Revolving Doors
Effective communication in the handover of mental health patients to community health practitioners (CHOCYS)

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ACSQHC acknowledges that the information contained in this one-year study presents initial developments and supports longer-term research and evaluation. The information presented here does not necessarily reflect the views of ACSQHC, nor can its accuracy be guaranteed.
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Abstract

The aim of this project was to create a robust process that decreases the risk of adverse events during vulnerable periods when private mental health patients are handed over from inpatient services to community practitioners. The ‘Revolving Doors – Effective communication in the handover of mental health patients to community health practitioners’ (CHOCYS) quality improvement study has collaboratively developed and implemented a strategy to streamline communication at discharge. Using the quality improvement Plan, Do, Study, Act (PDSA)\(^1\) model the stakeholder collaborative developed clinical handover documentation, processes, comparative clinical indicators, and revised hospital policy to support the uptake of evidence-based practice for clinical handover, hospital to community provider.
Background to the Study

Context
In 2003 mental health disorders comprised 13.3% of the total burden of disease and injury in Australia\(^2\). Private hospitals provide 43% of all hospital-based psychiatric care\(^3\) treating nearly 100,000 patients in 2002-03\(^4\). Clinical handover from hospital to community is a high-risk scenario particularly for patients who suffer mental illness. For this group of patients, particularly those admitted following a suicide attempt, suicide ideation and/or depression, the first 28 days following discharge is the most critical time in terms of suicide risk\(^5\) and that patients with a mental illness are at greater risk than the general patient population of unplanned readmissions during this same time period.

In the private mental health setting there is very little information that addresses clinical handover from inpatient to community\(^6\) and Durban’s study suggests that the process at discharge is an important factor in breaking the ‘revolving door cycle’. Clinical handover research has gained momentum over the last few years as researchers attempt to find solutions to the many challenges in communicating and coordinating care at the facility-community nexus. Kripalani\(^7\) recently identified communication failure and inadequate information transfer at discharge as factors contributing to adverse events. van Walraven found that for at least two-thirds of patients, their doctor will not have the discharge summary at the time of the first follow-up appointment and that 25% of referrers never receive a discharge summary\(^8\). Additionally in the mental health care setting, stigma, confidentiality and issues relating to competency for decision making increase the complexity of discharge communication\(^9\). In both acute and community settings deficits in communication and information transfer is increasingly being identified as a factor in adverse health events\(^10\)\(^11\)\(^12\) and diminished safety and quality of care\(^13\).

Information about mental health patients at the point of transfer from one service to another tends to be confined to their psychiatric status. People with a mental illness, however, may have poorer physical health and issues with relationships and lifestyle. Information about the person’s social and physical health therefore is required for a holistic treatment plan. Furthermore, not all patients have a regular GP (General Practitioner) and may attend any local 24-hr clinic or practitioner. GPs typically have many questions at handover that are not always addressed in the current process – handover can be comparatively unstructured, comprising a phone call plus a fax, and information about patients is delivered in a relatively ad-hoc manner. The quality, type and depth of the information is often dependent upon factors such as the interpersonal relationship between the GP and individual inpatient personnel, and time available by both parties to spend on the handover process at any given time. The discharge communication method needs to convey necessary and sufficient information for the community practitioner to help the patient maintain their treatment program.
Objectives

Project aims
This project sought to develop and test a standardised clinical handover discharge strategy for improving information transfer between private hospital and community-based providers. It was anticipated that such a strategy would decrease the risk of adverse events during that vulnerable period when private mental health patients are handed over from inpatient services to community practitioners.

The communication strategy is to be:
   - a three-way communication protocol between inpatient practitioners, community practitioners and patients; and
   - a protocol which conveys the clinical, social and physical information for that episode of care.

A restriction on this study was that the resources developed by the project would be paper-based and not electronic. This project also promoted patient involvement and transparency of the process. Patients were included in their discharge planning by reading their hospital discharge summary in the presence of their caregiver and also signing to acknowledge that they have read and understood it. The caregiver then counter-signed the discharge summary. To address concerns about staff confidentiality in a mental health setting, only the first name of the staff member was recorded on the consent form, while in the confidential project registration records the full name of the staff person witnessing the consent would be recorded.

Research Approach and Design

Guiding Principles
In attempting to create a robust clinical handover process to minimise the risk of adverse events, the organisational focus had to be on improving patient safety and managing risk. The key to this approach was identified in the definition of clinical handover endorsed by the Australian Medical Association in their ‘Safe Handover: Safe Patients’ guidelines which states:

   “Clinical handover is the transfer of professional responsibility and accountability for some or all aspects of care for a patient, or group of patients, to another person or professional group on a temporary or permanent basis.”

The acceptance by the staff of their responsibilities and their acknowledgement that they are accountable for their handover practices has been the foundation on which this study team has built its model.

Setting
The study was conducted at two not-for-profit private mental health care facilities in metropolitan New South Wales in 2008. Both sites are 86-bed hospitals with academic mental health units and offer a number of contemporary programs. Patients are admitted
under the care of a psychiatrist, with access to office hours medical coverage provided by salaried career medical officers (CMOs). After-hours care is provided by an on-call psychiatrist. In addition to nursing and allied health staff, each site has a discharge coordinator who is a registered nurse with specialist qualifications in mental health and a hospital pharmacist.

Research Model
The Plan, Do, Study, Act (PDSA) model for quality improvement is a framework suited to test the communication strategy (intervention) and to monitor the results of the Comparative Clinical Indicator (CCI, further discussed below). The PDSA model allows the researcher to assess whether a study intervention imposed to change a process produces an improvement in outcome.14

The four cycles are:

- **Plan** - the change to be tested
- **Do** - carry out the test, implement the strategy
- **Study** – the results evaluate data from the trial and summarise lessons learnt
- **Act** – adjust the strategy, plan the next cycle or embed and monitor

Our study involved three cycles:

Comparative Clinical Indicators (CCIs)
Patient safety and quality of care are core aims for all health care activities. The Comparative Clinical Indicators (CCIs) were developed systematically and empirically by the collaborative members from the information gathered during the first PDSA cycle. These indicators provided the data for monitoring clinicians’ adherence and compliance to key aspects of the revised clinical handover practice. When CCI results were reviewed in combination with the PDSA cycle feedback, we were able to identify gaps still present in the practice and to learn of the impact of the changes implemented to improve patient safety and quality of care.16

The seven indicators measured were:

1. Documentation of discharge date more than 48 hours prior to discharge;
2. Hospital discharge summaries faxed in less than 48 hours post discharge;
3. Patient phone follow-up within 7 days of discharge;
4. Patient phone follow-up within 14 days of discharge;
5. Psychiatrist’s discharge summary sent within 14 days;
6. General Practitioner (GP) overall satisfaction with the clinical handover communication with regards to its timeliness, content and format; and
7. Patient overall satisfaction with the discharge process.
**Results**

Against the seven comparative clinical indicators, the following results were obtained:

1. The documentation of the discharge date more than 48 hours prior to discharge improved by 13% between cycle 2 and 3;
2. Discharge summaries faxed in less than 48 hours post discharge went from 0 to 82% in cycle 2 falling to 55% in the third cycle.
3/4. Patient phone follow up, within 7 days improved by 12% between cycle 2 and 3 but fell by 20% between cycles for follow up within 14 days.
5. Psychiatrist’s discharge summary sent within 14 days increased from 68% to 78%.
6/7. Using a 5 and 6 point Likert scale, GPs and patients reviewed the intervention positively, with both groups achieving a 75% rating of ‘good’ or better for overall satisfaction for clinical handover communication and process.

Table 1 describes each indicator and its target while Table 2 summarises indicator results for Cycles 2 and 3.

Table 1: Comparative Clinical Indicators

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<td>Community practitioner satisfaction as assessed by survey satisfaction</td>
<td>75% of the respondents rate the discharge process as ‘Good to Excellent’ on a 5 point Likert scale</td>
</tr>
<tr>
<td>Patient overall satisfaction as assessed by survey or telephone interview</td>
<td>75% of the respondents rate the discharge process as ‘Good to Excellent’ on a 6 point Likert scale</td>
</tr>
<tr>
<td>Estimated discharge date documented more than 48 hours prior to discharge on chart review</td>
<td>100% of patients have an estimated discharge date written in the medical chart at least 48 hours prior to discharge</td>
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<tr>
<td>Length of time from patient discharge to community practitioner receiving the hospital discharge summary</td>
<td>100% of Hospital Discharge Summary are faxed to the referring community provider in less than 48 hours of discharge</td>
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<tr>
<td>Time follow-up call made by discharge coordinator or nominated caregiver</td>
<td>80% of patients receive a follow-up telephone call within 7 days of discharge</td>
</tr>
<tr>
<td>Time follow-up call made by discharge coordinator or nominated caregiver</td>
<td>100% of patients receive a follow-up telephone call within 14 days of discharge</td>
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<tr>
<td>Time to psychiatrist’s discharge summary being sent</td>
<td>100% psychiatrist’s discharge summary sent within 14 days post discharge</td>
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In addition to the CCI results for Cycles 2 and 3, the study team completed a medical record audit for the 150 study participants for every Hospital Discharge Summary (HODS) and Clinical Handover Checklist data item and CCI, in order to determine adherence and degree of compliance with the new clinical handover communication strategy.

Some key findings of the audit here:

Over 80% of patients read and signed their discharge summaries, and this is designed to keep the process transparent, engage the patients in their care and contract them to be active in following their discharge plan.

Confirmation of at least one post discharge follow-up appointment

The disappointing results for completion of ‘Alert status’ for a patient at discharge as recorded on the Medical HODS.

The clinical audit results suggested that adherence and compliance with the revised clinical handover process is being achieved and that the observed changes imply that the new communication strategy is effective in the promotion of an environment where the risk of adverse events for patients should decrease and organisational risk management improve.

One of the weaknesses of this study was the low response rate from community practitioners to various evaluation surveys. It may have been a better option to put resources into running several small focus groups to elicit greater input from GPs. Another consideration when surveying mental health patients was the large proportion of patients (30%) who could not recall the discharge process even though 84% signed their discharge summary. The longer the time lapse between discharge and survey the greater the likelihood that the patient could not recall aspects of their hospital care.
Feedback from relevant stakeholders

A selection of comments received through the feedback process, including community practitioner and patient surveys and reference group and staff feedback books, are provided below:

**Patients**
As part of the phone follow-up, patients were surveyed about the discharge process changes. The most common theme in the responses was that they didn’t have to update their doctor that the discharge summary had already arrived and the doctor knew what happen while they were in hospital. Typical comments were “my doctor had already received the information and I didn’t have to try and remember what happened in hospital,” “my GP knows what’s happened,” “when I went to see the doctor everything was there,” and “I didn’t have to explain to my doctor what I did in hospital.”

**Community practitioners (GPs)**
The aim of fax-back evaluation surveys for community practitioners was to help determine their overall satisfaction regarding the timeliness, content and format of the communication. The results for overall satisfaction ratings were scored using the five point Likert scale with the anchors excellent, very good, good, poor and fair. Using this method, 75% of respondents rated their satisfaction with the discharge summary as ‘good’ or better.

Any comments were usually directed towards access to more detailed information the nature of which was more appropriate for inclusion in the Psychiatrist’s Discharge letter.

**Staff**
Staff feedback was structured using the PDSA template which asks about positive and negative aspects of the intervention, expectations and suggestions for improvement. Typical of the positive responses was the comment that the new clinical handover documentation and process “facilitates better, easier communication between the hospital and community” and that it was easier than expected to complete. On the negative side the font size and the space to write in was too small.

**Discussion on Implementing and Sustaining HODS:**

**Usability**
Usability is a term more often associated with information and communication technology (ICT) and use of these products. The International Standards Organisation defines ‘Usability’ as a term which ‘refers to the extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use[17].’ In the designing the Hospital Discharge Summary (HODS) principles aligned with user-centred product development were employed to maximise uptake. For example tick boxes were used whenever possible as prompts and to allow speed in completing various aspects of the HODS. PDSA cycle feedback indicated that the majority of caregivers involved in the completion of the forms found them easy to use.
Usability issues surfaced when designing the content and format for the medications page of the HODS. One site preferred portrait layout and language that favoured the health professional while the other site, based on recent evaluation with both staff and patients, favoured landscape layout and more patient-friendly language, judging the discharge medications sheet as primarily a patient resource. The usability issue was about who the specified users and what the specified goals to achieve would be. On the bases of the evaluation findings, landscape orientation and patient-friendly language were adopted. In a different context, this usability issue could be solved by providing both a medical and patient version, something that is possible with medication software programs currently in use by a number of hospitals across Australia. This clinical handover documentation package has been developed to allow easy migration to e-health systems.

Change management
Where there is change in the way an organisation does something, and particularly when that change has both horizontal and vertical impact, resistance to that change will be experienced. The degree of resistance is influenced by the organisation’s culture, structure and climate. In the private health care setting, doctor, nurse and psychologist silos continue to exist within their various sub-cultures. This can be an obstacle for the PDSA study and slow or block progress. On the other hand if an organisation is innovative, and there is the will to change, then the emphasis is on supporting change and acting to improve performance. Characteristic of a successful PDSA strategy is strong clinical leadership, reporting mechanisms, a structured timeframe, and collaboration across the organisation with an emphasis on implementation of evidenced-based strategies.

The CHOCYS study experienced only minor change management barriers. For example, in a private setting, engaging the support of psychiatrists in the process was challenging, particularly in ensuring timely notification of discharge date and diagnoses in the early phases of the study. Strong clinical and executive leadership helped to minimise many potential change management issues.

Diffusion of innovation
Why do some new products or processes get adopted and others don’t? Diffusion of innovation is a theory that attempts to answer this question. One popular theory is that proposed by Everett Rogers who defines ‘innovation diffusion’ as ‘a process by which an innovation is communicated through certain channels over time among the members of a social system’. Important in this definition are the concepts of social system, time, communication and innovation, all of which were active in the CHOCYS study. For example, from Cycle 2 (where only study participants had the hospital discharge summary faxed to the referring clinician) to Cycle 3 (where all patients had summaries faxed) there was significant slippage in several CCIs. It could be argued that this was the result of ‘diffusion of innovation’ where the ‘late majority’ or ‘laggards’ slowed completion of the HODS and consequently HODS were not completed in time to allow CCI targets to be met. Other explanations for a drop in compliance with faxing time targets could have been that all staff may not have been exposed to the new documentation and process, or that sufficient time had not yet lapsed for the ‘innovation’ to filter through to all staff.
Sustainability

Importance of the role of discharge coordinator

The role of discharge coordinator has been pivotal to the success of the CHOCYS study. The discharge coordinator has assumed responsibility for ensuring all components of the clinical handover process are completed. They not only monitor the process but also take an active role by assuming responsibility for:

- faxing the discharge documentation to community providers authorised by the patient,
- linking clinicians involved in the patient’s management,
- conducting patient phone follow-up and assessment, and
- collecting CCI data for monthly reporting.

The role should not be underestimated as a factor for improved continuity of care, patient safety and quality of care.

Provision of resources (both people and equipment)

The discharge coordinator may be time-poor as the result of other roles they fulfil. In this situation the importance of an efficiently functioning, accessible fax machine is essential for the seamless implementation of the clinical handover process. The main issues identified regarding the fax process were:

- the time taken to send a multiple page fax,
- the number of faxes needing to be sent on any one day,
- the number and location of available fax machines, and
- who should be responsible for sending the fax?

The installation of a fast multiple function fax machine has assisted discharge coordinators with time management and resulted in a steady improvement in meeting faxing CCI targets.

An unexpected outcome of the project has been its time-saving aspect for medical record staff. Staff now have a clear summary regarding diagnosis and treatment for coding purposes, which has reduced the time spent searching the medical record for all relevant coding details. They also have critical information immediately available and summarised if required.

Enhancing sustainability

Obstacles to sustainability have been overcome through collaboration and negotiation. Briefly, the key facilitators to the processes were executive leadership, the appointment of an experienced nurse as discharge coordinator, organisation-wide focus on risk management, and dedication by the multidisciplinary team to meeting their responsibilities in a timely manner. In addition, sustainability and continued improvement should be guaranteed having aligned the regular reporting of discharge related outcomes (CCIs) with organisational quality and safety key performance indicators.
Updated Project Report

The CHOCYS study has collaboratively developed, implemented and evaluated a strategy to streamline communication at discharge.

Negotiations are on-going with two Divisions of General Practice with the view to having the admissions referral form available as a download on their websites. While in Victoria the St John of God Pinelodge Clinic is engaged with their local Division of General Practice looking at CHOCYS resources with a view to implementation to improve clinical handover.

There was also the provision to develop a second communication strategy for admission to a private hospital with similar information to assist with the handover from community to inpatient care. The rationale for this approach was that such a strategy should result in improved patient adherence with treatment plans; increase the level of practitioner satisfaction with the handover process so they can appropriately manage patients; and reduce communication gaps and duplication of information in the handover process.

Recommendations

Based on the outcomes of this study we recommend that:

- A clinical handover communication strategy, such as the one developed and reported here, be implemented to standardise discharge processes and improve outcomes for mental health patients
- The role of discharge coordinator is adopted as the minimum resource for effective, efficient clinical handover, and that
- All private hospitals adopt the clinical handover initiative to facilitate benchmarking as part of accreditation

For groups who plan to implement a new clinical handover discharge strategy, the PDSA model provides a rapid cyclic collaborative model. If adopting this model, we would recommend that your collaborative has in place organisational commitment, executive support and active representation and participation of key stakeholder groups to ensure a successful initiative. Sufficient resources in the form of both personnel and time are important steps towards a successful clinical handover initiative.
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