PRACTICE

ESSENTIALS

Safe handover

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High quality handovers are essential for safe healthcare and are used in many clinical situations. Miscommunication during handovers can lead to unnecessary diagnostic delays, patients not receiving required treatment, and medication errors.¹ Miscommunication is one of the leading causes for adverse events resulting in death or serious injury to patients.² The process of handovers can be improved, and the aim of this article is to provide practical guidance for clinicians on how to do this better.

What is a handover?

A handover involves the transfer of professional responsibility and accountability for some or all aspects of care for a patient, or groups of patients, to another person, such as a clinician or nurse, or professional group on a temporary or permanent basis.³ Ideally a professional can take over responsibility for a patient only if he or she receives all relevant information to continue the treatment or care effectively and safely.

How common are handovers?

Patients can be handed over up to 15 times during a five day hospitalisation, and a doctor might participate in 3000 handovers a month.⁴ Figure 1 illustrates the potential handover interactions for patients in an acute setting.

Why is handover important?

A narrative review including 69 studies and systematic review of 38 studies showed that poor communication between team members can lead to errors, patient harm, discontinuity of care, inefficient use of resources, and dissatisfied patients.^{5 6} There are several well studied ways to improve handovers. Systematic reviews of 36 quasi-experimental or observational studies⁷ and 29 studies (two randomised controlled trials and 27 uncontrolled studies)⁸ and an intervention study⁹ showed that implementing

structured handover tools improved information transfer and increased professional satisfaction. Shift-to-shift handovers at the bedside instead of away from the patient also improved satisfaction for patients and staff in a systematic review which included 41 studies.¹⁰ Another systematic review of 10 studies showed that educational interventions and non-technical skill based approaches to improve handovers such as simulation, group discussions, and lectures were beneficial.¹¹

What is best practice internationally?

In 2007 the Joint Commission International (JCI) and the World Health Organization suggested implementation of a standardised approach to handover communication by using the SBAR (Situation, Background, Assessment, Recommendation) technique.^{12 13} Effective communication is one of the JCI's main patient safety goals and one of the elements assessed during hospital accreditation. Handover needs to fulfil the criteria of being timely, accurate, complete, unambiguous, and understood by the recipient.¹⁴ Guidance is available to help clinicians improve handovers (see box 1 and additional educational resources).¹⁵

How to do it better

Changing handover practice at an organisational level is complicated and requires effective strategies for implementation, reinforcement, and education on why it is important.¹¹⁻¹⁷ Nevertheless, everyone can work on their handover practice by taking some practical steps that are relevant to all types of handovers. These include

- Assessing the key people that need to be involved in the handover (physicians, nurses, and patients and their carers)
- Choosing a calm environment with minimal distractions
- Using a structured format such as SBAR

What you need to know

- Information shared during clinical handover includes, as a minimum, the patient's current health status, medications, and treatment plans as well as advance directives and any important changes in the patient's status
- Tools and handover structures such as SBAR (Situation, Background, Assessment, Recommendation) have been shown to improve the quality of handovers
- Involving patients and carers in handovers—including scheduling a timely discharge conversation to discuss aspects of their admission and follow-up plan that includes a personalised discharge letter—is of great value.

Sources and selection criteria

We searched PubMed and the Cochrane review library (until April 2017) to identify original research studies for clinical handovers and the effectiveness of tools to improve handovers. We searched Medline using the MeSH term "patient handoff" with all related terms in the MeSH hierarchy (such as handover). This resulted in 626 potentially relevant papers. Additionally, we used the general search term "clinical handover" which resulted in 1206 potentially relevant papers. Titles were scanned to search for relevant review studies on intrahospital handovers, (electronic) handover tools, interdisciplinary communication, handovers to and from the hospital, and patient involvement in handovers.

We also searched the internet for reports, protocols, guidelines, and practical communications on handovers. Our personal network within the patient safety field was used to investigate the daily practice in handovers.

Box 1: What tools can help improve handover?

The use of structured handover tools, such as SBAR¹³ or I-PASS (Illness severity, Patient summary, Action list, Situation awareness and contingency plans, and Synthesis by receiver)⁹ have been shown to improve information transfer and healthcare professionals' satisfaction with handovers.^{7,8} The clinical questions included within the fixed format of a handover tool can be decided on at an organisational level or, depending on the type of handover, department, patient group or individual user. An example of SBAR is shown in box 2.

Box 2: Example of SBAR structure for telephone consultation between resident and senior staff member

Situation—A concise statement of the problem (what is going on now)

"I am calling about Mrs Smith; she is on the orthopaedic ward. I have seen her five minutes ago and she was dyspnoeic, breathing heavily, and had difficulty finding words."

Background—Pertinent and brief information related to the situation (what has happened)

"She is six days postoperative after total hip surgery, wound is healing. She is not fully mobile yet. Fraxiparine 0.3 cc, no diuretics, 1 L NaCl IV, no allergies, normal infection parameters. Vital functions: blood pressure 110/75 mm Hg, pulse 105 beats/min, temperature 37.8°C, breathing frequency 35 breaths/min, oxygen saturation 88%, no additional oxygen. She has a history of cardiac problems, but exact details not known."

Assessment—Analysis and considerations of options (what you found or think is going on)

"Patient is deteriorating rapidly, she has severe problems with breathing; her breathing is shallow, and her lips are pursed. I think she might need artificial respiration or additional diagnostics to find out the cause."

Recommendation—Request or recommend action (what you want done)

"I am worried and want you to come to the ward immediately for a second assessment of Mrs Smith. Is there anything I should do in the meantime?"

- Providing the person you are handing over to with the opportunity to ask questions and checking if they have understood correctly (report back).

What is the best approach to handover in a hospital setting?

Schedule sufficient time for the handover adjusted to the complexity of the patient's situation. Start by introducing yourself and create an environment in which participants feel free to ask questions. Emphasise important elements during your handover, such as expected actions within the next shift or details of any treatment restrictions such as avoiding giving fluids. When handing over to a team of care professionals, give specific orders to every individual. Check if the receiver of the handover has understood the information correctly by asking them to report back, and record necessary information in the patient's record. Be aware of barriers for effective communication when multiple disciplines are involved, such as differences in training, communication styles, lack of confidence, and hierarchy.¹⁸ Standardised handover tools and simulations may help to overcome these.¹⁸

What is the best approach to handover between hospitals and community settings?

For handovers at discharge, several important elements have been identified.^{14,19} Start planning the discharge early and structure the discharge process so everyone knows what to expect in terms of responsibilities, coordination of tasks within the team, and content of discharge information. The medical discharge information for a patient should at least include active problems, diagnosis, medications, any services required, warning signs of a worsening condition, safety-netting (who to contact in case of an emergency), and a follow-up plan. Involve the patient and carer in the discharge by providing verbal information during a discharge conversation and written information in a personalised patient discharge letter with information on diagnosis, treatment, potential complications, medication, lifestyle advice, and who to contact with questions.²⁰ Aim to send the (preliminary) discharge letter to the community care professional in good time, and, if possible, call to inform them if you feel this might enhance safe handover.

How should I involve patients in handovers?

The patient is the only constant factor in the care process and can therefore provide valuable information during the handover

process. Commonly used tools to structure handovers usually do not include patient involvement; therefore, you need to incorporate this as an additional element. Keep in mind that, as a patient receives an overwhelming amount of information during admission, having a carer present during the handover can be valuable. Try to involve the patient and carer whenever possible; not only during the more informal moments when talking to the patient at the bedside, but also during formal handovers.

Establish individual patients' need, wishes, and capacity for participation and understanding during the handover process, and discuss the level of involvement that they feel comfortable with.²¹ Patients can be more actively involved by conducting handovers at the bedside, providing the patient with understandable information about their condition and treatment plan, and allowing them to ask questions.²² For this to succeed, aim to set a specific time and place so patient and carer(s) know when to expect you. Create a situation in which patients feel comfortable to participate, for example, by introducing yourself, sitting down instead of standing next to the patient, making eye contact, and encouraging questions. Protect patients' privacy during bedside handovers by avoiding discussing sensitive issues in front of other patients in the room.

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Additional educational resources

- Royal College of Physicians. Acute care toolkit 1: Handover. www.rcplondon.ac.uk/guidelines-policy/acute-care-toolkit-1-handover
– Several tools and worksheets available. No registration required
- Australian Commission on Safety and Quality in Health Care. Commission has several publications, resources, and educational tools for clinical handover improvement. No registration required
– Clinical handover. www.safetyandquality.gov.au/our-work/clinical-communications/clinical-handover/
– Implementation toolkit for clinical handover improvement. www.safetyandquality.gov.au/implementation-toolkit-resource-portal/
– Standard 6: Clinical handover. Safety and quality improvement guide. www.safetyandquality.gov.au/wp-content/uploads/2012/10/Standard6_Oct_2012_WEB.pdf
- Institute for Healthcare Improvement. SBAR toolkit. www.ihl.org/resources/Pages/Tools/SBARToolkit.aspx
– Provides several practical tools such as the SBAR communication tool, scenarios, lesson plans, and tips for using SBAR. Registration required
- Australian Medical Association. Safe handover: safe patients. Guidance on clinical handover for clinicians and managers. https://ama.com.au/sites/default/files/documents/Clinical_Handover_0.pdf
– Provides guidance for safe clinical handovers for clinicians and managers. No registration required
- HANDOVER Project. <http://handover.cmj.org.pl>
– Contains a handover toolbox and a library with handover publications. Registration is required for the handover toolbox
- I-PASS Study Group. <http://www.ipasshandoffstudy.com/home>
– Information about the I-PASS handover study. Registration is required for request of curriculum materials

Information source for patients

- The Guy's and St Thomas' safety card. www.guysandstthomas.nhs.uk/patients-and-visitors/patients/inpatients/safety-card.aspx
- An example of a patient safety card that can support patients to take responsibility for their own care and safety, including items to discuss with nurses and physicians. No registration required

Patient involvement in handovers: a carer's story (HM)

Our son was born in October 2016 during a rapid delivery after a 42 week pregnancy. Immediately after birth, our son had difficulty breathing. Adequate action was taken and, after some complications, he made a steady recovery, and we were discharged five days later.

During our admission, all staff was friendly and concerned with our wellbeing. However, we had difficulties getting to grips with the whole situation. In my opinion, one contributing factor was that we, as parents, were never aware of or included in any shift-to-shift handovers between the nurses and between the physicians. We had too little information and were constantly asking nurses and physicians questions, but the information provided was very fragmented. We had to tell our story multiple times during the admission, and we sometimes had to remind nurses and physicians of intended actions suggested by the previous shift. This did not make us feel confident about the system as it felt inefficient.

In my opinion, not including us in the handover process was a missed opportunity because we could have provided additional information and perhaps facilitated the care process."

Education into practice

- Are staff in your hospital, practice, or department explicitly trained in conducting handovers with a structured handover tool such as SBAR?
- How do you create a facilitating environment for handovers?

How patients were involved in creation of this article

During the planning of this article we asked three patients about their experiences in handovers:

- None of them was actively involved in the day-to-day handover process
- All said that it could be difficult to understand the information provided by care professionals, such as about treatment plans, medication, and what to expect
- Two would have preferred to receive more information, but the other patient had no desire to be more actively involved.

Figure

Fig 1 Handover points from home to hospital, within the hospital, and from hospital to home for a patient with an acute illness (adapted with permission from design by LS van Galen for her thesis "Patient Safety in the Acute Healthcare Chain: is it safer@home?")