



SPECIALLING IN DELIRIUM AND DEMENTIA: A cross-sectional cohort study

Research Question

“Do elderly patients with delirium and dementia who are provided with an Individual Patient Special have nursing assessments conducted in clinical practice?”

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List of Abbreviations

ACI	Agency for Clinical Innovation
AHNM	After Hours Nurse Manager
ALOS	Average Length of Stay
APAT	Adult Patient Assessment Tool
AIN	Assistant in Nursing
CAM	Confusion Assessment Method
CHHC	Coffs Harbour Health Campus
IPS	Individual Patient Special
IPS-Agg	Individual Patient Special Aggression
IPS-CWF	Individual Patient Special Confused Wandering Falls
IPS-Co	Individual Patient Special Confused
IPS-Cust	Individual Patient Special Custodial
IPS-Fa	Individual Patient Special Falls
IPS-HD	Individual Patient Special High Dependency
LOS	Length of Stay
MNCLHD	Mid North Coast Local Health District
MET	Medical Emergency Team
MMSE	Mini Mental State Examination
MRN	Medical Record Number
NUM	Nurse Unit Manager
RACF	Residential Aged Care Facility

Table of Contents

Acknowledgements	2
List of Abbreviations	2
Table of Contents	3
List of Figures and Tables	3
Abstract	4
Executive Summary	5
Introduction	8
Background	9
Method	14
Results	18
Discussion	22
Conclusion	25
Recommendations	25
References	27
Appendix	30

List of Figures and Tables

Table 1	ProAct Codes for Requesting an Individual Patient Special	13
Figure 1	Medical record selection process for audit	15
Table 2	Assessments & the IPS model	17
Figure 2	Histogram of Patients Specialled by Wards	18
Table 3	Cognition Testing Outcome variables	19
Table 4	Outcome variables IPS policy and procedure	19
Figure 3	Percentage of patients receiving psychotropic medication	21

Abstract

Do patients with delirium and dementia who are provided with an Individual Patient Special (IPS) have nursing assessments conducted in clinical practice?

Aim

Few studies have examined the model of providing an IPS to patients who present to hospitals with delirium and dementia. This study measured rates of nursing admission assessments and adherence to IPS policy and procedure at a rural hospital.

Method

A quantitative retrospective medical record audit was conducted using consecutive sampling of specialised patients that were admitted to a rural 270 bed hospital over an 18 month period from June 2012 to January 2014. Inclusion criteria were patients aged 65 and over with a diagnosis of delirium and dementia who were specialised (n=150). Patients with a psychiatric illness and high dependency patients were excluded.

Results

The audit demonstrated low rates of completion of compulsory admission assessments for patients with delirium (21%) and dementia (20%) and low referral rates to Medical Team or Specialist Nurse for more expert care (23%). Results for compliance with the IPS model were mixed with good outcomes in completion of the daily patient behaviour chart (83%) and daily Medical Officer review (100%). Results revealed low completion rates for the reassessment process for the need for an ongoing special at 48 hours (30%).

Conclusion

Results indicate that the care of confused patients with challenging behaviour is complex and that compulsory admission assessments aren't attended for all patients. Changes to the IPS policy and procedure to reflect a therapeutic rather than a custodial model is recommended. The development of criteria to cease an IPS may result in reduced length of stay for IPS patients.

Implications for future practice

The demand for the IPS model is likely to increase as the population ages and the prevalence of delirium and dementia increases. It is important for health service providers to evaluate care provided to patients to ensure optimal, cost effective outcomes.

Key Words

Specialising, assessment, delirium, dementia, constant observation.

Executive Summary

Study Implications and Recommendations

As a result of this audit on specialising patients at Coffs Harbour Health Campus) CHHC it is recommended that the network IPS policy and procedure be revised by a **working group** of expert clinicians in the care of delirium and dementia. An expert group would include multidisciplinary representation from medical officers, nurses, allied health and a consumer representative.

It is suggested the group focus on the following areas:

- Development of a **therapeutic rather than custodial model** of care that places emphasis on finding the cause of a patient's challenging behaviour rather than merely observing and documenting the frequency of challenging behaviour.
- The development of **guidelines to cease an IPS**. The absence of any guidelines to assist clinicians to cease a special appears to result in prolonged and at times unnecessary use of a special, which increases cost of care. The emphasis on risk management and patient safety in current IPS policy may discourage clinicians from ceasing a special.
- Review is recommended of the large amount of **unnecessary paperwork** associated with securing, monitoring and reassessing a patient who is specialised. The current cumbersome process could be streamlined by utilising the current electronic medical record (EMR).
- Policy should promote the importance of **family engagement** in all aspects of a specialised patient's care.

A **pharmacy review** should be compulsory for all specialised patients on psychotropic medication especially when these medications are prescribed as often as necessary (PRN).

The reasons for the high number of **medical emergency team (MET) calls** for specialised patients should be investigated through existing morbidity and mortality meetings.

It is also recommended that the Mid North Coast Local Health District (MCHLHD) continues to invest in Assistant in Nursing (AIN) IPS **education and training** through nurse strategy funding.

Further investigation by the Quality Team is recommended to discern why there are low rates of admission assessments for delirium and dementia on the adult patient assessment tool (APAT).

What did this study find and what does it mean?

Results of the CHHC audit showed that 83 participants had a diagnosis of dementia and 99 participants had a diagnosis of delirium. There were 78 participants who had a diagnosis of both delirium and dementia. Rates for cognitive testing were low with 21% of all participants having a confusion assessment method (CAM) test attended and 20% of all participants having the recommended mini mental state examination (MMSE) attended.

On examining the district IPS model, there was full compliance with some aspects of policy and procedure including daily patient review by a Medical Officer (100%). However despite daily Medical Officer review there was a high number of patient medical emergency calls (MET) and rapid response calls for clinical deterioration (21% compared with an average 2% for the all admitted patients). The most frequent reason for a MET call was hypotension (29 %) and hypertension (22%). The audit didn't explore the cause of the MET calls but this unexpected finding may be an indication of the morbidity of this client group.

There was satisfactory compliance with nurses completing the patient behaviour chart every 30 minutes (83%) however the value this information contributes to patient care is questioned. Behaviour mapping and looking for causes of challenging behaviour may add more value in terms of looking for triggers for challenging behaviour rather than documenting a patient's behaviour every 30 minutes.

Review rates for the need for an ongoing special as per the IPS procedure were low at the eight hour interval (17%), at 24 hours (29%) and at 48 hours (30%). These figures suggest that reassessments are not occurring and this may contribute to unnecessary length of time specialised.

Most patients in this study (93%) were specialised due to being confused, wandering and considered to be a high falls risk. On admission falls risk assessments were attended for 77% of patients however not all patients who were found to be a high falls risk were specialised. There were 17 patients who were admitted and were not specialised but became specialised after they experienced a fall. From the total number of participants (n=150), three patients fell whilst being specialised.

A literature search showed alternatives to specialising may include physical or chemical restraint. The audit results showed low documented rates of physical restraint (2%) and high rates of the administration of psychotropic medications (77%). The administration of psychotropic medication may be viewed as a form of chemical restraint. The most common antipsychotic medication prescribed in the study population was haloperidol (61%) followed by risperidone (33%). These medications should always be used judiciously in the elderly and closely monitored. It was beyond the scope of this study to explore if there was a relationship between the high numbers of prescribed psychotropic medication and the high number of MET calls in the study participants. This finding could form the basis for a future study.

The patient medical record revealed minimal documented use of non-pharmacological approaches to care such as regular toileting, mobilising patients, addressing pain, and offering fluids prior to the administration of medications to sedate patients.

The average length of stay (ALOS) for specialised patients was 8.4 days compared with 2.5 days for all patients admitted to the regional hospital which

again may be an indication of the complexity of care for this patient group. Increased ALOS results in increased costs and increased risk of adverse patient outcomes such as hospital acquired infections. The average length of time a patient was specialised was 4.8 days.

Why the study was conducted?

Care of hospitalised older patients with delirium and dementia who have behavioural problems is complex and there is a concern amongst clinicians to keep them safe from falling or other adverse outcomes such as absconding or self-harm. Historically confused wandering patients were physically restrained however NSW Health now advocates a restraint minimisation policy. Providing an IPS is one way of monitoring confused elderly patients and keeping them safe from harm. The IPS model is where one nurse is allocated to care for one patient and the process of providing an IPS is termed "specialling". Specialling is an expensive model and there is a concern amongst health administrators regarding the growing demand for specialling as the population ages and costs escalate. There is also debate in the literature from economists who question if an IPS does keep patients safe and prevents them from falling. There is a suggestion from health administrators that cohorting patients whereby one nurse is allocated to care for more than one confused patient in the same room may assist in reducing the cost of specialling, however this concept hasn't been explored in terms of patient care.

There were few studies found that have examined the efficacy of the IPS model in terms of patient assessment and care. The aim of this study was to examine the IPS model at CHHC and measure admission assessments for delirium and dementia and falls in patients who are specialised.

Background of the Study

On admission to Coffs Harbour Health Campus the compulsory Adult Patient Assessment Tool (APAT) guides nurses in patient assessment, care planning and referral. When a patient is admitted with confusion there are two assessments on the APAT that assist clinicians to assess the confused older person. The first assessment is the CAM which is a validated tool to test for delirium. The second assessment is the MMSE which assists clinicians in determining the presence of dementia and the stages of dementia. It is important to differentiate between delirium and dementia as delirium is an acute onset confusional state that is reversible once the cause or causes are known, whereas dementia is a progressive decline in cognitive functioning that is unable to be reversed. Patients with a diagnosis of dementia may also be hospitalised with a delirium superimposed on dementia.

The APAT also directs nurses to refer to appropriate clinicians for further assessment and expert advice regarding care.

How the study was conducted

The study consisted of a retrospective medical record audit of patients specialised at a 270 bed regional hospital (n=150). Consecutive sampling was used and data was collected on an Excel spreadsheet by the primary researcher. All patients who were specialised between June 2012 and January 2014 were included. Inclusion criteria were patients aged 65 and over with a diagnosis of delirium and dementia as documented by a medical officer in the medical record. Exclusion criteria were patients with a psychiatric illness, patients withdrawing from alcohol and patients requiring high dependency care.

Care was measured against compulsory admission assessments and district IPS health policy and procedure. These documents are designed to guide clinicians in delivering care.

Introduction

This retrospective medical audit aimed to examine the following aspects of the Individual Patient Special (IPS) model:

- Rates of admission assessments for patients admitted to hospital with delirium and dementia who are specialised.
- Comparison between results of this audit and a similar audit conducted by Landon et.,al. (2009) on the APAT.
- The relationship between falls and falls assessments for patients who are specialised.
- Compliance rates with aspects of the health district's IPS policy and procedure including:
 - Completion of a risk assessment form every 24 hours for the need for a special
 - Completion of staff checklist and behaviour chart every 30-60 minutes.
 - Daily patient review by a Medical Officer
 - Daily nursing handover sheet completed.
 - Formal review by Nurse Unit Manager (NUM) or After Hours Nurse Manager (AHNM) every 24 hours for need for special.

Providing an IPS or "specialling" a patient in the acute hospital setting is a well-known nursing practice (Salmon & Lennon, 2003). In the literature definitions vary but specialling generally refers to providing 1:1 care to a patient by a nurse for an individual patient or a small number of cohorted patients (Harding, 2012; Moyle, Borbasi, Wallis, Olenshaw & Gracia, 2010). Specialled patients may have one or more of the following symptoms or diagnosis; agitation, high anxiety, alcohol withdrawal, behavioural disturbance, have a psychosis or personality disorder, have delirium or dementia, or may be neurologically impaired or suicidal (Nadler-Moodie, 2009).

Throughout this report the term “specialling” will mean the nursing practice of providing an individual patient special (Bowers & Park 2001, as cited in Wilkes, Jackson, Mohan & Wallis, 2010). The term “the special” will mean the staff member who is providing the care to the patient who is being “specialled”. Cohorting refers to the practice where one nurse constantly observes and cares for more than one confused patient in the same room. For the purposes of this report “delirium and dementia” will mean patients may have a diagnosis of delirium, a diagnosis of dementia or a combination of both delirium and dementia.

Assessment of patients with delirium and dementia

Admission assessment of the confused older person is important in order to facilitate care planning and referrals to other health professionals (Dick, La Grow, & Boddy 2009; Kaisu, Jouko, Timo & Reijo, 2006). It is important to establish the person’s baseline level of functioning and determine if they have a delirium, a dementia or a delirium superimposed on dementia (Britton & Russell, 2004). Dementia is a chronic confusional state whereas a delirium is an acute confusional state that is reversible once the cause or causes are identified (Inouye, 2006).

On the Mid North Coast and North Coast of NSW, 21 hospitals use the Adult Patient Assessment Tool (APAT) to assess all adult patients within the first 24 hours of admission (Landon, Carroll & Antoni, 2013). Completing the APAT within 24 hours of admission is compulsory for all adult patients. On the APAT there are two risk screens that relate to confusion: the Delirium Risk Screen and the Cognitive Impairment Risk Screen. These two risk screens and their associated actions were the primary outcome measured in this audit. When the Delirium Risk Screen is completed if the patient has positive signs of delirium (by a numerical score), they are to be referred to the Medical Officer or Specialist for a CAM. The CAM is a diagnostic observational instrument used to identify a new onset delirium. This tool helps to identify the syndrome’s essential and associated features and is useful in distinguishing the difference between delirium and dementia (Sendlebach & Guthrie, 2009). When the Cognitive Impairment Risk Screen is completed if the patient has two or more triggers present they are to be referred to the Medical Team or Specialist Health Worker for an MMSE. The MMSE is a validated tool that can be used to systematically assess dementia (Folstein, Folstein & McUgh 1975; Kurlowicz & Wallace, 1999).

Background

Literature Review

Despite an extensive literature search there appears to be few articles published on specialling patients with delirium and dementia. An electronic literature search was conducted using the following data bases: CINAHL, ProQuest, PsycInfo, The Cochrane Collaboration, PubMed, BMJ-Best Practice, Evidence Based Practice, OvidSP and Medline. Search terms included special*, staff special, special observation, individual patient special 1:1 nursing, companion sitter, close observation, constant observation, clinical observer, protective monitoring, delirium assessment and dementia

assessment. Journal articles, research articles, unpublished reports, local health policies and reports were also reviewed. Terms found that were synonymous with IPS or specialling included “sitters” (Nadler-Moodie, 2009), “observation assistants” (Harding, 2012), “special observation” (Dewing, 2012), “specialling” (Dick, Grow & Boddy, 2009) or “constant observation” (Mackay, Patterson & Cassells, 2005).

The search revealed assessment of the hospitalised patient with delirium and dementia is well documented in the literature (Flagg, McDowell, Mwose & Buelow, 2010; Atkins, 2011) however minimal documentation was found on the specialling model. This finding is supported by Dewing (2012) in her paper entitled: “Special observation and older persons with dementia and or delirium a disappointing literature review”. Dewing found the lack of published empirical research evidence on specialling the older patient with delirium and dementia infers that the practice is currently not informed by gerontological research evidence and requires further investigation (Dewing, 2012).

Most of the literature sourced by the researcher related to clinical guidelines for the constant observation of psychiatric patients who were at high risk of suicide and this appears to be shaping special observation in gerontological practice (Dewing, 2012; Dick et. al., 2009). For many years the term “constant observation” has described the routine psychiatric practice of monitoring suicidal patients by security guards (Stewart & Bowers 2012; Worley, Kunkel, Gitlin, Menefee & Conway, 2000). The model for psychiatric patients is based on a custodial model where the primary objective is to constantly “observe” the patient who is thought to be at risk of suicide, self-harm or violent behaviour (Mackay, Paterson & Cassells, 2005). For the confused hospitalised older person there is a move away from the custodial model to a more therapeutic model where the “special” is a nurse who is actively engaged in delivering direct patient care (Dewing, 2012).

What is the purpose of an IPS?

An IPS is designed to provide safety for patients who present with behaviour that indicates risk of harm to self or others (Nadler-Moodie, 2009). These behaviours may include high risk of falling, self-harm, pulling at medical equipment (e.g., intravenous lines and catheters), physical and verbal aggression, or intrusive behaviour and attempts to abscond (Nadler-Moodie, 2009).

The cause of these behaviours in the confused older person is often due to human distress, disorientation, and misperception that is unable to be verbally communicated (Brechin, Murphy, James & Codner, 2013). Behaviours may represent an unmet need rather than a consequence (symptom) of an illness and as such are amenable to change if those needs can be identified and met. When a special engages in a therapeutic rather than a custodial model of care, unmet patient needs can often be identified and addressed, with subsequent reduction in challenging behaviours. Non-pharmacological approaches to management such as regular toileting, relief of pain and involvement of family in care are examples of care that should be provided and trialed prior to administering any form of medication or physical restraint (Dodds, 1996; Gorski, 1995). This approach to care is known as a person-centered approach and should always be used when caring for the confused older person (NSW Agency for Clinical Innovation (ACI), 2014). The

foundation of person-centered care is respect and understanding for an individual and their right to self-determination (McCormack, Dewing & McCance, 2012). An example of a person centered tool that was developed by the Agency for Clinical Innovation (ACI) and introduced at CHHC in 2012 is the TOP 5. TOP 5 is a tool to enable staff to work with carers to communicate their knowledge and expertise of the person who has become the patient. Family and carers are requested to complete a form advising of five key strategies to better inform staff about the specific needs of a patient (NSW Health Central Coast Local Health District, 2012). The primary carer's knowledge of the patient, especially in relation to communication and behaviour can be the key to assist staff to understand the patient's needs (NSW ACI, 2012).

However in busy hospital environments staff are not always available to provide 1:1 care and chemical and physical restraint is often used to control patients' challenging behaviour (Bradas and Mion, 2007; Hughes, 2008). Physical restraint is defined as anything that limits an individual's voluntary movement such as bedrails, posy restraints, chair restraints and mittens (NSW Health, 2011). Physical restraint should only be used as a last resort as it increases morbidity and mortality, frequently leads to further confusion, skin tears, malnutrition, dehydration, incontinence of urine and faeces, decreased strength and mobility and can cause the development of decubitus ulcers (De Bellis, Masil, Curren, Prendergast, Harrington, & Muir-Cochrane, 2013). Chemical restraint is defined as the use of medication to control a person's behaviour where the intended purpose of the drug is to sedate the person for convenience or disciplinary purposes (NSW Health, 2011). Chemical restraint when used inappropriately can undermine physical and psychological well-being and prescribing rates should be closely monitored (Hughes, 2008). There is minimal supporting evidence in the literature to indicate that either physical or chemical restraint keeps the patient safe and prevents the elderly from falling (Gallinagh, Slevin & McCormack, 2002). NSW Health strongly advocates a restraint minimisation environment and specialising is a model that enables minimisation of both physical and chemical restraint.

Specialising and falls prevention

Most nurses identify that the main reason a patient is specialised is to keep them safe from falling. The confused older patient may be at risk of falling due to impulsiveness, disorientation, wandering, aggression, intrusiveness, and poor mobility (Adams and Kaplow, 2013; Dick, La Grow and Boddy, 2009). At CHHC the patient falls risk assessment screen is located on the APAT and is required to be attended for all adult patients on admission. Completion of the falls risk assessment and the resulting score alerts nurses to the degree of falls risk for each patient and prompts the nurse to implement falls prevention strategies.

Identifying a high falls risk patient from the APAT admission assessment and implementing falls minimisation strategies is essential as falls in the elderly can result in pain, injury, an ongoing fear of falling, decreased physical activity, raised levels of anxiety and depression, which in turn may result in functional decline- loss of independence and admission to residential care (Falls Injury Prevention Group, 2013).

According to the NSW Falls Injury Prevention Group (2013), falls are the single most cause of injury-related hospitalisation among people aged 65 years and over. In NSW hospitalisation rates for all fall-related injuries has increased by an estimated 3.8% annually. This equates to a total cost for health care related to falls in NSW to be an estimated \$558.50 million dollars annually (Falls Injury Prevention Group, 2013).

Given the increasing numbers of elderly patients presenting to hospitals who are at high risk of falling, health administrators are questioning if specialling will be a sustainable cost effective falls prevention strategy in future years.

Cost and patient safety

Keeping patients safe is a serious responsibility for health care providers and failure to do so can find staff involved in investigations such as Root Cause Analysis (RCA) investigations and hospital litigation (Adams & Kaplow, 2013). Hospitals are struggling to provide safe and cost-effective healthcare outcomes while protecting patients from harm (Adams & Kaplow, 2013). Providing an IPS is a costly nursing practice and is not well accounted for in most hospital budgets (Adams & Kaplow, 2013; Dewing, 2012). The Mid North Coast Local Health District (MNCLHD) does account for specialling costs and monitors trends monthly. In 2012-2013 the cost of specialling for the district was \$776,527, with 15 staff fully employed in the specialling role (MNCLHD, 2013).

At CHHC the staff member who most frequently fulfills the specialling role is an Assistant in Nursing (AIN) or an undergraduate nurse. They are the most economical to employ as they are the least qualified nursing staff (Adams & Kaplow, 2013). A Registered Nurse (RN) is responsible for supervising the care provided and administering medication. However in practice AINs are frequently left without support or training when caring for these very ill patients. Moyle et. al, (2010) found in their study on the management of older people with dementia that care provided by unskilled staff resulted in failure to recognise when patients were deteriorating as the main focus of care was on risk management rather than focusing on the cause for changing behaviour.

Increasing numbers of patients with delirium and dementia

There are more than 332,000 Australians living with dementia and this number is expected to soar to almost 900,000 by 2050 (AIHW, 2012). There were 83,226 patients with dementia admitted to Australian hospitals during 2009-2010 and this is expected to increase by 400% in 2050 (Health Economics, 2009).

Despite the increasing number of elderly patients being admitted to hospital in acute confusional states there exists a lack of research on the provision of an IPS to patients with delirium and dementia.

Among those with dementia 45% have been found to develop a delirium when hospitalised resulting in a longer length of hospital stay and a higher rate of complications potentially increasing the cost of care (The Cochrane Collaboration, 2006).

Delirium is the most common cause of all hospitalised elderly patients and may affect up to 56% of frail elderly patients in hospital (Inouye, 2006). It is known to increase mortality, increase hospital length of stay (LOS), cause premature admission to residential aged care facilities (RACFs) and increase

the risk of dementia (Travers et. al., 2012). Delirium is potentially reversible once the causative factors are identified however the presence of delirium is often missed, resulting in increased mortality and morbidity (McAulay-Powell, & Friedman, 2013).

In 2011/12 Emergency Department presentations at CHHC increased by 925 with the majority of increases in the 65 years and over age group (MNCLHD Services Plan, 2013). The population of the MNCLHD has increased by 8.5% between 2006-2011 with the largest increases in the age groups of 64-84 years (17%) and the over 85 years (31%) age groups. The current and projected numbers of older people will have significant service implications for the District Health Service as older people are the greatest consumers of health care (MNCLHD Services Plan, 2013).

Given the increased incidence of dementia and the greater numbers of older patients presenting to hospitals, combined with the increasing requirements to keep patients safe from falling, the researcher was motivated to conduct a quantitative medical record audit to examine the care provided to specialised patients. The following research question was formulated:

Do elderly patients with delirium and dementia who are provided with an Individual Patient Special have nursing assessments conducted in clinical practice?

Method

Ethics Approval

This study was approved on the 08/01/2013 by the North Coast Area Health Service HREC (Q094).

Study setting

The CHHC is a 270 bed base hospital on the Mid North Coast of NSW. There are no designated specialist aged care beds and no designated beds for patients who are specialised.

Sample Choice

The study design was a quantitative study consisting of a retrospective medical record audit of patients who were specialised during an 18 month period at CHHC. Participants were chosen by consecutive sampling of patients admitted June 2012-January 2014. Inclusion criteria were patients aged 65 years and over with a diagnosis of delirium and dementia as documented as a primary or secondary diagnosis. Exclusion criteria were psychiatric patients, high dependency patients and patients withdrawing from alcohol. Data was collected on an Excel spreadsheet by the primary researcher and de-identified for patients' confidentiality.

Participants were sourced from the hospital ProAct rostering system as the provision of an IPS is recorded in this system for staffing costs. Each occasion of specialling is recorded in hours on the ProAct data base. The Medical Record Number (MRN) of patients who are specialised is also recorded allowing for patient identification.

In the ProAct data base patients who were specialised are categorised under codes that reflect the patient's behaviour and rationale for requesting a special (Table 1).

ProAct Note Type	Rationale	Detail
IPS-CWF	Confused wandering and falls	Combined risks
IPS-Agg	Aggression	Predominate rationale is risk of aggression to others, including intrusive behaviours
IPS-Fa	Falls	Nil or mild cognitive impairment but at very high risk of falls despite maximum assessment and prevention strategies
IPS-HD	High Dependency	Clinical need including patients awaiting retrieval or transfer to a special unit
IPS-Co	Confusion	Risk of harm by significantly interfering with treatment or ADLs
IPS-Cust	Custodial	Patients under custody or at risk from external persons
MH-Spec	Mental Health	Scheduled/at risk of harm to self or others or absconding

Table 1. ProAct Codes for Requesting an IPS

Codes chosen for inclusion in the audit from the ProAct data base were: IPS-CWF, IPS-Agg, IPS-Fa. and IPS-Co.

The codes IPS-Cust, and MH-Spec refer to psychiatric patients and were outside the inclusion criteria. The code IPS-HD was also excluded as this code refers to patients who require 1:1 nursing due to their high acuity nursing requirements.

Entries on the ProAct data base with the selected codes numbered 3,957 occasions of specialling. An “occasion of specialling” is defined as a time period in hours- usually an eight hour nursing shift. When repeated entries with the same MRNs were combined, the 3,597 occasions of specialling equated to 279 individual patients. Of the 279 potential participants 107 were eliminated as they did not meet the selection criteria due to age less than 65, no diagnosis of delirium or dementia or withdrawing from alcohol. The remaining 172 patients had the selected code, met the age criteria and had a primary or secondary diagnosis of delirium and dementia. A patient was considered to have a diagnosis of delirium and dementia if a health professional documented the diagnosis on admission or discharge, in the patient progress notes or in the medical officers’ discharge summary. Twenty two files were not recorded in the analysis as they were unavailable for access due to records being held by other clinicians. The remaining 150 records were analysed following the selection process (Figure 1).

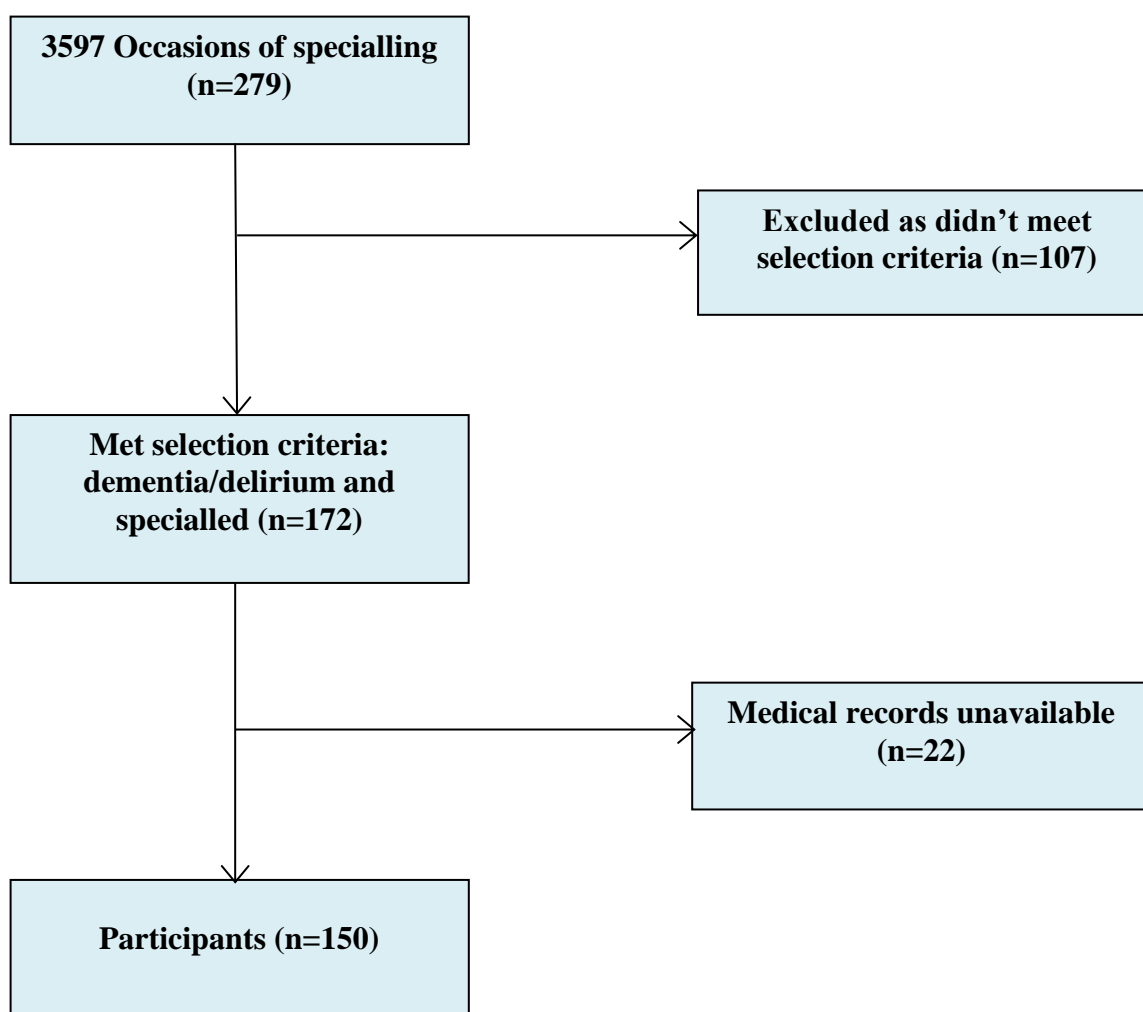


Figure 1: Medical record selection process for audit

Data was collated and analysed using SPSS computer software and functions of Excel with the assistance of a biostatistician and tutor from the Rural Research Capacity Building Program. The data is largely presented as descriptive statistics with some comparative analysis.

What was measured?

The primary outcome measure was rates of completion of admission assessments for delirium and dementia and referral rates to medical officer or specialist nurse for more expert advice on care.

The secondary outcome measure of this audit was rates of completion of the district IPS policy and procedure. The policy and procedure state that the following must be attended for all patients who are specialised:

- A risk assessment form for the need for a special is completed every 24 hours.
- Staff checklist and behaviour chart completed every 30-60 minutes.
- Daily Medical Officer patient review
- Daily nursing handover sheet /nursing care plan completed.
- Formal review by NUM or AHNM every 24 hours for the need for an ongoing special.

The third outcome measure of this audit was the relationship between falls nursing assessment on the APAT and specialising. The following was measured in relation to falls:

- The percentage of nursing falls risk assessments completed on admission on the APAT
- The reason for specialising as recorded on the ProAct data base.
- The percentage of patients with an admission diagnosis of falls.
- The number of patient who fell whilst being specialised.
- Restraint as an alternative to specialising, including physical and chemical restraint.

As there appears to be very little published documentation about patients who are specialised, a range of demographic, medical and psychosocial characteristics were collected to profile the type of patient who is specialised. A total of 53 variables were audited from the medical record regarding care of patients with delirium and dementia (Table 2).

What Measured	was	Outcome Variable
Patient Information Diagnosis		Age, gender, admission date, discharge date, length of stay (LOS), where the patient was admitted from, discharge destination Admission diagnosis, discharge diagnosis, comorbidities, presence of delirium/dementia
APAT Assessments		Falls risk assessment tool Cognitive Screen completed & Folsteins' Mini Mental State Examination (MMSE) and referral to Medical Team/Specialist Health Worker Delirium screen completed & Confusion Assessment Method (CAM) and referral to Medical Team/Specialist Health Worker
IPS Model		Risk assessment form to request an IPS Reason for special (code) Half hourly-hourly behaviour management log maintained Nursing handover form completed each shift Formal review by Nurse Unit Manager (NUM)/After Hours Nurse Manager (AHNM) at 24 hours Daily Medical Officer review Patients cohorted Who requested the special Who ceased the special Hours patient specialised
Falls		Number of patients admitted with a fall or fall related injury Number of patients who fell during admission
Restraint		Evidence of physical restraint Evidence of chemical restraint ie psychotropic medication
Other		Number of Medical Emergency Team (MET) calls Mortality IMMs & reason TOP 5 Family engagement in care

Table 2: Data collected regarding assessments and the IPS model

Person-Centred Care

Family and carer involvement is essential when caring for the confused older person who may be unable to communicate their needs. In this audit family consultation was considered to have occurred if there was documentation regarding any of the following: TOP 5, family meetings, telephone conversations, family staying, collaborative history supplied by family or discharge planning with family.

Results

Data was analysed for 150 participants. The mean age of participants was 83 (range 65-99). The ratio of female to male was 45% to 55%. When examining discharge destination for specialised patients a greater proportion were discharged to Residential Aged Care Facilities (RACFs) (61 patients) than those admitted from Residential Aged Care Facilities (51 patients). For those patients who were not discharged to a RACF they were either deceased, transferred to outlying facilities for sub-acute care or discharged home.

The mean number of hours a patient was specialised was 117 hours (4 days) (range 4 hours- 1,152 hours (48 days)).

The ALOS for a patient who was specialised was 11 days.

The specialised patients in this study were located in the emergency, medical, surgical and rehabilitation units.

The following histogram (Figure 2) shows the wards where participants were nursed:

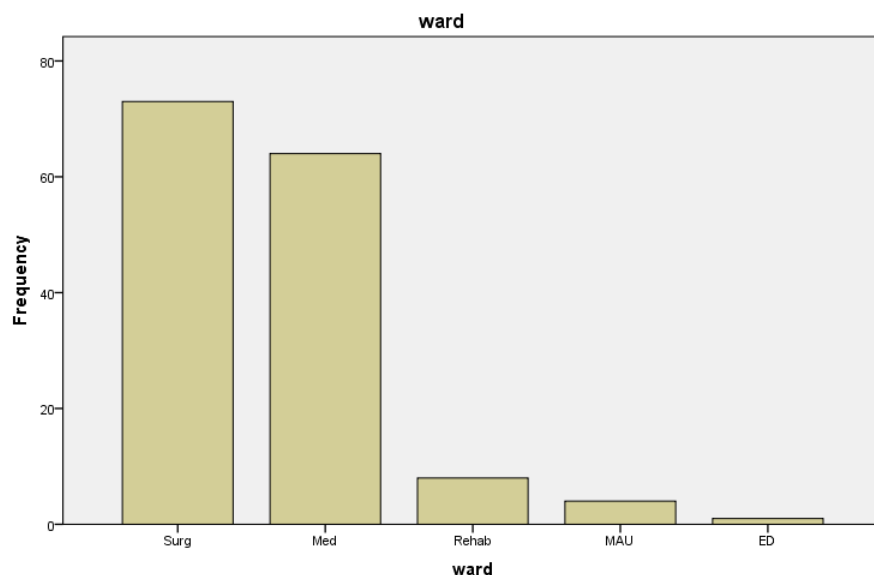


Figure 2: Histogram of Patients Specialised by Ward

Cohorting patients

The number of patients cohorted on all wards was 56 with some evidence that cohorting is higher on Surgical Ward (34/73 or 46%) compared to Medical Ward (20/64 or 31%) (Chisq=3.354, df=1, p=0.067).

Cohorted patients are less likely to have an APAT assessment attended.

Completion of the APAT

Using wards with participants greater than 10 (Medical and Surgical wards), data showed slightly higher rates of completion of the APAT on Medical Ward (19/64 or 29.7%) compared to Surgical Ward (12/61 or 16.4%) (Chisq=3.42, df=1, p=0.064).

Results of Primary Outcomes Measures related to APAT Assessments

The results of completion rates with the APAT risk assessments for delirium and cognitive impairment are presented in table 3. Results for screening for cognitive impairment were more favourable than those for delirium. However few patients who were recognised as having cognitive impairment had further diagnostic testing with the CAM and MMSE to determine if the cognitive impairment was a delirium or dementia.

Cognition Testing Outcome Variables	Compliance Percentage
Cognitive impairment risk screen attended	51%
Delirium risk screen attended	40%
Patients with delirium/dementia referred to Medical Team/Specialist Health Worker	23%
Delirium patients who had CAM	21%
Dementia patients who had MMSE	20%

Table 3: Results of primary outcome measures for completion rates of risk assessments for delirium and or dementia and referral to medical officer or specialist nurse

Results of Secondary Outcome Measures Related to the IPS Model

The results for compliance with the IPS policy and procedure for specialising is presented in table 4.

Outcome Variable Measured for the IPS Model	Percentage Result
Patients receiving a daily Medical Officer review	100%
Compliance with 30-60min patient behaviour chart	83%
Patient reassessed at 48 hours for the need for ongoing special	30%
Patient re-assessed at 24 hours for need for ongoing special	29%
Patient reassessed at 8 hours for need for ongoing special	17%

Table 4: Measurement of outcome variables for the IPS Policy and Procedure

From the above table it can be seen that all patients were reviewed daily by a medical officer however this daily patient review did not prevent unexpected deterioration in some patients. Thirty one patients had a MET call for an unanticipated clinical deterioration (21%) compared to 2% for all other admitted patients. The main reasons for a MET call or unanticipated clinical review included: hypotension, hypertension, respiratory causes or the patient was found unresponsive.

Similarly compliance with nurses completing a 30-60 minute patient behaviour chart was good (83%) however this constant observation of the patient's behaviour doesn't indicate triggers for challenging behaviour which may be of more value in patient care. The low compliance rates with re-assessment for the need for an ongoing special requires further investigation but may be reflective of the lack of guidelines to cease a special once it is in place.

Results of third outcome variable: falls

The main reason a patient was provided with an IPS was due to the risk of a fall. Nurses coded the requirement for a special “Confused Wandering Falls” (CWF) in 93% of all patients specialised. The second most frequent reason for requesting a special was confusion (4%). The most frequent admission diagnosis in the study population was a fall or fall related injury (27%) when comparisons were made with all other admission diagnosis for patients who were specialised. When reviewing falls risk assessment completion rates on the admission APAT, 68% of patients had a falls risk screen attended which was higher than risk assessments attended for delirium or dementia.

Not all patients who had a high falls risk assessment were specialised. There were 17 patients who were assessed as being a high falls risk on admission who were not specialised. However these 17 patients subsequently fell and a special was put in place to minimise the risk of further falls.

The results of the audit showed that for all participants three patients fell once specialising had commenced.

Chemical and Physical Restraint

Physical restraint was recorded for three patients and the reasons for restraint were well documented as per hospital policy. Study participants were prescribed psychotropic medication or combinations of psychotropic medications and benzodiazepines to manage challenging or escalating behaviour (Figure 3). While the prescribing of these medications is appropriate in some circumstances (eg. managing psychosis) psychotropics and benzodiazepines are recommended to be used in low doses with slow increments in the elderly as paradoxically they have many side effects such as hypotension, increased risk of falls, and decreased mobility. In this study most of these medications were prescribed as often as necessary (PRN) with the frequency of administration at the discretion of nurses. There were few patients who had a documented pharmacy review to monitor poly-pharmacy, medication interactions and alert to medication side effects.

Percentage of patients receiving psychotropic medications

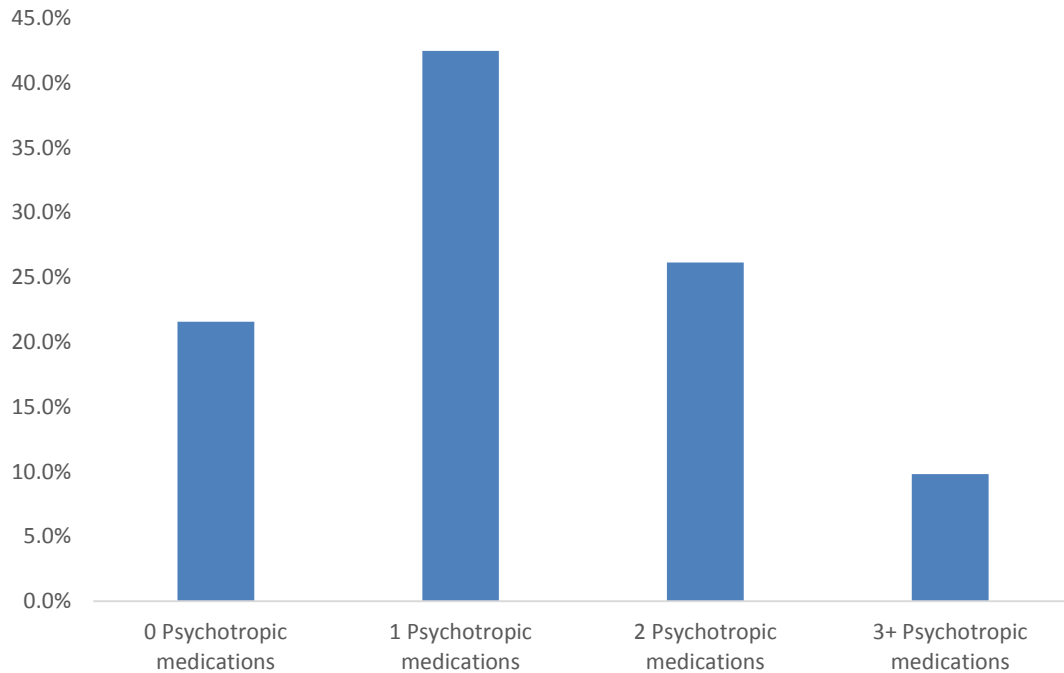


Figure 3: Percentage of patients receiving psychotropic medication.

Evidence of person-centered approaches to care

There was documented evidence in the medical record of family involvement in care for 79% of patients. Examples of family involvement included calls to families to source more information regarding patient's medical history and medications, relatives staying overnight, enquiries by family regarding care, family meetings or consultation with the family or carers regarding discharge plans.

The TOP 5 initiative introduced by the ACI is another example of person-centered care. The TOP 5 form was recorded for 13% of patients who were specialised.

Discussion

This study is one of the few studies evaluating the care of patients with delirium and dementia who were specialised in a rural hospital. The data revealed that there were low completion rates for compulsory cognitive assessments on the APAT and when the confused patient did have a positive risk assessment there was poor utilisation of the CAM (Flagg et al, 2010) to help differentiate between delirium and dementia. There were also low rates of use of the MMSE to assist with a dementia diagnosis (Kurlowicz & Wallace, 1990). Admission assessment rates for cognition were lower than those found in a similar study by Landon et. al., (2009) who also studied completion rates with the standard hospital admission risk forms on the APAT. Landon et. al. (2009) found that 43% of patients had a delirium risk screen attended on admission compared to a rate of 40% in this audit. However there was a slight improvement in the cognitive impairment risk screen in the CHHC audit (51%) compared to the Landon's findings where 50% of patients had the cognitive risk screen attended on admission. A comparison between these two audits has shown consistency in results; however it is disappointing to find that completion results haven't improved in cognitive risk assessments between 2009 and 2013.

For those patients who were identified as having delirium and dementia, 23% were referred to the Medical Team/Specialist Health Worker who is skilled in the management of patients with unpredictable and challenging behaviours.

The IPS policy and procedure at the regional hospital is reflective of a custodial model of surveillance rather than a therapeutic model of engagement. This finding is not unusual given the lack of published literature on IPS models for geriatric patients (Wilkes et. al., 2010). Results of the audit indicated that once an IPS was established the review process at the eight hour time frame (24%), 24 hour time frame (29%) and at 48 hours (31%) was low. This study did not explore why reassessments did not occur as per hospital policy, however once the special was in place they predominantly remained allocated to the patient until discharge. There are no guidelines in place to assist staff in the decision to cease a special and this may be a contributing factor. Although there were no comparative studies found in the literature that recorded the length of time patients are specialised, a potential exists to reduce the time specialised if the review process is improved. Increased length of stay is known to increase hospital cost and place patients at risk of adverse outcomes such as hospital acquired infections (NSW Health Activity Based Funding Taskforce, 2012). Data revealed that the average length of stay (ALOS) for a specialised patient was 11.4 days compared with an ALOS for all CHHC patients of 2.5 days. Increased LOS in specialised patients may reflect the complexity of care these patients require.

In regards to the IPS model there was 100% compliance with daily medical officer review however 21% of patients had a MET call or clinical review for sudden and unexpected deterioration. A rate of 21% MET call in the study group compares with a MET call rate of 2% for all hospitalised patients and this may be another indicator of the high level of morbidity for this client group. It is recommended that this unexpected finding be investigated further.

There is uncertainty and debate in the literature as to whether providing an IPS prevents a patient from falling (Adams and Kaplow, 2013; Tzeng, Yin, Grunawalt, 2008; Flaherty, Milta and Little, 2011). The data in this audit

revealed that the main reason a patient is specialised is to keep them safe from falling and this finding is also supported in the literature (Adams & Kaplow, 2013; Moyle, Borbasi, Wallis, Olorenshaw and Gracia, 2010). The CHHC audit data revealed that in the study population 27% of elderly patients were admitted secondary to a fall or a fall related injury and the main reason for the special was to prevent them from falling again. Not all patients who were admitted with a fall or a fall related injury were specialised from admission. Some patients fell later in their admission and the IPS was commenced to prevent them from falling again. The data showed that during the time all patients were specialised three patients fell. The study design didn't allow for conclusions to be made that the falls prevention was due to specialising, however the results look promising.

Documentation in the medical record revealed that physical restraint as an alternative to specialising was an uncommon practice. When patients were physically restrained, the reasons for the restraint were documented in the patient's medical record as per hospital policy. In contrast pharmacological management of agitation was common with 77% of patients prescribed at least one antipsychotic medication. Antipsychotics are medications that affect the action of a number of brain chemicals (neurotransmitters) and were initially developed to manage psychosis (Peisah & Skladzien, 2014). While there is some evidence that antipsychotics are effective for the management of delirium (Hatta, Kishi, Wada, Odwara, Takeuchi et. al., 2013) there is minimal evidence for their use in the management of agitation in dementia (Bradas and Mion, 2007). Antipsychotics have side effects such as over sedation or prolonged sedation, dry mouth, constipation, urinary retention, orthostasis, tardive dyskinesia, prolonged QT syndrome, and dizziness that contribute to falls. Antipsychotics prescribed for the care of the confused older person should be used judiciously, aimed at underlying symptoms, and prescribed in low doses and for short periods (Bradas & Mion, 2010). Similarly the use of benzodiazepines in the elderly increases the risks of adverse outcomes including falls, fractures and cognitive impairment (Dolan, Omer, Glynn, Corcoran & McCarthy, 2012). It was not an aim of this study to discern if medications were prescribed with therapeutic intent or for chemical restraint, but it was noted that most patients were prescribed at least one psychotropic and some patients more than one psychotropic medications. It is recommended that at CHHC the Pharmacy Department monitor the use of psychotropic medication and benzodiazepines in this client group, especially when they are prescribed combinations of medications PRN that have the effect of sedation. Monitoring could be in the form of regular pharmacy audits. There were few documented strategies of non-pharmacological approaches to care trialed prior to the administration of psychotropic medication (Dick et al, 2009). Non pharmacological strategies may include mobilising the patient, diversional therapy by use of activity boxes, toileting, offering warm drinks, requesting family to sit with patients and the use of volunteers. Although the TOP 5 is considered a person-centered strategy that may help minimise restraint, the TOP 5 was recorded for only 13% of patients. Documentation from the multidisciplinary team revealed that the patient's family or carers were either consulted or actively involved in care for 79% of patients.

In order to reduce the burgeoning budget of providing an IPS, some studies reveal the effectiveness of cohorting patients. Joseph & Little (2011) identified that cohorting patients in a four bed room helped to lower costs of specialising whilst maintaining positive patient outcomes. A model of care was

implemented specific to four designated beds where patients were specialised. This small unit was supported by a Geriatrician and a pre-requisite for staff to work in the unit was to undertake a training program in the care of the confused older patient. Similar results were found by Nadler-Moodie (2009) who created Specialised Adult Focused Environment (S.A.F.E.) beds where patients were cohorted and all staff who worked in the unit was given targeted education on care of the confused older person. This type of model should be differentiated from the IPS model as the care provided is no longer “individual”.

At CHHC the data revealed 37% of patients were cohorted with a higher number of patients cohorted on the surgical unit than other units. This study did not compare patient outcomes in terms of morbidity between cohorted and non cohorted patients however the study did measure the relationship between patients who were cohorted and completion of compulsory IPS paperwork. Data revealed lower compliance with IPS paperwork when patients are cohorted. The reason for this finding was not explored but may be reflective of the amount of paperwork required for an IPS.

Strengths & Weaknesses of the Study

The methodology of using a retrospective quantitative study is considered a strength of this study as it removes intentional bias on the participant's or researcher's part enabling more accurate outcome data.

Limitations of this study include the small sample size and the difficulty in replicating this study with the same rigor as other hospitals do not have the records required for the dimensions of this study. Specialising records such as the ProAct rostering system may not be available in all hospitals.

A weakness of this study may be the missing files of potential participants however this did not affect the selection process as this was beyond the researcher's control.

Bias

Selection bias was reduced by using consecutive sampling of participants for the 18 month period.

Researcher bias in relation to the study group was minimised by cross referencing methodology and data analysis with the Rural Research Capacity Building Program Officers, Biostatistician and Mentor.

Generalisability

This small study may be difficult to replicate with a similar design due to other hospital's differing data collection systems. However it is hoped that the results of this study may generalised in part to the wider population and to similar hospitals with similar client groups.

Conclusion

This small study has provided some insights into the care of patients with delirium and dementia who were specialised in a rural hospital. Results indicate that admission assessments on the APAT were not well attended and low rates of assessments such as the CAM and MMSE may result in a diagnosis of delirium being missed as these tools help differentiate between delirium and dementia.

The current IPS model may not be reflective of current best practice for care of the confused older patient as the model is custodial rather than therapeutic. There is an overt emphasis on risk aversion and less on person-centred care. Data revealed most patients were specialised due to a perceived risk of falling, however many patients were prescribed sedating medications with side effects that paradoxically increase the risk of falls.

There were low rates of reassessment for the need for an ongoing special which may result in prolonged and unnecessary specialling. An unexpected finding was the high number of medications prescribed that have a sedating effect and the high number of MET calls in this patient group.

Despite the widespread use of specialling in NSW hospitals, the model remains largely unexplored in the literature. Specialling is considered costly however until there is further research into alternative approaches to care, the demand is likely to continue as the population ages and the incidence of delirium and dementia increases.

Recommendations

It is recommended that **NSW Health** action the following in regards to the IPS model:

- Develop statewide systems for IPS data collection to include prevalence, cost and reasons for specialling. This will allow for budgeting, workforce planning and bench marking between local health districts.
- Formulation of a state IPS policy and framework that is an evidenced based therapeutic care model.
- Reduction of the number of security guards specialling aged patients
- NSW Health to continue to invest in education programs for care of the confused older patient through online courses similar to the Confused Hospitalised Older Persons Program (CHOPS).

Formation of a **CHHC working party** to:

- Revise current policy and procedure to reflect best practice guidelines and person-centered approaches to care. Policy to reflect a therapeutic model rather than a custodial model of care
- Develop guidelines to cease an IPS
- Streamline the process for obtaining an IPS by changing from a paper-based system to an electronic format through the electronic medical record (EMR).
- Review the number of MET calls through existing morbidity and mortality meetings

- Investigate the reasons for low compliance with APAT assessments through the existing Quality Unit.

Acknowledgements

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Appendix

Adult Patient Assessment Tool

TO BE COMPLETED ON ADMISSION
SIGN & DATE EACH COMPLETED PAGE

ADULT PATIENT ASSESSMENT TOOL

NORTH COAST AREA HEALTH SERVICE NSW HEALTH	 HOSPITAL	MRN: _____ SURNAME: _____ GIVEN NAMES: _____
			DOB: _____ SEX: _____ (Affix Addressograph)
Admission Date: ___/___/___ Time: _____ GP: _____ WARD: _____			Interpreter Required Y/N If Yes consider calling on 1800 674 994
PRESENTING HEALTH PROBLEM			
CURRENT COEXISTING CONDITIONS AND RELEVANT PAST HISTORY			
ALLERGIES <input checked="" type="checkbox"/> <small>Nil Known</small> <input type="checkbox"/> Yes <input type="checkbox"/> IF YES, TYPE & REACTION			
Food		-	PATIENTS OWN MEDICATIONS <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Stored in Ward
Latex/Other		-	Taken Home By Who?
Drugs/Medication		-	S4D/S8 Cupboard
Allergy Band			If 'Yes' note on Discharge Checklist
ORIENTATION TO WARD <input checked="" type="checkbox"/>			Webster Pack
Patient informed of treating doctor			COMPLIMENTARY THERAPIES USED <input checked="" type="checkbox"/>
Introduction to other patients		TV	Herbal <input type="checkbox"/> Comment: _____
Telephones/Mobile/Public		Visiting hours	Other <input type="checkbox"/> Comment: _____
Toilet/bathroom		Patient Lounge	
Meal times		VALUABLES <input checked="" type="checkbox"/>	GENERAL AIDS/PROSTHESES BROUGHT TO HOSPITAL <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Ward/Unit routine		Nil	Glasses
Aware of Rights & Responsibilities/Privacy		Sent Home	Contact Lenses
Buzzer/Call Bell		Hospital Safe	Hearing Aid: Right <input type="checkbox"/> Left <input type="checkbox"/>
Explain possibility of shared gender ward		Other	Walking Aid: Type: _____
Consent to visit - Clergy/ other <input type="checkbox"/> Y/N <input type="checkbox"/> → Denomination: _____			Dentures: Upper <input type="checkbox"/> Lower <input type="checkbox"/> Full <input type="checkbox"/> Partial <input type="checkbox"/>
Does Pt have Advanced Care Directive <input type="checkbox"/> Y/N <input type="checkbox"/>			Comment/Condition: _____
Comment: _____			
DISCHARGE RISK SCREEN <input checked="" type="checkbox"/>			Yes <input type="checkbox"/> No <input type="checkbox"/>
Estimated Day of Discharge EDD: _____ → PATIENT/FAMILY AWARE			
NB: When a risk is identified (ie <input checked="" type="checkbox"/>), consider a referral to Discharge Planner or appropriate Allied Health Professional			
Discharge Risk Factors		Yes <input type="checkbox"/> No <input type="checkbox"/>	Discharge Risk Factors
Does the patient live alone?			Does the patient require the services of an Aboriginal Health Liaison Officer or other cultural support?
Are there concerns about returning home alone?			Does the patient take 6 or more medications? (Discuss with clinical pharmacist/Medical Officer re: Home Medicines Review)
Does the patient have an identified carer? If YES, state who: _____			Is the patient likely to have problems managing self care on discharge, eg: walking, bathing, dressing, meal preparation, shopping, wound care, etc?
Type of residence (circle): Home / Unit / Caravan / Residential Aged Care Facility/ Hostel			Is the Patient a candidate for an Early Discharge Program?
Number of stairs: Front Rear Internal..... Ramp:			What are the patient's transport arrangements on Discharge? eg relative/friend: _____
Does the patient have caring responsibilities for other person / children / pets? (circle)			If NO transport organised describe action taken: _____
If YES, are they being cared for whilst you are in hospital?			
Do you have any concerns about their well being? If YES, what arrangements are being made? Comment: _____			
COMMUNITY SERVICES USED PRIOR TO ADMISSION <input checked="" type="checkbox"/>			CONTACTED <input checked="" type="checkbox"/>
Meals on Wheels		Community Nurses	Palliative Care
Home Care		Diabetes Educator	Cardiac Rehab
Community Transport		ACAT	Community Packages
Telecross		Dietician	Other (Specify): _____
REFERRALS MADE DURING ADMISSION			
Referral to	Date referred	Initial	Date seen
Referral to	Date referred	Initial	Date seen

NCAHS Adult Patient Assessment Tool - Version 2 April 2008

INFECTION CONTROL <input checked="" type="checkbox"/>					Yes	No
Does the patient require additional Precautions? ie. Airborne, Droplet, or Contact Precautions						
Does the Patient have a Notifiable Disease?						
If YES has mandatory notification to Public Health been attended? Ph: 6588 2750 (Port Macquarie Office) Ph: 6620 7500 (Lismore Office)						
If answer is 'YES' to any question implement appropriate precautions and notify Infection Control RN/CNC. Notified						
PHYSICAL ASSESSMENT Circle						
Neurological Status	Alert	Verbal Response	Pain response only	Unconscious		
Breathing	Normal	Cough	Dyspnoea	Other (Note):		
Vision for ADLs	Adequate Other (Note):	Impaired	Prosthesis	Glasses		
Hearing for ADLs	Adequate	Impaired	Prosthesis			
Mouth	Clean	Poor oral hygiene	Other (Note):			
Swallowing	Normal	Impaired (Note) →		Consider referral to Speech Pathology, if referred document on Referrals section (pg1)		
Speech	Normal	Impaired (Note) →				
Circulation	Peripheries warm & well perfused		Skin cool & clammy			
Skin	Intact Poor integrity (comment):					
	Pressure Areas?	YES	NO	Grade:	Location:	
				Grade:	Location:	
	Assess pressure ulcer risk (Refer to Pressure Area Assessment Tool)					
Wounds	Description: Location: If wound present refer to Wound Chart					
Elimination	Normal	Continent / Incontinent	IDC/SPC	Date of insertion:		
Bladder	Regular	Continent / Incontinent	Stoma:	Aperients:		
Bowels						
Muscular-skeletal	Normal	Stiffness	Deformities	Other:		
Pain	Pain Score	0 (least pain) – 10 (worst pain)		Score:		
	Pain location:	Pain Duration:		Pain Radiation:		
	Comment:					
Gastro-intestinal	Normal	Reflux	Nausea	Vomiting		
	Other:					
Sleep Patterns	Normal	Problems	→ Sedation used:			
Disabilities	Yes (Note): If "Yes" consider referral to NUM for further action.					
FALLS RISK SCREEN						
The Northern Hospital Modified Stratify July 2002. Permission to reproduce this tool was granted by The Northern Hospital						
FALLS RISK ASSESSMENT TOOL			Risk Score			
	➤ Assess patient daily and when change in condition occurs ➤ Score patient according to current characteristics					
1. Fall: Current admission?	Yes, the patient had a fall/s during current admission.		3	1. Complete Risk Assessment tool 2. Use Risk Score and professional knowledge to determine risk and most appropriate Prevention Strategies 3. Implement most appropriate Prevention Strategies 4. Document details in Care Plan or Pathway 5. Consider referrals to other disciplines. If referred, document on Referrals section (pg 1)		
2. Fall: within 12 months?	Yes, the patient had a fall/s in the last 12 months		1			
3. Mental State?	Yes, the patient is confused, disorientated, intellectually challenged, agitated or has impulsive behaviour		1			
4. Mobility?	Yes, the patient needs 'supervision' or is 'Able to Assist' ('Able to Assist' means can manoeuvre own body, cooperates/comprehends instructions, can stand unsupported with/without aid, maintains balance but is not able to ambulate without supervision)		1			
5. Impaired Balance?	Yes, the patient has impaired balance and/or hemiplegia		1			
6. Age?	Yes, the patient is 80 years or older		1			
7. Toileting?	Yes, the patient is in need of frequent toileting		1			
8. Vision?	Yes, the patient is visually impaired to the extent that everyday function is affected		1			
9. Drug/Alcohol?	Yes, the patient presented with drug or alcohol related problems		1			
RISK SCORE: 3 OR MORE = HIGH FALLS RISK						

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DIET circle			
Diabetic Usual diet:	Type 1	Type 2	Special:
Consider Referral to Dietician/Diabetic Educator. If referred document on Referrals section (pg 1).			
MALNUTRITION SCREEN			
1. Have you/the patient lost weight recently without trying?		Score	2. Have you/the patient been eating poorly due to decreased appetite?
	No	0	No
	Unsure	2	Yes
			1
If YES, how much (kg)?	1-5	1	Total Score (add scores from Q 1 & 2)
	6-10	2	If the patient has lost weight and/or are eating poorly they may be at risk of malnutrition; ie score >2
	11-15	3	
	>15	4	If score is >2 consider referral to Dietician – Note: If referred, document on Referrals section (pg 1)
	Unsure	2	

SUBSTANCE USE RISK SCREEN <input checked="" type="checkbox"/>		Yes	No
Does the patient smoke? (inform of NCAHS Smoke Free policy)			
Does the patient drink alcohol?			
Does the patient use non-prescription drugs? (eg. Cannabis, amphetamines, heroin)			
Is the patient prescribed drugs that can cause dependence? (eg. Benzodiazepines, morphine type drugs)			
If YES to any of the above, complete the 'Substance Use History' form → Completed?			
MENTAL ILLNESS RISK SCREEN <input checked="" type="checkbox"/>		Yes	No
1. Does the patient experience mental health problems?			
2. Does the patient currently see, or has previously been seen by a psychiatrist or mental health professional?			
3. Does the patient currently take medication to help with mental health problems?			
4. Has the patient ever tried to harm themselves?			
If the answer is YES to one or more questions consider referral to Mental Health			
5. Is the patient currently thinking about harming themselves?			
If answer is "Yes" to question 5 conduct preliminary screening for suicide risk, refer NSW Health Suicide Risk Assessment Guide, ensure patient safety, institute immediate management and refer to Mental Health for a comprehensive mental health risk assessment and further management where required. If referred document on Referrals section (pg 1).			
DELIRIUM RISK SCREEN <input checked="" type="checkbox"/>		Yes	No
Has clinical observation identified:			
1. Acute change in mental status?			
2. Difficulty focusing attention and is easily distracted?			
3. Confused thinking and rambling speech?			
4. An altered level of consciousness – lethargic, stuporous, comatose or hyper vigilant?			
And/or the:			
5. Informant or carer express concern regarding behaviour or mental state?			
If 1 or 2 are present AND 3 or 4 or 5 and the course is acute and fluctuating refer to medical team/specialist health worker to complete a Confusion Assessment Method (CAM) tool. If referred document on Referrals section (pg 1).			
COGNITIVE IMPAIRMENT RISK SCREEN <input checked="" type="checkbox"/>		Yes	No
Has clinical observation identified:			
1. Poor concentration and/or disorientation?			
2. Conversation is tangential (not keeping with the topic) and repetitive?			
3. Language deficits – difficulties understanding or expressing?			
4. Memory and recall impairment?			
5. Personality or behaviour changes?			
6. Alteration in praxis (ability to sequence motor activity), thinking, planning and functional independence?			
And/or the:			
7. Informant or carer expresses concern regarding memory loss or behaviour?			
If any two of the triggers 1 to 6 presents and the onset is not acute or associated with delirium refer to medical team/ specialist health worker to complete a Folsteins Mini Mental Status Examination (MMSE) . If referred document on Referrals section (pg 1).			

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DISCHARGE CHECKLIST (To be completed with patient)						
DISCHARGE DATE _____		TIME _____		DISCHARGE DESTINATION _____		
RELATIVE / CARER / FRIEND NOTIFIED			YES <input type="checkbox"/>	BY PATIENT <input type="checkbox"/>		BY STAFF <input type="checkbox"/>
IF PATIENT FROM ANOTHER FACILITY – HAVE THEY BEEN NOTIFIED OF RETURN/TRANSFER YES <input type="checkbox"/> NO <input type="checkbox"/>						
<input checked="" type="checkbox"/>	Yes	No	N/A	Comments		
Own medications/Webster pack / SD4 / S8 Drugs						
Medication s/Medication List/Scripts						
Valuables (list items returned)						
Own X-rays						
Own equipment (list)						
Equipment and supplies provided						
Medical/Nursing Summary						
Medical devices removed (eg cannula/ECG Leads)						
Patient Education/Discharge Information provided						
Carer Information provided						
Wound Care Information provided						
<input checked="" type="checkbox"/> COMMUNITY SERVICES REFERRAL/RECONNECT						
Type	Yes	No	Notified	Service Name and Phone Number		
Community Case Manager						
Community Nurse						
Home Care						
Meals on Wheels						
ACAT						
Occupational Therapist/Physiotherapist						
Allied Health						
Mental Health (Discharge Summary to Mental Health)						
Aboriginal Hospital Liaison Officer						
Aboriginal Medical Service						
Inter Agency Referral						
ACTIP/CAPACS						
Fax Referral To Quitline (for smokers motivated to quit)				See Quitline Referral form		
Other (eg. DOCs)						
<input checked="" type="checkbox"/> TRANSPORT ARRANGEMENTS						
Source	Yes	Booked	Time			
Relative/friend						
Taxi						
Ambulance						
Area Health Patient Transport						
Community Transport provider						
Aboriginal Hospital Liaison Officer						
Other						
FOLLOW-UP APPOINTMENTS						
Type	Yes	No	N/A	Date	Time	
GP						
Specialist						
Outpatient Clinic						
Aboriginal Medical Service						
Other						

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