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# Implementing Bedside Handover: Strategies for Change Management

McMurray, A., **Chaboyer, W.,** Wallis, M. (2010). Implementing Bedside Handover: Strategies for Change Management. *Journal of Clinical Nursing* 19 (17-18). pp. 2580-2589

#### **ABSTRACT**

**Aims and Objectives:** To identify factors influencing change in two hospitals that moved from taped and verbal nursing handover to bedside handover.

## Background

Bedside handover is based on patient-centred care, where patients participate in communicating relevant and timely information for care planning. Patient input reduces care fragmentation, miscommunication-related adverse events, readmissions, duplication of services and enhances satisfaction and continuity of care.

## Design

Analysing change management was a component of a study aimed at developing a standard operating protocol for bedside handover communication. The research was undertaken in two regional acute care hospitals in two different states of Australia.

#### Method

Data collection included 532 semi-structured observations in six wards in the two hospitals and 34 in-depth interviews conducted with a purposive sample of nursing staff involved in the handovers. Observation and interview data were analysed separately then combined to generate thematic analysis of factors influencing the change process in the transition to bedside handover.

## **Results, Conclusions**

Themes included embedding the change as part of the big picture, the need to link the project to standardisation initiatives, providing reassurance on safety and quality, smoothing out logistical difficulties and learning to listen. We conclude that change is

+more likely to be successful when it is part of a broader initiative such as a quality improvement strategy.

## **Relevance to Clinical Practice**

Nurses are generally supportive of quality improvement initiatives, particularly those aimed at standardising care. For successful implementation, change managers should be mindful of clinicians' attitudes, motivation and concerns and their need for reassurance when changing their practice. This is particularly important when change is dramatic, as in moving from verbal handover, conducted in the safety of the nursing office, to bedside handover where there is greater transparency and accountability for the accuracy and appropriateness of communication content and processes.

**Key Words:** interpersonal communication, nursing handover, patient participation, patient information, patient-centred care, quality of care

### INTRODUCTION

This study reports on a change from taped and verbal nursing handover to handing over at the patient's bedside. The change was embedded in an initiative to develop a standard operating protocol (SOP) for bedside handover that would improve accuracy and timeliness of handover by including patient input and visual information gleaned at the bedside (Chaboyer et al. 2008, 2009). Managing change in the healthcare setting is always challenging, especially when it involves transforming entrenched habits grounded in professional expectations. Changing communication strategies, such as shift-to-shift handover, carries its own particular challenges. Until recently, handover, like other forms of clinical communication, has been conducted with unique, often traditional styles of information transfer, characterised primarily by professional control and the sociolinguistic patterns peculiar to health professionals. In contemporary healthcare there is a gradual acceptance of a more inclusive approach where patients are seen as partners in care, capable of making important contributions to clinical decision-making and participating in their own care (Donaldson 2001, Iedema et al. 2008, Kravitz & Melnikow 2001). The patient-as-partner notion has evolved from the convergence of several powerful ideas; the rights and understanding of most health care consumers to participate in care; the ethical acceptance that patient autonomy in making choices 'trumps beneficence' (professional knows best) (Kravitz & Melnikow 2001, p. 584) and the empirical rationale from research showing that patient involvement produces better health outcomes. This is also consonant with the evidence-based practice (EBP) agenda, which includes patient circumstances and preferences as well as research data (Carnwell 2000, Jennings & Loan 2001). When patients have input into clinical communications

there is a reduced risk of fragmentation of care, miscommunication-related adverse events and a greater likelihood of continuity of care (Haggerty *et al.* 2003, Kravitz & Melnikow 2001, Rutherford *et al.* 2004, Wong *et al.* 2008).

#### BACKGROUND

As a fundamental element of healthcare communication, clinical handover is widely recognised as a major research priority (Australian Commission on Safety and Quality in Health Care (ACSQHC) 2008, Wong *et al.* 2008, World Health Organization (WHO) 2008). Wong *et al.*'s (2008) extensive literature review on clinical handover prepared for ACSQHC concluded that there were several high risks to quality and safety arising from handover, including those emanating from the situation, such as hospital to community transfer, interprofessional and inter-departmental risks, process risks (verbal information transmission only, use of abbreviations) and risks related to patient characteristics (differences in medical, surgical, paediatric patients). The need for standardised operating protocols (SOP's) is clearly recognised by ACSQHC, WHO and the Joint Commission, International Centre for Patient Safety as an essential element of quality improvement (Wong *et al.* 2008).

Research has shown that up to two-thirds of sentinel adverse events in hospitals are related to communication problems (Haig *et al.* 2006). Miscommunication during clinical handover can present a major risk for adverse events and can lead to service discontinuities, as evident in inappropriate presentation to emergency departments, suboptimal patient flow through the system, readmissions, duplication of services and patient dissatisfaction reports (Alem *et al.* 2008, Anthony & Hudson Barr 2004, Bomba & Prakash 2005, Henderson *et al.* 2004, Kable *et al.* 2004. VanWalraven *et al.* 2004).

Verbal handovers are often unreasonably lengthy, include non-essential and irrelevant information and some provide unreliable or inaccurate information with no reference to patient documentation, instead focusing on subjective, speculative, sometimes vague information ('the patient is fine' or Ms/Mr... is getting better') (Benson et al. 2006, Davies & Priestly 2006, O'Connell & Penney 2001, Philibert & Leach 2005). They can also be confined to ritualistic, retrospective, treatment oriented information (what the nurse achieved during the shift) rather than providing focus and direction for forward planning that includes psychological and social information on how patients are actually coping (Dowding 2001, Fenton 2006, Hopkinson 2002, McKenna & Walsh 1997, Webster 1999). Without supporting documentation verbal handovers create unnecessary risk (Bhabra et al. 2007, Pothier et al. 2005). Pothier et al.'s (2005) study found that verbal handover alone led to a complete loss of data after three handover cycles. Untimely, inaccurate, incomplete or judgemental transfer of information at handover can lead to inappropriate decision-making and a mismatch between patient care demands, resource capacity and service efficiencies (Anderson & Mangino 2006, ACHS 2004, Benson et al. 2006, Department of Health Western Australia 2005, Henderson et al. 2004, Kable *et al.* 2004, Silvester *et al.* 2004).

Sexton *et al.*'s (2004) shift-to-shift handover study which used content analysis of 23 audiotaped handover sessions on all shifts of one Australian hospital medical ward found that style, duration and content of verbal handovers was highly variable. In some cases, it lacked formal structures and processes making it difficult to convey consistent content and transmission of important information. This study revealed that only 5.9% of content involved discussions of ongoing care or ward management issues, which differed

from that recorded in existing documentation. Some handovers promoted confusion, failing to clarify issues regarding patient status, treatments or management (Sexton *et al.* 2004). Nurses' variable engagement with handover (Manias & Street 2000) and status differences and styles of communication, most often between medical practitioners and other members of the healthcare team, have also played a part in miscommunication-related medical errors (IOM 2003, Shortell & Kaluzny 2006).

To date, researchers have attempted to address consistency and appropriateness of communication at handover by developing minimum data sets and standard operating protocols for handover (Alavarado *et al.* 2006, Cheah *et al.* 2005, Fenton 2006, Haig *et al.* 2006, McCann *et al.* 2007, Wong *et al.* 2007). One widely used approach is the SBARR technique, reporting clinical information in terms of Situation, Background, Assessment, Recommendation and Response (Haig *et al.* 2006, Mikos 2007). This technique formalises the inputs and outcomes of handover and has the advantage of creating trust within the healthcare team, as all team members are provided with objective information from which to plan their actions in a context of mutual respect (Shortell & Kaluzny 2006).

Where a major change in the style or structure of handover is implemented models such as Lewin's (1951) model of unfreezing, changing and refreezing can be a useful guide to change (Kassean & Jagoo 2005). This involves identifying the driving and restraining forces that may be influencing group complacency or willingness to change (Lewin 1951). Alternatively anderson and Mangino (2006) outline a seven step change management strategy for implementing bedside handover for nurses in one US medical centre. Their approach was based on the client-centred model of care implemented in

their organisation, which revolved around patient participation. Steps involved building the team, identifying goals and measurable outcomes, making the implementation a priority, gathering baseline data, educating the team and providing resources and a celebration of achievements as well as clear feedback to staff and patients. Their research found cost savings and improvement in both staff and patient satisfaction. Staff members reported that they were also better able to prioritise care after having visualised patients within the first 20-30 minutes of their shift. Communication, listening to staff issues concerning the change and working toward a shared vision were crucial to the program's success.

Webster (1999) used action research to guide the change to bedside handover in a UK study. Like Anderson and Mangino's study, she ensured there was sufficient evaluative data to demonstrate the impact of the change and used two cornerstones of effective change management which predict success; namely, making the need for the change understood and making the change less threatening (Webster 1999). Both studies reported concerns from staff at the outset, primarily revolving around patient confidentiality. These concerns were listened to, rather than dismissed and made part of the evaluative cycle of the research (Anderson & Mangino 2006, Webster 1999).

Some staff members find participating in research and evaluation of change daunting. Manias and Street's (2000) ethnographic study of six Australian critical care nurses found that their experiences of being part of a bedside research study affected their ability to convey accurate handover information. Yet when change is managed in systematic steps with adequate evaluation and communication throughout the process it is more likely to result in successful outcomes. In summary, the literature on change

management indicates the need to identify the personal attitudes and concerns of those affected by a proposed change and to ensure that accurate information is collected and communicated at each step of the change process to promote understanding and garner support for the change.

## **METHODS**

In 2007 the research team participated in an ACSQHC funded initiative to develop standard operating protocols (SOP) for handover communication. The study focused on the structure, content, processes and outcomes of handover as well as clinicians' perceptions of accuracy and adequacy of communication and their satisfaction with the transition to bedside handover (Chaboyer *et al.* 2008). The research was undertaken in two regional acute care hospitals; one public hospital in Queensland which had implemented bedside handover as part of a safety improvement program called 'Transforming Care' (Rutherford *et al.* 2004) and one hospital in Western Australia with public and private patients, that was about to initiate the change from audio-taped to bedside handover. Ethical approval for the study was provided by the Human Ethics Committees of the hospitals and Griffith University.

Data collection included 532 semi-structured observations in six wards in the two hospitals and 34 in-depth interviews conducted with a purposive sample of nursing staff involved in the handovers. Data were gathered from medical, surgical and rehabilitation wards and recorded on a form that identified the number and category (Registered Nurse (RN), Enrolled Nurse (EN)) of both outgoing and oncoming staff, the extent to which the situation, background, assessment, recommendations (SBAR) format was used, the duration of each handover and open-ended comments about additional information

exchanged. Observations were roughly equivalent from both hospitals, with slightly more than half coming from the medical wards. Observations commenced when the nursing team went to the patient's bedside and were completed at the end of the information exchange about that patient.

The interviews were conducted with a purposive sample of nursing staff involved in the handovers. Questions sought to explore structure and process issues related to communicating patient information during the handover, including information on preparation, content, accuracy, patient involvement and input, privacy and confidentiality and any comments on shift variation. All data were digitally recorded, then transcribed for conjoint analysis by all members of the research team. Thematic analysis of interview data was undertaken through several iterations of individual transcripts using constant comparison to generate provisional themes. These were then shared among the researchers until consensus was achieved. Findings formed the basis for recommendations for a standard operating protocol (SOP) for bedside handover (Chaboyer *et al.* 2008) (Fig. 1). We report here on the change process as each hospital made the transition.

The Queensland hospital used Lewin's (1951) force-field model of unfreezing, moving and refreezing as a model for change. Their change management strategy involved several steps to ensure participation of all staff, accurate communication of the goals and expectations of the program and ownership of the change by those who would be implementing it. Unfreezing began with a review of strategies for improving handover based on data indicating staff dissatisfaction with existing handover processes. Moving involved development of practice guidelines by senior managers with input from patients

as well as clinicians. The guidelines included shared understandings that handovers would be reframed as the transfer of accountability from one staff member to another and patient confidentiality would be paramount, with all sensitive information communicated away from the bedside. Importantly, staff members were reassured that there would be an organisational emphasis on communication and educational strategies for sustainable change. Following implementation, the refreezing stage entrenched bedside handover as an expected clinical competency and therefore part of annual competency reviews.

Ongoing review and analysis of quality and safety with input from staff members has continued to demonstrate the program's effectiveness and staff satisfaction (Chaboyer *et al, in press*).

The decision to change from taped to bedside handover at the other hospital was made by the Director of Nursing in consultation with the Clinical Nurse Specialists (CNS) managing the three participating areas of the hospital: medical and surgical wards and the private hospital. The change was implemented following in-service sessions with each area, posters and information flyers posted in the staff lunch room and verbal explanations by the CNS responsible for each ward. Each ward had a practice trial of three days and a pilot trial of similar length to familiarise staff with being observed and ensure consistency of data collection techniques. CNS's explained the plan for observing handover and staff members were invited to volunteer for interviews.

#### **FINDINGS**

This article reports on implementation issues in changing to bedside handover as reported by the nurses interviewed. Within and cross-case analysis revealed the following themes: First, 'being part of the big picture' influenced staff members to make smaller, discrete changes, such as the change to bedside handover, given that it was part of a wider ranging series of changes designed to improve quality and safety. The second theme was 'linking the project to standardisation initiatives', which seemed to be important to nurses in maintaining consistency of care. Third was the provision of 'reassurance on safety and quality'. The nurses wanted to feel that all measures had been taken to prevent inaccuracies in their communication and reduce threats to confidentiality. The fourth theme was 'smoothing out logistical difficulties', such as maintaining continuity of information despite atypical shift patterns. The final theme was 'learning to listen'.

Bedside handover necessitated a change in their attentiveness, whereas in the previous verbal handovers, they had not been required to attend to patients' input. These themes are elaborated below.

## Being part of the 'big picture'.

Being part of an overall quality improvement strategy seemed to influence staff members' attitudes and understanding. Although both hospitals had quality improvement as an overriding goal, the 'Transforming Care' program at the Queensland hospital encouraged ongoing dialogue among staff which sought input into processes for clinical effectiveness while nurturing professional growth (Institute for Healthcare Improvement (IHI) 2008). Nurses from both hospitals reported the reactions from patients as positive. At the Queensland hospital bedside handover had been incorporated into the broader range of changes in transforming care. At the Western Australia hospital new to bedside handover, some nurses were initially apprehensive about their knowledge being put on

display, described by one as 'stage fright'. Others felt they needed 'some kind of a script...' to counter their 'nervousness in handing over in front of the patient' (RN). An RN shift coordinator described the change as follows:

You're more on the ball and it's taught nurses to lift their game, be more accountable, think about what they hand over and why...At bedside you can visualise what you've done for this patient. It can reveal patient cues, what's on their face, especially if a patient is unknown to you. (RN).

To help facilitate the change, the Director of Nursing (DON) and the clinical nurse specialists (CNS) used ward meetings to link the change to the overall hospital quality improvement strategy.

## Linking the project to standardisation initiatives

Standardisation of structures and processes was a highly valued outcome for the nurses from both hospitals. Guidelines were identified as a priority of the experienced hospital and a tool for achieving greater consistency of information at the hospital new to bedside handover. Even though the nurse giving handover might explain the content differently for someone new or with unknown skills, such as a student, study participants believed that systematising the information transfer enhanced their confidence in its appropriateness. One nurse noted that even though students or junior staff members had not anticipated handover at the bedside, it was good for them to see the change modeled by experienced nurses, especially when there was uniformity in the documentation and the way it was conducted:

...It helps them get involved, interact with others, helps their communication and confidence' (RN).

## Providing reassurance on safety and quality

Electronic handover sheets were used in both hospitals to maintain accuracy. However, because this information was updated by the team leader or coordinator there remained a possibility of missing information. During the bedside round, nurses annotated their handover sheets with relevant information. This reduced the risk of inaccuracies and, as handover sheets were ultimately shredded, it eliminated threats to confidentiality that can occur when using personal notes. Making these processes explicit and embedded in a wider strategy of improving documentation was reassuring to the nursing staff, which was critical to their acceptance of the change. This also provided a forum for staff to share strategies for communicating both verbally and in written form to cross-check the completeness of information:

You need to query the patients on whether they had a good day, if the doctor has been in, if they are self-caring, to give them feedback and confidence in their progress (RN).

If they've had their meds on time, if they're going home, who's picking them up (EN).

It helps provide continuity of care (RN).

## **Smoothing out logistical difficulties**

Coping with variable shift patterns proved a major challenge. Where audiotaped handovers could be listened to at any time, having to roster bedside handover took extra time when the afternoon nurse came on at 1400h rather than the usual 1300h. In these cases, handover was given to an 'interim nurse' who then handed over to the 1400h staff. Such duplication of communication was seen to increase the likelihood of forgetting information. It also affected management of the team when a staff member began an unconventional (e.g. 4 hour) shift, as one nurse reported:

I don't like being excluded because I want to know what's going on with all patients. If I have to answer the buzzer I want to have updated information (RN).

In most cases, these nurses would be allocated tasks rather than taking responsibility for designated patients. They were prepared for task assignments and taking over patient responsibilities during others' breaks this role by a brief handover guided by the handover sheet. However, variable handovers disrupted work flow and break scheduling and increased uncertainty about patients, especially where nurses had to wait for handover instead of getting on with patient care from the beginning of their shift. This issue had to be dealt with sensitively by the shift coordinators who acknowledged the problem and used group discussion to plan the flow of information.

## Learning to listen

Some difficulties during transitions were related to personalities and/or preferences. Some nurses were not convinced of the need to change from audio-taped to bedside handover, speculating what patients' presence would entail, '...it could become refocused on covering your butt.' Others advocated taped handover because it allows staff control over how information is received. 'You can go through it systematically. You listen, you get to work, you feel you know what's going on, you're more in control'. Others held the opposite view. 'We are supposed to be doing best practice, quality of care. The best care comes from including the patient'. These nurses believed that cross-checking information at bedside handover with the patient notes and asking questions to clarify treatments or medications also helped accuracy, as did visualising the patient's condition (e.g. colour of drainage) and listening to their input. Observations at the bedside prompted recall and patient recognition and allowed the courtesy of introducing the oncoming shift.

Patient-centred information transfer was more comprehensive and purposeful, enhancing nurse-client interactions, encouraging nurses to be more reflective and providing an opportunity to educate patients and give immediate feedback on their queries. Interactions also helped clinical staff reflect on issues that were seen to pose barriers to change and they exposed nurses to one another's perspectives, which is important for team building. One of the most frequent issues mentioned was confidentiality, which generated apprehensiveness, but with more experience in bedside handover, this was outweighed by the sense of greater accuracy and accountability.

#### **DISCUSSION**

Bedside handover can achieve many of the nurse-client advantages identified in the literature, including recognition of the link between active patient participation and better outcomes (Iedema *et al.* 2008). However this must be done as a whole of organisation change. Institutional change management strategies should also acknowledge the importance of individual, team and structural influences, particularly when the focus is on communication. Our analysis shows that, despite favourable attitudes towards the patient-as-partner approach to care among nurses, some structures, protocols and practice barriers can mitigate against successful implementation of patient-centred information transfer. For example, professional boundaries based on hierarchical rank and the professional autonomy that allows some members of the healthcare team to exclude patient input or communication from others reduces information sharing (Leggatt 2008). In addition, provision of a workable shift structure that ensures overlapping shifts and developing consistent protocols for patient allocation could also help redress structural barriers to change.

The study was limited to two Australian hospitals involved in implementing a national bedside handover initiative. It is therefore unknown whether the experience of change would be similar in other contexts. However, change takes place in the attitude, motivation and cognition of the worker (Waldman et al 2004), therefore, it is helpful to begin planning with a framework such as the Plan Do Study Act cycle (Institute for Healthcare Improvement 2008). Developing a plan for change, documenting it, evaluating the change and analyzing the implications helps link changes to the quality and safety improvement agenda. This was exemplified in the hospital experienced with bedside handover, where concerns about the change had been dealt with in the context of a wider quality improvement initiative. Gathering data outlining issues such as staff dissatisfaction with other forms of handover made it easier for clinical managers to persuade the staff at the bedside of the need for change. Using research data as well as cognitive awareness of the need to change can influence attitude and motivation, rendering change less threatening. This is a predictor of success, ensuring that those who are affected by the change participate in its transformation (Sullivan & Decker 2005, Webster 1999).

Among the biggest obstacles to change in organisations is failure to articulate the change, its rationale, time frame and individual implementation steps (Webster 1999).

Kotter (1995), one of the most influential leadership advocates from the Harvard

Business School also advocates the need to establish a sense of urgency – motivating

people to get outside their comfort zones, creating a powerful guiding coalition to oversee the change, developing and communicating a vision for what the change will bring, encouraging risk-taking and creative ideas, planning for and creating short-term wins and

reward structures for those involved in implementing change and ensuring that victory is declared at the appropriate time and accompanied by new projects, themes and change agents that will reinvigorate the process. Changes also need to be anchored in the work culture to show performance improvements (Kotter 1995). Elements of both Kotter's (1995) and Lewin's (1951) work are incorporated in our model for change to bedside handover (Fig. 2).

This study has provided some insights into the type of change management strategies that need to be in place for successful implementation of bedside handover. However many gaps remain in the research base. These include the need to examine clinicians' attitudes, motivation and cognitive processing in the context of care planning (Lally 1999, Lamond 2000) and how cultural issues, language and shared meanings contribute to good communication (Waldman et al. 2003). It would also be informative to investigate the degree to which health care professionals concur with patient preferences and information conveyed to clinical staff during handover and how structural issues such as staffing patterns can promote clear, safe communication and patient engagement while preventing critical errors (Sexton et al. 2004, Pronovost et al. 2004, Ratzan 2007a, b, Sabir et al. 2006, Waters & Easton 1999). Studies have yet to identify the role of computerised tools in supporting safe communication in complex healthcare organisations (Patterson et al. 2004), or in reducing duplication, inefficient resource allocation or deviation of previously established care plans (Philibert & Leach, 2005). Importantly, there is a need to track communication processes in terms of threats to confidentiality, as this was an issue of concern to nurses in our study as well as being reported in other studies (Anderson & Mangino 2006, Webster 1999). Investigations of

these issues can provide a multidimensional perspective of the congruence between the quality improvement and research agendas, both of which are instrumental in ensuring optimal patient experiences and healthcare outcomes (Davidson *et al.* 2006, Gerrish & Clayton 2004, Kitson 2006, Kitson *et al.*1998, McCormack *et al.* 2002, McKinley *et al.* 2007, Rycroft-Malone *et al.* 2004). This agenda should include individual case studies that exemplify practical, effective operational management strategies that highlight effective change strategies in developing standardised clinical processes focused on maintaining quality (Leggatt 2008). Clearly, quality and safety of communication is an authentic measure of caring and lies at the heart of nursing practice and nursing's role in the wider healthcare environment.

## RELEVANCE TO CLINICAL PRACTICE

The global body of nursing research indicates that nurses are generally supportive of quality improvement initiatives, particularly those aimed at standardising care to enhance effectiveness of patient care (Hinshaw 2000). For successful implementation of new innovations, change managers should be mindful of clinicians' attitudes, motivation and concerns and their need for reassurance. This is particularly salient when change is dramatic, as is the case in moving from verbal handover, conducted in the safety of the nursing office, to bedside handover where there is greater transparency for the patient and accountability for the accuracy and appropriateness of communication content and processes.

# **Contributions**

Study design: AM, WC, MW, CF

Data collection and analysis: AM, WC, MW, CF

Manuscript preparation: AM, WC, CF

**Conflict of interest:** The authors declare no conflict of interest.

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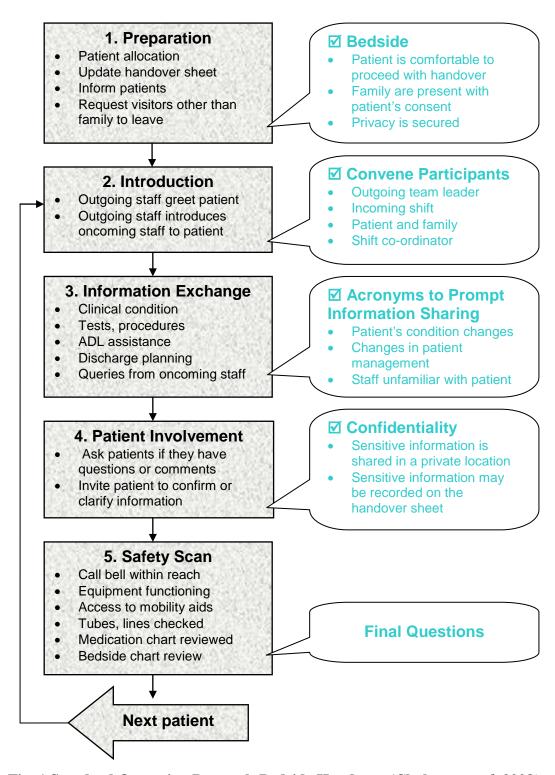


Fig. 1 Standard Operating Protocol: Bedside Handover (Chaboyer et al. 2008).

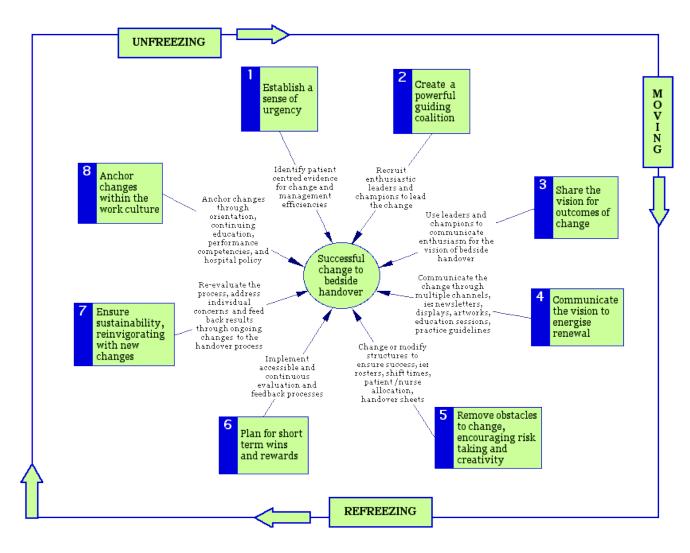


Figure 2: Model for Successful Change to Bedside Handover