

The National Clinical Handover Initiative

HELICS

Enabling



Reflection



Observation



Re-design



Data Collection



Participation



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**Centre for Health Communication,
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The Centre for Health Communication engages in research with frontline staff on their communication processes. The main focus of the Centre's work is on whether and how communication among clinicians and with patients and carers addresses organisational and policy dimensions of care. Researchers at the Centre and their collaborators have received more than \$10 million in funding from the Australian Research Council, the National Health and Medical Research Council, the Australian Commission on Safety and Quality in Health Care, and a range of other funding bodies. Details about the Centre's publications and projects are available from

<http://www.communication.uts.edu.au/centres/health/index.html>

The HELiCS DVD

- Video Featuring the Use of HELiCS within:
 - » an Emergency Department
 - » an Intensive Care Unit, and
 - » a Spinal Rehabilitation Unit
- Case Studies and Governance Documentation
- About the Centre for Health Communication

Participate in the inactive HELiCS website at:
www.communicationsafety.org

DVD-Rom Content

To be able to view the PDF-files as part of the documentation, it is recommended to view the HELiCS DVD on a computer.

All regions - MPEG-2 - 15min - 16:9, Stereo

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1. Thanks to Dr Dorothy Jones (Senior Medical Advisor WA Health) for her inspirational suggestion of the acronym HELiCS.

The kit was developed by the Centre for Health Communication at the University of Technology, Sydney (UTS) for the National Clinical Handover Initiative. Funding was provided by the Australian Commission on Safety and Quality in Health Care, on behalf of the Department of Health and Ageing, Commonwealth of Australia. The approach used in the kit is based on Professor Rick Iedema's research into 'video-ethnography', a practice improvement method initiated in 2002 [1-3; see references on page 51].

Input into the development of this kit was received from the following organisations:

The Australian Commission on Safety and Quality in Health Care

UTS Faculty of Nursing, Midwifery and Health

UTS Faculty of Education

UTS Faculty of Arts and Social Sciences

The University of Melbourne

Health care practitioners and policy makers from:

- Hunter New England Area Health Service
- Sydney South West Area Health Service
- South Eastern Sydney Illawarra Area Health Service.





Overview

This kit provides health care practitioners with a resource to address the challenges of clinical handover. Its approach builds on the strengths already present in health care teams.

The kit consists of three components:

1. this Booklet describing 'HELiCS';
2. a DVD providing a visual tour of how three hospital sites have deployed HELiCS, and
3. a Web link providing opportunities for discussion, questions and advice.

HELiCS enables frontline clinicians to observe their own handover practices using video, to reflect on the efficacy of those practices, and, if necessary, to redesign them.



- ← High Dependency Unit Beds 23 - 37
 - ← Neurosciences ICU / HDU Beds 13 - 22
 - ← Cardiovascular ICU / HDU Beds 1 - 12
- General ICU Beds 38 - 54 →

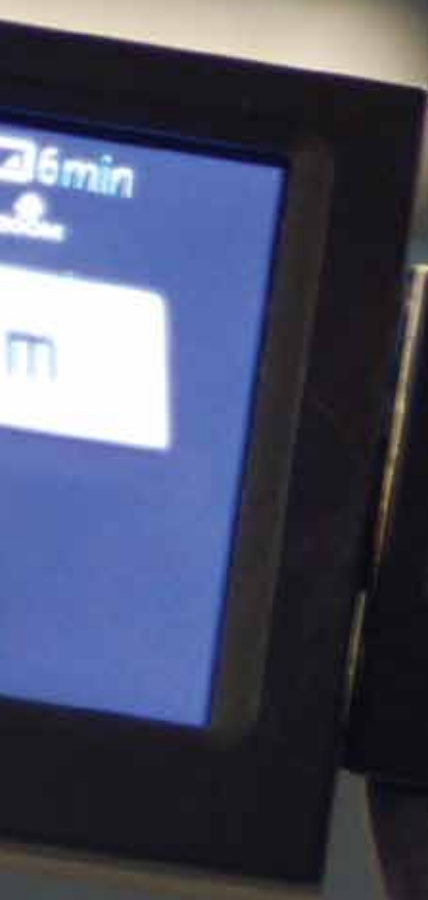


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HELiCS enables frontline clinicians to observe their own handover practices using video, to reflect on the efficacy of those practices, and, if necessary, to redesign them.



“Video footage provided a really good stimulator for discussion.”

Dr Mike Anscombe, Staff Specialist, Paediatrician and
Emergency Physician, John Hunter Hospital

“I think it’s a great idea, I think handover is always a subject that has caused great debate on what’s the best way to handover...”

Mr Alan Gardo, Nurse Unit Manager,
Royal Prince Alfred Hospital

“Frontline staff are the most important to devising handover solutions that work for them and their patients.”

Professor Rick Iedema, Executive Director,
Centre for Health Communication,
University of Technology, Sydney

What is it?

HELiCS is a videobased method used to improve clinical handover. By providing health care staff with access to visual data of their day-to-day health care practices, HELiCS enables them to reflect on how they work and communicate.

Where can it be used?

HELiCS can be used in any health service facility. Facilitators need to be aware of the ethical, privacy and confidentiality constraints that impact on their data gathering, processing and dissemination. Particularly in paediatric and mental health settings, special caution needs to be taken with how consent is negotiated with patients (please see the Governance Document on the DVD).

How does it work?

A facilitator or facilitators enter(s) into an agreement with frontline staff to involve them and their patients in using HELiCS. Following organisational management and ethics committee approval, the facilitator(s) negotiate with staff (and patients) which aspects of practice they would like to focus on. Following that negotiation, the facilitator(s) observes and subsequently captures these aspects on video. The footage is used for feedback sessions with staff. Staff thereby are involved in scrutinising their own ways of working and communicating, and in devising practices changes.

Who can use it?

Facilitators can be colleagues who have appraised themselves of the ethical and privacy constraints that bear on video-based practice improvement. Facilitators can also be staff from academic institutions who have agreed to collaborate with the health facility on a targeted practice improvement project. For assistance, please log into the Centre for Health Communication website.

How are participants invited?

Participants are invited to be involved through sending out an invitation for expressions of interest. Management obliging staff to participate may adversely impact on staff's commitment to the principles and outcomes of the research. Patient participants are invited on the basis of where the research is taking place, when the research takes place, and to what extent the recording will draw on specific patients' cases and affect their well-being while in the health care facility.

Why video?

Video captures aspects of how clinicians work and communicate that are not visible to the 'naked eye'. When we watch how we work and talk on screen, we notice things we are not aware of. Video provides a powerful way of seeing what we do and say from under a different aspect, enabling us to question it and change it.

Is the manipulation of video and video data complicated?

Handling a video camera is simple. There needs to be an agreement with subjects who will be in the video; about how the camera is used in their presence; what it is used for, when it is not to be used, who has access to the data, where the data is stored, and what data should not be captured or, if captured, destroyed. Manipulating video data can be done on any computer, although extra storage space in the form of an external hard drive is recommended. Video editing packages accompany most hard-disk video cameras, enabling novices to manipulate and edit footage. If the footage is needed for more formal purposes such as training or public display, a skilled video editor may need to be contracted.

HANDOVER
ENABLING
LEARNING
in COMMUNICATION for
SAFETY

The National Clinical Handover Initiative

HELICS

← Sterilising Service

← Cardiothoracic Com

← Eastern Heart Clinic/



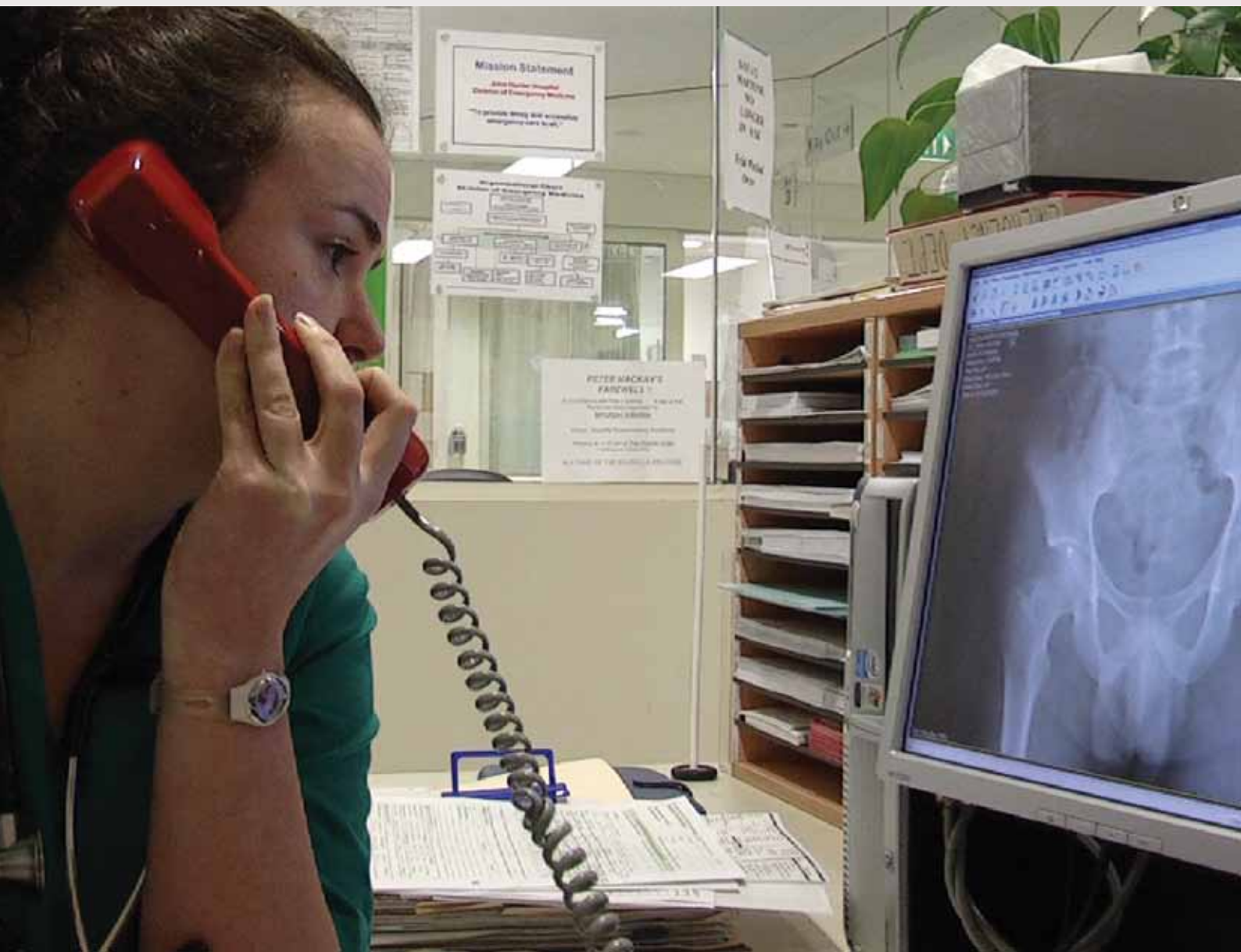
es Department
ference Rooms
Echo Lab./E.C.G.



Cardiothoracic Surgery &
Intensive Care Unit

Section 1

Enabling Learning



Background

Effective clinical handover is of increasing importance to health care, because:

- services are becoming more complex.
- these complexities mean that staff need to communicate more frequently and more speedily with each other about complex matters.
- much clinical work needs to be done by multi-disciplinary teams, requiring the ability to communicate outside one's professional discipline.
- the health care workforce is becoming more casualised, involving more staff with less-than-ideal knowledge about patients and processes.
- patients' role in health care generally is changing, and their role in clinical handover is now recognised to be crucial.
- patients continue to have high expectations for the continuity and outcomes of their care.

For all these reasons, clinical handover is central to contemporary health care, and improvement of handover is crucial to patients' safety.

Clinical Handover

Clinical handover is:

“The transfer of professional responsibility and accountability for some or all aspects of care for a patient, or group of patients, to another person or professional group on a temporary or permanent basis”^[5].

This definition states that clinical handover is about *responsibility* and *accountability*.

Responsibility is anchored in a person's acceptance that handover information and tasks are central to how they structure their work. A person's acceptance of that responsibility is an indicator of their commitment.

Accountability is anchored in the person's acknowledgement that as a clinician, they have an obligation to the patient, their colleagues and their organisation. This obligation is to conduct clinical handover according to established best practice and to document and account for their personal practice achievements.

Handover is not limited to professional groups. Patients, their family members, and primary carers often have knowledge and information that is relevant to the patient's care, and therefore to the handover process. Including them in the handover process has the potential to enhance the validity and diversity of knowledge and information available.

Clinical handover is central to many health care processes. The majority of communication events between health care professionals about patient care constitute either a full or a partial form of handover. This is particularly apparent in clinical settings where there is a high turnover or throughput of patients, such as the Emergency Department.



Responsibility

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Accountability

Accountability is anchored in the person's acknowledgment that as clinician, they have an obligation to the patient, their colleagues and their organisation. This obligation is to conduct clinical handover according to established best practice and to document and account for their personal practice achievements.

Handover as Safety Risk

Clinical handover is a high risk event. Miscommunication, misunderstanding, multiple-sequential information transmissions, and insufficient opportunities for checking tasks, information and responsibilities can produce serious errors. Inadequate cross-professional or cross-institutional handover can lead to different understandings about and plans for addressing a patient's needs and condition.

Communicating tasks that are crucial to patients' well-being in busy and noisy environments such as hospitals is difficult enough in itself^[6]. Health care is one of the few industries where service and training intersect in a complex and sometimes dangerous way. Thus, handover is not just about communicating tasks and responsibilities, but also about junior staff training and supervision^[7]. Unfortunately, the demands of care and the demands of training and supervision do not

always complement one another, creating risk for the patient^[8]. Solutions can be found for accommodating these different demands, but they require attention to the specific and day-to-day problems that clinicians experience^[1].

Communicating tasks in busy and noisy environments harbours risks for patients, and therefore requires special attention.



Best Practice in Clinical Handover

Guidelines for best practice handover are widely available^[4,9,10]. At the most general level, the following rules are frequently invoked^[11,12]:

- be clear, concise and accurate in your handover communication.
- articulate events witnessed by the person providing the handover in the first person; communicate other events in the third person.
- verify and document the content of verbal handover as soon as practicable.
- make sure handover communication occurs in a manner and language that is understood by the person assuming ongoing responsibility for care.
- provide and take opportunities for asking questions and clarifying information.
- set aside adequate time and sufficient space.
- minimise interruptions by pagers, relatives, colleagues.
- appoint a leader.
- keep a written list of all patients under the care of the team, including location and clinical condition.
- handover every patient whose care is transferred.

Structuring handover is critical to effective care.

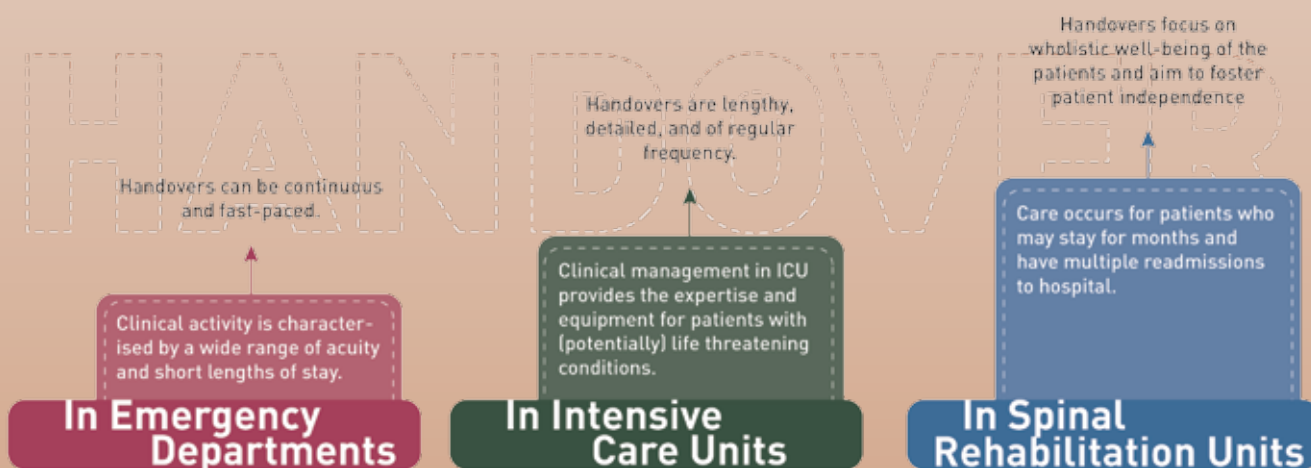
In addition to this kind of best practice advice, suggestions have been made about how to structure handover as interactive practice. As one example among many^[9], SBAR provides a model that requires the clinician handing over to present their cases as follows: Situation, Background, Assessment, Recommendation^[13]. The principle of SBAR is to standardise the approach to handover, and thereby make it easier to understand it and act on it. However, frontline staff will insist that 'their approach to handover depends on the clinical specialty and on specific circumstances'.

The Approach to Handover Depends on Clinical Specialty and Organisational Circumstances

The way that staff enact their handover will reflect the needs of their specialty and the treatment challenges it confronts. In **Emergency Departments**, for example, clinical activity is characterised by a wide range of acuities and short lengths of stay. Due to the speed with which information and patients travel through the unit, formal handovers are 'shadowed' by a constant stream of less formal handovers over the duration of the patient's stay. Moreover, emergency department handovers also reflect the patient's acuity. Handovers in the resuscitation bay focus on assessment, immediate care needs and clinical disposition of the patient, while the handover of both stabilised patients and of extremely unstable patients will be fast and economic, albeit with a very different emphasis.

In **Intensive Care Units**, Clinical management in ICU provides the expertise and equipment for patients with (potentially) life threatening conditions. Here, handovers are lengthy, detailed, and of regular frequency. Due to the uncertainty of intensive care medicine, these handovers may involve in-depth deliberations about diagnostic and prognostic matters. These handovers also often rely on a variety of technological sources of information. They may further involve professionals from other specialties and from allied health who are responsible for patients' clinical, exercise or dietary needs.

In **Spinal Rehabilitation Units**, care occurs for patients who may stay for months and have multiple readmissions to hospital. Handovers focus



on holistic well-being of the patients and aim to foster patient independence, including equipment-based, social and community information. The challenge here is to ensure that information generated at the beginning of an admission is accessible over the duration of such admission, which can last for months, and for all subsequent admissions. The multi-disciplinary nature of the care provided in spinal medicine further requires the presence at handover of occupational therapists, physiotherapists, nurses, dieticians,

physicians and surgeons. Finally, given the emphasis on the patients' self-management, spinal units may involve patients and family members in their handover.



Refer to the HELiCS DVD for examples of the different objectives of handover across clinical specialties.





Monitoring and Improving Clinical Handover: 'From the Ground Up'

The applicability of general rules and guidelines always remains contingent on how a unit or team adapts them to their working circumstances^[14]. Frequently, a team's or unit's approach to clinical handover needs to be uniquely tailored to suit local circumstances. HELiCS provides an opportunity for frontline clinicians to observe (on screen), question, (re)structure and evaluate their handover practices.

Our experience with using video for clinical practice improvement teaches us that^[2,3]:

- clinicians are intrigued by and interested in viewing real-practice footage; a frequent comment is 'we did not realise that is what happens in our unit!' and 'we did not know that that is how we work!'
- once clinicians come to trust the facilitator(s) and see the value of watching footage of their own practices, they become able to appreciate and learn from what works and change what does not work.
- because the clinicians gain the opportunity to engage with their own practice in an in-depth way, their ideas, proposals and interventions 'make sense' in that they belong to them as a team and fit in with their own practices.
- because clinicians are enabled through viewing the footage to think critically about their own ways of working, they become able to more critically observe and engage with their own and their colleagues' ways of working.
- Clinicians learn from engaging with patients' experiences of care and are encouraged by their patients to improve their practices^[22].

Video provides an opportunity for frontline clinicians to observe, question, restructure and evaluate their handover practices.

As video-based technique, HELiCS offers the following advantages:

1. visual data are more accessible and 'immediate' for busy clinicians than linguistic or numerical data.
2. the gap between research and practice is minimised because clinicians gain ownership over the change solutions and improvements they devise and implement.
3. HELiCS embeds in clinicians what James Reason terms 'constant vigilance'^[15]; that is, by participating in this research they gain a more vigilant and interventionist attitude towards their and their colleagues' ways of working.





Section 2

Using HELiCS



Considerations for Clinicians and Managers Wanting to Use this Kit

Before using HELiCS, please consider staff's readiness to engage with HELiCS.

When deciding to facilitate change and improvement using HELiCS, you first need to answer the following questions:

■ Are staff under stress?

- staff's emotional state will affect their attitude towards being asked to participate in reflecting on their and their colleagues' practices.

■ Are there tensions in the team or unit with whom you are intending to work?

- HELiCS requires participation from as many team or unit members as possible, and internal tensions may reduce individuals' willingness to learn; in case there are tensions, a team-based intervention to improve collaboration may need to precede deployment of HELiCS.

■ Are people keen to improve their practices and open to using reflexive methods?

- you may be able to identify 'leaders' or 'champions' who are willing to invest time and energy in supporting you as facilitator in this research.

- HELiCS participation goes beyond measuring selected clinical aspects of practice: participation encompasses being open and honest about concerns regarding the approach taken to clinical handover in the unit or team; this requires individuals who are receptive to others' questions about how the work is done, and to changing how the work is done.

■ Is it possible to involve patients in the feedback process for clinicians?

- In many if not most specialties patients have critical insight into how clinical practice can be improved.
- Acknowledging the patient experience by involving them in filming provides important information for the redesign of clinical work^[22].

Once you have the answers to these questions, you will be in a position to decide whether to deploy HELiCS. If you have any remaining questions, please contact the authors of this document using the contact details provided in its final section.

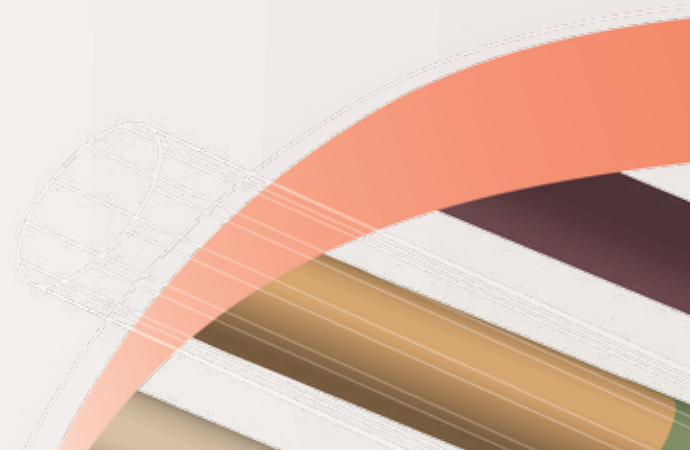
The Six Inter-related Processes of HELiCS

Deployment of HELiCS involves six inter-related processes:

1. **Participation** by frontline clinicians who volunteer to study their own ways of conducting handover.
2. **Observation** of existing handovers by a facilitator or facilitators or by trained members of the team.
3. **Data collection** of selected handover aspects involving real-time methods such as video and/or audio. These recordings are edited for feedback.
4. **Reflection** on handover processes using the recordings enabling scrutiny of practice.
5. **Re-design** of handover practice, where necessary, to better meet in situ challenges, constraints and opportunities.
6. **Enabling** of team learning and leadership by evaluating the redesigned practice, and by enabling staff to refine and share their accomplishments.

HELiCS enables a number of factors to intersect, allowing for more complexity than the plan-do-study-act 'cycle', that is frequently used as a metaphor for learning and improvement. By embracing the interdependence of component processes and the emergent (complex) nature of their unfolding, HELiCS promotes flexible adaptation to local circumstances.

In what follows, we describe the component processes of HELiCS in greater detail.



HELiCS promotes flexible adaptation to local circumstances.



Participation

Participation is about the facilitator(s) engaging with clinicians to discuss their concerns about clinical handover. Clinicians invariably have differing opinions of the strengths and weaknesses of handover. It is important not to discount any view or opinion. The objective is for people to discuss aspects of handover about which they would like to know more, or which they would like to change.

It may be useful to specifically identify operational and clinical areas that carry clinical risk, that have existing strengths and weaknesses, and that show capacity for improvement.

To get started, use the following questions to begin mapping the structural dimensions of clinical handover:

- **Where and when does handover occur?**
 - Map the times and spaces occupied by clinical handover.
- **How is clinical handover enacted?**
 - Decide who participates in what kinds of handover, for what purpose and producing what personal and organisational benefit.
 - Determine who does not attend specific handovers and why.
 - Establish whether handover is conducive to team deliberation and mutual questioning, and whether such dialogue involves all or only some participants.
- **How long does handover take?**
 - Determine whether handover is experienced as being too long or too short.
- **What is documented during handover and by whom?**
 - Map whether and how the handover information is documented (does it get written on a whiteboard, on personal pieces of paper, on official pieces of documentation?).
 - Is the approach to documenting handover information functional for everyone involved?
- **Are staff confident about the efficacy of the handovers that take place?**
 - Would they want to know more about how particular members of the team or unit conduct their handovers?
 - Would they want to know more about particular aspects of the unit's or team's handover content?
 - Would they like to learn about the complex trajectories followed by patient-related information?
- **What role do (or can) patients play?**
 - Should the patients role in handover be strengthened?

The information that is produced by team members as part of these discussions should be recorded. These records will guide and form the basis for videoing in situ clinical handovers. Encouraging team participation in these discussions helps team members feel comfortable with this research, understand that its purpose is to assist them (not criticise them), and gain trust in having their handovers videoed.

Establishing **trust** is crucial to using HELiCS. A primary principle of HELiCS is:

Clinicians need to know and feel that they are driving the redesign rather than being subjected to it by management or by outsiders.

It should be emphasised that the objective of HELiCS is to give all clinicians who conduct handover a voice in the organisation, structure and redesign of their practice.

Trust in HELiCS will be contingent on the following ground rules (many of these align with human research ethics principles; see the Governance Document on the DVD):

- all patient-identifying information will be removed from the recorded material (by erasing relevant sounds and images or by pixellating footage).
- the handover team is in control of the research and determines which aspects of their practice are videoed, which aspects are not videoed, which aspects should be destroyed, and which aspects can be publicly shown (to the others on the team).
- all footage is stored on a password-protected computer in a locked office, accessible only to the facilitator(s).
- raw footage is only handled by the facilitator(s).
- display of any footage to third parties only occurs with the explicit and written agreement of all people that are involved.
- at the conclusion of the research, data will be stored in accordance with ethics and governance regulations applicable to the organisation.



Ethical Considerations for Clinicians and Managers

Because HELiCS uses video footage of people working in health care organisations, and potentially of patients receiving care, it is important to be aware of the legal and ethical requirements governing the collection and storage of confidential information.

Australian hospitals and health services employ ethics officers who will be able to provide assistance in determining the constraints inherent in doing this research.

If the organisation chooses to classify HELiCS as a research project leading to formal academic publications, the appropriate procedures need to be undertaken to obtain ethics approval and ensure participants are able to give informed consent².

Besides checking the need for ethics clearance, it is recommended that participants are aware of, and apply the guidelines provided in, the National Health and Medical Research Council's 'National Statement on Ethical Conduct in Human Research'^[16].

² The HELiCS DVD contains documentation relevant to ethics.



Observation

Following clarification of the aspects of handover to pay attention to, the facilitator undertakes observations of clinical handover practices over a number of days, depending on the time available. The goal of observation is to enable the facilitator to decide which aspects of the handover to capture on video. The facilitator needs to take the time to familiarise themselves with how handover occurs. One or two days observing can provide important insights into the type of footage that would exemplify the challenges identified during preceding discussions with the team. Observation will clarify who to video, when to video, where to video, and for how long to video.

Another important dimension of observation is that the facilitator needs to establish trust with frontline clinicians. By being around the unit or department, the facilitator gets to know staff and they get to know him/her. This is a crucial part of the process. Ultimately, it is the trust engendered between the facilitator and frontline staff that will determine the success of the research initiative in an important way.

It is the trust engendered between the facilitator and frontline staff that will determine the success of the HELiCS research initiative.

Observation

Data Collection

Data collection centres on videoing handover practices. Videoing may focus on the specific operational and clinical areas that were originally identified by the team as

- a. carrying clinical risk,
- b. having particular strengths and weaknesses,
- c. harbouring capacity for improvement.

Practical considerations when videoing

Any type of video camera may be used for videoing. The following list identifies a few recommendations for ensuring success:

- use a digital camera that either stores directly to hard disk or other media that is easily read and manipulated on a computer.
- video in short 'takes' of (maximum five minutes) to facilitate storing, organising, locating and preparing the footage.
- be representative in your videoing, by
 - capturing the good as well as the not-so-good.
 - taking a few days; this will reveal whether handover on any one day may not be representative of how handover occurs generally.
 - engaging with clinicians while filming to make them feel more comfortable about the process and enable them to identify issues needing to be addressed.

Methodological Note

You may hear that video-filming handover practice is subject to 'the Hawthorne effect'. The Hawthorne effect is best described as follows: the research method influences and/or pre-determines its research findings. Accordingly, by filming clinicians, we may change their behaviour as a result of being watched and recorded. This is seen as a distortion of 'what really happens'.

There are three ways in which we can allay the concern that videoing produces a distorting effect on 'what normally happens':

1. Being videoed may affect staff for a period of time before getting used to the presence of the camera. Normally, staff are too busy to modify for long what they do 'to create a positive impression'.
2. There are an increasing number of stakeholders 'observing' clinicians' practices. The following 'observers' increasingly crowd into hospital spaces: academic researchers, hospital-based researchers, infection control auditors, students (medical, nursing and allied health students, but also non-clinical students), departmental and organisational managers, technical and IT specialists, consultants and 'reps' (concerned with how

to update equipment and work processes), television crews, media representatives, union representatives, community representatives (local politicians), patient advocacy groups, and last but not least, loved ones: families and care givers. Collectively, these 'visitors' intensify the gaze on the workings and outcomes of health care practice. HELiCS is but one facet of this intensifying gaze.

3. There is no research method that does not pre-determine its research findings. That is because research is per definition hostage to the researcher's choice of tools. Research tools shape what can be 'found' ^[17].

For these three reasons, outsider observation and videoing of clinical practice do not 'distort' contemporary ways of working to the point of producing invalid findings and unusable insights. On the contrary, feedback during our video projects has invariably confirmed how useful video is to generate discussions about issues that matter to frontline staff, how fascinating staff find video because of 'how real it is', and how enthusiastic staff are to trial new ideas generated through participating in HELiCS.


“The mechanism [HELiCS] is extremely helpful because it allows clinicians to step back and consider how it looks, how it sounds”

Dr Mike Anscombe, Staff Specialist,
Paediatrician and Emergency
Physician, John Hunter Hospital

Compiling the Footage

The facilitator and participants will feel at some point that they have reached 'saturation point' with videoing. That is, they feel that the footage captured is generally representative of how handover occurs in the unit, department or organisation. Now is the time to compile the footage for feedback.





This task may involve going back to the project's champion on the clinical team and liaising with them about:

- what data might be advantageous to show their team.
- what data is inappropriate to be shown.
- what data can or should be shown to particular clinical sub-groups.

Ideally, the footage is edited into three to five exemplars of a few minutes in duration. Focus on the issues identified during initial engagement with the team or unit, or on issues that arose during filming. These exemplars should be shown as much as possible to the clinicians involved in the filmed handovers. Keep in mind that because these clinicians were present at the handover and have a good knowledge of how they work, not much footage is needed to spark lively discussion!

Video editing packages

There are number of video editing packages on the market that can help with the compiling of footage, but it is not necessary to get too fancy with this. Sony cameras come with a very simple video-editing package. At the other end of the spectrum, FinalCutPro[®] is a professional and

expensive piece of software that will enable you to blend scenes together, label scenes, and modulate sound. You need to determine how much use you want to derive from the footage. Do you expect to be able to use clips for public presentations to show others your achievements? Or are you intending to keep the footage in-house? Your purpose will determine how much to spend on your camera and editing software. Ask your camera vendor for further advice.

The goal of compiling the footage is to find exemplars of practice that will spark discussion.

Data collection

Reflection

By engaging frontline clinicians in watching footage of their own handover practices, the facilitator enables them to watch themselves as they would watch others. By having their practices squeezed onto a two-dimensional screen, clinicians apprehend their own practices ‘from under a different aspect’^[18]. Thereby, practices that are commonly experienced as defining normal everyday reality become detached from people’s experiential moorings^[19]. This renders practice amenable to change. At the same time, because what they watch is so familiar, clinicians know exactly what is possible to change and what is not, what needs to be changed and why, how to change it, who needs to do it, where, and why.

HELiCS is designed on the basis that each site has its own affordances and constraints. Using it means accepting that:

“To meet the challenges posed by changing and complex environments local solutions have to be found to local problems. What works for one setting or patient may not be suitable for another”^[20].

Arranging the reflection sessions

Pre-arranging the reflection session(s) is important. While reflection is intended to allow for the free discussion of ideas, it is important for the facilitator to have a set of organising themes for the meeting(s).

The facilitator needs to organise the video clips according to the theme or themes selected for display, be flexible in the meetings in terms of being able to shift focus, and allow for adequate and lively discussion.

To achieve this, it is important to have prompting questions. Some examples are:

- Who was talking and who was not talking during this handover? Would the handover have benefited from input from other people or professions?
- Were there any problems with this handover? If so, what were they?
- What went well in this handover, and how can we make sure this happens more often?
- What could make this handover operate better for all those involved?
- What changes to the organisation and structure of handover appear to be required?
- What are staff’s views on these issues?
- What resources, if any, are required to make the proposed solutions work?



Record the discussion that occurs in response to the footage shown. Important ideas may be raised that need to be followed up by the facilitator with the group. Ideas may also need to be discussed with other groups of clinicians to gauge their feasibility, and refine them using others' views and expectations.

Get 'buy in'

The success of the reflection discussions depends on getting as many people involved as possible. When solutions are proposed, try to give responsibility for the implementation of these solutions to people who have the capacity to make it happen. Options include:

- » a separate meeting is held to work out how the plan may be realised with those who are likely to be implicated in its realisation.
- » the team simulates the proposed changes at a time when there is no risk or inconvenience for patients.

Redesign, Enabling Learning

By this stage the facilitator has

- talked to clinicians (and patients) about their thoughts about which aspects of handover are worthy of attention (**Participation**),
- observed and filmed handover practices over a number of days and shifts (**Observation and Data collection**), and
- allowed clinicians to view and discuss their practice (**Reflection**).

Clinicians should now be clear about the main strengths of their handovers, and of their main weaknesses. Reflection should have generated ideas about how handover can be improved. Individuals should have identified themselves as the people interested in realising these changes.

The most important thing now is to maintain momentum

For sustained positive changes to handover, clinicians need to **own** the change initiative and the solutions it proposes. Clinicians need to be supported in pursuing the changes and solutions. They need to stay involved and believe that what they proposed is doable, significant and supported by other team members. This requires ongoing communication. If they do not get the opportunity to communicate about their plans they may lose interest and revert to old ways.

Review the reflection outcomes

There is now a need to review the outcomes of the HELiCS process. To evaluate and refine the redesign process HELiCS may need to be invoked at this point to observe and video-film altered practices. This enables clinicians to comment on the changes and appreciate their achievements. By evaluating their intervention in this way, we achieve three things:

- the handover improvement may be further refined.
- a **capacity** is generated among staff to deal with practice redesign.
- this capacity builds **resilience** in the face of service crises^[21].

In addition to producing improvements for handover, HELiCS also operates at a more general level. It heightens staff's capacity for designing and implementing changes, and it provides a general insight into the organisational dimensions of their practices. This latter dimension is crucial for improving handover, but also for handling risk and failure generally in the organisation.



- Clinicians need to stay involved and believe that what they propose is doable, significant and supported by other team members.

Enabling
Re-design





Section 3

HELiCS in Action

In 2008, the Centre for Health Communication UTS with funding from the Australian Commission on Safety and Quality in Health Care embarked on a program of research that involved collaborating with three inpatient health care providers in three NSW Area Health Services.

The type of clinical services provided by these providers ranged from emergency health care, intensive care services, to longitudinal rehabilitation services. Over 150 health practitioners participated in the deployment of HELiCS over a period of 10 months.

This section provides an overview of how HELiCS was deployed. It includes the achievements, challenges, and the solutions that were achieved by three different clinical specialities to meet the handover needs of health care practitioners and patients.

Case Study 1:

The Emergency Department

In the emergency department setting, initial discussions with health care practitioners highlighted a perceived need for improvement in the following areas:

- **Shift change handovers:** These handovers were occurring at a white board on a busy corridor where patient information was recorded and updated.
- **Inconsistencies in clinical information:** There was a lack of inter-professional communication.
- **Important information** was omitted, or unavailable.
- **Uncertainty:** Staff were uncertain about the appropriate depth of information for shift change handover.
- **Unavailability:** Staff were not always available for handover.

Following observation and video-filming, the above problem domains were narrowed down to the following more specific challenges:

- **Large intakes of junior nursing staff** lack adequate emergency nursing experience and need to be brought up to speed through handover.
- **A complex environment** creates complicated

information transfers as well as placing physical and mental strain on staff.

- **Lack of clear structure** to handovers means the above challenges are not addressed.
- **Numerous interruptions** to handovers exacerbate the situation.
- **A high level of uncertainty** results about the types of information required when handing over to other shifts or other inpatient wards or units.

The following strengths were identified:

- **Strong clinical supervision** for junior medical staff.
- **Enthusiastic** clinical teams.
- **Strong community of care** and a strong feeling of teamwork.

These strengths helped the team in redesigning their handovers. Termed the '**team leader ward round**', this change enabled staff to:

- review each patient after handover (update assessment).
- allow patients to ask questions.
- look at what information and what tasks are central.
- determine how team leaders can facilitate information flow and central tasks.



For a more in-depth discussion see the HELiCS DVD, 'Emergency Department'.



Case Study 2:

Intensive Care Services

In the Intensive Care Service setting, early discussion with health care practitioners revealed a perceived need for improvement in the following areas:

- **Medical shift change handovers:** Uncertainty existed about the structure and organisation of these handovers.
- **Inter-professional Communication:** Uncertainty existed about communication opportunities between disciplinary teams and suspected inconsistencies in teams' understanding of clinical information.
- **Uncertainty about the use of electronic resources:** Staff were uncertain about the best way of integrating electronic resources (e.g. clinical information pertaining to chemistry, radiology) into handovers.
- **Uncertainty about depth of information to be handed over:** Staff were uncertain about the appropriate depth of information for different shift change handovers.
- **Duplication of handover:** The potential duplication and inefficiencies of multiple handover needed to be addressed.

Observation of handover practices in the unit revealed the following existing organisational strengths:

- **Handovers in the unit are seamless and highly expert-based:** Staff were found to be consistently highly explicit in terms of the information handed over, balancing information exchange with supervision

and training, and shifting tasks between professional groupings.

- **High-level integration of electronic patient systems in handover:** Handovers displayed a sophisticated use of electronic systems for the organisation and presentation of patient data (e.g. notes, chemistry, radiology).

Clinicians from the Intensive Care Unit were enabled to recognise both the strengths and weaknesses of their practice. Encouraged by what they saw, but also able to be more critical of their own practices by viewing the footage, the clinicians redesigned their handover practices to suit their own clinical needs. The first change was instituting a nursing 'head to toe' assessment presented to the medical team. This change emerged from medical and nursing staff realising that they need to have more input into the planning and activity of the other profession. The second change was moving medical handovers from the staff desk to the patient bedside, following the realisation that it is important to check handover information against up-to-date patient information and identity. Our evaluation of this change revealed that medical staff felt it makes the medical handovers more time efficient, and it combines scrutiny of the medical records with the most recent clinical assessment. Thirdly, senior staff committed to providing greater support for junior staff in their communication with senior medical colleagues. This change involved a clearer demarcation of task-related knowledge from teaching-related knowledge.



For a more in-depth discussion see the HELiCS DVD, 'Intensive Care Unit'.



Case Study 3:

Spinal Injury Rehabilitation

In the spinal injury rehabilitation unit, initial discussions with health care practitioners revealed a perceived need for improvement in the following areas:

- **Medical and inter-disciplinary team meetings:** Different views were felt to co-exist about the goals of patient involvement.
- **Uncertainty:** Staff were uncertain that inter-professional communication was indeed adequate to meet patient needs.
- **Duplication:** There was a sense that unit handovers suffered from unnecessary duplication and inefficiencies due to multiple handovers.

Observation and video-filming revealed the following strengths:

- **Staff enthusiasm:** The service employs an enthusiastic body of staff.
- **Functional focus:** There is a strong focus on ensuring longitudinal continuity of care, involving handovers addressing clinical, social, equipment, community, inter-organisational, and many related aspects of care, going well beyond a narrow organisational-clinical focus.
- **Clinical culture:** The unit displays a strong culture of clinical supervision and

multidisciplinary clinical leadership.

- **Inclusive culture:** The unit displays a strong culture of patient participation and empowerment.

Following reflexive feedback meetings, staff proposed a solution which sought to address people's uncertainty about whether their multi-disciplinary communications were adequate to ensure continuity of care, and to make explicit the contributions that each staff member makes to the ongoing care of the patient. To this end staff felt there should be opportunities provided for staff from different professional backgrounds to participate in each other's ongoing professional development and education. By allowing for this clarification of roles and communicative expectations, staff aimed to create a cross-fertilisation of knowledge and more effective mobilisation of professional expertise for the purpose of their handovers.



For a more in-depth discussion see the HELiCS DVD, 'Spinal Injury Rehabilitation'.



RPA Intensive

Concluding Note

HELiCS is a resource that addresses the challenges of clinical communication. HELiCS has been developed by the Centre for Health Communication to allow frontline clinicians to build on the strengths already present in their practice and to become aware of, and immediately address, those areas of practice that could benefit from improvement. By bringing together clinicians and facilitating the discussion about practice, researchers from the Centre for Health Communication have demonstrated that solutions can be found by frontline staff themselves to address complex handover issues.

It is our hope that you will find HELiCS to be a useful resource and we encourage you to contact us should further assistance be required.

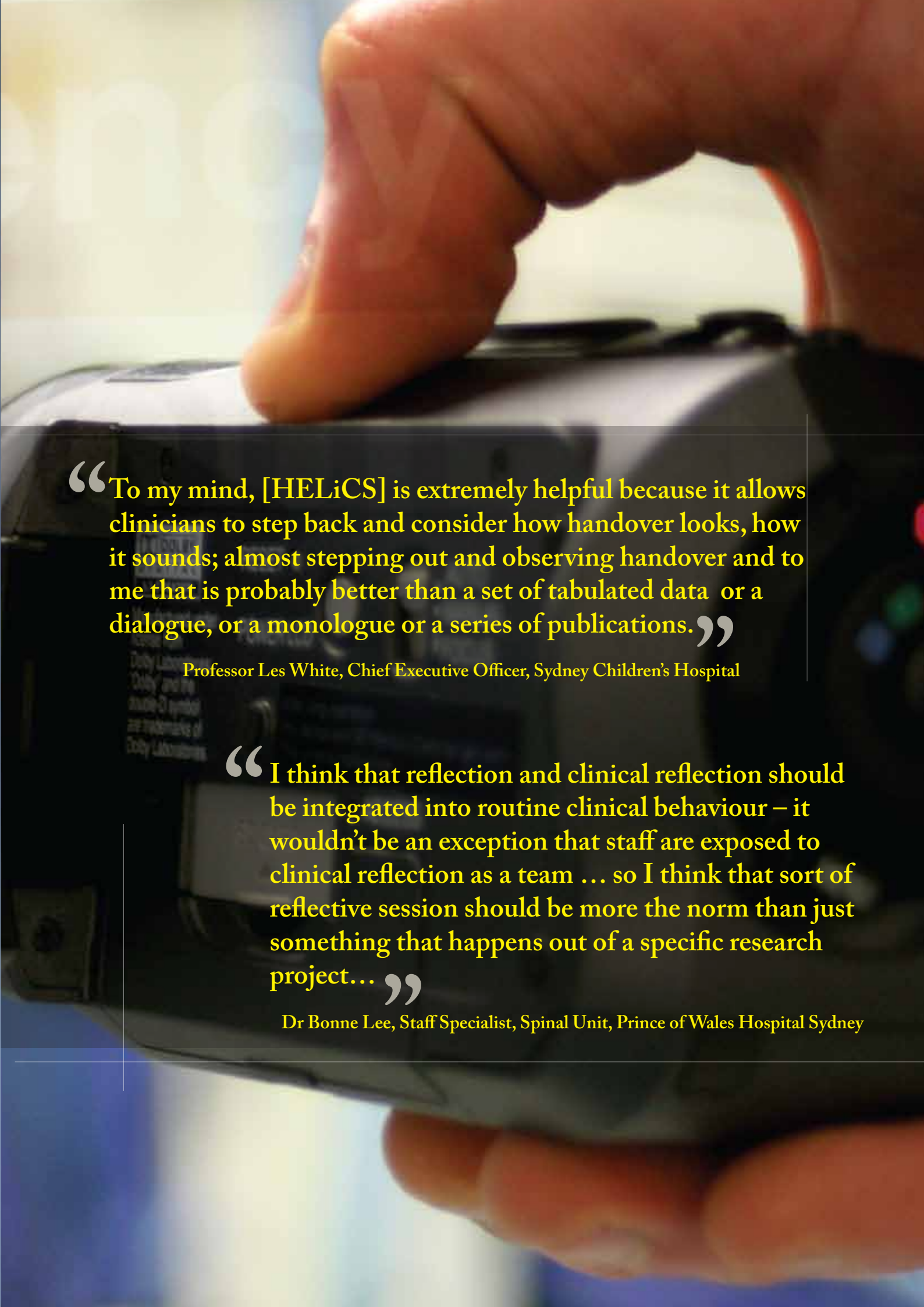


References

1. Carroll K, Iedema R, Kerridge R. Reshaping ICU ward round practices using video reflexive ethnography. *Qualitative Health Research* 2008; 18(3): 380-90.
2. Iedema R, et al. Visibilizing clinical work: Video ethnography in the contemporary hospital. *Health Sociology Review* 2006; 15(2): 156-168.
3. Iedema R, et al. Video-research in health: Visibilizing the effects of computerizing clinical care. *Qualitative Research Journal* 2007; 6(2): 15-30.
4. Australian Council for Safety and Quality in Health Care. *Clinical Handover and Patient Safety: Literature Review Report*. Canberra: Australian Council for Safety and Quality in Health Care; 2005.
5. Australian Medical Association. *Safe Handover: Safe Patients*. Canberra: Australian Medical Association; 2006.
6. Cook R, Render M, Woods D. Gaps in the continuity of care and progress on patient safety. *British Medical Journal* 2000; 320(7237): 791-4.
7. Roughton VJ, Severs MP. The junior doctor handover: current practices and future expectations. *J R Coll Phys* 1996; 30(3): 213-4.
8. Harrison M, Eardley W, Mccarron B. Time to hand over our old way of working?. *Hosp Med* 2005; 66(7): 399-400.
9. Australian Commission on Safety and Quality in Health Care. *Clinical Handover: A literature review*. Sydney: Australian Commission on Safety and Quality in Health Care; 2008.
10. Australian Medical Association. *Safe Handover: Safe Patients: a resource for medical staff*. www.ama.com.au/web.nsf/doc/WEEN-6XFDKN (see <http://www.ama.com.au/web.nsf/doc/WEEN-6XFDKN>) (accessed 17 February 2008).
11. Forrester K, et al. Clinical Handover: can we afford the time. *Journal of Law and Medicine* 2005; 13(2): 176-9.
12. Beasley R, Bernau S, Robinson G. From medical student to junior doctor: The medical handover - a good habit to cultivate. *StudentBMJ* 2006; 14(177): 220.
13. Haig KM, Sutton S, Whittington J. SBAR: A shared mental model for improving communication between clinicians. *Journal on Quality and Patient Safety* 2006; 32(3): 167-175.
14. Patterson ES. Structuring flexibility: the potential good, bad and ugly in standardisation of handovers. *Qual Saf Health Care* 2008; 17(1): 4-5.
15. Reason JT. *Managing the Risks of Organizational Accidents*. Aldershot: Ashgate, 1997.
16. National Health & Medical Research Council. *National Statement on Ethical Conduct in Human Research*. Canberra: National Health & Medical Research Council, 2007.
17. Taylor C. *Philosophy and the Human Sciences (Philosophical Papers Volume 2)*. Cambridge: Cambridge University Press, 1985.
18. Wittgenstein L. *Philosophical Investigations*. Oxford: Blackwell, 1953.
19. MacDougall D. *The corporeal image: Film, ethnography and the senses*. Princeton: Princeton University Press, 2006.
20. Grol R, Berwick D, Wensing M. On the trail of quality and safety in health care. *British Medical Journal* 2008; 336(12 January 2008): 74-6.
21. Merrick, ET, Iedema R, Sorensen R. Adaptive Interpretations of Adaptive Organisations: Enhancing Practitioner Resilience in Dealing with Public Service Instability. *Australian Journal of Public Administration*, accepted.
22. Bate P, Robert G. *Bringing User Experience to Healthcare Improvement: the concepts, methods and practices of experience-based design*. Oxford: Radcliffe Publishing, 2007.

Emergence





“To my mind, [HELiCS] is extremely helpful because it allows clinicians to step back and consider how handover looks, how it sounds; almost stepping out and observing handover and to me that is probably better than a set of tabulated data or a dialogue, or a monologue or a series of publications.”

Professor Les White, Chief Executive Officer, Sydney Children's Hospital

“I think that reflection and clinical reflection should be integrated into routine clinical behaviour – it wouldn't be an exception that staff are exposed to clinical reflection as a team ... so I think that sort of reflective session should be more the norm than just something that happens out of a specific research project...”

Dr Bonne Lee, Staff Specialist, Spinal Unit, Prince of Wales Hospital Sydney



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