Title:

Bedside Handover; One Quality Improvement Strategy to "Transform Care at the Bedside"

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ABSTRACT

This quality improvement project implemented bedside handover in nursing. Using

Lewin's 3-Step Model for Change, three wards in one Australian hospital changed

from verbal reporting in an isolated room to bedside handover. Practice guidelines

and a competency standard were developed. The change was received positively by

both staff and patients. Staff members reported that bedside handover improved

safety, efficiency, teamwork and the level of support from senior staff members.

Keywords: Clinical handover, Bedside handover, Quality Improvement, Lewin's 3-

Step Model for Change

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BACKGROUND

Transforming Care at the Bedside (TCAB) has recently emerged as a framework for improving safety on medical and surgical wards in acute care hospitals¹. Initiated by the Institute for Healthcare Improvement in the United States (US), this framework has four pillars; safety and reliability, care team vitality, patient-centered care and value-added processes. While these pillars make intuitive sense, and have formed the foundation of several improvement initiatives, evidence of the extent to which these initiatives lead to measurable benefits is only beginning to emerge. We report on the implementation and initial evaluation of one patient-centred strategy, bedside handover in nursing, as a part of transforming care in one Australian hospital.

Accurate communication during handover is a key element in the safety and quality agenda². Handover has been defined as the transfer of responsibility and/or accountability for patient care from one provider or team of providers to another³. To date, research into nursing handover has focused on comparing types of handovers such as face to face verbal, and tape recorded⁴⁻⁶, and on the functions and problems of maintaining accurate communication in handovers⁷⁻⁸. Bedside handover in nursing, while not new, is one strategy purported to improve patient centred care¹, however, there has been limited formal examination of its implementation. In fact, the majority of work in this area has been published a decade or more ago⁹. However, two recent studies on the process of bedside handover have been published in the area^{6,9}. The first described nursing bedside handover in an intensive care unit in the UK⁶. The second examined the use of reflexivity, combining reflexion and learning, in medical handovers¹⁰ in a large university medical center in the Netherlands. Philpin ⁶ noted

that verbal, non-verbal and written forms of communication were used to transfer information, while Broekhuis and Veldkamp¹⁰ concluded that there was a greater potential for improving communication strategies when reflection was encouraged.

Most researchers believe bedside handovers are time-effective⁹⁻¹¹ but there is limited documentation of how bedside handover should be implemented, and both who and what it should encompass. Without such guidance, clinical units wanting to implement such a practice change may have to rely on trial and error or other inefficient methods to implement this innovation. For these reasons, this paper describes a quality improvement activity aimed at improving patient-centred care, bedside handover in nursing. The rationale for the change, steps used to implement bedside handover, and patient and staff satisfaction after this practice improvement, are described.

METHODS

This quality improvement activity took place in one regional public hospital in Queensland, Australia. The hospital had 330 beds and about 454 full time equivalent (FTE) nursing staff in 2006, when the change occurred. Bedside handover in nursing was implemented in three units: two medical and one stroke/rehabilitation, involving about 74 FTE nursing staff.

Prior to implementing bedside handover, the nursing handover was undertaken in a staff room on each ward. The oncoming staff would wait for each staff member on the outgoing shift to come in to give their report. Time was wasted because of scheduling difficulties, in that the outgoing staff often would not know when the last person had finished their handover. Further time wasting occurred because of nurses reporting extraneous information and 'gossip' during the handover. As a result, at

times receiving staff were not seeing their patients until an hour after their shift started and retiring staff were dissatisfied because they were finishing late.

Other factors that provided drivers for change included patient complaints stemming from lack of communication, doctors reporting they could not find anyone who knew anything about the patient, and incongruence between the handover report and the patient's condition. In fact, over 90% of staff said they were provided with insufficient information. These factors provided an impetus for changing to bedside handover.

Implementing bedside handover

Prior to implementing bedside handover, the Nursing Director undertook a review of strategies to improve nursing handover as part of a broader agenda to improve nursing service delivery. Then, the nursing leadership team, consisting of the Nursing Director and the nurse unit managers (NUMs), together developed a plan to initiate bedside handover. These plans used Lewin's 3-Step Model for Change, unfreezing, moving and refreezing ¹². In the unfreezing step "equilibrium needs to be destabilised (unfrozen) before old behaviour can be discarded (unlearned) and new behaviour successfully adopted" ¹². In fact, dissatisfaction with the current system of handover meant that the nursing staff had already reached the first stage, and were 'unfrozen'.

Moving, the second step, was accomplished in a number of ways. First, practice guidelines for bedside handover (Table 1) were developed by a group of experienced managers and clinicians, based on previous literature and on the TCAB pillars. These guidelines provided nurses with a structure and process for bedside handover. They focused on preparing for the handover, including informing the patient, and defining

the actual content of the handover, ensuring that it included a safety scan and consideration for how to handle sensitive information. Key to patient safety, was the incorporation of a safety scan, undertaken by oncoming staff but with outgoing staff input. Specific aspects of this scan are detailed in Table 1 but involved a quick assessment of the environment, the patient and the medication record. Sensitive information was either whispered away from the bedside, generally outside of the patients' room, or was written on the handover sheet, with outgoing staff drawing attention to this information. Five key points about the handover were stressed, including:

- 1. The outgoing staff member should introduce the patient to oncoming staff and ensure a personable approach is maintained as this is the staff member who has built a rapport with the patient during the course of the shift;
- 2. Bedside handover should be viewed by staff as "transfer of accountability" from one staff to another;
- 3. Language should be maintained at a reasonable level of understanding to ensure patients do not feel they are being "talked over";
- 4. Sensitive information should be handed over in a private location following completion of bedside handover; and
- 5. Staff should explicitly encourage patients to ask questions and make other comments during the handover.

The second way the 'moving' step was addressed was with an emphasis on rapid-cycle improvement. Very little resistance to this change was encountered, likely due to staff dissatisfaction with the existing handover procedure, however any reluctance to change was managed by creating a climate of open communication.

Third, discussions with staff resulted in a plan for how bedside handover should be

implemented including who should be present, and what should be included in the handover. A number of initial concerns involved patient confidentiality and how bedside handover could be implemented on the night shift with patients sleeping were also considered. Two additional strategies, in-service education and development of written materials, were used to ensure the second step of 'moving' was accomplished in a way that ensured consistency.

The third step, refreezing, was addressed by developing a nursing competency with accompanying performance indicators (Table 2). Achieving this level of competency became part of the orientation program for all new staff and was incorporated into annual performance appraisals. Thus, bedside handover became 'part of the way we do things' in the three wards.

Measures

Evaluating the change to bedside handover was not planned as a formal study, however a number of activities were undertaken which indirectly reflected an assessment of the improvement. First, patients and staff were asked to comment on their impressions of bedside handover. Second, six months after the implementation of bedside handover nursing staff were asked to provide written comments about the new bedside handover process.

Data Analysis

Comments from patients and nurses are reported verbatim. Benefits of bedside handover are summarised using descriptive statistics.

RESULTS

The first evaluative aspect of the project involved asking patients and nurses their perceptions of bedside handover. Overwhelmingly, patients perceived the bedside handover positively. One patient commented:

"It's the only way I find out what's happening."

Despite initial apprehension regarding patient confidentiality and the process itself, staff too embraced bedside handover. In particular, new graduates and casual staff described how the process helped to ensure accurate provision of information and how undertaking the safety scans promoted safer care. One nurse said:

"As a casual nurse, I like it. It allows me to process information in a more meaningful way."

The second evaluative component was a survey conducted six months after implementation on two of the wards. A total of 27 (54%) staff responded. The following three benefits were most highly ranked:

- 1. Support from shift coordinators and team leaders (59% agreement)
- 2. Improved patient safety (44% agreement)
- 3. Improved patient outcomes through discharge planning (44% agreement).

Because shift coordinators and team leaders attend bedside handover along with the other staff, they have a better understanding of the situations nursing staff will have to deal with during the shift. Further, bedside handover provides an opportunity for these leaders to model behaviour, share their expertise, respond to queries etc.

Further, staff commented that more members of the multidisciplinary team including the doctors, attended nursing handover, which promoted better communication between professional groups.

As noted, this change to bedside handover occurred in 2006. Since that time, only minor modifications of the handover have occurred. In the rehabilitation ward, patients now lead the handover, with nurses adding information as required. On the medical wards, the SBAR (situation, background, assessment, recommendations) acronym is now used when the patient's condition has changed or when staff are unfamiliar with the patient. The development of a computerised handover sheet was a third improvement that has been implemented. The need for such a sheet arose with an increase in staff starting work part way into the shift and with the recognition that all staff on the ward had to know something about all patients, not only the patients they were assigned to. This double-sided, one page handover sheet contains basic demographic and clinical information about all the patients, including their age, diagnosis, current clinical issues and comments about their mobility, diet, and other activities of daily living. The handover sheet guides nurses when they are required to assist patients they did not formally receive a handover on.

DISCUSSION

This report describes how one hospital successfully implemented bedside handover, as one strategy to become more patient-centred. Importantly, patients perceived bedside handover very positively and they became active participants in the handover process, when bedside handover was used. Bedside handover also provides patients with an opportunity to gain a better understanding of their plan of care. It

seems reasonable to claim that, by gaining such knowledge, patients may be better equipped to ensure that their care is both appropriate and safe.

Interestingly, Timonen et al¹⁵ found that if patients were encouraged to ask questions during bedside handover, it was perceived to be patient-centred. But, a focus on documents, the use of medical jargon, and having too many nurses at the bedside presented barriers to patient participation. While the use of medical jargon cannot be completely avoided during handover, nurses tried to limit its use and they explicitly requested patients to ask questions or make comments. While issues such as patient confidentiality and sharing sensitive information are commonly identified as barriers to implementing bedside handover, this project demonstrated that they can be overcome by the use of written information, lowering voices and sharing sensitive information away from the bedside.

A second reason that bedside handover may improve patient safety relates to the safety scan that is incorporated into the handover. Because oncoming staff undertake this activity with input from outgoing staff, missing information or ambiguous statements can easily be addressed. For example, oncoming nurses may note that a medication has not been signed for and can question whether it in fact has been given. In essence, the safety scan ensures that oncoming nurses are active participants in the handover. Facilitated by scanning the patient, environment and bedside chart, oncoming staff will actively 'pull' information they require from outgoing staff, rather than passively receiving the information than outgoing staff identify as important and push out to them. The scan also appears to limit inconsistencies between the patient's reported and actual condition, with visual sighting of the patient triggering questions and additional information.

Participating nurses revealed that bedside handover had the potential to improve nursing care because one of the things it did was bring the nursing teams together. Zaccaro et al. ¹³ provide a model of team performance that can help to explain why bedside handover may be effective when used by the nursing team. They identified three factors that influence team performance. First, effective teams successfully integrate individual actions into the team. Given that bedside handovers take place with a number of nurses from both the outgoing and the incoming staff, they may actually promote this integration. Second, because many teams function in complex, dynamic environments, coordination is crucial. By bringing groups of nurses together, it is possible that bedside handover facilitates such coordination. Finally, team leadership is an important factor in team performance. In the case of bedside handover, not only did the Nursing Director and NUMs undertake a number of processes to ensure a smooth transition to bedside handover, nurses commented that bedside handover provided opportunities for them to gain support from shift coordinators and team leaders. Additionally, undertaking bedside handover allows senior nurses to model behaviours and actions that promote patient safety and facilitates the development of critical decision making skills among nursing staff work environment ⁹. Our project showed that about 60% of nurses thought that bedside handover facilitated support from their clinical leaders. Such clinical leadership has been seen to be crucial for driving change and in improving team performance^{14,18}.

The study also indicates the importance of staff feedback in ensuring safe, high quality and efficient patient care. Having their comments integrated into a set of handover guidelines is an indication of how staff at the bedside are valued, which illustrates positive role modelling by management. The guidelines also provided a tool

for nurses to make explicit what many of them may have been doing informally in practice. This provides an additional level of safety in communication, which helps all members of the team ensure consistency, accountability and competent practice¹⁶. It also provides a tool for clinical staff to use in assisting students, new or casual staff members who need immediate, efficient and safe processes to guide their practice¹⁷.

There are a number of limitations to this project. First, it was undertaken in one hospital, thus the local context may have influenced the project. Second, the move to bedside handover was informally evaluated, with nurses and patients asked to comment on the process. Further, we recognise that other improvements occurring at the same time, may have actually influenced the findings. For example, other initiatives that were implemented during the reporting period include the use of whiteboards at patients' bedsides to record the names of their nurses, nurses performing hourly patient rounds and NUMs undertaking daily patient rounds. The central element of these initiatives is good communication. The patient is the centre of activities, and two-way provision of current, relevant information helps convey patient activities and preferences to clinical staff, and helps ensure that patients understand where to go for assistance and information. Together these simple measures help promote consistency and continuity of care. Importantly, the leadership team were committed and actively engaged in these improvements and open to feedback from both clinical staff and patients. The extent to which this local 'championship' influences the positive results is unknown.

In conclusion, bedside handover has been successfully implemented because it was driven by both staff dissatisfaction with their current process of handover and by clinical leaders and nursing administration. Implementing bedside handover should not be viewed as an isolated initiative, but should consider it as one strategy to

transform nursing care at the bedside and improve the nursing work environment.

Including patients in the handover is another strategy to promote patient-centered care.

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Table 1: Practice Guidelines for Bedside Handover

	Description
Preparation	 Inform the patient that handover will occur shortly.
	• Request that visitors to wait in the lounge area during handover.
	• Ensure that parts of the medical record, including the observation
	sheet and medication record are at the patient bedside.
Content	 Outgoing staff introduce the patient to the oncoming staff.
	 Report should include reason for admission, medical history,
	tests and treatments, nursing care plan and discharge.
	 The patient is asked if they have any questions or comments.
Safety Scan	• Observe the patient's general appearance, dressings, lines and
	drains.
	• Check the environment including call bell and other equipment.
	 Review the medication record.

Table 2: Bedside Handover Competency

Performance Indicators

- Ensure the environment is conducive to handover by briefing patients, and requesting visitors to wait in lounge room until handover completed (as appropriate).
- Introduce oncoming staff to patient, and establish that the patient is comfortable to proceed.
- Demonstrate appropriate application of the principles of privacy, sensitivity, dignity and respect throughout the process.
- Demonstrate respect to the patient in terms of inclusive gestures, volume, tone and use of medical language.
- Demonstrate an ability to succinctly and professionally communicate information.
- Refer to biographical data contained on the handover sheet and do not state verbally.
- State date, reason, and relevant medical history for admission.
- Identify specific tests or investigations that have been ordered, and their results when available. Any resulting changes to the treatment should be noted.
- Outline the treatment and the nursing management plans.
- Provide a brief outline of the patient's response to the treatment plan and nursing management to date.
- Outline discharge plans, including proposed discharge date.
- Provide the patients with opportunities to seek clarification and confirm information.
- Undertake a safety scan of the patient, the environment and the medication record
- Close the handover session appropriately prior to leaving the bedside.