Poverty amid plenty

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Clinical handoffs are tools aimed at bridging gaps¹ that occur during transitions in care, whether across time (eg, shift changes) or across organisational boundaries (eg, the ward to the intensive care unit). They have long been viewed as potential threats to safety² and are attracting increasing attention for several reasons. First, from a control theory point of view, handoffs are inherently hazardous because having two controllers in a process always raises the possibility of conflict, poor coordination or miscommunication.³ Second, handoffs are often cast among 'the usual suspects' in after-the-fact reviews of critical incidents and adverse events,^{4 5} although a few have noted that they have also been sources of recovery from impending danger.⁶⁻⁹ And finally, concerns about fatigue leading to a reduction in work hours present a potential double bind, as decreasing risks from fatigue might be counterbalanced by increasing risks from more frequent handoffs.

Perhaps because of the pressing, practical reasons to 'solve the problem' represented by handoffs, most studies have focused on 'fixing' rather than understanding them. Most of the descriptive studies^{4 5 10-12} have framed the problem as failures of information transfer and involved surveying or interviewing personnel about their perceptions of the handoff process and thus risk the hindsight and outcome biases.¹³⁻¹⁶

Only a few have involved directly observing clinical handoffs 'in the wild', or tried to build a deeper understanding of what they are, what needs they serve and what actually happens in them.¹⁷⁻²¹ In this issue of *BMJ Quality & Safety*, Carroll *et al*'s study of nurses' shift change handoffs is a welcome attempt to fill a bit of this gap.²²

Carroll's group actually studied real handoffs, instead of assuming we know enough about them already to 'improve' them. As often happens when non-clinical, safety scientists study clinical work, they found things that no one suspected about—that which everyone sees—that was 'hidden in plain sight.' This paper adds to the growing understanding of handoffs^{3 23 24} as incredibly complex, exquisitely situated episodes that defy simplistic, 'one size fits all' solutions or clever mnemonics.²⁵

Although not explicitly stated, their work used several different framings to try to understand what happens during handoffs; this simultaneous support of a multiplicity of views²⁶⁻²⁸ is an important improvement over much previous handoff research, and leads to a richer, more complete and better-nuanced understanding of handoffs. It is difficult to imagine how the mutually contradictory goals of the incoming and outgoing roles and the resulting struggle for control of the conversation might otherwise have surfaced. It also shows the value of accepting research based on an interpretive paradigm, rather than relying solely on the positivist approach that currently dominates biomedicine.²⁹⁻³¹

However, because healthcare tends to unconsciously adopt a positivist, information-processing framing²⁷ as

the natural (in fact, the only) way in which to view handoffs, there is a potential hazard for readers of this work. An information transfer framing attempts to assess the quality and adequacy of handoffs in terms of the number of data points transferred accurately. This carries with it three problems. First, data does not equal information, much less understanding; the difficulty in 'connecting the dots' in a sea of data is common, so accurate data transfer alone cannot ensure adequate understanding. Second, the idea of 'completeness' in this regard is a will-of-the-wisp. It is impossible to articulate, much less transfer, all that has been learnt about even a single patient over the past shift. The value of a model is precisely that it is not complete, because completeness is overwhelming. Finally, the data transfer framing implicitly sneaks in the idea that more items are always better than fewer. (We see this in the oft-proposed 'solution' to the handoff problem of creating a list of standard data elements that should always be covered). It leads to a kind of 'scope creep' where things can be progressively added, but nothing is ever taken away.^{32 33} Over 40 years ago, Herbert Simon encapsulated this problem in his statement: 'An abundance of information creates a poverty of attention.'^{34 35} We tend to hear a lot about information in health professionals' discourses about handoffs, but precious little about salience; it is time to emphasise this neglected perspective.

Let us not do to the handoff what the electronic medical record (EMR) has done to the chart—sacrifice salience for 'completeness' and lose the important in a sea of the marginally relevant and questionably trustworthy.³⁶⁻⁴¹

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