Handoffs: what's good for residents is good for nurses…so what's next?

Rebecca R Kitzmiller,[1] Sim B Sitkin,[2] Arpana R Vidyarthi[3]

[1]School of Nursing and Faculty, Carolina's Health Informatics Program, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, USA
[2]Fuqua School of Business and Sanford School of Public Policy, Center on Leadership and Ethics, Duke University, Durham, North Carolina, USA
[3]Duke-NUS Medical School, Advanced Internal Medicine, National University Health System, Singapore

Correspondence to
Dr Rebecca R Kitzmiller, School of Nursing, and Faculty, Carolina's Health Informatics Program, The University of North Carolina at Chapel Hill, Chapel Hill, North Carolina 27515, USA; kitzm002@email.unc.edu

Accepted 30 August 2017
Published Online First 11 September 2017

► http://dx.doi.org/10.1136/bmjqs-2016-006224

To cite: Kitzmiller RR, Sitkin SB, Vidyarthi AR. *BMJ Qual Saf* 2017;**26**:944–946.

Communicating patient information at shift change is a time-honoured nursing tradition. Historically referred to as 'giving report', the methods and information shared during nursing handoffs varied widely in modality (eg, face to face or through audio recordings), location (eg, in the break room, unit work centre or bedside) and format (eg, notes, formatted document or electronic health record). Although the shift change handoff process has evolved to increasingly emphasise face-to-face exchange and required data elements, variability persists,[1] and the shift transition remains a vulnerable time for patients.

Shift changes generally, and the nursing handoff specifically, create gaps in care where errors may occur. In this issue of *BMJ Quality and Safety*, Starmer and colleagues[2] describe a framework, IPASS, to bridge this gap. IPASS stands for **I**llness severity; **P**atient summary, **A**ction list; **S**ituation awareness and contingency planning; and **S**ynthesis by receiver. IPASS is a handoff improvement bundle that provides a standardised structure to the information exchanged at shift change. This work joins a growing literature that demonstrates the positive effects gained from standardising communication content and delivery methods.[3] The IPASS bundle was initially studied in paediatric residents across the USA[4] and was adapted by Starmer *et al*[2] for use by nurses in a paediatric intensive care unit. These researchers found that implementation of this bundle increased the frequency, quality and efficiency of key handoff elements, including fewer interruptions during nursing shift change.[2] Collectively, these findings suggest that the benefits of communicating patient information in a structured manner apply similarly to residents, nurses and (potentially) other health professionals.

This all comes as good news, but is not entirely unexpected. Any handoff, be it resident, nurse or others, represents a time period fraught with potential for miscommunication. Technical 'fixes' such as role definition, standardised information exchange, templates and checklists help to reduce the risks incurred from communication gaps. We believe these 'fixes' are germane and ought to be widely implemented across multidisciplinary healthcare processes. These solutions focus on an important technical aspect of handoffs and contribute to reducing medical errors.[4] That said, handoffs are complex and involve *both* technical and non-technical facets such as interpersonal and social systems.[5–7] As handoffs are increasing and the risks to patients at the gap are significant, exploring the non-technical realms may inform the next level of gains in handoff improvement. The quality of interpersonal relationships which includes personal credibility, the degree of trust and the context in which the handoff is delivered all influence the effectiveness of the handoff and are worthy of deeper consideration.

First, personal credibility. Projecting capability, honesty, mindfulness and dedication is essential to establishing credibility between members of the care team.[8] Building credibility occurs through competent care delivery and through anticipating evolving patient problems and the needs of the care team. As a result of credibility, the oncoming nurse can believe the accuracy of handoff information, can be confident that care tasks were carried out correctly and completely, and can rest assured that he or she is well positioned to deal with the effects of past events as well as future ones. In the absence of such credibility, the veracity of handoff information may be questioned and, as a result, the information and insights that each individual brings to the

handoff may not be sought and instead may even be devalued, discounted or ignored.[6]

Second, trust. To rely on another individual (ie, to be vulnerable) implies that one believes the other person's intentions are benevolent, involve a high degree of integrity and are based on value congruence.[9] Researchers noted that some study participants interpreted questions during handoffs as malevolent behaviour, rather than an attempt to gain a greater understanding of patient status.[1] Negative interpretation may discourage the kinds of clarity seeking that leads to shared mental models and safer care. To gain the trust of another, one must demonstrate concern, understanding, respect and fairness.[10] On a patient care unit, this might take the form of recognising the skills and knowledge of the nurses coming on shift and taking action to lessen their anticipated care burden. Among nursing units, a high degree of trust in nurse managers was associated with safer medication administration, perhaps because trust implies a conducive climate for raising safety issues as well as developing effective solutions for those issues.[11] We believe that trust is equally influential in handoffs as this is the critical time period within which nurses should identify and correct errors, potential errors and erroneous mental models.[12] However, when healthcare team members are afraid that their observations or input are not wanted or valued, they will refrain from communicating and essentially remain silent[6 13] even if asking questions is part of the structured communication template. The amount of information that could be transmitted at shift change is virtually infinite; thus, the ability to question, seek clarification and correct misunderstanding is essential and critically dependent on the degree of trust between those involved in the handoff.

Third, contextual clarity and coherence. Community or team identity is grounded in understanding the context in which care is delivered, and includes unit priorities, individual roles and responsibilities, and how individuals collectively carry out the work of the unit.[10] Units characterised by a high sense of teamwork are associated with better patient outcomes.[14] Although a few studies noted that handoffs also serve to educate, establish norms and values, and build team identity,[12 15] handoff improvement efforts tend to focus almost exclusively on patient-specific information to the neglect of information about the larger unit in which care takes place. Since care is not delivered in a vacuum, those involved in handoffs also must understand the overall care priorities as well as the capabilities of the oncoming nurses in order to anticipate how the team needs to collaborate to deliver high-quality care. It is imperative that those involved with the handoff feel that they are part of the same team or community, especially when they have different specialties or have never worked a shift together.

To date, high-quality handoffs are overwhelmingly defined by the degree to which accurate and appropriate patient information is communicated from one care provider to another. Indeed, Starmer and colleagues demonstrated that careful management of information exchange was beneficial.[2 4] We agree and affirm that this type of standardisation is necessary. Even in the face of enhanced communication structures, though, miscommunication and errors persist. We posit that attention to the interpersonal and social systems will offer new insights into overcoming miscommunication between care providers. Such attention is particularly important in light of the increasing fragmentation of care delivery (eg, shorter shifts, increased handoffs), the fluid nature of care teams (eg, trauma and rapid response teams) and the instability of care teams (eg, high nurse turnover or use of temporary nursing staff).

In today's inpatient environment, healthcare providers lack the luxury of time to establish the relationships that, in the past, constituted a cornerstone of care delivery. Standardising the technical aspects of handoffs is important. But to drive the next level of handoff improvement, incorporating insights from organisational behaviour into future research may deepen our understanding of the non-technical aspects of handoffs and in turn inform the next generation of interventions that will potentially keep patients even safer.

Competing interests None declared.

Provenance and peer review Commissioned; internally peer reviewed.

REFERENCES

1 Carroll JS, Williams M, Gallivan TM. The ins and outs of change of shift handoffs between nurses: a communication challenge. *BMJ Qual Saf* 2012;21:586–93.
2 Starmer AJ, Schnock KO, Lyons A, *et al*. Effects of the I-PASS Nursing Handoff Bundle on communication quality and workflow. *BMJ Qual Saf* 2017;26:949–57.
3 Anderson J, Malone L, Shanahan K, *et al*. Nursing bedside clinical handover - an integrated review of issues and tools. *J Clin Nurs* 2015;24:662–71.
4 Starmer AJ, Sectish TC, Simon DW, *et al*. Rates of medical errors and preventable adverse events among hospitalized children following implementation of a resident handoff bundle. *JAMA* 2013;310:2262–70.
5 Frankel RM, Flanagan M, Ebright P, *et al*. Context, culture and (non-verbal) communication affect handover quality. *BMJ Qual Saf* 2012;21 Suppl 1:i121–i128.
6 Hays MM. An exploratory study of supportive communication during shift report. *Southern Online Journal of Nursing Research* 2002;3:1–4.
7 Edmondson AC. Speaking up in the operating room: How team Leaders promote learning in interdisciplinary action teams. *Journal of Management Studies* 2003;40:1419–52.
8 Sitkin SB, Lind EA, Siang S. The six domains of leadership. *Leader to Leader* 2006;2006:27–33.
9 Rousseau DM, Sitkin SB, Burt RS, *et al*. Not so different after all: A cross-discipline view of trust. *Academy of Management Review* 1998;23:393–404.

10 Lind EA, Sitkin SB. *The six domains of leadership*. Detroit, MI: Learning with Leaders, 2015.
11 Vogus TJ, Sutcliffe KM. The impact of safety organizing, trusted leadership, and care pathways on reported medication errors in hospital nursing units. *Med Care* 2007;45:997–1002.
12 Patterson ES, Wears RL. Patient handoffs: standardized and reliable measurement tools remain elusive. *Jt Comm J Qual Patient Saf* 2010;36:52–61.
13 Kish-Gephart JJ, Detert JR, Treviño LK, *et al*. Silenced by fear:The nature, sources, and consequences of fear at work. *Research in Organizational Behavior* 2009;29:163–93.
14 Lemieux-Charles L, McGuire WL. What do we know about health care team effectiveness? A review of the literature. *Med Care Res Rev* 2006;63:263–300.
15 Chaboyer W, McMurray A, Wallis M. Bedside nursing handover: a case study. *Int J Nurs Pract* 2010;16:27–34.