ADVANCED PRACTICE NURSES IN MELBOURNE'S HOSPITALS: CLINICAL COORDINATORS IN A RAPID ASSESSMENT MEDICAL UNIT

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ABSTRACT

Maintaining optimum health and functioning of ageing populations is an ongoing challenge for acute care facilities worldwide. As populations age, the risk of illness and potential debility increases with the increased rate of comorbidity, multipharmacy and sensory and muscle bulk loss that accompany old age. With these factors comes the potential for increased hospital admission rate, prolonged immobility, reduced function and increasing length of stay (NHMRC 2000). To address these issues, a hospital in Melbourne has developed a Rapid Assessment Medical Unit (RAMU) which provides comprehensive multidisciplinary assessment and commences discharge planning for all medical patients within 48 hours of admission. Coordinating this function is a Clinical Coordinator (CC), who is an advanced practice nurse (APN): a particular feature of the model. Parsons and McMurty (1997) argue that APNs in this role significantly enhance effective utilisation of health services through comprehensive assessment and contextualisation of patient health issues. The result is a streamlining of care, effective and efficient use of resources with an emphasis on discharge planning and community support.

INTRODUCTION

odern health services are being confronted with enormous challenges. Social demographics show the Australian population is ageing with resultant complex social, functional and health needs. In 2001 12% of the Australian population was aged 65 or older and by 2021 this will increase to 18% (NHMRC 2000). As populations age so does the incidence of multipharmacy, comorbidity, sensory impairment, and muscle bulk loss which combine to increase the risk of acute illness, immobility, functional decline and frequent, extended hospital admissions (NHMRC 2000). The cost to the individual in health, function and quality of life can be enormous. The cost in dollars to a fiscally challenged health care system can be equally as damaging.

Between May 1999 and April 2000, 78.7% of all medical patients admitted to the study site in Melbourne, were aged 65 years or above. The average length of stay for medical patients in this group was eight days, which did not compare well with the Victorian state average of 5.8 days for the same period. Similarly 36.6% of medical patients were readmitted to the study site within three months of discharge.

Patient care delivery was costly for the hospital (at approximately \$AUD500 per bed/day) with relatively long inpatient stays and with one-third of medical patients readmitting within three months of discharge. There were also potential lifestyle consequences for the patient.

On retrospective analysis of patient records, several issues became apparent. There was a lack of timely comprehensive assessment, consistent care planning, community consultation and discharge planning; all impacting on the above with consequences for both patient and hospital.

To address these issues the hospital developed a revolutionary model of care for medical patients. The new unit opened in April 2000 and is called the Rapid Assessment Medical Unit (RAMU). All medical patients admitted are assessed in RAMU where, within 48 hours, medical, nursing, functional, cognitive and social assessments are conducted. This process is coordinated and documented by the Clinical Coordinator (CC), an advanced practice nurse (APN). The CC coordinates a comprehensive, multidisciplinary team approach whereby patient issues are contextualised in terms of their effect on patient safety, functioning and well being. Discharge planning is immediately commenced with all issues communicated to team members. The patient and community carers are consulted, educated and informed of all facets of the care plan.

This article reviews the literature to examine the advanced practice nurse role, the value of APNs and the benefits APNs have with patients with complex needs. In particular this article will be focusing on APNs in acute care settings caring for medical patients.

LITERATURE REVIEW

The Australian population is ageing with the proportion of people aged 65 years or more increasing from 12% in 2001 to 18% by 2021 (NHMRC 2000). Nearly 80% of medical patients admitted to the study site in 2001 were 65 years or older therefore the importance of effective and accurate assessment, contextualisation of their illness and timely discharge planning is obvious.

Historically, patient assessment and therefore care delivery and planning have been illness focused which has failed to acknowledge the impact of acute illness on the older patient's function and safety in the community. The RAMU, however, promotes a comprehensive model of patient assessment, planning and care provision. This process identifies acute, chronic and potential functional and safety issues which all impact on the patient's need for post discharge support and maintenance of independence (Abraham et al 1999; Johnson et al 1995; Metz 1999; Slaughter et al 2000).

Facilitating the implementation of RAMU's model of comprehensive patient assessment and planning is the CC, an APN. The APN role originated in the UK and USA and requires nurses with relevant experience and qualifications to practise at a highly skilled, autonomous and independent level (Sidani and Irvine 1999). Internationally, APNs are highly valued members of healthcare teams whose practice is informed by skillful and comprehensive assessments and coordination of multidisciplinary service provision that is tailored to meet the needs of patients and community carers (Simpson 1997).

The CC's ability to assess all facets of the older patient's function is imperative in planning appropriately. As the NHMRC (2000) suggests this group is jeopardised

by multipharmacy, sensory and muscle bulk loss, comorbidity and chronic illness which, when accompanied by acute illness and prolonged immobility, increases the risk of functional decline and therefore reliance on expensive resource intensive acute health care services and overstretched community home supports.

In recognition of these issues, CCs, in conjunction with patients, primary carers and a multidisciplinary team, develop a care plan that encompasses illness, cognitive and functional issues to maintain independence and life quality for the patient whilst in hospital and in the community.

CCs are arguably unique in this role in their ability to contextualise the impact of illness for the patient. CCs assess the meaning of illness for each patient and assess the cognitive, functional, and social impacts for the patient of their illness. This ability to '...understand what illness means to the patient, what it interrupts, and what recovery means' (Benner 1984, p.75) informs the development and coordination of the individualised management plan.

On RAMU the CC's role encompasses four core functions: assessment; planning, facilitation of information exchange; and, education. These functions were identified by Donagrandi and Eddy (2000), Peterson-Sinclair (1997) and Simpson (1997) as critical elements of advanced practice. Benner (1984) enhances these suggestions in her description of expert nurses' skilful ability to comprehensively assess the patient and contextualise the illness to create a vision of '..what is possible' (p.35).

The benefits of APN assessment and intervention are potentially widespread with enhanced patient outcomes and satisfaction, reduced length of inpatient stays and resulting in improved access to health care and cost savings for the institution (Anderson et al 1998; Johnson et al 1995; Parsons and McMurty 1997).

By comprehensively assessing medical patients, RAMUs CCs identify those who are at risk of functional decline as a result of illness and hospital admission, a function Naylor et al (2000) and Schifalacqua et al (2000) suggest APNs are highly effective in performing.

In identifying patients at risk of functional decline, mortality, hospital readmission rate and the need for people to enter aged care facilities remains unaltered however Nicholaus et al (1999) and Schifalacqua et al (2000) argue the interventions initiated by APNs reduce the length of initial and subsequent admissions, improves and maintains functional status and delays entry to residential aged care facilities.

The introduction of the CC role in RAMU has been pivotal in addressing many of the inefficiencies of traditional models of patient treatment and planning at this hospital. There is an increasing recognition and

appreciation of expert nursing practice especially in the assessment and planning phases of the medical patient's stay: phases that are emphasised in RAMU. The CC's skill and ability to contextualise the patient's illness and assess the impact of hospitalisation on the patient's function and independence has promoted an approach to treatment that has moved away from an illness focused, reactive model towards a model that is comprehensive, proactive, problem orientated and patient focused; in essence CCs encourage holism through collaboration and multidisciplinary teamwork. Although the introduction of the CC role has been beneficial and effective in many areas, there are still improvements to be made which will be discussed further.

DISCUSSION

At the hospital in Melbourne, 79.7% of all medical patients admitted were aged 65 years or more. Therefore, the majority of medical patients are at risk of confronting issues associated with ageing and potential functional decline. In the 12 months prior to the introduction of RAMU, April 1999 to March 2000, the average length of stay for this group of people was eight days, significantly longer than the Victorian state average of 5.8 days. Care and discharge planning was random and this process was at best ad hoc and no coordination of patient management existed. With an ageing Australian population who are increasingly at risk, these issues were likely to perpetuate thus resulting in unnecessarily extended hospital stays potentiating functional decline and lifestyle consequences for patients and significant resource and financial stains for the hospital and community providers.

In April 2000 the hospital's RAMU opened which aimed to address these issues. The aims of the RAMU are to:

- 1. Promote expert medical, nursing and allied health assessments within 24 hours of admission:
- 2. Develop a patient focused management plan identifying all patient issues, interventions, discharge criteria and an estimated discharge date within 48 hours of admission to hospital;
- 3. Streamline previous inefficiencies encountered in providing acute patient care; and,
 - 4. Improve public access to health care at the hospital.

For this model to succeed, however, there had to be one health care professional to coordinate the process. Hence the CC role was developed.

The CC role is an APN role which has evolved since the inception of RAMU. Initially the CC role was to be primarily an independent, autonomous role that provided clinical expertise with extended responsibilities for example ordering radiological and pathological tests, catheterisation, cannulations and arterial blood sampling. However, medical patient demographics presented an unforseen challenge. It quickly became apparent that the majority of the patient group were older people who were functionally jeopardised requiring support from spouses, family and friends and government to remain independent and safe in the community.

Jacobzone (2000) identifies this issue and suggests that illness is not the primary concern for older people and modern health care; it is the need for functional support to maintain independence and safety. This realisation reinforced the importance of effective risk assessment and discharge planning. With adequate expert nursing and medical staff on RAMU to perform technical aspects of patient care, CCs, whilst maintaining autonomy and independent practice, adapted their role to address the need for a skilled professional to comprehensively assess patients and coordinate a plan that addressed the needs of the patient whilst in hospital and in the community.

This adaptation of role is consistent with Hook et al (2000), Naylor et al (2000) and, Schifalacqua et al's (2000) suggestions that APNs are highly effective in identifying people at risk of functional decline as a result of illness, immobility and hospital admission.

This suggestion was evidenced at this hospital site with CCs identifying 30% of medical patients requiring geriatrician and aged care consultations. In turn, the increased demand for aged care services has resulted in service adaptation with the opening of the Acute Care of the Elderly (ACE) unit. The ACE unit is geographically and ideologically designed to enhance and maintain functional status of elderly people at risk of decline. In turn independent and safe function will be maintained for patients utilising community service providers, the demand for residential care will be reduced and the cost of extended hospital admissions will be reduced.

The CC role has, therefore, significantly contributed to patient care and practice reform at the study site in many ways:

- 1. All medical patients now benefit from a comprehensive assessment where all facets of their health and functioning are assessed;
- 2. All issues are incorporated into a concise care plan which identifies patient problems, interventions, desired outcomes, allied health referrals and an estimated discharge date;
- 3. Allied health referrals are made within 24 hours of patient admission thereby enhancing effectiveness of allied health assessment and early input;
- 4. All patients and primary carers are now consulted and educated in care plan development;
 - 5. Increased hospital-community communication occurs;
- 6. There is increased patient and carer satisfaction as indicated in satisfaction surveys; and,

7. The effectiveness of the CC's ability to identify patients at risk of functional decline has contributed to the recognition of the need for acute care services for the elderly.

However, there is still need for improvement. The average length of stay has not significantly decreased. In the 12-month period preceding RAMU the average length of stay for medical patients was eight days. This fell by 0.3 days to 7.7 days in the 12-month period after RAMU opened.

Similarly, unplanned readmission within a three-month period is yet to indicate significant improvement. In May/June/July 1999 prior to RAMU 17% of medical patients experienced an unplanned readmission within three months of discharge. For the same period in 2000, this fell to 13% but in 2001 for the same period this rose to 15%. The reasons for lack of improvement in these indicators are complex and multifactorial.

The lack of apparent improvement since the opening of RAMU and the commencement of the CCs may indicate that there are inaccuracies with prediction of events that impact on hospital stay, it may also indicate that the planning process requires refinement. As a result, CCs are looking to further modify and adapt their role. Thus far CC practice has been confined to the RAMU. Therefore, as patients leave this area and transfer to medical wards, contact is lost restricting CC's ability to monitor patients, evaluate and modify interventions. This is under review. CC's ability to enhance patient and organisational outcomes will be enhanced with increased opportunity to monitor patient progress, evaluate the care plan and facilitate the medical team towards client goals from admission to discharge.

The CC performs several key functions in the assessment and care planning phases of the medical patient's episode. CCs are responsible for risk screening and assessing all medical patients for cognitive, functional and safety perspectives which necessitate CCs gathering collateral information from the patient and his/her primary community carer. CCs work closely with the physician and attend physician ward rounds during which time all issues are discussed with the patient and a multidisciplinary care plan is developed which identifies assessment information, patient issues, interventions and outcomes to be achieved by an estimated discharge date. During this process the CC has identified the need for allied health staff and has referred appropriately. This plan is formulated, documented and communicated to the patient, primary carer and the relevant team members within 48 hours before the patient is transferred to medical wards.

RAMU's CCs skill in identifying elders at risk resulted in 30% of all medical admissions being referred to the Aged Care Consultation Service. In response to the demand for aged care services, 2001 saw the opening of an Acute Care of the Elderly ward: a unit geographically

located and ideologically focused to address the needs of elderly patients at risk of loss of function. The effectiveness of the CCs as APNs in accurately assessing and screening medical patients assists in the recognition of the need for such services which potentially enhances satisfaction and life quality for elderly patients in their maintenance of independence.

CONCLUSION

The need for improved access to medical expertise and treatment at a Melbourne hospital prompted the opening of the RAMU in April 2000. To coordinate treatment and services, APNs were employed and are known as Clinical Coordinators. The latter are highly skilled and appropriately qualified and experienced nurses who practise independently and collegially with all members of the multi disciplinary team. They focus on the need to contextualise the meaning illness has for each patient and therefore to plan appropriately. Since their inception in April 2000, CCs have contributed positively to patient service processes, service provision and practice reform. However, CCs are re-evaluating their practices and have identified areas of improvement. The next year will continue to provide challenges and see further adaptations to the role which will further enhance patient and organisational outcomes.

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