

2 Clinicians' voices: what healthcare professionals say about handover practice

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2.1 Setting the scene

The following patient story is taken verbatim from a junior doctor's recount of an adverse event submitted to the ECCHo handover survey (See Manias *et al.* 2015).

'Adverse events: Missed foreign body in facial wound of young female patient and avoidable delay in recognition and remedial treatment. Result: 6 kg weight loss from inability to eat properly for more than a month, chronic inflammation of face causing problems with salivation, facial numbness with severe pain for several months. Patient required avoidable surgery and patient might now have an opioid dependence from the painkillers prescribed during this time.

Details: Female patient in her 20s presented via ambulance at night after being assaulted by a man who hit her in the face with what she thought to be broken rock. Initially there were concerns for brain injury, spinal injury and facial injury. She had an open wound on her cheek. Full examination was performed and she was kept in a hard-collar with spinal precautions until a significant injury could be ruled out with CT scan of her head, neck and face. The wound on her face was cleaned and dressed, but left open as her possible spinal injuries were the priority and the hard collar partly covered the wound preventing safe management. The patient's CT scan was performed just before morning medical shift handover and had not been processed or reported at time of handover.

Handovers usually occurred in meeting room (away from patient bedside), but a new system of walk-around bedside handover had just been implemented. There were advantages to this change, but also major disadvantages. Junior medical staff tended to be pushed to the back, behind senior nursing staff and senior colleagues. The handover group was bigger because it was considered better to have more people involved. The nurses and doctors providing the handover information tended to speak more quietly and directed their speech to only senior staff as they were now in a less private, more open environment discussing highly sensitive information with often only a curtain between emergency department cubicles. Handovers now seemed more rushed and disorganized and took much longer. People now jostled for a position while walking quickly between patients so they could actually hear what was being said. Important results were no longer checked during handover (as they often were before). It now took too long to log-on to multiple bedside computers that often didn't function as they ought to. The junior staff who already often struggled to assert themselves or clarify information now rarely spoke up. After all, they couldn't hear properly at the back, had a larger crowd to speak to and were acutely aware that questions slow things down further.

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The junior doctor taking over the patient's care did not hear the handover clearly and did not clarify either. Instead he went and read the medical notes carefully. From both the handover and the medical notes he thought that the wound had been carefully explored and cleaned and that the wound could be safely sutured if the CT scan was reported as normal and the hard-collar could be removed safely. He felt confident with this and did not feel the need to discuss it further with his seniors. In fact, the senior doctor had stated that the wound was explored only superficially and recommended careful exploration and possible referral to plastics if concerned. After the junior doctor obtained a verbal report of the CT scan over the phone, he removed the hard-collar and cleared the patient of a spinal injury. He then cleaned the facial wound and carefully sutured the wound.

After the patient was considered safe to go home, he understood that clear communication with the general practitioner was required. As it was a Sunday, he wrote a letter detailing the suggested follow up for the patient. He told the patient to see her general practitioner in three days and then again in seven days for wound review, suture removal and to confirm that the formal CT report was indeed unremarkable. He gave a copy of the letter to the patient, faxed a copy to the general practitioner and put another copy in the medical notes. The letter clearly asked the general practitioner to chase the formal CT report among other things. The fax was not received by the general practitioner. The patient forgot the advice that was given, but managed to see her general practitioner on three occasions over the next 10 days.

The general practitioner reviewed the wound, commenced antibiotics for a presumed wound infection, removed the sutures and reassured the patient that she would improve with time. The general practitioner did not however chase the formal CT report, nor was it sent to her. As she did not receive the letter, she saw no reason to check it. The CT was reviewed the following day by a consultant radiologist. He amended the original report to comment on a foreign body in the belly of one of the main jaw muscles. He noted that it looked like a piece of bone, but could not see a fracture. This amended report was sent to the senior doctor, but was placed in the wrong pigeonhole in the emergency department after the original 'normal' report had been placed in the correct pigeonhole.

The senior doctor received the amended report two weeks later and had not checked the results of the CT scan on the computer because he was reassured by the 'normal report' that had already been sent to him. He spoke to the junior doctor and called the patient at home. The patient had been off work the last week, had not been able to eat, losing 4kg since the incident, and was taking opioid painkillers for the pain. Her face had been becoming more swollen and painful despite antibiotics and a well-healed wound. She had one week earlier been reassured by her general practitioner after suture removal and was giving it more time to heal. The amended results of the CT were discussed with the patient and she agreed to come in.

As the senior doctor was due to finish his shift, he informed another emergency department doctor about the patient, he also informed the triage nurses and called the plastics registrar to organize a review of the patient on arrival. He wrote a detailed note in the case notes requesting an admission under plastic surgery for removal of the piece of rock that had been missed. The second emergency department doctor called the patient again as her shift was coming to an end. The patient presented one hour after her shift ended. She briefly saw the patient and looked through her cheek with a bedside ultrasound machine. She easily recognized what looked like a piece of rock in the masseter muscle with surrounding collection of fluid involving the parotid gland and possibly nerves of the face just below the well healing scar. She wrote this observation in the patient's notes and told triage nurses who called the plastics registrar.

The plastics registrar had not heard about the patient as he had just started and had not been told about the patient by his colleague at their handover meeting. He suggested an emergency

department doctor see the patient first as he was about to go to theater to perform an operation. Two hours later the patient was seen briefly in the emergency department waiting room by an emergency department doctor who knew very little about the patient. He immediately called the plastic registrar and told him about the CT scan. The plastics registrar finally saw the patient six hours after she first arrived. By this time the patient was angry and in pain and was not in the mood to communicate well with the plastics registrar. The patient wanted to go home. The plastics registrar was also unwilling to admit the patient without a formal ultrasound. He did not see the medical notes at all as they were ‘missing’ when he arrived in emergency department. The notes were in fact with nursing staff in a handover meeting! He organized an ultrasound and sent the patient home.

The ultrasound appointment took two weeks to occur as it was considered non-urgent. The patient again attended her general practitioner one week later. The general practitioner did not organize any tests or specialist referrals, as she understood the patient had recently been seen by plastics and emergency department and was awaiting an ultrasound. She had not received any communication to suggest otherwise. She did prescribe more painkillers, however. After the ultrasound was performed and reported, she was admitted under plastics, underwent surgery where a piece of rock was removed from her masseter muscle. It took several weeks before she was able to eat normally with normal face sensation. Based on subsequent presentations to multiple emergency departments since this event and collateral history from family, she is now suspected of having opioid dependence that includes IV drug use. She has been fired from her job as a direct result of this. Both patient and family deny any opioid or illicit drug use before Endone was first prescribed for pain related to this event.

This anecdote highlights the ways in which an accumulation of communication failures and gaps in clinical handover practices can impact on patient safety. At least eight problematic handover events contributed to the disastrous outcome for this patient:

1. In the shift-to-shift handover in the emergency department, the junior doctor taking over care of the patient did not hear the bedside handover clearly and therefore missed important information about the patient’s wound.
2. The junior doctor did not seek clarification during the handover, assuming that the medical notes would provide the necessary information. However, both the handover and the medical notes led him to believe wrongly that the wound had been explored and cleaned.
3. The junior doctor faxed the general practitioner the patient’s discharge summary and gave a copy of the discharge letter to the patient on discharge. However, the general practitioner did not receive this written handover and therefore did not follow the advice to chase up the CT report.
4. The consultant radiologist’s amended abnormal CT report was not received by the senior doctor as it was placed in wrong pigeon hole.
5. The second emergency department doctor asked the triage nurse to call the plastics registrar, instead of doing it himself.
6. When the plastics registrar started his shift he did not receive information about the patient from his colleagues. As a result, he suggested that an emergency department doctor see the patient first, and it was six hours before the patient saw a plastics registrar.

7. When the plastic registrar finally saw the patient he did not have sufficient information as the patient's notes were missing. The registrar mistakenly discharged her.
8. The emergency department staff communicated poorly with the patient's general practitioner. As a result, the general practitioner did not organize further tests or a specialist referral, nor did the general practitioner try to fast track the ultra sound which took a further two weeks.

This anecdote reinforces one of the major findings from the literature detailed in chapter 1. It shows that communication failures, gaps and misunderstandings in clinical handover are a major contributing factor in critical incidents. The anecdote also highlights one of the major findings of our research, described in chapters 8 and 15, that it is often an accumulation of multiple handover communication breakdowns rather than one isolated incident that can lead to avoidable patient harm.

2.2 Investigating clinicians' perspectives on clinical handover

In this chapter we describe the views, opinions and anecdotal evidence of clinicians and hospital managers about clinical handover practices, accumulated through face-to-face interviews and responses to a survey. The interview and survey questions were designed to elicit clinicians' perspectives on the problems and challenges in the conduct of clinical handover in their workplaces and their views on the role of communication in clinical handover and its impact on the quality and safety of patient care.

The aim of both the interviews and the wider national survey were to 'hear' and understand the clinicians' voices. The clinicians' views provided us with contextual understanding and localized knowledge that then informed our ethnographic work. We were also interested to see if the clinicians' voices substantiated or diverged from the findings in the literature about challenges and risks inherent in many handover practices that we documented in chapter 1. As you will see in this chapter, the clinicians' responses reinforced many of the findings in the literature but they also pointed towards gaps in international research into handover risks and possible solutions. These are gaps which we argue can only be investigated through ethnographic, qualitative research that focuses not only on what people say they do but also on what they actually do.

2.2.1 In-depth interviews

We interviewed clinicians and managers in the early stages of the project with two goals in mind:

1. We wanted to hear staff attitudes, suggestions and evaluations of their clinical handover practice in their own words to help us focus our subsequent ethnographic observations and data collection.

2. We wanted to be able to cross-reference what interviewees *believed* were the problems with communication in particular contexts with what we *saw* in the actual data of clinical handovers.

We interviewed 112 hospital and health department staff from around Australia – managers, doctors, nurses, allied health and health policy workers. The interviews were semi-structured, designed to provide interviewees with opportunities to describe and interpret local clinical handover practices, institutional and informal factors and the unwritten rules that impact on handover interactions. In particular, we asked informants to reflect on communication during the handover process and to discuss their perceptions of the barriers to and enablers of effective handover. We asked interviewees to describe incidents where they thought a communication error had occurred and if this impacted on the safety and quality of the patient experience. We also asked participants to identify areas where, in their view, improvement was needed. The interviews were audio-recorded, transcribed and analyzed thematically.

We used an interview schedule designed around a number of open questions. Questions were informed by a 2011 pilot study (McGregor *et al.* 2011), Slade *et al.*'s research into communication in emergency departments (Slade *et al.* 2015) and published research. The interview questions were adapted to suit the roles and professional backgrounds of interviewees, and we allowed interviews to develop dynamically, following up on interviewees' comments and concerns. The interview schedule included these questions:

- What patient information do you believe should be transferred during a medical/nursing clinical handover?
- What patient information is most likely to be left out of clinical handovers?
- What are the aims of a medical (or nursing/allied health) handover?
- What stages of the patient journey are more vulnerable to the loss of patient information?
- What skills do you think contribute to an effective clinical handover?
- How would junior clinicians best acquire these skills?
- What factors contribute to an ineffective handover process?
- What are some of the ways that clinical handovers can be improved?
- If you are aware of any critical incidents in which poor clinical handover played a part, please describe what happened.

2.2.2 The survey data

The multi-site survey was completed by 707 respondents from the following professional groups: nursing (60.4%), medical (22%), allied health (14.5%), pharmacy (0.4%) and midwifery (2.7%). The sample provided a broad cross-section of healthcare settings: workers in metropolitan tertiary (58%) and general (19%) hospitals, country

health sites (12%), mental health (3%) and community health facilities (8%). The survey was conducted in the early stages of the project, providing a broader snapshot of health professionals' perceptions of handover practice and effectiveness in their work areas. Questions explored the practices and processes the respondents used when giving and receiving handovers; any problems the respondents identified with those practices; the organizational support provided for handover; handover communication training needs; adverse events experienced and suggestions for improving handover practice (see Manias *et al.* 2015). In the following discussion of the clinician's views, we intersperse responses and findings from the survey with quotations and findings from the qualitative interview data and we relate these clinicians' views to the key issues identified from the handover research literature in chapter 1.

2.3 Adverse events associated with poor handover practice

As outlined in chapter 1, it is now internationally recognized that failures in both clinician–patient and clinician–clinician interactions during clinical handover are a major cause of avoidable patient harm in hospitals. To investigate these claims, we asked respondents if they were aware of any critical incidents involving clinical handover and in particular any incidents involving communication breakdowns in clinical handover.

Survey respondents overwhelmingly stated that clinical handover was highly relevant to patient safety (82.9%). We were concerned to find that nearly half (46%) the sample reported being aware of at least one adverse or critical event where poor handover communication had played a part in past 12 months. A total of 17.6% of the sample reported one adverse event and 28.4% indicated that they were aware of multiple events (22.8% two to five events; 5.6% more than five).

We asked respondents in the survey to describe briefly their recent workplace experiences. The case study at the beginning of this chapter is one example, taken directly from the 135 open text responses received. This account demonstrates the profound impact of multiple communication breakdowns on a patient's health outcomes.

In Tab. 2.1 we group the events reported in the survey under six general headings. For each category we provide an example taken directly from the survey, with the text split across two columns to highlight the type of the handover event and negative outcome for patients. We also show the number of responses in each category as a percentage of all answers provided to this open-ended question.

Each of the events described by survey respondents involved communication breakdowns or errors of some kind – either incorrect or incomplete information was handed over or critical information was not handed over. Many of the cases confirm the types of handover failures reported in adverse events cited in research on handover-related incidents and error classifications outlined in chapter 1 (Andersen *et al.* 2014; Thomas *et al.* 2013).

Tab. 2.1: Survey data: types of adverse events relating to clinical handover

Types of errors in handover	n (%)	Description	Impact on patient(s)
Inadequate information in handing over the treatment plan	44	Patient was to be fasted for a semi-urgent procedure, but fasting didn't occur. Procedure was rebooked for a week later.	In the interim, the patient developed a hospital acquired pneumonia, which increased length of stay by two weeks.
Inaccurate clinical information handed over	37	96-year-old resident fell at night, hit head, all appropriate immediate care provided and all vital signs were maintained satisfactorily. At early morning handover, handover was that resident was now finally sleeping and was very tired and should not be disturbed.	Staff proceeded with early am duties, resident was respiratory obstructing – snoring loudly and staff did not realize that neurological deficit was extending following injury. Resident suffered MI following [?] long period of reduced oxygenation.
Incorrect medications handed over	33	Patient on an adrenaline infusion. Infusion turned off for transfer. Not handed over, infusion not restarted...	Patient lost cardiac output
Inadequate cognitive or behavioral information handed over	8	Patient with acute delirium transferred from one ward to another in middle of night. Delirious state of patient was not handed over.	Resulted in the patient having a fall half hour after arrival on ward. Patient died of injuries sustained.
Failure to hand over infection control status	5	Patient transferred from emergency department. Not handed over that patient had a micro [microbiology] alert...	Patient cohorted with other patients who were put at risk. All patients had to be screened.
Failure to communicate falls and mobility information	8	Poor communication of a fall at ward transfer	Led to delayed diagnosis of #hip, delayed surgery, poor recovery and eventual death

In the interviews the clinicians provided many anecdotes about critical incidents and complaints due to poor handover. Broadly, the accounts involved the following factors:

- mistaken identity and failure to follow standard admission procedures
- misjudged and miscommunicated acuity of patient
- conflicting understandings about what a family case conference had agreed would happen to a patient after discharge

- wrong site surgery due to a prolonged sequence of communication errors and oversights
- inadequate and inaccurate information handed over due to the fact that the person handing over had not cared for the patient or had not seen the patient for many hours.
- inadequate information exchanged in telephone consultations between junior and senior doctors
- miscommunication and gaps in communication due to multiple handovers.

The interviewees' accounts demonstrated that errors and communication problems could occur at any stage of a patient's journey. As one senior clinician stated:

The common denominator or the common end point is an error, sometimes critical usually in the form where I have reviewed it. It can be from all aspects of what goes to the point of making a diagnoses and implementing a management plan. So, it could be the bit left out was a critical bit of the history that [the clinicians involved] knew about or failed to ask, but weren't then asked to go and retrieve, if you understand what I mean by that. It could be an examination finding they knew of but didn't relay in their phone conversation. It can be a test result that they didn't relay they knew. (Interview, medical director, high dependency unit)

2.4 Issues and challenges in handover practices: the clinicians' views

In chapter 1 we summarized the international research on communication risk factors in clinical handover under two headings: factors in organizational and institutional contexts that impact on the effectiveness of handovers (e.g. noise, interruptions, interdisciplinary boundaries etc); and communication risk factors in actual handover delivery (e.g. lack of structure, excessive reliance on memory, no patient involvement etc). Findings from the survey and interviews provide insight into the priority and impact of these problems for the clinicians in our sample.

The results confirm that clinicians perceive handover to be problematic: nearly a quarter of the ECCHO survey respondents reported that handovers were not conducted effectively or only somewhat effectively in their work area (23%), while only 35.6% reported that handovers were very or highly effective. While over a half the sample (55.3%) reported that their handover practices were very or highly effective, they judged that only a third of their colleagues handed over effectively, suggesting (as is often the case in surveys) that the problems lie mostly with the behavior of others!

Both interview participants and survey respondents identified the following recurrent problems, each of which had the potential to create risks for patient safety.

2.4.1 Omission of significant information

Many interviewees commented that significant information was often left out of handovers:

‘The more information gets left out, the more time the patient gets handed over. So it becomes: the first doctor that took the history, he met the patient and knows a lot more about them and can give a very detailed history. The second doctor to the third doctor to the next doctor, less and less gets passed on.’ (Interview, emergency department staff specialist)

‘Whenever we go back and review incidents where perhaps it hasn’t gone well there tends to be – it usually is around a breakdown of communication, where perhaps some vital information has been left out.’ (Interview, executive director, critical care)

2.4.2 Changes and omissions in information across multiple shift-change handovers

Information about a patient can change significantly when it is transferred across the multiple shift-change handovers in a 24-hour period. Key information may be omitted and inaccurate information relayed, leading to an accumulation of misunderstandings.

2.4.3 Lack of direct patient care by clinician handing over

The reliability of information handed over can be compromised if the clinician handing over has not cared for the patient. This was raised as particularly problematic by the majority of the clinicians interviewed.

‘The other thing that is a major [thing] in handover is when you’re getting handover from someone who actually hasn’t looked after the patient. So it’s very disjointed and because they don’t know the patient, they don’t really know what’s happening. So it’s a lot of flicking through the notes. And, yeah, I just think that’s a little bit unsafe.’ (nursing unit manager)

‘Most obvious thing is about having authentically cared for your patient. So actually know the patient that you’re handing over [...] There’s nothing more frustrating and you hear it a lot, ‘Oh, I haven’t been looking after this patient’, and they’ll read something out of the notes. I don’t think that’s necessarily an acceptable [...] Yea I think there needs to be an authentic knowledge of your patient so that you can accurately hand over the care [...]’ (executive director critical care)

As many clinicians stated, and as research has shown, involving the patient in the handover process can be a significant safety check, as well as consistent with health policy directives on patient-centered care.

2.4.4 Lack of interaction in handovers

The role of the clinicians receiving information and, specifically, the manner in which they clarify information or confirm their shared understanding of the handover requirements is an essential aspect of effective spoken handovers that has received limited research attention (Foster & Manser 2012; Horwitz *et al.* 2009). Without interaction on behalf of the incoming team, it is not at all clear if the patient's information and recommendations for treatment have been understood, agreed to or ignored.

To examine this aspect of handover we asked a further set of questions about how frequently clinicians used statements to clarify or confirm their understanding of the clinical information provided during handover. In commenting on their own behavior when receiving a handover, only a quarter (24%) of the sample indicated that they personally *always* confirmed their understanding of the information received at the conclusion of a handover. In commenting on the behavior of those to whom they were giving a handover, only 12.2% of our sample indicated that other clinicians *always* confirmed information, with 10.9% reporting that others never or rarely confirmed their understanding of the information with them. Fig. 2.1 captures these differences.

Sixty percent of respondents indicated that they rarely (5.9%) or sometimes (54%) needed to clarify the information provided. Nearly a third (32.1%) indicated that they usually sought clarification.

These findings clearly indicate that interaction is limited and clarification is often not sought in the handover process, findings that the qualitative research in the ECCHO project confirmed, as explained across the following chapters of this book.

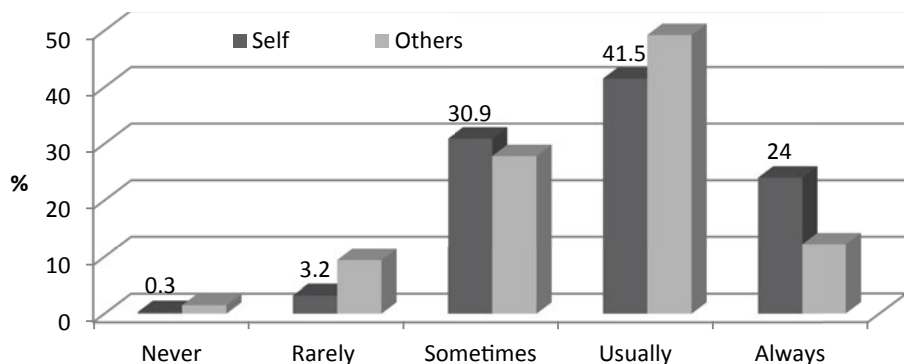


Fig. 2.1: Handover practice: the frequency of receiver confirming understanding of information

2.4.5 Over-reliance on memory and lack of adequate written records

Chapter 1 describes published evidence that indicates that a heavy reliance on memory without adequate reference to the patient's medical records is associated with information errors in handover. In the ECCHo survey and interviews we also asked clinicians about the types of strategies and resources they used to ensure they retained handover information. Multiple responses were accepted, resulting in total percentages exceeding 100%. When describing their own practices, 72.6% reported using written notes to ensure information was retained and 10.6% reported entering information directly into electronic medical records. A third (33.2%) reported that they personally relied on memory, and 38.9% believed other clinicians also relied on their memory.

In the interviews clinicians frequently commented on the inadequacy of medical records. Clinicians were often not able to find the patient's records, and when they did the notes would be illegible, inaccurate or incomplete, failing to note information that might have been handed over verbally. One clinician expressed it in this way:

'As part of my role I'm required to do medical record reviews, look at some of our documentation in certain areas. And I have to say it's atrocious. Ever since I've been in health it's been atrocious ... when I was a clinician, we looked for an excuse every time. We used to say we don't have time. But now stepping back and looking inward, I don't think that that's an adequate excuse and I think if they really – cause they turn around and say 'we're here for the patient'. Well, who's being affected by this? Not only staff but the patient's being affected. And possibly seriously affected if it's a medication issue or what have you.' (Interview, emergency care network co-ordinator)

In several chapters of this book (particularly chapters 9 and 15) we demonstrate the problems caused by inadequate written handover information and propose strategies to make written material durable, accurate and compliant with safety guidelines.

2.4.6 Lack of mentoring of junior clinicians

As documented in chapter 1, the strong hierarchical barriers between junior and senior clinicians have been found to impact on the effectiveness of handovers, often limiting effective, empathetic mentoring and leadership. In the survey we asked questions to elicit the perceived level of support available to junior clinicians to improve their handover practice and to identify potential barriers to effective role modelling by senior personnel.

We were concerned to find that nearly half of the sample reported that in the month prior to the survey they had never (23.5%) or rarely (28.4%) observed or

experienced senior personnel providing feedback to juniors about their handover practices. Comments made about the frequency and form of handover feedback in the survey included that 'consultants are almost never observed giving handover, it is almost exclusively the responsibility of the junior staff'.

When asked about the potential barriers to engaging senior staff as effective role models for handover, by far the most common response (40.5%) was that senior personnel were too busy to provide feedback about handover to junior clinicians. When responses were analyzed according to experience level, 59.2% of junior personnel believed senior staff to be too busy to provide feedback compared to 36.2% of senior personnel. Over a quarter of the sample also indicated that senior staff do not see handover training as their responsibility (26.9%) and that they are more focused on other clinical priorities (17%).

In a question probing constraints on role modeling by seniors, 26.9% of respondents indicated that senior staff may not have sufficient handover skills themselves to model effective practice or may lack the specific communication skills necessary to adequately mentor junior staff in handover (17.7%). Comments indicated a perceived reluctance among senior personnel to give genuine feedback and their possible lack of training in how to provide effective feedback.

Despite these sobering perceptions, we found that interviewees repeatedly emphasized the value of good role models and senior leadership in handover. For example:

'Modelling and mentoring is a very effective way as long as what they're modelling and mentoring is practice and evidence-based. So I think that as a tool it's a very effective way to learn a good handover. For example, a ward round done properly with good communication skills and handover between the multidisciplinary teams is a very effective way of handing over information.' (Interview, staff specialist, emergency department)

'I think it needs to be role models make sure it's seen that every day this is how you do work [...] I'm not sure waving the big stick is going to work. So I think there is a role for the senior staff to set the scene so to speak, to be the role models, but also [to provide] the tools to be able to be do it.' (Interview, clinical medical director)

Our results suggest there is a serious mismatch between what clinicians believe would be good for handover training (senior role modelling) and what actually happens. Chapters 3, 4 and 5 of this book provide qualitative descriptions of senior and junior doctors interacting during medical handovers and present specific communication strategies to improve mentoring and leadership in handover.

2.5 Clinicians' responses to handover policy directions

In chapter 1 we outlined policy level responses to improving clinical handover: efforts to standardize the handover delivery process and the cultural shift towards

patient-centered care. In both the ECCHo survey and interviews we explored clinicians' and managers' attitudes and reactions to these directions. As described below, we found limited commitment to both points, suggesting that clinicians have yet to be convinced of the value of these policy-led directions and may need training in how to achieve them.

2.5.1 Clinicians' use and evaluations of structured communication tools

As documented in chapter 1, the development of structural communication tools for handover, such as SBAR or iSBAR, has been a key component of international initiatives to improve handover practice. However, a relatively slow personal and systematic uptake of standardized tools and checklists by clinicians has been recognized (Gawande 2010; Winters *et al.* 2009). In a recent survey of emergency and internal medicine physicians, Kessler *et al.* (2014) reported that while 72.5% of the doctors surveyed believed having a standardized handover tool would improve the handover process from the emergency department to inpatient admission, only 18% indicated that they actually used some form of a standardized handover tool. These physicians further acknowledge that their frequency of use was typically inconsistent (with less than 25% of their patients).

In comparison to Kessler *et al.*'s findings, 63.4% of our survey respondents indicated that they used some type of clinical handover tools when giving handovers to other clinicians including: handover sheets (36.1%), mental prompts or checklist (31.7%) and electronic devices (8.3%). Yet only one-third of the clinicians surveyed used the standardized tool required in their context – SBAR, iSBAR or iSoBAR. This is despite the fact that health departments across Australia have mandated the use of iSBAR or one of its variants, particularly in nursing and medical shift-to-shift handovers.

Paradoxically, when asked later in the survey for suggestions about how to improve handover, many respondents (21.5%) described the need for greater standardization and the introduction of uniform and simple handover processes. There is clearly a mismatch between what clinicians believe would be good for handover and what they and colleagues are actually doing in handover.

Similarly, our interview data also indicated low use of standardization tools. The majority of the clinicians we interviewed said that they did not use the recommended tool for handover. While compliance was greater among nursing staff it was still low. Many of the clinicians we interviewed were not even aware that such a tool had been recommended. These findings suggest the need for qualitative research into how handover tools are and can be used, along with qualitative demonstrations of their impact on handover quality.

2.5.2 Adoption and perceived effectiveness of patient-centered handovers

In chapter 1 we outlined the increasing adoption internationally of policies of patient-centered care. The central tenets of patient-centered care are that:

[Patients should be] engaged and respected as active and informed participants in their own healthcare, and that clinicians and healthcare organizations should elicit individual patient preferences, needs and beliefs, and be receptive to these. (Slade *et al.* 2015a:5)

The Australian clinical handover guidelines encourage clinicians to actively involve patients in the handover process, and many hospitals have mandated that at least a part of the shift-to-shift handover take place at the patient's bedside. Yet less than half the survey sample (43.7%) indicated that they considered bedside handovers to be slightly (26.7%) or much more effective (29.6%) than non-bedside handovers. Over a quarter of the sample (29.6%) felt that they had insufficient information to judge whether bedside handover was more effective.

However, conducting handover by the bedside does not necessarily mean the patient or family members are actually engaged in the handover. In the survey we tried to separate the issue of location (patient's bedside) from approach (patient engagement) by specifically asking whether involving patients and their family/carers improved the effectiveness of handover. As shown in Fig. 2.2 below, the response trends for the involvement questions were similar but with slightly fewer survey participants recognizing the benefits of including family members or carers in the handover process. Over one-fifth of the sample indicated that they were unable to judge if patient (21.8%) and family/carer involvement (23.3%) would improve handover effectiveness.

While a patient and family-centered approach has been strongly advocated in the literature as a way of promoting reciprocal relationships and shared decision-making

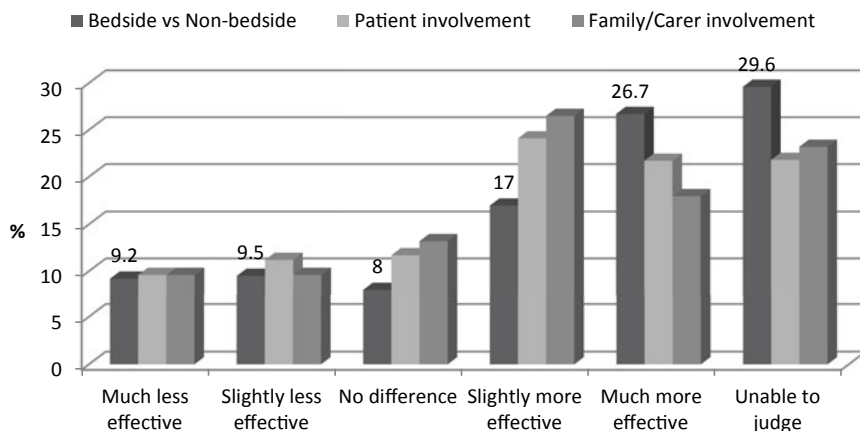


Fig. 2.2: Effectiveness of patient-centered handover

(Manias & Watson 2014), the survey respondents reinforced perceived barriers to the inclusion of patient and families in handover, with comments such as these:

- 'Involving patients is time consuming with too many interruptions'
- 'It is good for the patient as they feel information is being shared. However, in some circumstances some of the pertinent information cannot be openly shared at handover as it would make the patient uncomfortable.' (Survey responses)

However, other interviewees stressed the importance of involving the patient and the family in the handovers:

'We've got a culturally diverse group here, but where possible [patients] give us a lot of information and the family members do too. So, allowing for that bit in the process because sometimes they can give you more information than anyone else can.' (Interview, clinical nurse educator, emergency department)

'It's important to ensure that there's a portion of it (the handover) that involves the patient and their family being able to contribute to that. And so it kind of balances out that need for the transfer of clinical information with that more patient-centered, allowing that ownership of their care and care decision-making, to be involved in the process.' (Interview, executive director critical care)

These mixed responses suggest that clinicians remain to be convinced of the value of patient-centered handovers and need training in how to manage the challenges of patient-centered communication. Qualitative research reported in chapter 6 and 7 addresses these points.

2.6 Clinicians' suggestions to improve clinical handover

Over half the sample (52.2%) submitted suggestions to improve how handovers were conducted in their workplace. As well as suggesting the need for greater standardization (discussed above), respondents suggested improvements to the handover context, the process of handover delivery and general 'professional' behavior. In summary, suggestions included:

2.6.1 Handover context

- Effective electronic systems to support handover need to be available during handover.
- More time needs to be allocated to handover.
- Handovers need to be held in more appropriate spaces.
- Management needs to better recognize the workload and staffing impact of handover.

2.6.2 Handover delivery

- Clinicians need to recognize the value of involving patients and caregivers in handover.
- Clinicians need to present relevant content (although 'relevant' was not defined).
- Clinicians need to take notes and record information more effectively.
- Senior staff should be involved in handovers and should support junior staff.

2.6.3 General suggestions

- The personnel involved in handovers needed to practice greater professionalism and responsibility (although those terms were not defined).
- Communication and teamwork should be made more efficient.

2.7 The need for education and training in handover communication

The need for more training and ongoing education in handover was a recurrent theme in both survey responses and interviews. This is consistent with international research, which has argued strongly for the need for explicit training in clinical handover skills (e.g. Scovell 2010; Street *et al.* 2009; Jeffcott *et al.* 2009; Klee *et al.* 2012). In the ECCHo survey, 17.9% of the comments identified education as an important means to improve many aspects of handover delivery, mentioning the value of constructive on-the-job feedback, role modeling and the provision of interdisciplinary workshops as possible strategies.

Given this strong support for education and training, we were therefore concerned to find that 26.8% of clinicians surveyed had received no handover training but believed training was required; 38.2% said that they had received some training but believed they required more. Only 24.1% reported that they had received sufficient handover training.

The vast majority of survey respondents believed that professional development workshops (71%) were the most effective handover training delivery method, with online and print resources (47.1%) also recognized as an effective workplace training method. Responses indicated that many clinicians believe handover training should be included in undergraduate (53.25%) and/or postgraduate (35.6%) tertiary courses. Respondents suggested that orientation sessions or undergraduate courses should cover use of handover tools, principles of documentation and critical incident analysis, ways to evaluate the relevance of clinical information and communication skills.

In fact, in one of the most striking findings of the survey, respondents were almost unanimous (93.5%) in recognizing the role of communication in effective

handover: almost two-thirds (63.5%) said that communication skills were extremely important to effective handover, and more than a quarter (29.9%) said communication was very important. Only 2% believed that clinicians did *not* need communication training.

Echoing these findings, in the interviews senior clinicians said the teaching of communication skills was critical:

I think probably first and foremost, you have to have the skill of communication. It's my observation that a lot of medical people, to have achieved the success they have, are often actually very poor communicators and I think it's the nature of who they are. That is so common in medicine. They're just not good at communicating what they know and what they don't know, in a way that is clear to the person that they're talking to. (Interview, medical director, high dependency unit)

Yet the vast majority of those interviewed said that any communication skills training they had received had been token and had not been incorporated into clinical skills training.

2.8 Conclusion

Through their survey and interview responses, clinicians indicate that current handover practice is variable, and that clinical staff often use suboptimal communication strategies and resources to manage risk. In busy work settings many clinicians feel ill-equipped to manage handover in a standardized and confident manner and most clinicians would like more training and ongoing support in handover skills, including in communication skills.

Clinicians agreed that ineffective communication during handovers is a major cause of critical incidents. Most of the contributing factors to the critical events described by participants were communication-based.

In chapter 1 we outlined the evidence from international research. In this chapter we have described the views of clinicians. We believe that a crucial complement to both these perspectives is to investigate what actually occurs in different handover contexts across different hospital sites. This requires qualitative research: close-up ethnographic observation and language analysis of actual handovers.

Each of these different data sets – published research, clinicians' views and qualitative empirical research – provides one angle on the complex picture of clinical handover. The ECCHo project is able to make a distinctive contribution to our understanding of clinical handover by bringing these complementary angles together across the remaining chapters of this book.

We give the last word in this chapter to one of our interviewees:

We review 15 critical incidents from around the State on average every fortnight. I would have to say a significant component of those involve issues in relation to communication in handover. They're at all those interfaces, whether that be between emergency department and admitting

teams, between emergency department and consultants that they speak to on the phone, whether it be between ward teams and consultants on the phone, ward teams and nurses. Wherever communication occurs I've seen many, many examples of things that go terribly wrong, because the communication of handover information has failed in some way. People were unaware of a result that needed to be checked. People were unaware of critical bits of the history and the comment comes back when more senior people who took the handover are asked, 'Yeah, well why didn't you do anything about it 'Well, I was never told', rather than 'Well, I never asked'. So you know I think it's a key component to not all, but large amounts of error in our system. (Interview, medical director, high dependency unit).