Patient care handovers: what will it take to ensure quality and safety during times of transition?

Julie K Johnson and Paul Barach

It has been suggested that you can't improve what you don't measure. It has also been suggested that if you don't know where you are going, any map will do. The articles in this supplement demonstrate that researchers in Australia are mapping approaches to measuring and improving the complex arena of clinical handover. Furthermore, their collective efforts at trying to make sense of the chaotic interlude of handover are at the cutting edge of clinical research.

The focus on clinical handover is a relatively recent phenomenon in the grand scheme of quality and safety efforts. Interest in handovers has grown steadily over the past decade as researchers, hospital administrators, educators and policymakers have come to realise that the potential breakdown in communication during patient handover is a serious issue affecting their institutions, clinicians and patients. Indeed, the world has woken up to the fact that ineffective handovers are a hazard to patients, and result in misuse and poor utilisation of resources.

Clinicians and researchers agree that handovers serve as the basis for transferring responsibility *and* accountability for the care of patients from outgoing to incoming health care teams across shifts, across disciplines and across care settings. Poor continuity of clinical care, either at a patient's referral to hospital by a primary care provider or specialist, or at discharge from hospital, can be detrimental to the patient's wellbeing. The exchange of information and responsibility that occurs during shift changes is critical for maintaining continuity and patient safety, and can often determine the ultimate outcome of care.[1]

System issues are at the heart of patient handovers — clinician-to-clinician communication, coordination of transitions and creation of mechanisms for feedback and feed-forward. The complexity of the handover process presents a series of "vulnerable gaps" in patient care that can result in errors, near misses and adverse events. Research has illustrated that there is little standardisation and great variation across disciplines and health care organisations in the ways in which handovers are performed.[2-4]

Unlike some areas that have been the focus of safety improvements, handovers of patient care are ubiquitous, cutting across all care settings and all disciplines. The World Health Organization listed "communication during patient care handover" as one of its "High 5" patient safety initiatives.[5] Improving effective communication throughout the hospital is a leading patient safety goal espoused by The Joint Commission in the United States.[6] The Australian Commission on Safety and Quality in Health Care (ACSQHC) has identified clinical handover as a particular focus for 2009.[7] The call to action by the ACSQHC has been heard, and this *MJA* supplement represents a vibrant response from Australian researchers.

Developing a single approach for all handovers is not possible because of the diversity and complexity of health care. Ensuring quality and safety during times of transition will therefore require an approach that draws on all available wisdom about what is needed to improve handovers, coupled with a systems approach to understanding and improving care at the point where patients and providers meet. The articles presented here examine handovers within and across multiple care settings (including residential aged-care facilities,[8,9] inpatient care,[10-15] mental health[16] and maternity care[17]); handovers from community to hospital care;[18] and the effects of different financing structures (public/private, state/federal).[19] The projects described use a blend of qualitative and quantitative methods, including observations, interviews, focus groups, surveys, appreciative inquiry and case studies. In addition, the studies test several interventions to improve communication around the handover process: shared electronic health records, common datasets, educational interventions aimed at increasing staff awareness, checklists and whiteboards.

Six recommendations emerge from the articles in this supplement and other cutting-edge work by a diverse set of researchers around the world.

1. Seek to understand handover communication as a complex adaptive process

Improving outcomes requires an appreciation of the inherent link between explicit processes and results. Focusing on the system, rather than the individual, directs attention to the processes and outcomes of care without blaming or shaming individual people.[20]

2. Recognise the effect of culture as a key enabler for change and improvement

The culture of a care-giving unit underpins all processes and all improvements to care. Providers who are junior or new to the system may lack knowledge and confidence. For example, immigrants may be self-conscious about their command of the language and reluctant to ask questions. Lack of experience and the effects of a different cultural background are further exacerbated in settings with a steep authority gradient.

3. Develop tools to make information readily accessible and transparent

Developing and maintaining decision aids requires an investment of effort and money. There may be a tendency to bypass such information documentation activities if easier avenues for securing information can be identified. Well designed, ergonomic solutions and consistent policies on the use of these resources increase the chances that such tools will be successfully adopted.

4. Apply principles of human factors to clinical design

Design workspaces that help reduce or eliminate interruptions during patient handover. Learn to appreciate the impact of the built environment and its impact on patient outcomes.

5. Focus on training and sustaining

Handovers are rarely taught systematically. The following principles can help to redress this:

- *Teach providers to tell a "better story".* More effective integration of the quantitative outcomes data with the more qualitative contextual data will enhance the wisdom of carers and capture the complexity of patient stories.
- *Provide feedback.* Sustain the effort by giving feedback about individual performance and by setting performance expectations.
- *Couple inexperienced providers with experienced incoming and outgoing providers.* The experienced incoming provider can demonstrate proper enquiries about patient status and issues, and the experienced outgoing provider can demonstrate proper "storytelling" and methods. Capturing the wisdom of an 8-hour shift is more complex than one might assume.
- *Consider the use of videotaped simulated handovers and self-directed videotaping for reflexive learning.* Use of these tools can improve handover. They can demonstrate the nature of false assumptions and omissions; the effects of interruptions; good versus poor patient problem descriptions; and the consequences of relying only on written information.

6. Identify the leadership required to improve handovers

Effective leadership (at microsystem, organisational and national levels) is crucial for addressing systems issues and for creating the kind of "learning" organisation that is necessary for providing safer care.

Several overarching themes can be gleaned from the articles presented in this supplement. Firstly, while standardisation of process and content are at the heart of effective handover, there is also a need for local customisation so that clinicians own and champion the handover process. This cannot be overemphasised. Front-line care-giving teams need to adapt standardised protocols to meet their needs, based on their unique set of constraints and enablers. Secondly, action research methods that bridge the gap between research and practice are an effective way to engage front-line staff in improving the handover process. Translating the recommendations of this supplement into practice will involve adapting them to local needs determined by the people, process and patterns at work in Australia. The proof in these and other proposed solutions comes down to implementation. In translational research, the handover phenomenon informs the research, and the research informs the practice.

Questions to help guide local implementation of new handover strategies and to measure the impact of the changes

- What are the clinical handover situations that carry the most risk for patients?
- What information and critical success factors are needed to better understand the process of handovers in this setting?
- What handover interventions are the most effective?
- What resources and tools are available to improve handover communication?
- Which individual clinicians are willing to serve as "champions" for improving the handover process?
- What mechanisms can be put in place to spread, sustain and transfer improvements across the organisation?
- What improvements can be built into information systems tools to enhance their successful adoption (eg, checklists, reminder systems, information technology solutions)?

Research funding bodies in Australia (such as the Australian Research Council and the National Health and Medical Research Council [NHMRC]) need to hear this message and consider allocating 2009–2010 research priorities accordingly. Action-oriented research emphasises the need for a highly collaborative and consultative approach between researchers and care-giving teams. As Iedema and colleagues state eloquently (*page S133*), "When enabled and trusted to develop and redesign work processes that make sense to them, clinicians gain ownership over the solutions proposed and designs instituted".[13] Handovers are high-risk scenarios for patient safety. In the end, patients will be safer only when clinicians are engaged and leading the change required around handovers.

Competing interests

None identified.

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