious practices in the hospital. If not provided, then why do you think this was the case?
   - Importance: 1 2 3 4 5
   - Satisfaction: 1 2 3 4 5

31. Assist me with meals. If not provided, then why do you think this was the case?
   - Importance: 1 2 3 4 5
   - Satisfaction: 1 2 3 4 5

32. See that I have food and/or fluids between meals. If not provided, then why do you think this was the case?
   - Importance: 1 2 3 4 5
   - Satisfaction: 1 2 3 4 5

33. See that my food is served properly. If not provided, then why do you think this was the case?
   - Importance: 1 2 3 4 5
   - Satisfaction: 1 2 3 4 5

34. Ask the dietician to serve me soft foods that I am able to chew. If not provided, then why do you think this was the case?
   - Importance: 1 2 3 4 5
   - Satisfaction: 1 2 3 4 5

35. Help me understand how to plan the diet I will need at home. If not provided, then why do you think this was the case?
   - Importance: 1 2 3 4 5
   - Satisfaction: 1 2 3 4 5
<table>
<thead>
<tr>
<th></th>
<th>Importance</th>
<th>Satisfaction</th>
</tr>
</thead>
</table>
| 36 | Be sure I have a copy of my diet  
If Not provided, then why do you think this was the case? | 1 2 3 4 5 | 1 2 3 4 5 |
| 37 | Talk with me about topics unrelated to my illness, such as news, hobbies, other interests  
If Not provided, then why do you think this was the case? | 1 2 3 4 5 | 1 2 3 4 5 |
| 38 | Plan some diversion or recreation for me  
If Not provided, then why do you think this was the case? | 1 2 3 4 5 | 1 2 3 4 5 |
| 39 | Take time to talk with my family and answer their questions  
If Not provided, then why do you think this was the case? | 1 2 3 4 5 | 1 2 3 4 5 |
| 40 | Help me make arrangements for my care at home  
If Not provided, then why do you think this was the case? | 1 2 3 4 5 | 1 2 3 4 5 |
| 41 | Notice changes in my condition and report them  
If Not provided, then why do you think this was the case? | 1 2 3 4 5 | 1 2 3 4 5 |
| 42 | Tell my doctor that I am worried about my condition  
If Not provided, then why do you think this was the case? | 1 2 3 4 5 | 1 2 3 4 5 |
| 43 | Be understanding when I | 1 2 3 4 5 | 1 2 3 4 5 |
Patient Questionnaire: Nursing care during hospitalisation

<table>
<thead>
<tr>
<th>Importance</th>
<th>Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Little</td>
<td>Great</td>
</tr>
</tbody>
</table>

am irritable and demanding
*If Not provided, then why do you think this was the case?*

44 Take time to listen to me
*If Not provided, then why do you think this was the case?*

45 Carry out doctors orders
*If Not provided, then why do you think this was the case?*

46 Explain about diagnostic tests ahead of time so that I will know what to expect
*If Not provided, why do you think this was so?*

47 Give me pamphlets to read and/or talk with me about my illness in order to help me understand how to care for myself
*If Not provided, then why do you think this was the case?*

48 Arrange for a community nurse to visit me at home
*If Not provided, then why do you think this was the case?*

49 Talk with my family about my illness and the care I will need at home
*If Not provided, then why do you think this was so?*

50 What was your level of satisfaction with the overall nursing care you received during your hospital stay?
If there are other aspects of nursing care you think are important for nurses to provide, please describe below

If there are other aspects of nursing care that nurses provide that you think are unimportant, please describe below
Carers

Caregiving Activities Scale (CAS) Questionnaire

Please rate **how important** you believe it is for nursing staff to provide care in the following areas during your family member’s hospital stay, and your satisfaction that this care was provided. If your satisfaction was low then please give possible reasons for this care not being provided.

<table>
<thead>
<tr>
<th></th>
<th>Importance</th>
<th>Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Little 1</td>
<td>Great 2</td>
</tr>
<tr>
<td>1</td>
<td>Take the patient’s temperature and pulse</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If Not provided, then why do you think this was the case?</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Give or assist the patient with a daily bath</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If Not provided, then why do you think this was the case?</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Assist the patient with mouth and teeth care</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If Not provided, then why do you think this was the case?</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Provide the patient with a clean, comfortable bed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If Not provided, then why do you think this was the case?</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Help the patient with grooming, such as care of nails, hair and/or shaving</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If Not provided, then why do you think this was the case?</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Be sure that the patient has the necessary equipment – glass, towel, soap, blanket etc.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If Not provided, then why do you think this was the case?</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Provide privacy during the patient’s bath and treatments</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If Not provided, then why do you think this was the case?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Importance</td>
<td>Satisfaction</td>
</tr>
<tr>
<td>---</td>
<td>------------</td>
<td>--------------</td>
</tr>
<tr>
<td>8</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td></td>
<td>Take special care of the patient's skin so it does not become sore</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If Not provided, then why do you think this was the case?</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td></td>
<td>See that the unit is clean and tidy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If Not provided, then why do you think this was the case?</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td></td>
<td>Allow the patient to make decisions about his/her care</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If Not provided, then why do you think this was the case?</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td></td>
<td>Help the patient to assume a comfortable or appropriate position</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If Not provided, then why do you think this was the case?</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td></td>
<td>Notice when the patient is in pain and give the patient medications if ordered</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If Not provided, then why do you think this was the case?</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td></td>
<td>Change the patient's position frequently</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If Not provided, then why do you think this was the case?</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td></td>
<td>Observe the effects of treatments ordered by the physician</td>
<td></td>
</tr>
<tr>
<td></td>
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<td>Carer Questionnaire: Nursing care during hospitalisation</td>
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<td>Provide a comfortable, pleasant environment (proper temperature, free from odours and disturbing noises)</td>
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<td>Relieve the patient’s anxiety by explaining reasons for his/her symptoms</td>
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<td>Nurse makes the patient feel he/she is happy to care for the patient</td>
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<td>Arrange for the patient’s priest, minister or rabbi to visit him/her</td>
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<td>Make it possible for the patient to observe his/her religious practices in the hospital</td>
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Carer Questionnaire: Nursing care during hospitalisation

If Not provided, then why do you think this was the case?

31 Assist the patient with meals

1 2 3 4 5

1 2 3 4 5

32 See that the patient has food and/or fluids between meals

1 2 3 4 5

1 2 3 4 5

33 See that the patient’s food is served properly

1 2 3 4 5

1 2 3 4 5

34 Ask the dietician to serve the patient soft foods that he/she is able to chew

1 2 3 4 5

1 2 3 4 5

35 Help the patient understand how to plan the diet he/she will need at home

1 2 3 4 5

1 2 3 4 5

36 Be sure the patient has a copy of his/her diet

1 2 3 4 5

1 2 3 4 5

37 Talk with the patient about topics unrelated to his/her illness, such as news, hobbies, other interests

1 2 3 4 5

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<td>Plan some diversion or recreation for the patient. <em>If Not provided, then why do you think this was the case?</em></td>
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<td>39</td>
<td>Take time to talk with the patient’s family and answer their questions. <em>If Not provided, then why do you think this was the case?</em></td>
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<td>40</td>
<td>Help the patient make arrangements for his/her care at home. <em>If Not provided, then why do you think this was the case?</em></td>
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<td>Notice changes in the patient’s condition and report them. <em>If Not provided, then why do you think this was the case?</em></td>
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<td>42</td>
<td>Tell the patient’s doctor that the patient is worried about his/her condition. <em>If Not provided, then why do you think this was the case?</em></td>
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<td>43</td>
<td>Be understanding when the patient is irritable and demanding. <em>If Not provided, then why do you think this was the case?</em></td>
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<td>44</td>
<td>Take time to listen to the patient. <em>If Not provided, then why do you think this was the case?</em></td>
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<td>45</td>
<td>Carry out doctors orders</td>
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Explain about diagnostic tests ahead of time so that the patient will know what to expect

If Not provided, why do you think this was so?

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Give the patient pamphlets to read and/or talk with him/her about the illness in order to help him/her understand how to care for him/herself

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Arrange for a community nurse to visit the patient at home

If Not provided, then why do you think this was the case?

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Talk with the patient’s family about the illness and the care he/she will need at home

If Not provided, then why do you think this was so?

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What was your level of satisfaction with the overall nursing care your family member received during this hospital stay?

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If there are other aspects of nursing care you think are important for nurses to provide, please describe below

If there are other aspects of nursing care that nurses provide that you think are unimportant, please describe below
Nurses

Caregiving Activities Scale (CAS) Questionnaire

Please rate how important you believe it is for nursing staff to provide care in the following areas during an elderly patient’s hospital stay, and your opportunity to demonstrate these areas of care. If you are unable to provide certain areas of care then please give possible reasons.

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<th>Importance</th>
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<tr>
<td>1</td>
<td>Take the patient’s temperature and pulse</td>
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<td>If Not provided, then why do you think this was the case?</td>
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<td>2</td>
<td>Give or assist the patient with a daily bath</td>
<td>1 2 3 4 5</td>
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<td>If Not provided, then why do you think this was the case?</td>
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<td>3</td>
<td>Assist the patient with mouth and teeth care</td>
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<td>If Not provided, then why do you think this was the case?</td>
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<td>4</td>
<td>Provide the patient with a clean, comfortable bed</td>
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<td>If Not provided, then why do you think this was the case?</td>
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<td>5</td>
<td>Help the patient with grooming, such as care of nails, hair and/or shaving</td>
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<td>6</td>
<td>Be sure that the patient has the necessary equipment – glass, towel, soap, blanket etc.</td>
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<td>7</td>
<td>Provide privacy during the patient’s bath and treatments</td>
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If Not provided, then why do you think this was the case?

8. Take special care of the patient’s skin so it does not become sore
   If Not provided, then why do you think this was the case?
     1 2 3 4 5 1 2 3 4 5

9. See that the unit is clean and tidy
   If Not provided, then why do you think this was the case?
     1 2 3 4 5 1 2 3 4 5

10. Allow the patient to make decisions about his/her care
    If Not provided, then why do you think this was the case?
       1 2 3 4 5 1 2 3 4 5

11. Help the patient to assume a comfortable or appropriate position
    If Not provided, then why do you think this was the case?
       1 2 3 4 5 1 2 3 4 5

12. Notice when the patient is in pain and give the patient medications if ordered
    If Not provided, then why do you think this was the case?
       1 2 3 4 5 1 2 3 4 5

13. Change the patient’s position frequently
    If Not provided, then why do you think this was the case?
       1 2 3 4 5 1 2 3 4 5

14. Observe the effects of treatments ordered by the physician
    If Not provided, then why do you think this was the case?
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15. Consider the patient’s personal preferences when caring for him/her
    If Not provided, then why
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<td>N/A</td>
<td>Never 1 2 3 4 5</td>
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<td>Frequent 1 2 3 4 5</td>
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<td>26</td>
<td>Provide a comfortable, pleasant environment. (proper temperature, free from odours and disturbing noises)</td>
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<td>If Not provided, then why do you think this was the case?</td>
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<td>Great 1 2 3 4 5</td>
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<td>27</td>
<td>Relieve the patient’s anxiety by explaining reasons for his/her symptoms.</td>
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<td>If Not provided, then why do you think this was the case?</td>
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<td>28</td>
<td>Make the patient feel I am happy to care for him/her.</td>
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<td>If Not provided, then why do you think this was the case?</td>
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<td></td>
<td>N/A</td>
<td>Never 1 2 3 4 5</td>
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<td>Frequent 1 2 3 4 5</td>
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<tr>
<td>29</td>
<td>Arrange for the patient’s priest, minister or rabbi to visit him/her.</td>
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<td></td>
<td>If Not provided, then why do you think this was the case?</td>
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<td>Little 1 2 3 4 5</td>
<td>Great 1 2 3 4 5</td>
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<td></td>
<td>N/A</td>
<td>Never 1 2 3 4 5</td>
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<td>Frequent 1 2 3 4 5</td>
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<tr>
<td>30</td>
<td>Make it possible for the</td>
<td></td>
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</tr>
<tr>
<td>Importance</td>
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<td></td>
</tr>
<tr>
<td>Little</td>
<td>Great</td>
<td>N/A</td>
<td>Never</td>
<td>Frequent</td>
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<tr>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
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</tr>
</tbody>
</table>

**Nurse Questionnaire: Nursing care during hospitalisation**

- **31** Assist the patient with meals
  *If not provided, then why do you think this was the case?*
  | 1 2 3 4 5 | 1 2 3 4 5 |

- **32** See that the patient has food and/or fluids between meals
  *If not provided, then why do you think this was the case?*
  | 1 2 3 4 5 | 1 2 3 4 5 |

- **33** See that the patient's food is served properly
  *If not provided, then why do you think this was the case?*
  | 1 2 3 4 5 | 1 2 3 4 5 |

- **34** Ask the dietician to serve the patient soft foods that he/she is able to chew
  *If not provided, then why do you think this was the case?*
  | 1 2 3 4 5 | 1 2 3 4 5 |

- **35** Help the patient understand how to plan the diet he/she will need at home
  *If not provided, then why do you think this was the case?*
  | 1 2 3 4 5 | 1 2 3 4 5 |

- **36** Be sure the patient has a copy of his/her diet
  *If not provided, then why do you think this was the case?*
  | 1 2 3 4 5 | 1 2 3 4 5 |

- **37** Talk with the patient about topics unrelated to his/her illness, such as news, hobbies, other interests
<p>| 1 2 3 4 5 | 1 2 3 4 5 |</p>
<table>
<thead>
<tr>
<th>Importance</th>
<th>Opportunity to demonstrate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Little</td>
</tr>
<tr>
<td>Plan some diversion or recreation for the patient</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>If Not provided, then why do you think this was the case?</td>
<td></td>
</tr>
<tr>
<td>Take time to talk with the patient’s family and answer their questions</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>If Not provided, then why do you think this was the case?</td>
<td></td>
</tr>
<tr>
<td>Help the patient make arrangements for his/her care at home</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>If Not provided, then why do you think this was the case?</td>
<td></td>
</tr>
<tr>
<td>Notice changes in the patient’s condition and report them</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>If Not provided, then why do you think this was the case?</td>
<td></td>
</tr>
<tr>
<td>Tell the patient’s doctor that the patient is worried about his/her condition</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>If Not provided, then why do you think this was the case?</td>
<td></td>
</tr>
<tr>
<td>Be understanding when the patient is irritable and demanding</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>If Not provided, then why do you think this was the case?</td>
<td></td>
</tr>
<tr>
<td>Take time to listen to the patient</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>If Not provided, then why</td>
<td></td>
</tr>
<tr>
<td>Importance</td>
<td>Opportunity to demonstrate</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>Little</td>
<td>Great</td>
</tr>
<tr>
<td>do you think this was the case?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Carry out doctors orders</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>If Not provided, then why do you think this was the case?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Explain about diagnostic tests ahead of time so that the patient will know what to expect</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>If Not provided, why do you think this was so?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Give the patient pamphlets to read and/or talk with him/her about the illness in order to help him/her understand how to care for him/herself</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>If Not provided, then why do you think this was the case?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Arrange for a community nurse to visit the patient at home</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>If Not provided, then why do you think this was the case?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Talk with the patient’s family about the illness and the care he/she will need at home</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>If Not provided, then why do you think this was so?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>What is your level of satisfaction with the overall nursing care you have the opportunity to provide to elderly patients?</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>
If there are other aspects of nursing care you think are important for nurses to provide, please describe below.

If there are other aspects of nursing care that nurses provide that you think are unimportant, please describe below.

Do you think the nursing needs of patients differ in terms of ages (e.g., age less than 65 yrs versus 65 to 80 years, and 65 to 80 years versus greater than 80 years)? If so, in what ways do they differ?

Are you a registered or enrolled nurse? Please list any other courses completed since graduating in nursing.

How many years have you been employed as a nurse?
Appendix 7

The Action Evaluation Research Process Wall Chart modified
Appendix 8

Barthel Activities of Daily Living (ADL) Index modified
# BARTHEL ADL INDEX (BAI)

## INCORPORATING OREM'S SELF-CARE REQUISITES

**Insert MRN sticker here**

ON ADMISSION DATE: _____/_____/_____

ON DISCHARGE DATE: _____/_____/_____

<table>
<thead>
<tr>
<th>Self-care Requisites</th>
<th>Scores</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage elimination - toilet use</td>
<td></td>
<td>0Dependent 1Needs some help but can do something alone 2Independent (on &amp; off, wiping, dressing)</td>
</tr>
<tr>
<td>Manage elimination - bladder function</td>
<td></td>
<td>0Incontinent, or catheterised &amp; unable to manage 1Occasional accident (max, once per 24 hours) 2Continent (for more than seven days)</td>
</tr>
<tr>
<td>Manage elimination - bowel function</td>
<td></td>
<td>0Incontinent (or needs to be given enema) 1Occasional accident (once a week) 2Continent</td>
</tr>
<tr>
<td>Maintain intake of food and fluids - feeding functions</td>
<td></td>
<td>0Unable 1Needs help in cutting, spreading butter, etc 2Independent (food provided within reach)</td>
</tr>
<tr>
<td>Normalcy - manage grooming</td>
<td></td>
<td>0Needs help with personal care (face hair teeth shaving) 1Independent (implements provided)</td>
</tr>
<tr>
<td>Normalcy - manage dressing</td>
<td></td>
<td>0Dependent 1Needs help but can do about half unaided 2Independent up &amp; down</td>
</tr>
<tr>
<td>Normalcy - manage bathing</td>
<td></td>
<td>0Dependent 1Independent (must get in/out unsupervised &amp; unaided)</td>
</tr>
<tr>
<td>Balance activity and rest - manage mobility</td>
<td></td>
<td>0Immobil 1Wheelchair independent, including corners 2Walks with help of one person (verbal or physical) 3Independent and understands need for rest</td>
</tr>
<tr>
<td>Balance activity and rest - manage transfer</td>
<td></td>
<td>0Unable - no sitting balance demonstrated 1Major help (physical, one or two people) 2Minor help (verbal or physical) 3Independent and understands need for rest</td>
</tr>
<tr>
<td>Balance activity and rest - manage stairs</td>
<td></td>
<td>0Unable 1Needs help (verbal, physical, carrying aid) 2Independent up &amp; down and understands need for rest</td>
</tr>
<tr>
<td>Balance solitude and social interaction</td>
<td></td>
<td>0Not able to communicate concerns clearly 1Willing to discuss concerns with nursing staff / family 2Independently seeks information &amp; solitude</td>
</tr>
</tbody>
</table>

**SCORE:** [ ] [ ] [ ]
<table>
<thead>
<tr>
<th>Self-care Requisites</th>
<th>Date</th>
<th>Comments During Hospitalisation</th>
<th>Comments Before Discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage elimination - toilet use</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manage elimination - bladder function</td>
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<tr>
<td>Manage elimination - bowel function</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintain intake of food and fluids - feeding functions</td>
<td></td>
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<tr>
<td>Normacy - manage grooming</td>
<td></td>
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<tr>
<td>Normacy - manage dressing</td>
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<tr>
<td>Normacy - manage bathing</td>
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<tr>
<td>Balance activity and rest - manage mobility</td>
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<tr>
<td>Balance activity and rest - manage transfer</td>
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</tr>
<tr>
<td>Balance activity and rest - manage stairs</td>
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<td></td>
<td></td>
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<tr>
<td>Balance solitude and social interaction</td>
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Appendix 9

Medication Regime Assessment
# MEDICATION REGIME ASSESSMENT

**INCORPORATING NICHE MEDICATION CONCEPTS**

**Code:**

**ON ADMISSION DATE:**

**ON DISCHARGE DATE:**

## DOES THE PATIENT:

<table>
<thead>
<tr>
<th></th>
<th>Knowledge Levels On Admission</th>
<th>Education Date</th>
<th>Knowledge Levels Before Discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understand what is on the medication label eg: can the patient read the label - is the print large enough</td>
<td>1 2 3 4</td>
<td></td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>Know what the medication is used for</td>
<td>1 2 3 4</td>
<td></td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>Know how often to take the medication and what the term PRN means</td>
<td>1 2 3 4</td>
<td></td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>Know the circumstances of when to take the medication eg. with food, before or after food</td>
<td>1 2 3 4</td>
<td></td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>Know how to open the medication container &amp; consume or self-administer the medication as intended eg. Inhaler, nebuliser or spacer</td>
<td>1 2 3 4</td>
<td></td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>Know the common side effects &amp; interactions of each medication</td>
<td>1 2 3 4</td>
<td></td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>Know when, where &amp; how to make follow-up appointments to the relevant doctor for a repeat prescription</td>
<td>1 2 3 4</td>
<td></td>
<td>1 2 3 4</td>
</tr>
</tbody>
</table>

**Score On Admission:**

**Score Before Discharge:**

**Pharmacist informed?**

**YES / NO**

**Key to Knowledge levels:**

1 = Nil knowledge
2 = Little knowledge
3 = Good knowledge
4 = Excellent knowledge
<table>
<thead>
<tr>
<th>DOES THE PATIENT:</th>
<th>Date</th>
<th>Comments During Hospitalisation</th>
<th>Comments Before Discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understand what is on the medication label eg: can the patient read the label - is the print large enough</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Know what the medication is used for</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Know how often to take the medication and what the term PRN means</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Know the circumstances of when to take the medication eg. with food, before or after food</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Know how to open the medication container &amp; consume or self-administer the medication as intended eg. Inhaler, nebuliser or spacer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Know the common side effects &amp; interactions of each medication</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Know when, where &amp; how to make follow-up appointments to the relevant doctor for a repeat prescription</td>
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</tr>
</tbody>
</table>
Appendix 10

CAS questionnaire (satisfaction only)
Patients and Nurses
Patients

Caregiving Activities Scale (CAS) Questionnaire

Please rate how satisfied you were with the nursing care provided. If your satisfaction was low then please give possible reasons for this care not being provided.

<table>
<thead>
<tr>
<th></th>
<th>Take my temperature and pulse</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>If Not provided, then why do you think this was the case?</td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Give or assist me with a daily bath</td>
</tr>
<tr>
<td></td>
<td>If Not provided, then why do you think this was the case?</td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Assist me with the care of my mouth and teeth</td>
</tr>
<tr>
<td></td>
<td>If Not provided, then why do you think this was the case?</td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Provide me with a clean, comfortable bed</td>
</tr>
<tr>
<td></td>
<td>If Not provided, then why do you think this was the case?</td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Help me with grooming, such as care of my nails, hair and/or shaving</td>
</tr>
<tr>
<td></td>
<td>If Not provided, then why do you think this was the case?</td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Be sure that I have the necessary equipment - glass, towel, soap, blanket etc.</td>
</tr>
<tr>
<td></td>
<td>If Not provided, then why do you think this was the case?</td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Provide privacy during</td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

| N/A | Poor | 1 | 2 | 3 | 4 | 5 | Excelle |

Page 1 of 3
my bath and treatments
If Not provided, then why do you think this was the case?

8 Take special care of my skin so it does not become sore
If Not provided, then why do you think this was the case?

9 See that the unit is clean and tidy
If Not provided, then why do you think this was the case?

10 Allow me to make decisions about my care
If Not provided, then why do you think this was the case?

11 Help me to assume a comfortable or appropriate position
If Not provided, then why do you think this was the case?

12 Notice when I am in pain and give me medications if ordered
If Not provided, then why do you think this was the case?

13 Change my position frequently
If Not provided, then why do you think this was the case?

14 Observe the effects of treatments ordered by the physician
If Not provided, then why do you think this was the case?
<table>
<thead>
<tr>
<th></th>
<th>Question</th>
<th>N/A</th>
<th>Poor</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>Consider my personal preferences when caring for me. If not provided, then why do you think this was the case?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<td>See that the bed pan or urinal are provided when needed. If not provided, then why do you think this was the case?</td>
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<td>Help me maintain or restore normal elimination. If not provided, then why do you think this was the case?</td>
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<td>Check on bowel functioning and report problems to the doctor. If not provided, then why do you think this was the case?</td>
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<td>Help me in and out of bed. If not provided, then why do you think this was the case?</td>
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<td>Help me get necessary exercise while I am in the hospital. If not provided, then why do you think this was the case?</td>
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<td>Discuss with me the amount and type of activity I should have at home. If not provided, then why do you think this was the case?</td>
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<td>Plan my care so that I will be able to rest while in the hospital</td>
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<td>Relieve my anxiety by explaining reasons for my symptoms</td>
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<td>Make me feel you are happy to care for me</td>
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do you think this was the case?

29 Arrange for my priest, minister or rabbi to visit me
If Not provided, then why do you think this was the case?

30 Make it possible for me to observe my religious practices in the hospital
If Not provided, then why do you think this was the case?

31 Assist me with meals
If Not provided, then why do you think this was the case?

32 See that I have food and/or fluids between meals
If Not provided, then why do you think this was the case?

33 See that my food is served properly
If Not provided, then why do you think this was the case?

34 Ask the dietician to serve me soft foods that I am able to chew
If Not provided, then why do you think this was the case?

35 Help me understand how to plan the diet I will need at home
If Not provided, then why do you think this was the case?
36. Be sure I have a copy of my diet. If Not provided, then why do you think this was the case?

37. Talk with me about topics unrelated to my illness, such as news, hobbies, other interests. If Not provided, then why do you think this was the case?

38. Plan some diversion or recreation for me. If Not provided, then why do you think this was the case?

39. Take time to talk with my family and answer their questions. If Not provided, then why do you think this was the case?

40. Help me make arrangements for my care at home. If Not provided, then why do you think this was the case?

41. Notice changes in my condition and report them. If Not provided, then why do you think this was the case?

42. Tell my doctor that I am worried about my condition. If Not provided, then why do you think this was the case?

43. Be understanding when I

Satisfaction
N/A Poor Good Excellent
1 2 3 4 5
am irritable and demanding
If Not provided, then why do you think this was the case?

44. Take time to listen to me
If Not provided, then why do you think this was the case?

45. Carry out doctors orders
If Not provided, then why do you think this was the case?

46. Explain about diagnostic tests ahead of time so that I will know what to expect
If Not provided, why do you think this was so?

47. Give me pamphlets to read and/or talk with me about my illness in order to help me understand how to care for myself
If Not provided, then why do you think this was the case?

48. Arrange for a community nurse to visit me at home
If Not provided, then why do you think this was the case?

49. Talk with my family about my illness and the care I will need at home
If Not provided, then why do you think this was so?

50. What was your level of satisfaction with the overall nursing care you received during your hospital stay?

Satisfaction

N/A  Poor  Excelle
If there are other aspects of nursing care you think are important for nurses to provide, please describe below

If there are other aspects of nursing care that nurses provide that you think are unimportant, please describe below
Nurses

Caregiving Activities Scale (CAS) Questionnaire

Please rate how satisfied you were with the opportunity to provide nursing care. If you are unable to provide certain areas of care then please give possible reasons.

1. Take the patient’s temperature and pulse
   *If Not provided, then why do you think this was the case?*
   1 2 3 4 5

2. Give or assist the patient with a daily bath
   *If Not provided, then why do you think this was the case?*
   1 2 3 4 5

3. Assist the patient with mouth and teeth care
   *If Not provided, then why do you think this was the case?*
   1 2 3 4 5

4. Provide the patient with a clean, comfortable bed
   *If Not provided, then why do you think this was the case?*
   1 2 3 4 5

5. Help the patient with grooming, such as care of nails, hair and/or shaving
   *If Not provided, then why do you think this was the case?*
   1 2 3 4 5

6. Be sure that the patient has the necessary equipment – glass, towel, soap, blanket etc.
   *If Not provided, then why do you think this was the case?*
   1 2 3 4 5

7. Provide privacy during the patient’s bath and treatments
   1 2 3 4 5

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<th>Number</th>
<th>Question</th>
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<td>8</td>
<td>Take special care of the patient's skin so it does not become sore</td>
<td>1 2 3 4 5</td>
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<td>9</td>
<td>See that the unit is clean and tidy</td>
<td>1 2 3 4 5</td>
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<td>10</td>
<td>Allow the patient to make decisions about his/her care</td>
<td>1 2 3 4 5</td>
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<td>11</td>
<td>Help the patient to assume a comfortable or appropriate position</td>
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<td>12</td>
<td>Notice when the patient is in pain and give the patient medications if ordered</td>
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<td>13</td>
<td>Change the patient's position frequently</td>
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<td>14</td>
<td>Observe the effects of treatments ordered by the physician</td>
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<td>15</td>
<td>Consider the patient's personal preferences when caring for him/her</td>
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do you think this was the case?

16. Provide bed pan or urinal when needed
   If Not provided, then why do you think this was the case?

17. Help the patient maintain or restore normal elimination
   If Not provided, then why do you think this was the case?

18. Check on bowel functioning and report problems to the doctor
   If Not provided, then why do you think this was the case?

19. Help the patient in and out of bed
   If Not provided, then why do you think this was the case?

20. Help the patient get necessary exercise while he/she is in the hospital
   If Not provided, then why do you think this was the case?

21. Discuss with the patient the amount and type of activity he/she should have at home
   If Not provided, then why do you think this was the case?

22. Encourage the patient to take more responsibility for his/her own care while in the hospital
   If Not provided, then why do you think this was the case?

23. Give prescribed medications on time
   If Not provided, then why do you think this was the
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<td>24 Teach the patient about the medications he/she will be taking at home. If not provided, then why do you think this was the case?</td>
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<td>25 Plan the patient's care so that he/she will be able to rest while in the hospital. If not provided, then why do you think this was the case?</td>
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<td>26 Provide a comfortable, pleasant environment (proper temperature, free from odours and disturbing noises). If not provided, then why do you think this was the case?</td>
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<td>28 Make the patient feel I am happy to care for him/her. If not provided, then why do you think this was the case?</td>
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<td>29 Arrange for the patient's priest, minister or rabbi to visit him/her. If not provided, then why do you think this was the case?</td>
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<td>30 Make it possible for the</td>
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Nurse Questionnaire: Nursing care during hospital stay

Opportunity to demonstrate

N/A Never Fre=

31. Assist the patient with meals
   If Not provided, then why do you think this was the case?

32. See that the patient has food and/or fluids between meals
   If Not provided, then why do you think this was the case?

33. See that the patient’s food is served properly
   If Not provided, then why do you think this was the case?

34. Ask the dietician to serve the patient soft foods that he/she is able to chew
   If Not provided, then why do you think this was the case?

35. Help the patient understand how to plan the diet he/she will need at home
   If Not provided, then why do you think this was the case?

36. Be sure the patient has a copy of his/her diet
   If Not provided, then why do you think this was the case?

37. Talk with the patient about topics unrelated to his/her illness, such as news, hobbies, other interests

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If Not provided, then why do you think this was the case?

Plan some diversion or recreation for the patient

If Not provided, then why do you think this was the case?

Take time to talk with the patient’s family and answer their questions

If Not provided, then why do you think this was the case?

Help the patient make arrangements for his/her care at home

If Not provided, then why do you think this was the case?

Notice changes in the patient’s condition and report them

If Not provided, then why do you think this was the case?

Tell the patient’s doctor that the patient is worried about his/her condition

If Not provided, then why do you think this was the case?

Be understanding when the patient is irritable and demanding

If Not provided, then why do you think this was the case?

Take time to listen to the patient

If Not provided, then why
do you think this was the case?

45 Carry-out doctors orders
If Not provided, then why do you think this was the case?

46 Explain about diagnostic tests ahead of time so that the patient will know what to expect
If Not provided, why do you think this was so?

47 Give the patient pamphlets to read and/or talk with him/her about the illness in order to help him/her understand how to care for him/herself
If Not provided, then why do you think this was the case?

48 Arrange for a community nurse to visit the patient at home
If Not provided, then why do you think this was the case?

49 Talk with the patient’s family about the illness and the care he/she will need at home
If Not provided, then why do you think this was so?

50 What is your level of satisfaction with the overall nursing care you have the opportunity to provide to elderly patients?
If there are other aspects of nursing care you think are important for nurses to provide, please describe below.

If there are other aspects of nursing care that nurses provide that you think are unimportant, please describe below.

Do you think the nursing needs of patients differ in terms of ages (e.g., age less than 65 yrs versus 65 to 80 years, and 65 to 80 years versus greater than 80 years)? If so, in what ways do they differ?

Are you a registered or enrolled nurse? Please list any other courses completed since graduating in nursing.

How many years have you been employed as a nurse?
REFERENCES


Chadha, S., & Young, J. (2002). National service framework for older people – Will access to health services for elderly patients improve? Dis Manage Health Outcomes, 10(9), 527-533.


Improving aspects of quality of nursing care
for older acutely ill hospitalised medical patients
through an action research process

Janet Barbara Glasson
RN, CM, DipAppSc(Nsg), BNurs

Submitted in fulfilment of requirements for the degree of
Master of Health Science (Hons)
2004

College of Social and Health Sciences
School of Nursing, Family and Community Health
University of Western Sydney
PLEASE NOTE

The greatest amount of care has been taken while scanning this thesis,

and the best possible result has been obtained.
Declaration

I, Janet Barbara Glasson, certify that this dissertation contains no material which has been accepted for the award of any other degree or diploma in any university, and that, to the best of my knowledge and belief, it contains no material previously published or written by another person, except where due reference is made in the text of the research project.

Signed: 

Janet Barbara Glasson
Acknowledgements

There are many people who have contributed toward this project. My foremost thanks to my family and in particular my husband Graham and my daughters Melissa and Catherine who gave endless support and encouragement and showed great patience.

I would like to extend many thanks to my supervisor Prof. Esther Chang for her support, guidance and constructive feedback on my work. Thanks to Dr. Karen Hancock who assisted with supervision. Thanks also to Prof. John Daly, Assoc. Prof. Lorraine Ferguson who jointly supervised me while Prof. Chang was on leave. I would also like to thank Prof. Lynn Chenoweth for her valuable input, especially in the early stages of the research.

My gratitude is expressed to the patients, their family members/carers, directors of nursing and the nursing staff at the participating hospitals whose cooperation and support made this study possible. Special thanks also to the nursing staff and reference group members, Tracy Hall, Frances Hill-Murray and Lesley Collier, who volunteered to take part during the Participatory Action Research process for their support and friendship.

My sincere appreciation to the Australian Research Council who funded this linkage project, and to the University of Western Sydney who awarded the Australian Postgraduate Award Industry (APAI) scholarship that facilitated this project to proceed.
ABSTRACT

The current literature suggests one of the challenges of nursing today is to meet the health care needs of the growing older population, that is, people over the age of 65. Quality of nursing care is important for acutely ill older people who are the largest group of patients in terms of hospital admissions. In Australia, as it is throughout the more developed regions of the world, the ageing population is a major focus for social and economic planners and policy makers. Therefore, there is an increasing need for health systems to change their focus to more closely assess strategies used to manage the acutely ill older hospital population.

The main aim of this study was to improve the quality of nursing care for older, acutely ill, hospitalised medical patients. The study used a mixed method triangulated approach that utilised quantitative and qualitative methods to survey perceived needs of older patients, their family members/carers and their nursing staff, in the process of developing, implementing and evaluating a new model of care using a participatory action research (PAR) process.

There were three specific objectives. The first was to evaluate which aspects of nursing care were considered most important for older medical patients during acute hospitalisation from the perspective of older patients, their family members/carers, and their nurses. The degree of satisfaction with aspects of care by older patients and their family members/carers was also measured. Nurses rated their satisfaction in terms of opportunity to deliver these aspects of care. The second was to develop and implement a model of care that addressed the identified nursing care needs and priorities of older patients through a PAR process. The third and final objective was to determine whether, employing a PAR process, the chosen model of care addressed the identified nursing care needs and priorities and resulted in increased patient satisfaction and improved health care for older patients. The study was conducted in three stages, that involved administering
questionnaires during stage 1 and recording meeting minutes, field notes and administering evaluation instruments during stages 2 and 3. The latter stages were conducted concurrently during the PAR process to develop, implement and evaluate the new model of care.

Stage 1 findings indicated that older patients and their family members/carers were only moderately satisfied with the provision of physical care activities. In addition, several individual aspects of care were identified with which patients were not satisfied during their acute hospital stay, suggesting these aspects of care needed to be improved. Several of these findings were addressed during stages 2 and 3 of the study. Results provided evidence for the efficacy of a model of care utilising Orem’s model, employing a PAR process with increased patient knowledge levels regarding medication regimes, increased functional activities of daily living (ADL) outcomes and increased satisfaction with the nursing care provided. Nurses were also more satisfied with opportunities to provide nursing care. The results also demonstrated that a seemingly simple intervention (such as patient education on medication and ADL) could produce better than expected results.

This study demonstrated the implementation of a PAR process to motivate nursing staff, utilising an evidence-based model of care approach, resulted in changes to clinical nursing practice that impacted positively on older patients’ and nursing staff’s satisfaction with care provided, patient knowledge and final health outcomes. One of the implications from this study for nursing practice is that clinical nurses may improve the quality of care provided for their older patients if a structured approach, such as the PAR process, is applied in the ward setting. It is recommended that the findings of this study be applied to develop guidelines for acutely hospitalised medical patients, particularly for issues relating to educational sessions to increase the patient’s functional activities and knowledge levels of their medication regimes prior to discharge. It is further recommended that future research focus on other issues that older patients identified during stage 1 findings as aspects of care with which they were not satisfied during their acute hospital stay.
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