



Centre of
Research Excellence
in Patient Safety

WORKSHOP REPORT

**‘Developing a research framework
and agenda for clinical handover’**

*Centre for Research Excellence in Patient Safety, Monash University
and
The Australian Commission for Safety and Quality in Health Care*

**Saturday, 24th February, 2007
Mercure Hotel, Brisbane, QLD**

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Executive Summary

The NHMRC Centre of Research Excellence in Patient Safety (CRE-PS), supported by the Australian Commission on Safety and Quality in Healthcare, held a clinical handover workshop in Brisbane on Saturday 24th February 2007.

By engaging with key stakeholders, CRE-PS intended the workshop to be a forum from which a research framework and agenda for national and international audiences could be developed.

This framework for handover research formed the key outcome of the workshop and is integral in guiding future research into how best to address gaps in knowledge surrounding the process of clinical handover. It will, subsequently, contribute to enhanced patient safety through improving, modifying and reducing reliance on handover.

Four presentations by CRE-PS and Commission members helped both to set the scene and encourage debate and discussion during the workshop proceedings:

- Overview of past national and international workshops (Bryce Cassin)
- Introducing a proposed framework and gaps in knowledge (Dr Sue Evans)
- Exploring the concept of resilience within handover (Dr Shelly Jeffcott)
- Describing the challenges of handover research (Dr Georgiana Chin)

The main discussion in the workshop centred on ratifying a definition and framework for handover. Key concepts from the framework then became the focus of brainstorming sessions.

The workshop group was broken down into three smaller teams, each with a CRE-PS representative, who reported back to the larger group with the most pertinent of a range of generated research questions around these nine core concepts. Discussion and debate was encouraged throughout by the workshop facilitator, Professor Joseph Ibrahim.

Introduction

The workshop was preceded by a day-long seminar where a range of experts made presentations which discussed the complexity behind handover and the feasibility of a variety of potential solutions (both system and technology based).

There were also some speakers who presented useful examples of specific (mainly acute health sector) initiatives implemented to help alleviate the problem of handover, at a local level. Thus, the seminar provided a backdrop to in-depth discussion which took place on the Saturday, with invited participants.

Appendix A contains full details of the Seminar Programme. Approximately 240 participants attended from Australia and internationally (2 from NZ). Appendices B and C contain programme and participant information (n~25) for the workshop.

Workshop Objectives

The workshop began when the facilitator asked participants what they hoped to achieve in the half day of discussion. Four main aims were raised:

1. To find an agreed definition of handover
2. To define a national strategy, relevant to the frontline
 - a. Underpinned by a conceptual model or framework
 - b. Leading to 10 to 20 research questions (requiring prioritisation)
3. To establish collaborations for undertaking achievable research projects
4. To share knowledge on potential assessment tools appropriate to handover

This ambitious list was refined to focus on points one and two, centring particularly on the latter (i.e. 2a and 2b) model and framework building. Up to now, research in Australia surrounding clinical handover has been largely ad hoc and atheoretical which has meant that results have been hard to generalise.

CRE-PS presented a framework to provide the structure for examining the problem of handover and serve as a guide to examining both the important variables that exist and the relationships between those variables. It was intended to guide a systematic research agenda in handover, determining which concepts are important to investigate and in what priority.

A Definition for Handover

A refinement of the recent definition of clinical handover, presented in the 2006 Australian Medical Association (AMA) booklet¹ *Safer Handover: Safer Patients*, was proposed to the group. This definition describes clinical handover as:

'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.'

This is in contrast to previous definitions that had discussed information transfer without notions of responsibility and accountability. It was felt that both information transfer and responsibility/accountability transfer should be included in any comprehensive definition of clinical handover.

In addition, the wider system, that is, the contextual or structural shapers of cognition and behaviour (e.g. risk management policy, pre-existing organisational sub-cultures, structural/political factors), should be incorporated in the definition.

The majority of workshop participants agreed on the addition of the extra concepts, particularly acknowledging the importance of a difference between the concepts of responsibility and accountability. There was discussion around the

need to establish a consensus as to their meanings and key distinctions.

For instance, accountability was regarded as something that cannot be delegated, i.e. you are accountable *to* something/someone outside of yourself (e.g. policy and procedures). Responsibility is then something that you may be able to delegate and so varies more between individuals who will inevitably feel different levels of responsibility *for* their own conduct/actions.

The explicit addition of a reference to ‘teams’ was also mooted for future definitions of handover. This would differentiate between individual and team responsibilities/accountabilities and so assist in better reflecting the hierarchy of professional accountability within healthcare systems. Teamwork is an important pre-determinant of successful handover and is influenced by many complex, system-based factors.

One participant reminded us all that handover is a strategy to achieve an objective, i.e. to provide the necessary information to enable safe patient care. As such, there is a need to remain mindful that clinical handover is about more than just the acts of transfer; although, of course, the success of these transfers is crucial to the success of the end objective (e.g. patient safety).

A Framework for Handover

A number of frameworks with potential application to the area of clinical handover were explored, prior to the workshop (see: Figure 1). Many of these were created specifically to explore safety and quality in healthcare and have been applied, successfully, to particular problem areas; but never to clinical handover.

Source	Variables
<i>Agency for Healthcare Research and Quality (AHRQ)</i>	Effectiveness, Patient safety, Timeliness, Patient Centredness ²
<i>Australian Council on Healthcare Standards (ACHS)</i>	Clinical function, Support function, Corporate function ³
<i>World Health Organisation (WHO)</i>	Stewardship, financing, creating and sustaining resources and producing and using research ⁴
<i>Donabedian</i>	Structure, Process, Outcome ⁵
<i>Normative Primary Healthcare</i>	Goals and values, planning and development, core functions, approaches, capacity, outcomes and indicators ⁶

Figure 1: Potential frameworks for application to clinical handover

After this initial literature review and a series of consultation sessions with an expert group from within the CRE-PS team, a framework was proposed. It combined the Donabedian model for evaluating quality and a normative model, previously applied to primary healthcare. This mixture appears to be well-suited to the context of clinical handover and the key issues, therein (see: Figure 2).

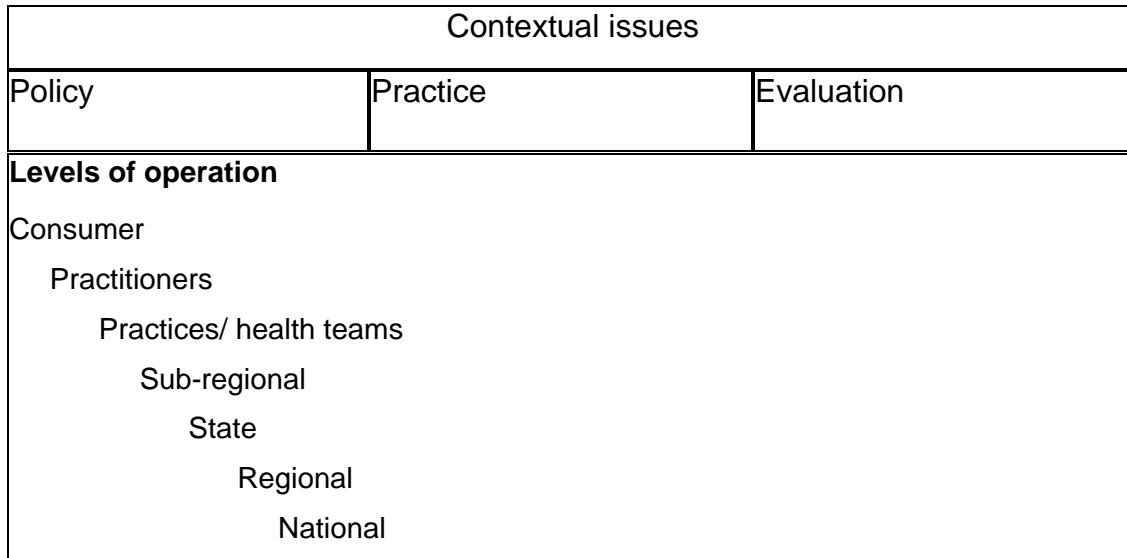


Figure 2: Preferred framework for clinical handover research (as adapted from Donabedian and the Normative Primary Healthcare Models)

Importantly, the respective concepts of structure, process and outcome were replaced by policy, practice and evaluation, within the overall context or system of care. Levels of operation are also included since we wish to depart from the hospital-centric perspective of prior research. Some participants felt that policy would be better placed within the overarching ‘context’ box within the model, although the majority were happy with the present model. It will be used as an underpinning framework for the discovery and organisation of a future research.

In essence, the three domains that came out of the re-worked AMA definition were: ‘information’, ‘responsibility/accountability’ and ‘system.’ These were then interlaced with the proposed adapted handover framework (Figure 2) and lead us to a 3x3 matrix from which to create/structure pertinent research questions:

	<i>Policy</i>	<i>Practice</i>	<i>Evaluation</i>
<i>Information</i>	RESEARCH QUESTIONS...		
<i>Responsibility/ Accountability</i>			
<i>System</i>			

Figure 3: 3 x 3 matrix from which participants developed research questions

An Agenda for Research

The bulk of the workshop was spent brainstorming research questions that fit within the 9 different grids (see: Figure 3). These are reported, in turn, below:

Policy

Information

Is a framework necessary to define a research agenda into clinical handover?

Is this framework a good one for generating key questions and ideas for research?

If so, how should decisions around research prioritisation be made?

Should we need to introduce policies to standardise care and information transfer for handover?

If so, what would such policies look like?

What would be the most appropriate way to enforce such policies?

Do we need to standardise definitions, templates, scripts for handover?

If so, how will we achieve this and will it help to improve the process of handover?

What needs to be done to ensure greater commitment at hospital, jurisdictional and national level to research, develop and test systems to support handover?

How can we better tackle the problem of privacy within handover?

Do we need to invest resources into understanding privacy concerns?

Is there a core dataset for handover?

If so, can it be mandated?

Are information systems currently linked with regards to the ability to connect different information sources required for decision-making at handover?

If not, what sort of policy do we need to ensure that information there is adequate interaction between information systems so that information is appropriately linked?

Responsibility/Accountability

Is it possible to have a system of accountability for clinical handover?

If so, what would standards to establish official lines of accountability for handover look like?

How would they need to be tailored to different handover formats, especially interdisciplinary formats?

What are the factors that would ensure that a system of accountability is implemented?

What type of audit process would be necessary to ensure compliance?

How do we ensure that we tackle accountability and responsibility issues at all levels of the hierarchy (i.e. from CEO level to coal face)?

Who needs to be accountable to whom to ensure the most effective handover process?

Why is it that that occupational health and safety issues are accepted more readily than clinical handover issues?

Should handover be treated like an occupational health and safety issue, and be mandated to ensure it is a priority to staff?

How do we make handover policy as important an issue as occupational health and enhance the understanding of handover at the coalface?

Is it possible to find out how many clinicians are credentialed and whether delineation of responsibility is mentioned?

Is it possible to make explicit the responsibility / accountability held by clinicians (e.g. in contracts)?

What research do we need to do to begin to understand people's motivations?

How do we identify what they value/consider important elements of responsibility?

System

Do mandated policies and procedures in clinical handover, at an institutional level, make a difference?

Does dedicated training in clinical handover, at different professional levels, make a difference?

If yes, what forms of training are most effective, e.g. scenario based training, role play, other forms of education and training?

Does interdisciplinary training, at both undergraduate and postgraduate levels, enhance teamwork as related to clinical handover?

Does training and real-life training in computer systems and informatics, as related to clinical handover, improve handover?

Do we know enough about cultures of escalation of issues in handover?

How can the escalation of issues be encouraged more at an institutional level?

Do we know enough about appropriate staffing levels/mix, in relation to different types

and formats of handover?

Can credentialing be standardised at jurisdictional or national level?

If so, will this help to improve the effectiveness and safety of patients at handover?

What levels of ICT investment are necessary to support effective handovers?

What other processes, outside of handover, currently support handover and the debriefing of staff / review of patients?

Does training enhance team communication, in general and specifically relating to handover?

If so, what would training for good team communication consist of? How do we sustain this (beyond the usual 12 month drop-off)? Do we need ongoing assessment of communication by way of a regular review?

Do we need different communication programmes for different settings and how do we appropriately design these?

Practice

Information

What is simply part of normal practice (i.e. good communication) and what is special (i.e. specific skills) for handover?

What role do clinical judgement and individual motivations play within handover?

What information needs to be handed over? What information doesn't need to be handed over, under specific circumstances?

How do we accurately identify necessary from unnecessary information to be transferred?

Does standardisation of work processes reduce the need for handover?

What tools for standardising care delivery are being implemented and what is their impact on reducing information loss?

Can we identify which parts of information transfer directly relate to practitioner action? That is, the information that is always acted upon in order to help us rationalise the overall process?

What sort of formats and/or presentations of data are most appropriate (either electronically, handwritten, verbal or combinations of all three)?

Can we develop a structured way of best presenting information, in different contexts?

How do we tackle the potential problems of duplication, irrelevant information and excessive time taken when combining information at handover between different teams (e.g. nursing and doctors)?

How can efficient teamwork training help to avoid such inter-team duplication?

Who needs to be involved in handover? Should everyone be included or just certain groups?

Where is the best place to carry out handover? (e.g. bedside versus other locations)

Do we fully understand the specific characteristics behind different handovers (e.g. bedside handover) and their general benefits and drawbacks?

How does information transfer need to vary for specific contexts (e.g. the bedside vs. handover in specific location)?

Are we trying to do too much in the handover? For example, trying to encompass other issues such as bed management and education? Are these important to be involved in handover or should they be discrete and separate exercises?

How do we enforce the minimum dataset that needs to be transferred between frontline teams, once we have decided upon it?

Do different handovers under (e.g. ward based or discipline based) need different techniques surrounding the practice of clinical handover?

If so, do different techniques work better under certain circumstances?

Responsibility/Accountability

Who should be handing over to whom?

How do we discover if Nurse X hands over appropriately to Dr. Y – does it happen? What's the gap and how do we fill it?

Who should be accountable to whom?

Who is responsible to whom?

What are the accountabilities which are necessary for a good handover?

How are responsibility and accountability best dealt with in teams?

How can we best research team factors, considering that handover between teams is different from handover within teams (in terms of responsibilities and other cultural factors)?

Who is responsible / accountable for a private patient in a public hospital?

Who is responsible / accountable for an outlier?

Which professional group feels most responsibility for overseeing handover?

Are there differences between professional group's overall feelings of responsibility to each other and ultimately their patients?

What happens in circumstances when you are responsible and not accountable? How do cultural and individual factors mediate this?

Need to know whether junior staff are accepting responsibility at handover for patients that they do not have clinical skills to manage?

If handover doesn't occur, what is the escalation process?

If the escalation process is inadequate who is responsible to whom for reporting this?

Are accountabilities upheld amongst frontline staff?

Who is responsible for enforcing accountabilities at the shop floor?

How do we identify the reasons behind why issues don't get escalated?

System

What is the organisational system we are looking at surrounding handover?

How does organisational culture impact on communication within each subsystem?

How does the content and nature of handovers fit into overall communication processes and the structure of care?

What actually goes on in handovers? How can we characterise specific variables across handover settings and formats so as to determine what is similar and what is different?

Is nursing handover comparable to medical handover? Are there common elements? Should all handovers be the same in physical location?

Can we attempt to better identify how handovers fit into the wider system of care rather than seeing how the system of care should better incorporate handover?

How can we identify at jurisdictional and national levels where handover is done well?

How do we measure good teamwork and functionality within teams?

How does the functionality of teams impact on the quality of handover? What are the necessary requirements for handover in any team?

How do we measure safety culture within hospitals systems and subsystems?

How does safety culture influence handover? Can improvements in safety culture lead to improvements in handover practice?

What is the relationship between organisational subcultures and handover?

Do we know the best method of communication, i.e. should all handovers always be in quarantined time?

What are the implications of quarantined time, in terms of workforce and financial pressures?

Evaluation

Information

How do we best measure a successful and poor handover?

Exactly what are we measuring? What factors are we looking at when we measure a good handover?

Which process measures are most appropriate / useful?

Which outcome measures are most appropriate / useful?

Is it possible to measure associations between adverse events and improvements to clinical handover?

Can handover be evaluated in simulation?

If you have a good team, does that directly relate to a good outcome or is that dependent on the other variables like patient factors and environment?

Can we use pathways to discover and measure variances against outcomes?

What is a research model that we can use to effectively evaluate what is a good handover? (RCTs and doing comparisons are tricky because of different doctors and other variation. A key problem is trying to get volunteers into the negative arm!)

Responsibility/Accountability

Do other safety-critical industries have evaluation measures for responsibility and accountability that are transferable to healthcare?

How do we evaluate responsibility and accountability:

- Between individual A and individual B
- Between team A and team B
- Within team A and team B

How do we ensure that systems of handover clearly define:

- Who is responsible to whom?
- Who is accountable to whom?
- ...and for what?

What attributes separate those good at following accountabilities and what extent are these attributes trainable, at both the individual and team levels?

What should the responsibility/accountability transfer be when a patient move from acute to community sectors?

Are the lines of accountability clear at all hierarchical levels? If not, what are the issues?

What drives accountabilities within a system (e.g. fear of litigation within upper levels)?

What knowledge currently exists around process/outcome measures for the evaluation of responsibility/accountability?

System

What are we measuring?

What theory is informing what we are doing?

How do changes in handover impact on the outcome of care?

What sort baselines can we measure against?

How do we know if handover is making a difference in terms of effectiveness of care delivery (i.e. a reduction in length of stay)?

How do we know if handover is making a difference in terms of completeness (i.e. did they get a discharge summary)?

What are potential outcome measures? Can we use adverse events as a measure?

Do different health systems measure handover in different ways?

Are there demonstrably different contexts of care impacting on the handover process?

How do different geographical contexts of care affect evaluation?

How do we best to assess culture within an organisation?

How do we better understand issues of sustainability, generalisability and transferability?

Can we link culture to outcomes as has been done in other industries but not health?

How do changes in practice impact on patient care?

What is the best means of establishing a baseline to measure handover against?

How can we measure that a reduction in adverse events is attributable to handover?

Can we assess handover using simulation? What are the best methods to do this?

Is good teamwork directly linked to good outcomes and how do other patient/environmental factors mediate this?

Closing Summary

In summary, the policy section asks how we can coordinate the creation and regulation, across units and jurisdictions, of:

- Standards for care
- Standards for information transfer
- Standards for responsibility/accountability, and,
- Standards for information systems

In summary, the practice section asks how we can determine:

- The most appropriate information
- The most appropriate format
- The most appropriate system of accountability
- The most appropriate individual and team competencies

In summary, the evaluation section asks how we can assess:

- What is a good handover / good team
- How do we best measure these (processes vs. outcomes)
- If simulation is a useful research tool, and,
- Can improvements be linked to better patient care

The Way Forward

Lack of a systematic approach to clinical handover remains a major barrier to improving practice, reducing patient harm and ensuring safe care.

The workshop succeeded in ratifying a research framework. The framework articulates a proposed national approach to identifying the gaps in our knowledge, in the form of a list of research questions within our 3x3 matrix of key variables for handover. In order to best fill these gaps, the research questions now need to be subjected to an explicit scoring system in order to ensure that research is prioritised according to impact (physical, emotional and financial) and research feasibility.

We propose the use of a Delphi technique with workshop participants to further develop, prioritise and ratify research questions.⁷ Details of how, and over what time frame, this will be operationalised will be determined by the CRE-PS team.

References

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5. Donabedian A. The quality of care - how can it be assessed? *JAMA* 1998; 260: 1743-8.
6. Davies GP HW, McDonald J, Furler J, Harris E, Harris. . Developments in Australian general practice 2000–2002: what did these contribute to a well functioning and comprehensive Primary Health Care System? *Aust NZ Health Policy* 2006; 3(1).
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Appendix A: Seminar Programme

Clinical Handover Seminar

Friday 23rd February 2007

Mercure Hotel, Brisbane

PROGRAM

08:30 Registration

09:00 Dr John Wakefield: Queensland Health: Opening address.

09:10 Associate Professor Ian Scott: Setting the scene- do we need handover?

09:30 Ms Karen Gibson: Improving transition from hospital to community: handing over key clinical facts.

09:50 Professor Peter Cameron: What is handover? What are the real issues?

10:00 Morning tea

Session 1: Health system approach Facilitator: Professor Peter Cameron

10:30 Dr John Wakefield: Queensland's initiatives to improve clinical handover.

10:50 Dr Annie Moulden: Victoria's initiatives to improve clinical handover.

11:10 Dr Annette Pantle: New South Wales' initiatives to improve handover.

11:30 Dr Christine Jorm: Australian Commission on Safety and Quality in Healthcare – building handover tools and knowledge with the WHO Patient Safety Alliance.

11:50 Questions to Health System speakers.

12:05 Lunch

Session 2: Health services approach Facilitator: Dr John Wakefield

13:00 Professor David Watters: Using IT to assist in handover.

13:30 Ms Linda Hardy: Improving handover using a multi-pronged approach.

14:00 Dr Kim Hill: Enhancing clinical communication between clinicians.

14:30 Ms Jenny Rodwell: Improving patient safety and consumer engagement through a new clinical handover procedure.

15:00 Afternoon tea

Session 3: Future directions Facilitator: Professor Joe Ibrahim

15:30 Ms Jennie McKay: Streamlining medication management into the community.

16:00 Professor Penny Sanderson: Designing practical systems to improve information transfer.

16:20 Panel discussion: Moving beyond projects- sustaining and spreading achievements. Do we know enough to make significant change?

16:45 Close.

SPEAKER DETAILS

Dr John Wakefield: Senior Director, Queensland Health Patient Safety Centre.

Associate Professor Ian Scott: Director, Internal Medicine; Director, Clinical Services Evaluation Unit Princess Alexandra Hospital; and

Associate Professor of Medicine, University of Queensland.

Ms Karen Gibson: General Manager, Project Coordination National E-Health Transition Authority (NEHTA).

Professor Peter Cameron: Director, NHMRC CRE in Patient Safety; Emergency Physician, Alfred Trauma Centre; Head, Victorian State Trauma Registry.

Dr Christine Jorm: Senior Medical Advisor, Australian Commission on Safety and Quality in Health Care.

Dr Annie Moulden: Paediatrician and Director, Quality and Safety, Royal Children's Hospital, Melbourne; Clinical champion, Victorian Quality Council Clinical Handover project.

Professor Joseph Ibrahim: Associate Director, NHMRC CRE in Patient Safety; Foundation Professor and Director, Aged Care Medicine, Peninsula Health; Clinical Liaison Officer, State Coroners Office and Victorian Institute for Forensic Medicine.

Dr Annette Pantle: Director, Clinical Practice Improvement, Clinical Excellence Commission, NSW.

Professor David Watters: Professor of Surgery, University of Melbourne; Director of Surgery, Barwon Health.

Professor Penny Sanderson: Professor of Cognitive Engineering and Human Factors, The University of Queensland.

Ms Linda Hardy: Nursing Director, Medical Business Unit, Ipswich Hospital.

Dr Kim Hill: Director, Clinical Governance, Hunter New England Health, NSW.

Ms Jenny Rodwell: A/Quality Risk Manager, Coffs Harbour Base Hospital, NSW.

Ms Jennie McKay: Senior Clinical Pharmacist, electronic Liaison Medication System (eLMS), Safe Medication Practice Unit, Queensland Health.

Appendix B: Workshop Programme

*Clinical Handover Workshop
Saturday 24th February 2007
Mercure Hotel, Brisbane*

WORKSHOP OUTLINE

TIME	CONTENT	FACILITATOR/SPEAKER
08:30	Registration (with coffee/pastries)	
08:45	Welcome	Dr Christine Jorm
	Introduction / Objectives of workshop	Prof Joe Ibrahim
	Handovers and patient deaths: What's the evidence of a problem?	Prof Joe Ibrahim
09:05	What would happen if there was no handover today, tomorrow, next week?	Prof Joe Ibrahim
09:20	Background National & State Initiatives ASQHC workshop '05, ARCHI Seminar '04, VQC workshop '06, WHO '07	Dr Christine Jorm & Bryce Cassin
09:30	Current gaps in knowledge (10 mins) What are the key issues? (from delegates) Which are the most important for research? (from delegates)	Dr Sue Evans & Prof Joe Ibrahim
10:00	Delegates review ACSQHC workshop themes: are they still relevant?	Prof Joe Ibrahim & Dr Sue Evans
10:20	MORNING TEA	
10:35	Developing the research framework - key principles (from delegates)	Prof Peter Cameron
11:05	Exploring New Ideas Resilience through handover - Dr. Shelly Jeffcott (10 mins)	Dr Shelly Jeffcott & Prof Joe Ibrahim
11:35	Research methods Research challenges in clinical handover - Dr. Georgiana Chin (10mins)	Dr Georgiana Chin & Prof Joe Ibrahim
12:05	Developing specific research questions within the framework (the research agenda) - defining the research questions (from delegates)	Prof Joe Ibrahim
12:45	Next steps: research prioritisation	Prof Joe Ibrahim
12:55	Thanks and closing of workshop	Prof Peter Cameron

Appendix C: Workshop Participants

Associate Professor Robert Adams, Respiratory Consultant, SA Department of Health

Associate Professor Gillian Bishop, Director ICU, Campbelltown, Sydney, South West Area Health Service

Professor Peter Cameron, Director Centre of Research Excellence in Patient Safety, Monash University, Melbourne

Mr Bryce Cassin, Manager Clinical Safety and Quality Projects, Australian Commission on Safety and Quality in Health Care

Dr Georgiana Chin, PhD scholar, NHMRC CRE in Patient Safety

Dr Sue Evans Executive Officer /Senior Research Fellow, Centre of Research Excellence in Patient Safety

Dr Kim Hill, Director Clinical Governance, Hunter New England Health, NSW

Professor Joseph Ibrahim, Associate Director Centre of Research Excellence in Patient Safety

Dr Shelly Jeffcott, Senior Research Fellow, Centre of Research Excellence in Patient Safety

Dr Christine Jorm, Senior Medical Advisor, Australian Commission on Safety and Quality in Health

Dr Peter Lim, AMA representative, Australian Medical Association

Dr Roderick McRae, AMA representative, Australian Medical Association

Dr Annette Pantle Director, Clinical Practice Improvement Projects, Clinical Excellence Commission

Mrs Christy Pirone, Principal Consultant, Safety and Quality SA Department of Health

Dr Brian Richards, Principal Medical Advisor, Department of Health and Ageing

Professor Penny Sanderson, Professor of Cognitive Engineering and Human Factors, The University of Queensland

Associate Professor Ian Scott Director, Clinical Services Evaluation Unit Clinical Service Evaluation Unit, Princess Alexandra Hospital, Brisbane

Dr Duncan Stuart, Deputy Executive and Director of Medical Services, Royal Brisbane and Women's Hospital

Dr John Wakefield, Senior Director, QLD Health Patient Safety Centre

Dr Bernadette Watson, Lecturer, The University of Queensland, School of Psychology

Professor David Watters, Professor of Surgery, University of Melbourne

Ms Maureen Wilson, Manager, Victorian Quality Council

Miss Ming Chow Wong, PhD scholar, School of Information Systems, University of Tasmania

Dr Kwang Chien Yee, Medical Registrar, University of Tasmania, Faculty of Commerce