

# Scaffolding Clinical Reasoning and Decision Making: Clinical Handover

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## **Abstract**

*Clinical handover is a dangerous time for patients. Poor communication during handover is widely thought to contribute to poorer patient outcomes. In Australia, tools such as ISBAR have been introduced in an attempt to provide a shared framework and consistent handover format. Despite the introduction of ISBAR, errors are still a prevalent issue. This paper introduces a potential solution. The Research Skills Development (RSD) framework was used as a tool for final year nursing students to apply clinical judgement and critical thinking during handover. Identifying handover as an active process will stimulate the provision of rationales for patient management, and earlier recognition of clinical deterioration.*

## **Background**

Clinical handover presents a high risk for patient safety, with potentially life-threatening consequences (Mannix, Parry & Roderick, 2017). Handover is defined as the transfer of professional accountability and responsibility of care (Australian Commission on Quality and Safety in Healthcare [ACSQHC] 2010). Poor communication during this transaction can result in adverse events, including ineffective or wrong treatments (Mannix et al., 2017) and prolonged hospital admission (Spooner, Chaboyer, Corley, Hammond, & Fraser, 2013). The scale of this problem is large, with millions of handover episodes occurring annually in the Australian healthcare system (ACSQHC, 2011). In Australia, ISBAR (Identify, Situation, Background, Assessment and Recommendation) is a tool used to facilitate the safe transfer of patient information in handover. ISBAR assists with organising the transfer of patient information into a logical format to reduce the omission of important information and to facilitate consistency in the process.

Handover should not be limited to the transmission of information; it is an opportunity to develop a shared understanding of patients (Rixon, Braaf, Williams, Liew & Manias, 2017). The benefits of nurses questioning during handover include the detection of incorrect assessments and actions (Rayo et al, 2014). Research by Drach-Zahavy (2015) suggests active participation in handover is associated with a reduction in errors. Additionally, providing rationales for clinical decisions has been found to improve clinical reasoning, enabling the receiving nurse to anticipate and plan care (Bakon, Wirihana, Christensen, Craft, 2017).

There is a need to develop learning opportunities for student nurses to develop their skills in both giving and receiving handover. Handover is more than a passive transaction; it provides a space for learning, questioning and utilising clinical reasoning skills to make judgements about patients. Students need to move beyond using ISBAR for the passive relay and one-way transmission of patient information. In addition to implications for patient safety, the undergraduate nursing curriculum is embedded in Work Integrated Learning (WIL). Strong industry partnerships are critical for the implementation of the curriculum. Learning opportunities are needed for students to apply work skills in the classroom, to improve the employability of graduates.

Clinical reasoning is an essential component of health care practice. In nursing, it is the process of making professional judgements and it is dependent on the development of critical thinking (Banning, 2008). Nurses with inadequate clinical reasoning skills often fail to detect patient deterioration (Levett-Jones et al, 2010) and evidence suggests that graduate nurses may lack the clinical reasoning skills to provide safe patient care (Hunter & Arthur, 2016). In consideration of these factors, learning opportunities are needed to stimulate students to apply critical thinking during the handover process so that clinical reasoning can be developed.

### **A Potential Solution**

The Research Skills Development (RSD) framework (Willison, 2017) was used in tutorials as a conceptual tool for final year student nurses to develop, articulate and apply the processes of critical thinking and clinical reasoning. Students were initially provided with a stimulus posed as a clinical problem which, when discussed in tutorials, was used to unpack the facets of the RSD framework, and forge the link to clinical reasoning. Students then received a video handover of a patient, designed to simulate the clinical environment. Students applied the RSD framework to the information obtained in the handover. This process assisted students to critically reflect, clearly articulate risks and concerns, and organise the information they received. This made the clinical reasoning process more explicit, developing students' conscious awareness and confidence when analysing information.

Students then had the opportunity to apply this learning in simulated scenarios during their clinical skills laboratory workshops.

### **Evaluation**

This was a trial using the RSD framework to stimulate critical thinking and the application of clinical reasoning to the handover process. Undergraduate student nurses arranged the RSD facets so that they were applicable and meaningful for this purpose (see figure 1). Some facets of the RSD framework were very clearly applied to support clinical reasoning during handover, particularly 'Embark and Clarify'. Some aspects of the RSD framework cut across many aspects of the clinical reasoning process, resulting in confusion. However, this was consolidated throughout the semester as the application of the RSD facets became more familiar and students were able to adapt them.

The curriculum needs to be developed to scaffold this teaching and learning activity. Prior learning about clinical handover is required. This needs to reach beyond using ISBAR as a tool for the passive transmission of information; students need to be aware of the risks associated with clinical handover and the importance of asking critical questions. During this trial, the focus was predominantly on receiving clinical handover. This activity needs to be developed further to incorporate giving clinical handover. Clearer links also need to be made to clinical skills laboratory practice and the RSD facets and pentagon need to be available to students during these workshops.

To effectively evaluate this teaching and learning activity, it will be important to draw on students' own experience of giving and receiving handover prior to commencing this work. Further evaluation will be required after the implementation of this activity and after the student's clinical practicum to ascertain the translation of learning to clinical practice.

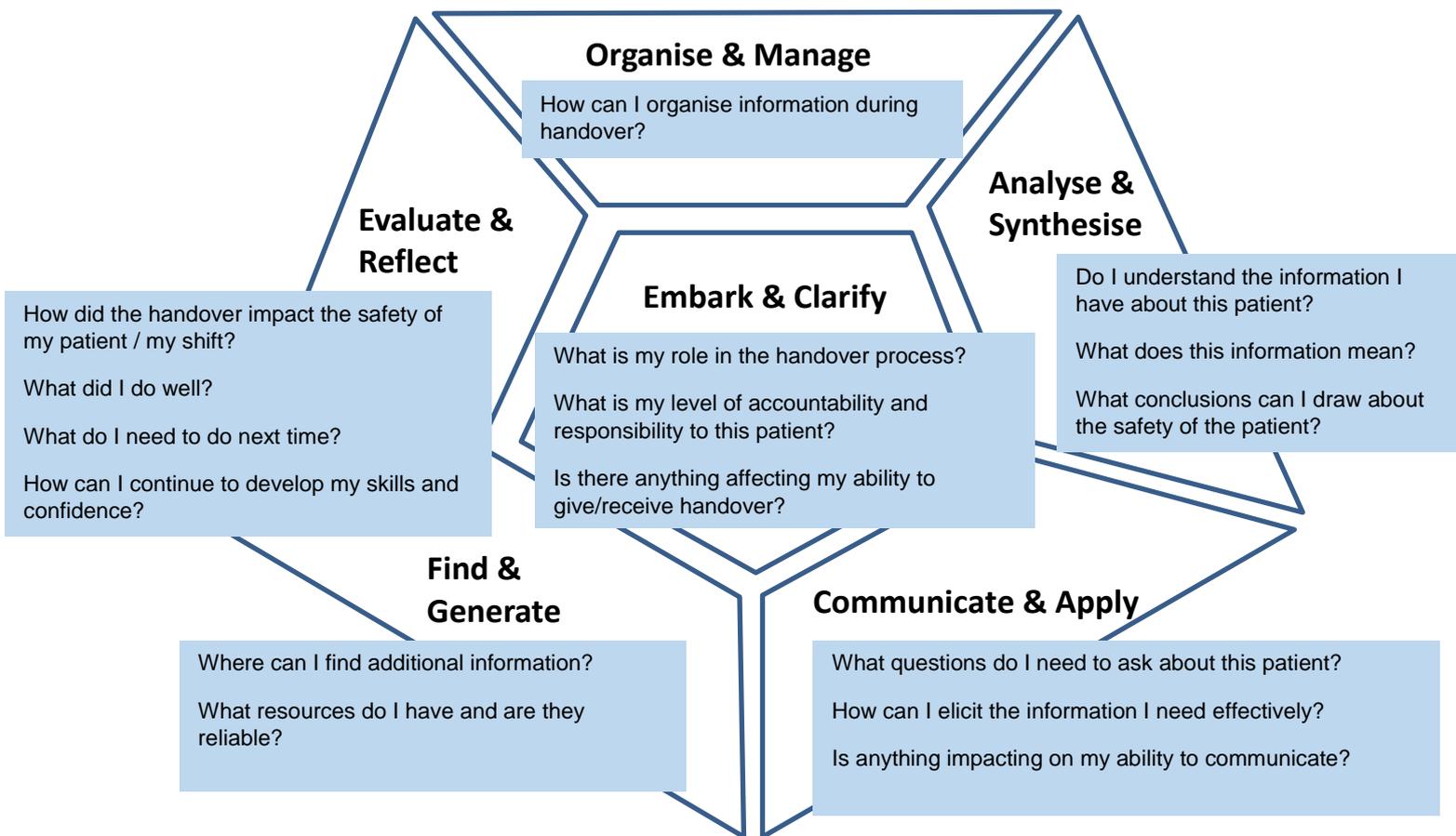
### **Conclusion**

This teaching and learning activity was developed for student nurses to apply critical thinking and clinical reasoning skills to clinical handover. After trialling the application of the RSD framework for this purpose, this activity will be developed to enable formal evaluation of translation to clinical practice. The curriculum overall needs to incorporate teaching and learning activities in relation to giving and receiving handover, whereas it is currently a skill that is taken for granted. Further research is needed to investigate the links between clinical handover and patient safety.

**Figure 1**

# *MELT pentagon*

**'When in doubt, return to the centre'**



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