Emergency Department to Inpatient Unit Handover: A Problems Assessment

Georgia Tobiano, PhD  
*Nursing and Midwifery Education and Research Unit, Gold Coast Health, Gold Coast, Australia*

Andrea Marshall, PhD  
*Nursing and Midwifery Education and Research Unit and Menzies Health Queensland, Gold Coast Health and Griffith University, Gold Coast, Australia*

Kim Jenkinson, BN  
*Gold Coast Health, Gold Coast, Australia*

Christine Ryan, BN  
*Clinical Governance, Gold Coast Health, Gold Coast, Australia*

**Purpose:**

There is substantial research evidence that miscommunication results in poor outcomes, and rigorous study designs are required to improve handover (Robertson, Morgan, Bird, Catchpole, & McCulloch, 2014). In fact, 60-80% of communication failures (including handover) contribute to clinical incidents (The Joint Commission, 2013). Intra-hospital handover, or within hospital handover, of patients, are high risk scenarios. These handovers are risky because of the co-ordination of differing health professional from differing contexts, organisational pressures and logistical arrangements of transferring patients (Gardiner, Marshall, & Gillespie, 2015). There is little value devising interventions for improving clinical outcomes in hospitals, without sufficiently understanding the problems faced by staff (French et al., 2012). Thus the aim of this study is to identify the barriers and enablers to effective emergency department (ED) to inpatient unit (IPU) nursing handovers.

**Methods:**

One approach to designing and implementing interventions that is likely to be effective and sustainable in practice is a knowledge translation (KT) approach (Canadian Institutes of Health Research, 2015). Integrated KT has a strong focus on involving end users in all phases of research, including problem assessment (Canadian Institutes of Health Research, 2015). Thus we undertook a problem assessment with 50 nurses working in ED and IPUs. A semi-structured interview guide was used to explore nurses’ perceived barriers and enablers to effective intra-hospital handover. The interview guide was guided by the Theoretical Domains Framework (TDF). The TDF combines many overlapping behavioural theories (Cane, O’Connor, & Michie, 2012), providing a succinct and validated list of 14 domains to guide intervention development including; knowledge; skills; role identity; belief about capability; optimism; belief about consequences; reinforcement; intentions; goals; memory, attention and decision processes; environmental context and resources; social influence; emotion and behavioural regulation (Cane et al., 2012). Ten focus group interviews were conducted and audio-recorded, with two researchers were present. The size of each group ranged from 4-8 participants, and data saturation was achieved.

Initial analysis of data has occurred. Once interviews are transcribed, a formal barriers analysis will be conducted. Deductive content analysis will occur on transcribed interviews (Elo & Kyngäs, 2008). A categorisation matrix will be designed using the 14 domains of the TDF, and interview data will be coded according to the dimensions in the matrix (Elo & Kyngäs, 2008).

**Results:**

‘Belief about capabilities’ and ‘skills’ were viewed as enablers, as nurses perceived they had the ability to provide high quality handover. Further nurses’ ‘motivation’ to improve practice was high, and their ‘beliefs about consequences’ showed they were concerned about the handover process, and wanted to improve practice and patient safety.
The most frequent barriers discussed were ‘role identity’ and ‘knowledge’. For role identity, there were many nurses involved in the handover and transfer process. An initial handover occurred between the ED team leader and the IPU team leader, while the patient was in ED. After this handover occurred, role confusion occurred. It was unclear who should transfer the patient to the IPU (orderlies or nurses not providing direct care for the patient were often used to transfer and handover the patient to the IPU), and the role of the person transferring the patient was unclear in terms of handover content required on the IPU, given an initial handover occurred between two team leaders. Nurses in ED and IPU stated the lack of agreement on roles provided many opportunities for poor information transfer.

Both ED and IPU staff agreed that that ED staff did not have sufficient ‘knowledge’ of their patients, due to time pressures in ED and limited handover practices between ED nurses. As a result a culture of ‘chart biopsy’ occurred, where ED staff would often handover content directly from the electronic medical record, which IPU staff could also read. Thus IPU nurses were often dissatisfied as they required different information, such as tasks completed by bedside nurses and changes that had occurred to the patient.

**Conclusion:** Using the TDF allowed us to undertake a theory-informed problem assessment of ED to IPU handover. As a result, two improvement groups have been formed at the hospital, each addressing barriers identified (‘knowledge’ and ‘role identity’). In each group, researchers, quality improvement leaders and clinicians will continue to work together, allowing research evaluative measures to be used to test the effectiveness of strategies developed. Using a knowledge translation approach, where end-users are involved, is likely to maximise the acceptability of interventions introduced, and in turn improve clinical outcomes (Canadian Institutes of Health Research, 2015).

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**Title:**
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Abstract Summary:
Emergency department to inpatient unit handover is complex and risky for nurses. Researchers identified the most common barriers to effective emergency department to inpatient unit handover including, “knowledge” and “role identity”. Identifying barriers with end-users allowed targeted interventions to be developed to improve communication.

Content Outline:
Introduction

A Miscommunication is a leading cause of adverse events

B Intra-hospital handover is a high risk communication scenario

C The aim of this study is to identify the barriers and enablers to effective emergency department (ED) to inpatient unit (IPU) nursing handovers, as perceived by end-users (i.e. nurses)

Main Point #1There are perceived enablers to effective emergency department to inpatient unit handover

Supporting point #1 Nurses view their skills and capabilities as sufficient for high quality handover

Supporting point 2 Nurses are motivated to improve their practice, and identify the consequences of poor handover

Main Point #2 There are perceived barriers to effective emergency department to inpatient unit handover

Supporting point #1 Nurses view ‘role identify’ as a barrier to effective emergency department to inpatient unit handover. The content of handover and person responsible for transferring patients to inpatient units are areas of confusion

Supporting point #2 Nurses identify emergency department nurses’ ‘knowledge’ as a barrier to effective emergency department to inpatient unit handover

Conclusion
A Undertaking a problem assessment has allowed improvement groups to be formed at the hospital, with each group directly addressing identified barriers

B Involving end-users in the problem assessment may enhance uptake of interventions that improvement groups develop, as interventions will directly address nurses’ perceived problems

First Primary Presenting Author

**Primary Presenting Author**

Georgia Tobiano, PhD
Gold Coast Health
Nursing and Midwifery Education and Research Unit
Nurse Researcher
Gold Coast
Australia

**Professional Experience:** September 2016-present: Nurse Researcher, Gold Coast University Hospital
February 2016-September 2016: Research Fellow, Griffith University
January 2009-September 2016: Registered Nurse, Gold Coast Hospital and Health Service

**Author Summary:** Georgia Tobiano is a Nurse Researcher at Gold Coast University Hospital. Her research focus is patient- and family-participation in acute care. In particular, she investigates how patient participation in handover, medication safety, and nutrition can optimize safety for patients.

Second Author

Andrea Marshall, PhD
Gold Coast Health and Griffith University
Nursing and Midwifery Education and Research Unit and Menzies Health Queensland
Professor of Acute and Complex Care Nursing
Gold Coast
Australia

**Professional Experience:** 2012-present: Professor of Acute and Complex Care Nursing, Gold Coast Health
September 2010-January 2011: Postdoctoral Research Fellow, Kingston General Hospital and Queen's University
2009-2011: Director Postgraduate Advanced Studies, University of Sydney

**Author Summary:** Professor Marshall has published in excess of 70 peer-reviewed research articles. She has a h-index of 13 (Scopus) and 22 (Google) with over 1100 citations to her work. She has an additional 6 papers currently in press. Key publications are listed below. Andrea Marshall has extensive experience in mentoring and supervising early career researchers. Professor Marshall provides expertise in using mixed-methods research, qualitative research, and research in clinical settings including knowledge translation research.

Third Author

Kim Jenkinson, BN
Gold Coast Health
Clinical Facilitator
Gold Coast
Australia
**Professional Experience:** 2011-current, Clinical Facilitator, Specialist Medical Unit, Gold Coast Health
2010-2011: Registered Nurse, Gold Coast Health Kim Jenkinson is a member of the clinical handover committee, and has acted in the Lead position

**Author Summary:** Kim Jenkinson is a member of the clinical handover committee, allowing access to up-to-date handover issues within the hospital, access to multi-disciplinary clinicians and consumer advocates with handover expertise and a platform to disseminate the findings. Jenkinson has lead literature searches of current handover literature available.

Fourth Author
Christine Ryan, BN
Gold Coast Health
Clinical Governance
Clinical Handover Clinical Improvement Lead
Gold Coast
Australia

**Professional Experience:** April 2016-current: Clinical Handover Clinical Improvement Lead, Gold Coast Health 2008-2016: Patient Safety Coordinator, Gold Coast Health June 2014-December 2014: Acting Quality Coordinator (Speciality and Procedural Services Directorate), Gold Coast Health 2006-2008: Patient Safety Officer

**Author Summary:** Ryan has over 10 years experience working on patient safety in hospitals, including extensive experience assisting with the review of internal processes with focus on quality improvement outcomes at every level of the hospital. Ryan is currently completing her Masters in Clinical Leadership.