Transferring Clients Safely: Know Your Client and Know Your Team

College of Nurses of Ontario

Transfer of Accountability
Knowledge Translation
Project Report

in partnership with the
Ontario College of Pharmacists
and
College of Physicians and Surgeons

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<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>3</td>
</tr>
<tr>
<td>Phase 1 – Background and Literature Review</td>
<td>3</td>
</tr>
<tr>
<td>Accountability</td>
<td>4</td>
</tr>
<tr>
<td>Handover</td>
<td>4</td>
</tr>
<tr>
<td>Communication</td>
<td>5</td>
</tr>
<tr>
<td>Guidelines and Policy</td>
<td>5</td>
</tr>
<tr>
<td>Clients and Families</td>
<td>6</td>
</tr>
<tr>
<td>Summary of the Literature</td>
<td>6</td>
</tr>
<tr>
<td>Phase 2 – Data Collection and Analysis</td>
<td>7</td>
</tr>
<tr>
<td>Workshop</td>
<td>7</td>
</tr>
<tr>
<td>Method and Sample</td>
<td>7</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>8</td>
</tr>
<tr>
<td>Findings</td>
<td>8</td>
</tr>
<tr>
<td>Theme 1: Client and Provider Focused</td>
<td>8</td>
</tr>
<tr>
<td>Theme 2: Structured Flexibility</td>
<td>10</td>
</tr>
<tr>
<td>Theme 3: Independent Collaboration</td>
<td>11</td>
</tr>
<tr>
<td>Summary of Findings</td>
<td>11</td>
</tr>
<tr>
<td>Phase 3 – Validation of Findings and Implications for Regulatory Framework</td>
<td>12</td>
</tr>
<tr>
<td>Transfer Principles</td>
<td>12</td>
</tr>
<tr>
<td>Conclusion and Recommendations</td>
<td>13</td>
</tr>
<tr>
<td>References</td>
<td>15</td>
</tr>
<tr>
<td>Appendix A</td>
<td>18</td>
</tr>
<tr>
<td>Appendix B</td>
<td>65</td>
</tr>
</tbody>
</table>
Transfer of Accountability

Introduction

In January 2008, the College of Nurses of Ontario (CNO) conducted the Transfer of Accountability Knowledge Translation Fellowship (KTF) project to gain insight into the challenges of transferring client care among multiple health care professionals and settings, and to identify any associated regulatory implications. A client handover or transition in care from one provider to another involves the transfer of information, primary responsibility, and authority between providers. Handovers take place in the context of numerous client care activities and settings, including staff handoffs and shift changes, before and after procedures and at discharge home or to another institution. Despite the reality that many clients are discharged from health care settings quicker and sicker, requiring complex treatment protocols from multiple providers across multiple settings, little attention has been paid to understanding effective mechanisms for transferring information at interface points or to potential regulatory implications. Further, while nurses play a major role in transfer of accountability at these boundaries of care, other health care practitioners are also involved in handover activities. Indeed, an increasing emphasis on interprofessional care and collaboration supports examining these processes with colleagues from other professions.

The KTF consisted of three phases. In Phase 1, the CNO Outreach Consultants, several CNO managers, representatives from the College of Physicians and Surgeons of Ontario and the Ontario College of Pharmacists, and employees from St. Michael’s Hospital and Sunnybrook Health Sciences participated in a one day workshop where the concept of transfer of accountability was explored and methods to collect information on transfer of accountability from stakeholders were developed. During Phase 2, a series of consultation and data collection activities were conducted by each of the six Outreach Consultants in their relevant practice sectors, CNO management representatives, by pharmacists and physicians, and by health care practitioners at both hospitals. Monthly follow-up teleconferences were also scheduled during this phase. Phase 3 consisted of a full day workshop where the transfer of accountability data was validated and implications for a regulatory framework were explored. Each phase is described below.

Phase 1 – Getting Started

During this phase of the project, the literature was reviewed and a one day workshop was held with the Outreach Consultants and previously cited partners. Findings from the literature review and the workshop content are summarized below.

Phase 1 – Background and Literature Review

Transfer of accountability involves the transfer of rights, duties, and obligations from one person or group of people to another (Solet et al., 2005). The fundamental aim of any handover is to achieve the efficient transfer of high quality clinical information at times of

1 An Outreach Consultant is a nurse with extensive knowledge and practice expertise who provides consultation to a wide variety of stakeholders regarding the application of CNO standards in their practice sector. Outreach Consultants lead sector specific advisory groups that seek to enhance CNO’s knowledge of practice setting realities and application of regulatory standards to practice.
transition of responsibility for clients (British Medical Association Junior Doctors Committee, 2004). Communication at the time of handover should result in a clear understanding by each provider about who is responsible for which aspects of the client’s care (American College of Obstetrics and Gynaecology, 2007). While providers may think they perform handovers well, the evidence suggests major gaps in care occur during these critical exchanges. Due to frequent misunderstandings, errors and lost information, clients experiencing these errors and gaps may have higher rates of unexpected readmission, failure to adhere to care plans, misuse of medication, poor follow-up and potentially negative clinical outcomes (Lingard et al., 2004).

One of the difficulties in researching this topic is the variety of language used. The wide variety of terms made the research literature challenging to search, potentially leading to confusion about the topic. It may be helpful to define two words that are used in the literature to refer to transitions in care: accountability and handover.

**Accountability**
A number of terms are found in a discussion of accountability. Examining the research, there are few studies of accountability in clinical practice. Accountability is complex, closely linked with autonomy and authority. The Oxford dictionary uses responsibility for actions or ability to explain actions to define accountability and autonomy is explained to mean self-governing or having personal freedom.

Accountability is an integral part of professional practice that rests on two concepts, ability and competence. Savage and Moore (2004) recently defined accountability as an elusive and ambiguous term, and provide an important distinction between accountability and responsibility. Accountability is the continuous process of monitoring one’s professional conduct, requires independent thought, involves explaining and justifying actions based on sound professional knowledge and is transparent, logical and replicable decision-making, whereas responsibility traditionally means performing tasks in an accurate and timely way.

**Handover**
The literature reflects a number of terms that are applied to transitions in care. For instance, “handover” or “handoffs” are terms that suggest the transfer of information and knowledge along with authority and responsibility among care providers. Other terms include sign-over, sign-off, sign-out, and rounds (which relate to clinicians transferring care to a covering physician or team for on-call responsibility). Nursing change of shift, shift change, change-over and “giving report” focus more on the exchange of client information (and responsibility) at the end of a given time period or shift and the beginning of the next (Association of Perioperative Registered Nurses, 2007). Even traditional discharges from inpatient services can be considered handovers, to nursing home, family or self-care at home, from specialty to primary care, other agencies or home-assisted care, but with an opportunity to be explicit about the diagnoses, medications, treatment and follow-up plans.

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The literature points to several challenges related to transfer of accountability. Specifically, environmental challenges include interruptions, too much noise during the handover, lack of space, and a variable location for the handover. Additionally, increased client acuity results in stress related to insufficient staff time to complete the client handover (Behara et al., 2005; Benson et al., 2007; Currie, 2001; Solet et al., 2005; Meissner et al., 2007; Singer & Dean, 2006). Further, the ineffectiveness of handovers can result in assessments being repeated, time being wasted and delays or duplication of tests/treatments, delays in surgical intervention, delays in obtaining consents and authorizations, and delays in client disposition and care (Arora et al., 2005; Bomba & Prakash, 2005; Ye et al., 2007). In addition to these challenges, our review of the literature identified three main areas of concern related to transfer of accountability: (1) communication; (2) guidelines and policy; and, (3) clients and families. A summary of each is provided below. The full literature review and annotated bibliography is provided in Appendix 1.

**Communication**

Much of the client safety improvement activity in health care organizations has focused on the question of communication and client handover. For example, the American Joint Commission has mandated a National Patient Safety Goal to standardize handover communication. Internationally, the World Health Organization has identified communication during client handover as one of nine patient safety priority areas. The content of handover is unstructured and varies across specialties and there is little agreement about the required content (Behara et al., 2005; Pothier et al., 2005; Alvarado et al., 2006). Health professionals suggest that the lack consistency and guidelines results in information that may be repetitive, insufficient, inaccurate or incomplete, often speculative and irrelevant to patient care (Apker, Mallak, & Gibson, 2007; Bomba & Prakash, 2005; Currie, 2001; Dowding, 2001; Lingard et al., 2004; McFetridge et al., 2007; O’Connell & Penney, 2001; Sexton, et al., 2004; Singer & Dean, 2006; Ye et al., 2007). A number of structured tools/organizers have been adopted and evaluated by agencies to organize the content of handover and provide sufficient relevant information for health professionals to provide patient care.

**Guidelines and Policy**

Internationally, researchers acknowledge that effective systems and processes ensure accurate communication of information. Yet few organizational policies, guidelines or standards exist around handover (Alvarado et al., 2006; Halasyamani et al., 2006; Horwitz et al., 2006; Sabir, Yentis & Holdcroft, 2006). Further, both the information and the transfer of attending responsibility were rarely documented (Horn, Bell & Moss, 2004). On a national level, the transfer of accountability for nursing professionals has been examined by two Canadian organizations, Hamilton Health Sciences Corporation (Alvarado et al., 2006) and Winnipeg Regional Health Authority (Benson et al., 2007). Both organizations have developed specific agency guidelines for shift report and documentation requirements based on best practices and existing nursing standards. The Hamilton project provided an evidence-based framework to support nursing handover of...
patient care and resulted in the implementation of a standardized approach to transfer of accountability. Guidelines were developed, pilot-tested and evaluated. Ultimately, nursing standards for client safety during transfer of accountability were produced along with a bedside checklist for client safety (Alvarado et al., 2006).

Interestingly, no regulatory frameworks for client handover were located although the UK Royal College of Physicians does have Standards of Good Practice to improve continuity of care (British Medical Association Junior Doctors Committee, 2004). The US-based Association of Perioperative Registered Nurses has modeled a toolkit resource to improve transitions in care within the perioperative environment. The American Geriatrics Society Health Care Systems Committee has developed a position statement to improve the quality of transitional care (Coleman & Boul, 2003). In addition, the Australian Council for Safety and Quality in Health Care (2005) has produced an excellent evidence-based report which outlined how ineffective handovers and medical transitions can lead to wrong treatment, delays in medical diagnosis, life-threatening adverse events, client complaints, increased health care expenditures, increased hospital length of stay and litigation.

Clients and Families
While the literature on handovers focuses mostly on the role of physicians and nurses, clients and their families are also a key to safe transition of care. For instance, several authors note that clients and families are the one constant in the process and can be an important safeguard in care transitions, playing a critical role to ensure continuity of care (Coleman et al., 2006; World Health Organization Collaborating Centre for Patient Safety, 2007). Yet, very little research is available studying the role of clients and family specifically at handover, and that which is available tends to focus on discharge from acute to community care.

An exception is the emerging literature that discusses the effectiveness of using a face-to-face bedside handover which facilitates information exchange between clients, family members and health care providers. In addition, providing written summaries of discharge is an additional way to involve clients and families (Halasyamani et al., 2006).

Summary of the Literature
Overall, while there is a growing literature focused on handover, the existing evidence is primarily at the level of expert opinion/consensus. There is little evidence about transfer of accountability in relation to each professional’s role, the role of interprofessional care teams or that of clients and families. Moreover, the evidence focuses specifically on the transfer of client information, and only briefly mentions the transfer of accountability inherent in the handover process. Finally, our search of the literature did not reveal the existence of standards for transfer of accountability from any health professional regulatory colleges, although the Royal College of Physicians has standards of good practice to improve continuity of care and guidelines were found for physicians on safe clinical handover (British Medical Association Junior Doctors Committee, 2004).
Phase 2 – Data Collection and Analysis

Workshop
This Transfer of Accountability Knowledge Translation Project was designed to gain insight into challenges associated with transferring accountability for client care between multiple health care professionals and settings from individuals who work closest to the process. Accordingly, the project engaged the CNO Outreach Consultants and stakeholders in each sector, partners from two practice settings, and representatives from the regulatory bodies of pharmacy and medicine to develop an understanding of the system strengths and resources, and to make recommendations to enhance performance. To achieve these outcomes, an appreciative inquiry\(^3\) (AI) approach guided data collection was utilized. The one-day workshop introduced the AI process and engaged participants in an AI process to collect and interpret data from each other.

Five generic AI processes were incorporated into the data collection process, including: (1) using the positive as the focus on inquiry; (2) inquiring into exceptionally positive moments; (3) sharing the stories and identifying life-giving forces; (4) creating shared images of a preferred future; and, (5) innovating and improvising ways to create that future. At the workshop, participants interviewed each other about an experience with transfer of accountability using a generic AI interview guide. Participants then joined into groups of six individuals, analyzed the stories, collated themes, and identified potential innovations in processes, roles and relationships. Next, the group as a whole identified organizational processes that could be used to enhance performance, such as work flow, communication and leadership. After the workshop, an interview guide for the project was developed and pilot tested (see Appendix 2).

Method and Sample
In phase 2, the Outreach Consultants and partners used the interview guide developed to conduct in person or telephone interviews with key stakeholders in their respective sectors. Interviews were conducted from stakeholders in 6 of CNO’s identified practice sectors, including: (1) adult acute care; (2) community and public health; (3) paediatrics; (4) mental health and corrections; (5) long-term care, rehabilitation, complex continuing care; and, (6) palliative. In addition, partners from the College of Physicians and Surgeons of Ontario, the Ontario College of Pharmacists, St. Michael’s Hospital and Sunnybrook Health Sciences collected data from respective stakeholders. A series of monthly follow-up teleconferences with a CNO director, several CNO managers and the research partner were conducted during this phase of the project to address any questions and/or concerns with the project.

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\(^3\) Appreciative Inquiry (AI) is a facilitated approach to organizational planning and change that asks, “what is working well around here and how do we build on it?” It’s based on the assumption that in every group or organization, something works well. Developed by David Cooperrider and his colleagues at Case Western University, AI involves the art and practice of asking questions that strengthen a system’s capacity to apprehend, anticipate, and heighten positive potential.
Data Analysis
Content analysis was used to analyze the interview data. Content analysis is a commonly used analytic method for developing an objective and systematic description of the manifest content of qualitative data. The meaning-oriented method was used to explore the data, identify major themes, and link the data with the research questions and objectives.

Findings
A total of 85 interviews were conducted by the CNO Outreach Consultants, managers and interprofessional partners from the College of Physicians and Surgeons of Ontario and the Ontario College of Pharmacists. A wide range of health care providers were interviewed (e.g. nurses, physicians, pharmacists, social workers, pastoral care and clinical nurse specialists) and several individuals relayed personal experience as a family member of someone who had been transferred. Three key themes emerged from the interviews in response to our questions regarding successful client transfers and future vision. We describe each theme here with examples from the “best” transfer experiences.

Theme 1: Client and Provider Focused
This theme speaks to the ways in which successful transfers focus on the needs of clients and their families as well as those of providers. Across all jurisdictions, study participants spoke to the need to ensure the clinical relevance and appropriateness of the transfer as well as including the client and/or family in the transfer decision. Participants indicated that clients are especially vulnerable during times of transfer and that a successful transfer is measured by the degree to which the client is informed and comfortable, the extent to which the family is informed and the degree to which staff are confident they have provided the care their clients and families need. Specifically, study participants spoke to the importance of making sure that the client and their family members understand the reasons for the transfer, that they understand the limitations of the current situation, and what they can expect from health care providers in the “new” environment. As illustrated by this participant, family members play a critical role in ensuring that client information has been shared with and between health care providers, including between nurses at shift change:

Nurse going off shift brought the oncoming nurse to the bedside, introduced her to us and included us in a portion of her report as ID band and fluid levels checked. As a spouse, I had an opportunity to provide input re: limitations and needs. I felt much more confident/comfortable with care provided by on-coming nurse, and my husbands’ needs were better met on that shift – unfortunately the needs and limitations did not seem to be passed on to subsequent shifts. (Acute Care)

In addition, participants told us that transfer from institutional to community care are more likely to be successful when family members are involved in planning and when they have time to obtain required supplies and equipment. This is especially true in the case of pediatric care when family members need to learn new ways of caring for their child, or when family members are entering long-term care.
I want to share my experience of the transfer of my husband from medical floor to long-term care. Nurses on the unit came to meet us prior the transfer. Found out preferences/needs/wants plan of care had been shared ahead of time. Found out areas of chief concern, including the need to give rescue meds quickly when shortness of breath started. Decision to transfer was made based on bed availability and palliative care teams identification that my husband’s needs were not being met on the medical floor. Nurses gave me a tour and showed me what was available and opportunities for me to discuss my role as a contributor to my husband’s care. Were allowed to go out on pre-planned pass and when we returned, even though it was a different team, they knew our story and our preferences. (Long-Term Care)

Study participants also spoke to the importance of meeting the information needs of health care providers during the transfer process. As stated above, successful transfer involves the exchange of comprehensive client information, including the client’s medical history, a summary of the current situation, medications, test results and those pending. Participants spoke to the experience of being confident that they have received accurate, complete and appropriate information from practitioners. In addition, they spoke to the importance of being able to trust the judgment of providers from whom they are receiving the information.

*The positive part of the experience was the verbal report received as well as the phone call prior to transferring the patient to the critical care unit that seemed to help everyone be comfortable with the admission. The RN who took the report was able to ask questions once the patient arrived because they already had that head start in the information about the client before they arrived which allowed time for the RN to use critical thinking and come up with appropriate probing questions. (Acute Care)*

*One emergency department doctor I work with who always does an outstanding job of exchanging information at change of shift – he tries to avoid transfers [between physicians] but if he can’t, he gives great details, tells what he is waiting or looking for and it is all on the chart. This lets you trust his judgment. (College of Physicians and Surgeons)*

Study participants also spoke about the need to respect client confidentiality while at the same time, disclose enough information to meet client and family needs.

*Privacy is sometimes an issue due to value and respect of patient confidentiality and may be barrier as want to encourage exchange of info with transfer, comply with privacy but encourage collaboration. (Community)*

*People needed to stop hiding behind the confidentiality/privacy laws and using it as a barrier to not share information. (Community)*
Theme 2: Structured Flexibility

This theme speaks to the process of transfer of accountability and highlights the tension between the need for well defined structures that contribute to successful transfers and situational flexibility to meet unique client needs. Participants described transfers as a process that is ideally comprised of several stages, including pre-transfer planning, movement of the client, and post transfer follow-up. Successful transfers require in-person reciprocal exchange of client information, including comprehensive data on the client’s history, medications and diagnostic testing results. Moreover, participants spoke about the value of having both a verbal report before receiving the patient so that they could prepare for the client’s arrival, as well as having written documentation to help with the accuracy of the data. In addition, time for pre-planning was also associated with successful client transfer, especially in the community setting and with complex client needs. Respondents also spoke about the need for protected physical space and uninterrupted time in which client information can be exchanged.

The community nurse visited the client in the community and determined that the client needed to be assessed in the emergency department (ED). The community nurse called the ED to provide a verbal report as to why she was sending the client in to the local ED. The nurse also sent written documentation along with the client in the event it was a different nurse assessing the client than she had spoken to on the phone. The client was transferred to ED without the stress of having to relay information from the community nurse to the ED nurse. This written form from the community also provided a detailed list of the correct dosages of medication that the client is currently taking, noting that the labels on the bottle may not have reflected the most recent dosage change by the family doctor who had visited the client at home. (Community)

Respondents also point to the importance of situational flexibility when executing client transfers. Specifically, several respondents spoke to the ways in which health care providers stretched standard operating procedures in order to respond to specific client needs. This was particularly true with respect to the link between institutional and community settings. Participants spoke about transfer situations when additional time was required to address client needs in the community, and the hospital provided supplies and equipment until the resources were available in the community. While, for the most part, the flexibility in organizational polices and procedures was only needed to bridge short resource gaps, respondents indicated that a tremendous sense of good will between providers was generated as a result of this type of collaborative experience.

This palliative care client was being discharged home and was prescribed IV mixture to be administered by an epidural which needed laminar flow compounding and several days to order ingredients. The client was sent home with sufficient meds to cover the gap. This was not official hospital policy; the communication and arrangements were made through the hospital pharmacist. (Ontario College of Pharmacists)
Theme 3: Independent Collaboration

This theme speaks to both the independent and collaborative roles health care practitioners play in relation to successful transfer of accountability. Specifically, participants discussed the importance of knowing their roles and responsibilities in any given situation and of respecting the skills and knowledge of providers from different health care sectors and organizations. As discussed above, the importance of mutual respect is especially relevant when the health care team has to negotiate across multiple boundaries and complex client needs.

My role [as a nurse] in transferring accountability for the client is to make sure that the doctor’s orders are correct, that the charting is up to date, that the time and date is set for transfer and to ensure that the receiving institution knows that the patient is being transferred. (Mental Health and Corrections)

Everyone knew their role well, especially the forensic team. They made it a great experience because the team becomes very fluid with the increased efficiency from each member. (Mental Health and Corrections)

This transfer would have been even better if there was a greater understanding of the role of health workers and parish nurses within the community, including more willing to share health information with client consent. (Long-Term Care)

Participants also identified the importance of collaboration between multiple health care teams and organizations. Collaboration is particularly important in situations of conflicting client goals, changing patient condition, and complex client needs. In addition, several participants suggested that transfers need to be seen as a continuum of care, seamless care, or part of the care journey, rather than independent points at which one kind of care is concluded and another starts.

The individual had mental health issues and the family found it difficult to care for the individual, to the extent that they were neglectful. When this individual presented to emergency room there was a link between the community and acute care case manager which facilitated improved care, including hospitalization until the patient’s case history could be reviewed by the capacity board. Effort to improve care for this person involved partnership of various organizations, including coordinated police and emergency medical services to remove the client from the unsafe environment. While the change in care took a month of planning, it was an extremely positive experience for all involved due to team work and in the end, the client was in a ‘better place’. (Mental Health and Corrections)

Summary of Findings

In summary, participants told us that a transfer, or client handoff, is one of the most vulnerable times for clients and families. To achieve a “successful” transfer of accountability, health care providers need to “know your client, know your team on both sides of the transfer, and know your resources, what you need and how to get it.” In many
cases, successful transfer of accountability is about “who you know”. Transfers need to be timely, provide comprehensive client and family information, be customized to client needs, involve in-person exchange of information and provide opportunities for ongoing dialogue as required. Clients are placed at even more risk when there are many interruptions during the exchange of information, when there are insufficient human resources to conduct the transfer, when the transfer is unplanned and unprepared, when there is a lack of respect between providers and when there is a lack of understanding about issues of client privacy and confidentiality.

During the three months of data collection, participants in the project became aware that many health care settings have protocols for transfer of care in response to Accreditation Canada’s required organizational practices for communication\(^4\). Examples of identified protocols that were either in use or under development included standardized documentation and reporting at shift change, and medication reconciliation at admission, discharge and points of interorganizational transfer.

**Phase 3 – Validation of Findings and Implications for Regulatory Framework**

**Transfer Principles**

Phase 3 consisted of a full day workshop where preliminary findings were validated and implications for a regulatory framework were explored. Participants engaged in conversation about the interviews they conducted, the stories they heard from their stakeholders, and shared initial impressions of the findings. Workshop participants engaged in a discussion about the complexity of client transfers, reaching consensus on the following principles:

1. Transfer of accountability is an ongoing process and part of a care journey.
2. Involvement of the clients and/or family as active participants in transfer decisions and processes is paramount.
3. Transfer of accountability requires systems and processes at point of care.
4. The knowledge and skills required for successful transfer of accountability are consistent across all sectors and health care providers.
5. There is a sense of ownership and sustainability when transfer processes are developed at the local level with staff input.
6. While knowledge and skill are important in transfers of client care, the use of good clinical judgment in the context of each client situation is a key to successful outcomes for clients, families and care providers.

\(^4\) Definition of required organization practices (ROP) and details for the communication practices can be refer to Accreditation Canada’s web page at: [http://www.accreditation-canada.ca/default.aspx?page=355&cat=30](http://www.accreditation-canada.ca/default.aspx?page=355&cat=30)
7. Electronic health records have the potential to revolutionize practice; however, more of these tools are needed, and we need more of them soon.

8. It is easier to transfer clients within systems you know and to people you have worked with before – a different skill set is required in a context that is less familiar.

9. Given the complex and context-specific nature of transfers and the importance of clinical judgment for client safety outcomes, participants responded that the development of a standard of practice and/or standardized guideline from regulatory bodies to support transfer of accountability in all clinical settings is not necessary nor would it likely be meaningful. Instead, there were reports from the participants that they did indeed incorporate existing standards (e.g. Confidentiality and Privacy - Personal Health Information, Documentation, and, Therapeutic Nurse-Client Relationship) and other tools into their transfer activities.

10. Organizations and teams are working together to create context specific tools that they own, can evaluate and modify, as required.

11. Using this type of interprofessional approach to gain further insights into practice setting realities of health care teams is beneficial and supports the need for regulatory bodies to seek input for their products and services.

Conclusion and Recommendations

The goal of the Transfer of Accountability Knowledge Translation Fellowship project was twofold: to gain insight into the practice setting realities for nurses and other health care providers as they manage increasingly complex client care needs across multiple settings and with a wide variety of care providers, and to determine if there are regulatory implications. All regulatory bodies, including CNO, establish expectations through policies, position statements, practice standards, guidelines and/or other documents, for how members do what they do in an effective, safe and ethical manner. This project demonstrated that these expectations provide the basis and support for sound clinical judgment. Furthermore, it illustrated that these expectations support providers in their work to continue to be vigilant in identifying and addressing exceptional client care situations – situations that require innovative approaches to the transfer process.

The literature and study findings alert us to the fact that successful transfer of accountability involves effective communication and collaboration. Examples of positive and successful experiences demonstrated universal features across settings and providers, including the involvement of the client and family in decision making and planning, comprehensive and concise client information, opportunity for questions and follow-up by client and family as well as health care providers, time for planning and availability of staff to execute the transfer, and interprofessional and interorganizational collaboration. At the same time, participants told us that successful client and family outcomes depended...
on the ways in which individual health care providers interact with each other and in groups. In exceptional client care situations, individual providers directed their attention toward real obstacles which had to do with the way group dynamics influenced organizational and political systems and away from transient obstacles, such as temporary lack of resources.

The findings of this project prompted CNO to review its document “Transferring Clients” for relevancy and applicability. As a result of the project, it was determined to retire the document and promote nurses to build on their existing logical and analytical strengths by reviewing current practice standards and practice guidelines that directly influence the process of transfer of accountability.

The following four recommendations are made to support safe client care associated with transfer of accountability:

1. It is recommended that the CNO continue to provide opportunities for nurses and other health professionals to gain insight into each others’ practice environments.

2. It is recommended that CNO continue to support professional accountability through relevant policies, position statements, standards\(^5\), guidelines and/or other documents to which professionals are legally obliged to adhere throughout their career and to encourage their use by members in their maintenance of continuing competence.

3. It is recommended that CNO continue to encourage its members to demonstrate their professional accountability in coming up with innovative responses and strategies to ensure safe transitions in care.

4. It is recommended that CNO continue to identify interprofessional opportunities to gain insight into practice environments through projects of this nature.

\(^5\) Practice standards applicable to transfer of accountability include: Confidentiality and Privacy – Personal Health Information, Documentation, and Therapeutic Nurse-Client Relationship.
References


Appendix A

Executive summary

A literature review was conducted using a variety of electronic databases to search for published literature. Additionally, a brief search of the Internet was conducted to retrieve grey literature, specifically reports.

The wide variety of terms made the research literature challenging to search, potentially leading to confusion about the topic. A brief discussion of terminology describing accountability and transitions in care is provided.

Transitions are interruptions or gaps in continuity of care and present opportunities for errors and threats to patient safety between care providers/teams, between institutions, and all along the continuum of care. The actions to ensure coordination and continuity of health care to patients who move or transfer between different locations or different levels of care within the same location include the transfer of knowledge and information as well as the transfer of professional accountability between health care providers.

The topic is generating international interest with interest and activity from Australia, Canada, New Zealand, the United Kingdom, the United States, Germany and the Netherlands. The Canadian Council on Health Services Accreditation and the Canadian Patient Safety Institute promote the use of effective mechanisms for the transfer of patient information at care transitions. Application of human factors literature and research from high reliability organizations has identified several principles for handover that can be applied to health care. A number of initiatives from a variety of professional groups are actively investigating the topic of handover.

Evidence about handover is emerging with the level of evidence consisting of expert opinion/consensus, several surveys and some formal evaluation studies assessing the results of innovations around handover. Transfer of accountability for patient care is a part of care transition but discussed only briefly in the literature with the focus upon transfer of information. Several issues and solutions are identified according to the research evidence and literature reviews.

Most of the research literature has focused on the transfer of information rather than the transfer of accountability. Very little research is available studying the role of patient and family specifically at handover. Selected literature is more focused upon discharge into the community, often into nursing homes. No nursing standards from regulatory colleges were found although at least two Canadian nursing departments in agencies are developing nursing standards around shift report (Alvarado et al., 2006; Benson et al., 2007).

A few nursing regulatory implications relevant to handover are presented.

Search process and results
A worldwide literature search was conducted using search terms derived from the search profile. The following databases were searched for publications in the English language: PubMed, Ovid Healthstar, CINAHL, ABI/Inform, EMBASE, PsycINFO and the Cochrane Library. The Internet was also searched using scholar.google.com, google.ca and vivissimo.com for English publications. Searching was limited to the year 2000 forward. Subject/MESH headings or keywords, depending upon the database's indexing system, were used to retrieve citations. Articles were retrieved and were screened for relevance to the topic of transfer of accountability. The bibliographies of many articles were checked for further references. In addition, related articles were checked and the bibliographies of relevant articles were manually searched in order to increase the yield.

The search of the Internet produced some grey literature. English language reports, from government and health professional associations in Australia and the United Kingdom yielded valuable information about other country’s experiences. The majority of the literature originates from Australia, the United Kingdom, and the United States. A few Canadian articles were found.

Selections were thoughtfully chosen to include scholarly evidence from research studies and reviews to represent what is happening across the continuum of care. Descriptive articles and editorials that identified issues of concern were excluded. Several reports from other jurisdictions are also included. Most of the selected citations were published in the last three years.

The selected research literature deals mainly with nurses and physicians, within hospital settings such as emergency, critical care, medical-surgical areas and transfers into community settings. Very little literature related to patient and family perspective was found, although some selections do represent patient transfer to the community either home or to another institution. More literature was located with a medical focus, because physicians needed to examine the transfer of information and accountability to address patient safety concerns resulting from reduced clinical shifts and increased numbers of handovers.

**Making sense of the language**

One of the difficulties in researching this topic is the variety of language used. The wide variety of terms made the research literature challenging to search, potentially leading to confusion about the topic. It may be helpful to define a few words that may be used in this report. The terms needing discussion are accountability and transitions in care.

A number of terms are found in a discussion of accountability. Examining the research, there are few studies of accountability in clinical practice. Accountability is complex, closely linked with autonomy and authority. The Oxford dictionary uses responsibility for
actions or able to explain actions to define accountability and autonomy is explained to mean self-governing or having personal freedom,6.

Accountability is an integral part of professional practice, resting on two concepts, ability and competence. It is defined as an elusive and ambiguous term in a recent UK paper (Savage & Moore, 2004). This ethnographic study examined the understanding of accountability within an interdisciplinary team of clinicians working in primary care. The following points summarize the key concepts from the literature and study findings:

- Accountability is the continuous process of monitoring one’s professional conduct, requires independent thought, involves explaining and justifying actions based on sound professional knowledge and is transparent, logical and replicable decision-making while responsibility traditionally means performing tasks in an accurate and timely way through delegation.
- Accountability is a consequence of autonomy; authority is the legitimate power to fulfill a charge of responsibility.
- Authority and responsibility are seen as prerequisites of autonomy and accountability.
- Authority and responsibility may be interdependent with more accountability expected of those with greater authority.

Further, a number of terms are applied to transitions in care, differing by discipline (doctor, nurse), region and common usage. “Hand off” or “handover” are terms that suggest the transfer of information and knowledge along with authority and responsibility among care providers. Other terms encountered include sign-over, sign-off, sign-out, check-out, rounds (which relate to clinicians transferring care to a covering physician or team for on-call responsibility). Nursing change of shift, shift change, change-over, “giving report” focus more on the exchange of patient information (and responsibility) at the end of a given time period or shift and the beginning of the next (AORN, 2007). Even traditional discharges from inpatient services can be considered handovers, to nursing home, family or self-care at home, from specialty to primary care, other agencies or home-assisted care, but with an opportunity to be explicit about the diagnoses, medications and both treatment and follow-up plans. For the purpose of this report, the term handover will be used.

Introduction
Patients can encounter health professionals in a wide variety of settings, with potentially many transition points for communication of patient information. A handover, or patient transition in care from one provider to another, involves the transfer of information, primary responsibility, and authority between providers. Handovers take place in multiple activities and locations, in hospital and community, such as on admission, during shift and unit changes, before and after procedures and at discharge home or to another institution. Types of handover identified were nursing shift change, physician transferring complete

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or on-call responsibility, anesthesia to PACU nurse, emergency/ICU to inpatient units, hospital discharge to community (home or other institution).

Transitions are interruptions or gaps in continuity of care and present opportunities for errors and threats to patient safety between care providers/teams, between institutions, and all along the continuum of care. The actions to ensure coordination and continuity of health care to patients who move or transfer between different locations or different levels of care within the same location include the transfer of knowledge and information as well as the transfer of professional accountability between health care providers. Most of the research literature has focused on the transfer of information rather than the transfer of accountability.

Inadequate communication between care providers or between care providers and patients/families is consistently the main root cause of sentinel events with at least half of communication breakdowns taking place during handovers (Alvarado et al., 2006; AORN, 2007). Further, a majority of avoidable adverse events are due to the lack of effective communication (i.e. lost information, misinterpretation, and misdirected or missed actions (Solet et al., 2005). Information that transfers between practitioners about patient care is becoming recognized as an important consideration in improving patient safety, workflow and quality care (Australian Council for Safety and Quality in Health Care, 2005).

Handovers involve the transfer of rights, duties, and obligations from one person or group of people to another (Solet et al., 2005). The fundamental aim of any handover is to achieve the efficient transfer of high quality clinical information at times of transition of responsibility for patients (British Medical Association Junior Doctors Committee, 2004). Communication at the time of handover should result in a clear understanding by each provider about who is responsible for which aspects of the patient’s care (ACOG Committee on Patient Safety and Quality Improvement, 2007).

Providers may think they perform handovers well, but the evidence suggests major gaps in care occur during these critical exchanges. Due to frequent misunderstandings, errors and lost information, patients experiencing these errors and gaps may have higher rates of unexpected readmission, failure to adhere to care plans, misuse of medication, poor follow-up and potentially bad clinical outcomes (Lingard et al., 2004).

Activity in other jurisdictions

The patient safety movement has prompted considerable worldwide activity in health care. Organizations account for much of the activity studying patient handover. For example, the American Joint Commission has mandated a National Patient Safety Goal to standardize handover communication. Internationally, the World Health Organization has identified communication during patient handover as one of nine patient safety priority areas. Australia, Canada, New Zealand, the United Kingdom, the United States, Germany and the Netherlands all participate as international learning laboratories testing patient safety solutions involving handoffs. In Canada, both the Canadian Council on Health Services Accreditation and the Canadian Patient Safety Institute promote the use of
effective mechanisms for the transfer of patient information at care transitions (Alvarado et al., 2006).

At the same time, there has been interest from various health professional groups. The Australian Medical Association (2006), and the British Medical Association Junior Doctors Committee, (2004) published guidelines on clinical handover for clinicians and managers. The American College of Obstetricians and Gynecologists have developed a committee opinion on communication strategies. Interestingly, no specific professional standards for patient handover were located although the UK Royal College of Physicians does have Standards of Good Practice to improve continuity of care (British Medical Association, Junior Doctors Committee, 2004). The US-based Association of periOperative Registered Nurses (AORN) has modeled a toolkit resource to improve transitions in care within the perioperative environment. The American Geriatrics Society Health Care Systems Committee has developed a position statement to improve the quality of transitional care (Coleman & Boult, 2003). Written from a managed care perspective, Coleman, Fox & the HMO Care Management Workgroup (2004) address issues common to any setting, not just the HMO and include recommendations for actions to improve quality of patient care during transitions.

The Australian Council for Safety and Quality in Health Care (2005) produced an excellent evidence-based analysis. This report substantiated and referenced the harm produced by ineffective handovers and medical transitions, stating that ineffective handover can lead to wrong treatment, delays in medical diagnosis, life-threatening adverse events, patient complaints, increased health care expenditures, increased hospital length of stay, even litigation. Unfortunately, this review did not identify specific best practices for handovers, emphasizing the need for future quality research. The committee did categorize the scientific studies into system factors, organizational/cultural factors and individual factors. s

Table 1: System, Organizational/Cultural, and Individual Factors

System Factors

- Multidisciplinary decision making on rounds reduced medical error.
- Continuity providers were more accurate and safer than on-call team providers.
- Staffing levels may affect quality of handoffs.
- Research should be designed to evaluate and measure clinical handovers relative to patient quality and safety.

Organizational/Cultural Factors

- Communication consists of four elements:
  - sender
  - message
  - receiver
feedback

- Organizational attitudes and behavioral norms affect teamwork.
- Hiring practices should include communication skills.
- Processes should be determined for structured minimum level of information required for hand off.
- Verbal AND written information should be used for hand offs.
- A continuous improvement model, with an empowerment culture, will drive innovations with care transition improvements.
- Systems should be in place to provide accurate information when cross-covering teams are providing emergency care.

**Individual Factors**

- Competent practitioners should be recruited.
- Organizations should promote training and learning for staff members.
- Minimum information sets should be determined and staff members should be held accountable for following clear protocols.
- Training should be provided to increase individual skill level for hand-off communication.
- Clinician knowledge deficits should be corrected.

Handovers have not been studied or engineered in health care to the extent that they have been researched and refined in High Reliability Organizations (HROs). HROs such as the nuclear power industry, aviation cockpits and air traffic control, Navy carrier flight decks and space shuttle mission control have developed, studied and formalized effective methods for safe transitions (i.e. handovers) in operations. These approaches have included effective team communication tools and strategies that have become part of their organizational cultures (AORN, 2007; Patterson et al., 2004).

These methods are based on a deep knowledge of human factors and engineering design for safety. HROs acknowledge human fallibility, system complexity, ambiguity and uncertainty, limitations of individuals in learning, training and attention, continuity gaps, negative impact of fatigue on human performance, dynamic conditions, difficult decision making under time constraints and numerous system vulnerabilities. Health care organizations are now integrating successful lessons from these HROs to design safer systems for patients (AORN, 2007).

Three different groups reviewed handover methods used in organizations where lapses in transitions can have serious consequences. (Patterson et al., 2004 and Behara et al., 2005 reviewed the fields of nuclear power, space shuttle mission control, railroad dispatching, ambulance dispatching; Catchpole et al., 2007 examined aviation and motor car racing) Twenty-one handover strategies found in multiple sources in data were examined. Techniques included verbal, face-to-face, and interactive questioning coordinated with written summaries just prior to shift change. The wide variability of handovers across health care systems creates challenges not seen in industrial settings. Problems identified
by the authors for health include timing-schedules, limited information technology system support, indistinct responsibility transfers and the potential tradeoff between effectiveness and efficiency. (Patterson et al., 2004).

Of 21 strategies identified by Patterson et al., (2004), there were several inferred objectives: to enhance handover effectiveness, to improve efficiency and effectiveness; increase access to data, to improve coordination with others, and enable error detection and recovery. Strategies that were found to work in an Emergency Department consistently include, (as presented in Behara et al., 2005):

- Face-to-face verbal updates with interactive questioning
- Delay handover when concerned about status or stability of process
- Topics initiated by oncoming as well as outgoing
- Limit initiation of operator actions during update (wait until after hand off)
-Incoming assesses current status
- Updates provided in consistent order every time
- Offgoing has knowledge of previous shift activities
- Handover includes offgoing’s contingency plans, stance towards changes in plans.

Strategies that were used occasionally in an Emergency Department occasionally include (as presented in Behara et al., 2005):

- Offgoing oversees oncoming’s work following update
- Unambiguous transfer of responsibility
- Overhear others’ updates
- Additional update from practitioners other than the offgoing

Strategies that were never used in the Emergency Department include (as presented in Behara et al., 2005):

- Limited interruptions during handover
- Offgoing writes summary before handover
- Incoming scans historical data before handover
- Incoming reviews captured sensor-derived data before handover
- Intermittent monitoring of systems status while “off”
- Incoming receives primary access to most up-to-date information
- Incoming receives paperwork including handwritten annotations
- Readback to ensure understanding
- Others are clear about which party is responsible for which duties at a given time

Use of some of these strategies may differ according to discipline and according to specialty. For example, in nursing, unambiguous transfer of responsibility consistently occurs with handover regardless of specialty unit in most models of nursing care; readback is used by nurses in many situations, limited interruptions during nursing...
Transferring Clients Safely

4/29/2009

25

handover can vary dependent upon circumstances. Incoming scans of historical data may be impractical in many situations where a hard copy or lack of computer access is available (AORN, 2007; Behara et al., 2005).

Issues and proposed solutions

Evidence about handover is emerging. There is not a great deal of quality research studying handover in clinical settings. The performance and function of shift handovers in health care is a widely neglected topic in practice and research (Meissner et al., 2007). The level of evidence is low, consisting of expert opinion/consensus and several descriptive/survey studies (WHO Collaborating Centre for Patient Safety Solutions, 2007). Many of the studies are small and present quantitative self reported data. Accounts of handover tend to be descriptive and lack critical depth (Manias & Street, 2000). The literature also includes formal evaluation studies that assess the results and impact of the implementation of specific projects (Alvarado et al., 2006; Fenton, 2006; Catchpole et al., 2007). These studies examine system issues because of the agency emphasis to respond to patient safety priorities and accreditation requirements.

Transfer of accountability for patient care is a part of care transition but discussed only briefly in the literature. For example, it is found in editorials, commentaries, and discussions about patient handover more often than in research literature. Yet, as information about the patient is handed over, so too is professional responsibility for the patient. Transfer of accountability in most nursing models of care, occurs with shift report, at the time or close to the time of the transfer of information (Arora & Johnson, 2006; Strople & Ottani, 2006). The transfer is transparent and easily understood.

Various researchers have studied care transitions from the perspective of nurses and physicians. Research in hospitals has concentrated upon specific units: Emergency, intensive care, peri-operative areas, likely because these are fast-paced areas experiencing high patient turnover. Whether the handover occurred at shift change or as a transfer of care to another area, there is great agreement about the issues. While the handover process is highly variable and specialty-specific, both nurses and physicians identified similar concerns (Behara et al., 2005; British Medical Association Junior Doctors Committee, 2004).

Inadequate research has been conducted looking at handover. Handover involves both the transfer of information and the transfer of accountability, but the focus in published research is on transfer of information. Much of the nursing literature completed in the 1980s and 1990s, described shift report. Most reports were anecdotal, suggesting changes to improve shift report or describing content (Dowding, 2001). There is an assumption in the literature that without the information communicated during the shift report, an individual nurse’s ability to assess patient status and plan care is compromised (Dowding, 2001).
One large multi-site observational study focused on physician and nurse shift change transitions from five different emergency departments in the US and Canada. All five hospitals, reported that physicians and nurses consistently performed handovers separately, not as a team, using no formal tools. There was a consistent order to discuss patients and all handovers were interactive with an opportunity for questions and clarification. Physicians seldom used the health record for handover although nurses sometimes did. Handovers expanded and contracted according to the number of patients, emergencies or other pressing situations needing immediate attention. All sites experienced frequent interruptions during handover. There was wide variability in how Emergency staff conducted handovers. (Behara et al.,2005). This research has helped to advance the understanding of handover and frames the issues.

The great dilemma for handover is the tradeoff between effectiveness and efficiency. Individuals and organizations have a shared responsibility to ensure safe continuity of information and responsibility (British Medical Association Junior Doctors Committee, 2004). Quality care must integrate the concepts of effectiveness and efficiency. Staying within an allotted time frame for handover can be difficult. Because of the high patient acuity in hospitals and the complexity of patient care, report can exceed the time available and decrease staff time for patient care (Strople & Ottani, 2006).

Internationally, researchers acknowledge that effective systems and processes ensure accurate communication of information. Yet, few if any written agency policies, guidelines or standards, exist around handover. (Alvarado et al., 2006; Halasyamani et al., 2006; Horwitz et al., 2006; Sabir, Yentis & Holdcroft, 2006). Policies, guidelines and standards clarify how and when transfer of responsibility occurs e.g. at shift report for nurses. Further, both the information and the transfer of attending responsibility were rarely documented (Horn, Bell & Moss, 2004). While several authors conducted national surveys that identified the lack of written polices, guidelines or standards, the transfer of accountability for nursing professionals has been examined by two Canadian organizations. Hamilton Health Sciences Corporation (Alvarado et al., 2006) and Winnipeg Regional Health Authority (Benson et al., 2007) have developed specific agency guidelines for shift report and implemented a variety of documentation based on evidence and existing nursing standards. The Hamilton project provided an evidence-based framework to support nursing handover of patient care and resulted in the implementation of a standardized approach to transfer of accountability. Guidelines were developed, pilot-tested and evaluated. Ultimately, nursing standards for patient safety during transfer of accountability were produced along with a bedside checklist for patient safety (Alvarado et al., 2006). The Winnipeg project has an evaluation planned. Yet another example in the research is the use of standardized, written discharge checklists for elderly patients in the US. These checklists have improved handover of care from inpatient to posthospital settings through the development of content and process standards for discharge (Halasyamani et al., 2006).

Several national surveys conducted in the United States, New Zealand, and the United Kingdom inquired about handover education in various medical programs. Minimal formal instruction or ongoing training on handover skills was provided (Arora et al., 2005;
Horwitz, et al., 2006; McCann, McHardy & Child., 2007; Sabir, Yentis & Holdcroft, 2006; Sinha et al., 2007; Solet et al., 2005). It does not appear to be any different for the nursing profession. Kerr, 2002, reported that student nurses and new graduate nurses learned handover by observing others, describing the process as part of the nurses’ enculturation into the profession. McMaster University School of Nursing is exploring ways to introduce transfer of accountability/handover education into their curriculum (Alvarado et al., 2006).

The format of shift report varies greatly. A recent national survey of Canadian handover practices reports that verbal handovers at nursing shift change occur 50% of the time, taped handovers occur 30% of the time, written handovers occur 10% of time and 10% of handovers are voicemail, whiteboard or electronic (Benson et al., 2007). Interestingly, verbal handovers are the most used method in Canada yet continue to raise concerns. An experimental study reported that nurses wrote down less than half of the information provided during the course of a verbal report and that recall of verbal report data was limited to 27% (Dowding, 2001). Taped reports, similar to verbal reports can lack accuracy and timeliness with little interaction or clarification possible (Kerr, 2002). Very little research has been conducted into the written report or voicemail, whiteboard or electronic report (Dowding, 2001; Strople & Ottani, 2007). In short, it is unclear which format for nursing shift report works best. Studies have inconsistent results. In one nursing study, face-to-face handover at the bedside with a limited professional exchange to communicate sensitive and confidential information was most effective (O’Connell & Penney, 2001). Two other studies using simulated patients found that a combination of a written report using a standardized form or checklist with a verbal handover is most effective, almost entirely eliminating loss of patient information (Pothier, et al., 2005; Bhabra, et al., 2007).

Additionally, the content of handover is unstructured and varies across specialties. (Behara et al., 2005; Pothier et al., 2005; Alvarado et al., 2006). There is little agreement about what the content should be. Health professionals describe that handover lacks consistency and guidelines, resulting in information that may be repetitive, insufficient, inaccurate or incomplete, often speculative and irrelevant to patient care (Apker, Mallak, & Gibson, 2007; Bomba & Prakash, 2005; Currie, 2001; Dowding, 2001; Lingard et al., 2004; McFetridge et al., 2007; O’Connell & Penney, 2001; Sexton, et al., 2004; Singer & Dean, 2006; Ye et al., 2007). A number of structured tools/organizers have been adopted and evaluated by agencies to organize the content of handover and provide sufficient relevant information for health professionals to provide patient care. The use of checklists, protocols and guides optimized communication, increased accuracy and currency of information, minimized omissions and matched the plan of patient care that promoting patient safety (Alvarado et al., 2006; AORN, 2007; Arora & Johnson, 2006; Benson et al., 2007; Catchpole et al., 2007; Fenton, 2006; Solet et al., 2005). Several authors recommend using amnemonic aid to transfer of information. A variety of tools were discussed: CUBAN (Currie, 2001), JUMP (McCann, McHardy & Child, 2007); I PASS the BATON I-SBAR, PACE, 5 Ps (AORN, 2007); PEDIATRIC (Arora & Johnson, 2006). What tool is chosen probably is not the issue, just that a tool provides structure to communication at handover. Some authors recommended using technical support such as
electronic methods to standardize communication and to assist health professionals in transferring accurate patient information available from the health record (AORN, 2007; Cheah et al., 2005; Strople & Ottani, 2006). A highly recommended communication strategy to improve the reliability of information exchange and used particularly around critical actions, medication doses and urgent actions is readback/ hearback/ repeatback (AORN, 2007; Brown, 2004; Patterson et al., 2004).

Similarly, many studies identified environmental problems with handover. Concerns raised include the following: too many interruptions, too much noise during the handover, lack of space, and a variable location for the handover. Additionally, increased patient acuity produced stress in staff about not having enough time for the handover (Behara et al., 2005; Benson et al., 2007; Currie, 2001; Solet et al., 2005; Meissner, et al., 2007; Singer & Dean, 2006). Further, the ineffectiveness of handovers resulted in assessments being repeated, time being wasted and delays or duplication of tests/treatments, delays in surgical intervention, delays in obtaining consents and authorizations, delays in patient disposition and patient care (Arora et al., 2005; Bomba & Prakash, 2005; Ye et al., 2007). Environmental issues can be addressed in written agency policies (Benson et al., 2007). Establishing that handovers occur in a quiet area, free of distractions and interruptions ensures patient confidentiality supports the communication process (Singer & Dean, 2006).

Furthermore, handover is not patient centered; the focus is on tasks completed rather than a prospective plan of care (Dowding, 2001; Manias & Street, 2000; O’Connell & Penney, 2001). Using a face-to-face bedside handover is inclusive allowing the patient to participate. Confidentiality may be an issue to consider although such issues could be handled at a different time and location (O’Connell & Penney, 2001). Providing written summaries of discharge is an additional way to involve patients and families (Halasyamani et al., 2006).

The transfer of timely and accurate information across settings is critical to the execution of effective care transitions. Discharge, as a type of handover, has been well studied as a transition in care (Greenwald, Denham & Jack, 2007). Practitioners need to shift their mindset from the concept of a patient discharge to that of a patient transfer to achieve seamless continuity of care. While health professionals and agencies recognize the importance of transferring appropriate, accurate and concise discharge information, several reviews identify deficiencies in information transfer that affect the quality and continuity of care which adversely affect patient care (Greenwald, Denham & Jack, 2007; Kripalani et al., 2007; Payne et al., 2002). More often than not, incomplete and sometimes incorrect information, particularly regarding medications and test results is sent into the community, or, the written discharge summary arrives to community providers long after follow-up in the community occurs. Patient care planning is definitely impacted.

Role of patient and family

While handovers are mostly about physicians and nurse, patients and their families are also a key element. Several authors comment that patients and families are the one
constant in the process and can be an important safeguard in care transitions, playing a critical role to ensure continuity of care (Coleman et al., 2006; WHO Collaborating Centre for Patient Safety, 2007). Yet, very little research is available studying the role of patient and family specifically at handover. Selected literature is more focused upon discharge into the community, often into nursing homes.

Providing a written, understandable discharge summary to each patient at the time of discharge encourages patient participation in decision making. Patients and families who do not have enough or the right information, cannot be active participants in their care (Greenwald, Denham & Jack, 2007).

The US Care Transitions Project, under Dr. Eric Coleman is studying ways to reduce health care fragmentation for older adults. This group focused upon patient and family preparation, developing interventions and simple tools such as coaching and a measure to evaluate the quality of patient care transitions. Patients taught about medications and treatment, and given skills and tools to communicate relevant information with caregivers improved their continuity of care and avoided readmissions (Coleman, Mahoney & Parry, 2005; Parry et al., 2003; Weinberg et al., 2006). Patients and caregivers experience safer and better quality care transitions when empowered with communications skills to be more knowledgeable and assume more active roles in their own care (Coleman et al., 2006). A validated psychometric measurement, the Care Transitions Measure is available to measure the quality of the transition experience from the patient’s perspective with the goal to improve continuity of care (Coleman et al., 2006).

Patient and family satisfaction improves with increased involvement and information. This may be accomplished with bedside report (Anderson & Mangino, 2006). Another article described how coordination across settings improved patient clinical outcomes and satisfaction with care. This survey of postsurgical patients and their postdischarge care effectively provided information, support and education for patients and families at care transitions, concluding that although health care providers are neither accountable nor supported to coordinate care across the continuum (Parry et al., 2005). The discharge planning literature has repeatedly demonstrated this. Essential elements for discharge planning are communication, coordination, education, patient participation and collaboration between all members of the health care team improve patient satisfaction and quality care (Carroll & Dowling, 2007; Greenwald, Denham & Jack, 2007).

Principles

Based upon human factors literature and research from the HROs (AORN, 2007; Behara et al., 2005; Patterson et al., 2004), the following principles can be applied to health care:

- Interactive communications with questions between giver and receiver of information
- Include up-to-date information regarding care, treatment, services, condition, recent or anticipated changes
• Limit interruptions (information loss)
• Sufficient time allocated to handover process
• Require verification process: repeat-back or read-back as appropriate
• Receiver has opportunity to review relevant historical data, including previous care, treatment, services

Gaps

There is a general lack of quality research about handover, specifically in nursing and what does exist is at a low evidence level of expert opinion/consensus, several surveys and several formal evaluations of innovations. Very little information about the role of the patient and family in handovers is available.

There is no research that addresses transfer of accountability specifically. It is only briefly mentioned in the handover literature as part of the process along with the transfer of information.

There are no nursing standards from any health professional regulatory colleges, although the Royal College of Physicians has standards of good practice to improve continuity of care and guidelines were found for physicians on safe clinical handover (British Medical Association Junior Doctors Committee, 2004; Australian Medical Association, 2006).

Regulatory implications

Regulatory colleges promote excellence in nursing practice and protect the best interests of the public for patient safety. Individual health professionals and organizations share the responsibility to ensure effective communication is at the heart of excellence in patient care. The wide variation in the ways nurses coordinate care through documentation practices makes it difficult to identify uniform and best practices for representing and communicating nursing information. The College of Nurses of Ontario has identified the care planning process as the structuring framework for this work, stating that a dynamic care planning process must be embedded in a rich communication infrastructure. Under the umbrella of patient safety, the importance of communication is recognized internationally. Handover communication by nurses needs to be examined more thoroughly with well designed studies.

Nurses need to have a heightened awareness of the formal passing of information and accountability for patients. Perhaps there should be a requirement for formal education about handover in undergraduate nursing curriculum and for ongoing professional development to upgrade practicing nurses, for example producing workshops, online courses and developing videos. To date, it is not clear if such education exists but, at least one university nursing program is investigating adding such study to undergraduate curriculum (Alvarado et al., 2006).
Both the Australian and the British Medical Association have produced guidelines for clinical handover for physicians which include good practices for handover. No nursing regulatory standards about transfer of accountability were located. The College of Nurses of Ontario has a practice guideline on transferring clients and may provide a starting point to examine nursing transfer of accountability. Hamilton Health Sciences Corporation has developed a process and a transfer of accountability unit standards template for nursing (Alvarado et al., 2006). Winnipeg Regional Health Authority has also embarked upon a process to improve shift handover (Benson et al., 2007).

Perhaps what is needed is a common framework to use in assigning accountability at each step of a standardized process. Such an undertaking may require cross-disciplinary discussions involving other health professional regulatory colleges leading to the need for a joint statement of clarification. This work may be hampered because of the paucity of quality research around transfer of accountability (Savage & Moore, 2004).

The shift in health care institutions to work in teams is forcing a closer look at accountability. The traditional culture in medicine and other health professionals gives emphasis to individual accountability of clinical practitioners. The increasing emphasis upon interdisciplinary teams responsible for patient care has blurred traditional professional role boundaries and reduced the autonomy of health care professionals in an attempt to improve patient safety. As a result, new demands for interdisciplinary functioning with the nurse as a part of the team may conflict with individual accountability and the existing rules set out by regulatory bodies (Amalberti et al., 2005; Carroll & Quijada, 2004). A re-examination of our current perspective on professional autonomy may be useful.
Although debate continues over estimates of the amount of preventable medical harm that occurs in health care, there seems to be a consensus that health care is not as safe and reliable as it might be. It is often assumed that copying and adapting the success stories of nonmedical industries, such as civil aviation and nuclear power, will make medicine as safe as these industries. However, the solution is not that simple. This article explains why a benchmarking approach to safety in high-risk industries is needed to help translate lessons so that they are usable and long lasting in health care. The most important difference among industries lies not so much in the pertinent safety toolkit, which is similar for most industries, but in an industry's willingness to abandon historical and cultural precedents and beliefs that are linked to performance and autonomy, in a constant drive toward a culture of safety. Five successive systemic barriers currently prevent health care from becoming an ultrasafe industrial system: the need to limit the discretion of workers, the need to reduce worker autonomy, the need to make the transition from a craftsmanship mindset to that of equivalent actors, the need for system-level (senior leadership) arbitration to optimize safety strategies, and the need for simplification. Finally, health care must overcome 3 unique problems: a wide range of risk among medical specialties, difficulty in defining medical error, and various structural constraints (such as public demand, teaching role, and chronic shortage of staff). Without such a framework to guide development, ongoing efforts to improve safety by adopting the safety strategies of other industries may yield reduced dividends. Rapid progress is possible only if the health care industry is willing to address these structural constraints needed to overcome the 5 barriers to ultrasafe performance.


BACKGROUND: The transfer of care for hospitalized patients between inpatient physicians is routinely mediated through written and verbal communication or "sign-out". This study aims to describe how communication failures during this process can lead to patient harm.

METHODS: In interviews employing critical incident technique, first year resident physicians (interns) described (1) any adverse events or near misses due to suboptimal preceding patient sign-out; (2) the worst event due to suboptimal sign-out in which they were involved; and (3)
suggestions to improve sign-out. All data were analyzed and categorized using the constant comparative method with independent review by three researchers.

RESULTS: Twenty six interns caring for 82 patients were interviewed after receiving sign-out from another intern. Twenty five discrete incidents, all the result of communication failures during the preceding patient sign-out, and 21 worst events were described. Inter-rater agreement for categorization was high (kappa 0.78-1.00). Omitted content (such as medications, active problems, pending tests) or failure-prone communication processes (such as lack of face-to-face discussion) emerged as major categories of failed communication. In nearly all cases these failures led to uncertainty during decisions on patient care. Uncertainty may result in inefficient or suboptimal care such as repeat or unnecessary tests. Interns desired thorough but relevant face-to-face verbal sign-outs that reviewed anticipated issues. They preferred legible, accurate, updated, written sign-out sheets that included standard patient content such as code status or active and anticipated medical problems.

CONCLUSION: Communication failures during sign-out often lead to uncertainty in decisions on patient care. These may result in inefficient or suboptimal care leading to patient harm.


OBJECTIVE: To describe strategies employed during handoffs in four settings with high consequences for failure.


SETTING: NASA Johnson Space Center in Texas, nuclear power generation plants in Canada, a railroad dispatch center in the United States, and an ambulance dispatch center in Toronto.

MAIN MEASURE: Evidence of 21 handoff strategies from observations and interviews.

RESULTS: Nineteen of 21 strategies were used in at least one domain, on at least an 'as needed' basis.

CONCLUSIONS: An understanding of how handoffs are conducted in settings with high consequences for failure can jumpstart endeavors to modify handoffs to improve patient safety.

Executive Summary

BACKGROUND: Government policy concerned with the modernisation of the National Health Service (NHS) has urged nurses and others working in the health services to become more collaborative adopt a flexible approach to role boundaries and establish clear lines of accountability for the quality of clinical care. However, the government’s clinical governance agenda gives little recognition to the ways in which health care professions have been hierarchically ordered in the past and how these historical relationships may continue to shape multidisciplinary working in the modernised NHS. At the same time, there is little acknowledgement of the ambiguous nature of accountability where role boundaries become blurred. This is particularly the case for nurses. The Nursing and Midwifery Council (2002a), for example, reports that many of the queries they receive and many of the professional conduct cases they hear arise from nurses’ uncertainty or lack of awareness about their accountability. Accountability is especially confused in primary care, where modernisation and the need to meet new targets for preventative services have had particular implications for practice nurses. However, the changing role, professional autonomy and accountabilities of practice nurses under clinical governance have been little explored.

THE STUDY: This ethnographic study used interviews, vignettes and participant observation to explore how accountability was understood within one team of clinicians working in a general practice, following the introduction of clinical governance. The three main areas of enquiry concerned:

1. how accountability was understood across the health care team;
2. who was involved in multidisciplinary decision making; and
3. the nature of the relationship between decision making and accountability.

The practice, which served a patient population of approximately 6,500, was located in a market town in the south of England. It was well established, relatively affluent (a former fund holding practice) and had taken the lead locally in implementing clinical governance. Staff included five partners (three part time), and a part-time retainer, four part-time practice nurses employed by the practice, two attached community nurses, a practice manager, an administrator, six receptionists (full and part time) and two (later four) part-time pharmacy staff. Fieldwork took place over a six-month period and included participant observation of clinical governance meetings in the primary care team (PCT), multidisciplinary practice meetings and clinical practice. Thirteen semi-structured interviews, which included the use of vignettes to discuss hypothetical clinical situations, were conducted with three general practitioners, four practice nurses, two community staff and four administrative staff.

FINDINGS:

1. How accountability was understood across the health care team
The study found that the meaning of 'accountability' was elusive and ambiguous for participants and that this ambiguity mirrored the 'catch-all' use of the term in current government policy. It was described by some as a retrospective explanation of actions, particularly as a way of apportioning or accepting blame. At the same time, accountability could be seen as something that motivates action and good practice and implies a readiness to take the consequences of action. In addition, accountability was used as a way of describing certain relationships, such as those between practitioners and clients, or between employers and employees. In general, participants found it difficult to articulate what accountability meant, and the more intent they became on pinning it down the more its meaning seemed to elude them.

2. Who was involved in multidisciplinary decision-making

It was anticipated that some members of the health care team would be more influential in multidisciplinary decision-making than others, because of the historical relationships between the different disciplines involved. However, the study found that multidisciplinary decision-making as a contemporaneous collective activity was unusual. In terms of every day clinical practice, staff tended to make decisions about individual patients in isolation. Where such decisions involved different members of the team, they were often made in stages, involving different practitioners at different points. In contrast, decisions about patient groups (those concerned with the development of practice protocols, for example) were made by a sample of practitioners from different disciplines working together over a finite period of time. Similarly, decisions about the development of services might involve staff from across the health care professions, but ultimately these decisions were made by the practice partners, who had particular priorities and responsibilities as the owners of a small business.

3. The nature of the relationship between decision-making and accountability

Data from vignettes suggested that, in certain contexts, some practitioners were seen as more accountable than others. For some participants, accountability for clinical decisions rested with those members of the staff considered to have the most expertise, whether or not they were present during decision-making. In some circumstances, and contrary to the legal position, lack of previous contact with a patient, or a poorer grasp of certain kinds of knowledge (for example, where a nurse took on a 'medical’ task), were associated with a lesser degree of accountability. Data from across the study suggested that accountability could be passed like a hot potato from one practitioner to another, principally by providing a colleague with a narrative or an account of decision-making. Although some nurses saw themselves as accountable for their practice, a contrasting view was also evident amongst all staff, promoted perhaps by the set-up of the practice as a small business, in which partners were seen to carry ultimate accountability for the decisions made by practice staff. These differing approaches to accountability
reflect differences in the stances of regulatory bodies such as the United Kingdom Central Council for Nurses (UKCC)/Nursing and Midwifery Council (NMC) and General Medical Council (GMC). The study raised unforeseen issues about the accountability of clinicians using such aids to decision making as practice protocols. Some staff felt that the accountability of practice partners was expanding almost without limit while that of nurses was becoming ever more bounded by the use of protocols. This suggests both the need for greater awareness of policymakers’ understandings of the meanings and scope of accountability and the need for research that looks at the relationship between patient need, nurses’ clinical judgement and the knowledge on which more formalised guidance rests. Finally, documentation was seen to have the potential to protect practitioners from litigation but could also leave them open to litigation when it was inadequately completed. Software used to document decision-making placed limits on the information that could be recorded, particularly about nursing practice. Staff felt that meeting patients’ needs represented a huge responsibility that they could, to some extent, share with other members of the practice. Yet despite a policy promoting partnership working, for many, accountability for practice remained an individual issue for all clinicians.

LIMITATIONS: The findings of the study are limited in that they relate to one general practice and thus provide food for thought rather than generalisable insights. In addition, at the time of research, primary care was entering a period of significant change and, understandably, many practices were reluctant to open themselves to scrutiny during such upheaval. This meant that it took us longer than anticipated to find a research site and, as a result, the fieldwork period was reduced, with less opportunity than planned for observing decision-making over time. Moreover, the requirements of the local ethics committee aimed at protecting patients from feeling pressurised to consent to observation meant that the study included less direct observation of clinical care and decision-making than originally planned. Finally, because of its highly ambiguous nature, questioning participants about accountability was problematic. The research suggests that understandings of accountability can be context-dependent, yet by not being fully aware of this during data collection we may have influenced participants’ responses to our questioning. In the use of vignettes, for example, we asked who was accountable in a certain scenario and, by our style of questioning, may have prompted participants to think more about accountability as blame, rather than giving them scope to draw on the term’s other meanings.

RECOMMENDATIONS:
• Ambiguity in the literature and the clinical area about the nature and extent of the accountability of different professional groups jointly involved in decision-making highlights the need for a joint statement of clarification from the main regulatory bodies.
• Findings from this ethnographic study suggest that multidisciplinary decision-making may be limited in the primary care context because of lack of
opportunity for colleagues to meet collectively and because of the constraints placed on collective decision-making within general practices as small businesses. A broader study based on survey and multiple case studies is therefore proposed to further explore the nature, extent and implications of multidisciplinary decision-making in primary care.

- The study identifies the importance of protocols for practice nurses who are working at the boundaries of existing nursing roles, but also highlights concerns about the status of the knowledge on which these protocols are based, and about the relationship between these tools and practitioners’ clinical judgement. This suggests the need for further research to explore the way in which GP practice protocols are developed and maintained, and to investigate the relationship between protocols, clinical judgement and accountability.

- The lack of practitioner clarity about professional and legal accountability in a changing health service suggests the need for continuing professional development in this area. The study indicates that it would be useful to develop such resources as workshops or videos that use different clinical decision-making scenarios to explore and improve practitioners’ understanding of their accountability in different contexts.
Activity in other jurisdictions


The Australian Resource Centre for Healthcare Innovations (ARCHI) was contracted by the Australian Council for Quality and Safety in Health Care (the Council) to undertake a comprehensive review of published and unpublished literature on clinical handover and patient safety. The literature review was designed to identify:

- Factors relating to clinical handover associated with patient safety;
- The effectiveness of safety cultures within non-health industries; and
- The quality of evidence and gaps in research.

For the purpose of this report, clinical handover includes communication between the change of shift, communication between care providers about patient care, handoff, records and information tools to assist in communication between care providers about patient care. Patient safety includes the variables that limit or affect preventable adverse patient outcomes and errors. Information that transfers between practitioners about patient care is becoming recognised as an important consideration in improving patient safety, workflow and quality care. Ineffective handover can lead to wrong treatment, delays in medical diagnosis, life threatening adverse events, patient complaints, increased health care expenditure, increased hospital length of stay, and a range of other effects that impact on the health system. A number of industries, unrelated to the health system, can provide new insights into improving handover and workers’ safety. For this reason there are sections relating to non-health related industries in this report. These industry areas are most commonly mining, heavy industries and aviation. It is anticipated that the practices adopted and evaluated in non-health industries could be applied to the health sector. This review was undertaken over a 3-month period and used published and unpublished literature that describes the handover process and the impact on safety.
The AMA has developed this guide - Safe Handover: Safe Patients - to provide doctors, hospitals and members of the health care team with a resource to assist them in their efforts to improve patient safety. The guide is the first of its type published in Australia, and has been developed from a similar guide prepared by the British Medical Association. It is generally agreed that clinical handover is neither well taught nor well practised in Australia - so this guide is a big step forward. It provides practical guidance to those doctors and hospitals who are seeking to improve their handover processes.

Effective communication lies at the very heart of good patient care. This document:
- Provides guidance to doctors on best practice in handover
- Provides examples of good models of handover that doctors and hospital managers can learn from
- Aims to drive further developments in standardising handover arrangements in UK hospitals


This is the position statement of the American Geriatrics Society Health Care Systems Committee.


Some 23 percent of hospitalized patients over age 65 are discharged to another institution, and 11.6 percent are discharged with home health care. Not all patients undergoing transitions are at high risk for adverse events. However, those with poor transitional care plans are particularly likely to "fall through the cracks" — especially since patients transferred between
sites may have a new diagnosis or a change in functional status that affects their ability for self-care.


Handoff communication, which includes up-to-date information regarding patient care, treatment and service, condition, and any recent or anticipated changes, should be interactive to allow for discussion between the giver and receiver of patient information. It requires a process for verification of the received information, including read-back or other methods as appropriate.


Gaps in hand-over (or hand-off) communication between patient care units, and between and among care teams, can cause serious breakdowns in the continuity of care, inappropriate treatment, and potential harm for the patient.

Issues and proposed solutions


Communication of information between health care providers is a fundamental component of patient care. The information shared between providers who are changing shifts, referred to as "handover," helps plan patient care, identifies safety concerns and facilitates continuity of information. Absent or inaccurate information can have deleterious effects on patient care. According to the Joint Commission on Accreditation of Healthcare Organizations (JCAHO 2003), almost 70% of all sentinel events are caused by breakdown in communication. Issues and concerns regarding the effectiveness of handover at shift change were raised by nurses throughout Hamilton Health Sciences (HHS), leading to the approval of a hospital-wide project to implement evidenced-based Transfer of Accountability (TOA) Guidelines and a bedside patient safety checklist. This article describes the development of the guidelines, the results of the pilot study and the ongoing implementation of the project. The observed impact on patient safety within HHS is presented.
OBJECTIVES: To identify the perceptions of emergency physicians (EPs) and hospitalists regarding interservice handoff communication as patients are transferred from the emergency department to the inpatient setting. METHODS: Investigators conducted individual interviews with 12 physicians (six EPs and six hospitalists). Data evaluation consisted of using the steps of constant comparative, thematic analysis. RESULTS: Physicians perceived handoff communication as a gray zone characterized by ambiguity about patients' conditions and treatment. Two major themes emerged regarding the handoff gray zone. The first theme, poor communication practices and conflicting communication expectations, presented barriers that exacerbated physicians' information ambiguity. Specifically, handoffs consisting of insufficient information, incomplete data, omissions, and faulty information flow exacerbated gray zone problems and may negatively affect patient outcomes. EPs and hospitalists had different expectations about handoffs, and those expectations influenced their interactions in ways that may result in communication breakdowns. The second theme illustrated how poor handoff communication contributes to boarding-related patient safety threats for boarders and emergency department patients alike. Those interviewed talked about the systemic failures that lead to patient boarding and how poor handoffs exacerbated system flaws. CONCLUSIONS: Handoffs between EPs and hospitalists both reflect and contribute to the ambiguity inherent in emergency medicine. Poor handoffs, consisting of faulty communication behaviors and conflicting expectations for information, contribute to patient boarding conditions that can pose safety threats. Pragmatic conclusions are drawn regarding physician-physician communication in patient transfers, and recommendations are offered for medical education.


The Hand-off Toolkit developed in collaboration between the Association of periOperative Registered Nurses (AORN), and the Department of Defense Patient Safety Program (DoD PSP) provides health care organizations with strategies and examples of tools to improve health care handoffs and transitions during the perioperative phase of patient care. Each health care facility should adopt, develop, and implement a tool that promotes standardization of the hand-off process, with the ultimate goal of improving patient care and enhancing patient safety.
The development of a standardized hand-off communications tool is a dynamic process that allows for continued opportunities to improve the delivery of patient care for the perioperative patient. The toolkit is developed specific to the perioperative environment. It is intended to be utilized as a resource and a general guide for facilities developing a comprehensive, standardize approach to patient hand-off communications throughout the perioperative phase.

The tool kit components can be downloaded from this site. List of components:

- Hand-Off Tool Kit Executive Summary
- Research in the Health Care Industry
- Hand-Off Communication Tools Overview
- Sample Patient Hand-Off Tools
- Recommendations for Perioperative Patient Hand-Off
- Policy Guidance for Hand-Offs
- Presentation on Standardizing Hand-Offs for Patient Safety
- Perioperative Hand-Off Talking Points
- Additional Hand-Off Resources


BACKGROUND: The Joint Commission has made a "standardized approach to hand-off communications" a National Patient Safety Goal. METHOD: An interactive 90-minute workshop (hand-off clinic) was developed in 2005 to (1) develop a standardized process for the handoff, (2) create a checklist of critical patient content, and (3) plan for dissemination and training.

CONCLUSION: To date, 7 of 10 residency programs have participated. Analysis of these protocols demonstrated that the hand-off process is highly variable and discipline-specific. Although all disciplines required a verbal handoff, because of competing demands, verbal communication did not always occur. In some cases, the transfer of professional responsibility was separated in time and space from the transfer of information. For example, in two cases, patient tasks were assigned to other team members to facilitate timely departure of a postcall resident (to meet resident duty-hour restrictions), but results were not formally communicated to anyone. The hand-off clinic facilitated the incorporation of "closed-loop" communication by requiring that follow-up on these tasks be conveyed to the on-call resident.

DISCUSSION: This model for design and implementation can be applied to other health care settings.
In health care organizations, the division of labor and a need for continuous, 24 hour treatment subjects patients to multiple transitions in care. These transitions, or “handovers,” are potential points of failure that have seen very little study. We observed transitions of care in five hospital emergency departments as part of a larger study on safety in emergency care and found that in addition to many other differences in work patterns among the various hospitals, very different sorts of handovers occurred in different contexts, and these differences appeared to reflect a common structure. Using these observations, we have proposed a conceptual framework for characterizing handover events. The ability to characterize certain types of transitions may help to clarify future studies, while assisting in the development of interventions to better fit the context of clinical work.


In 2002, the Winnipeg Regional Health Authority commissioned an external review for improvements to patient care. From this review arose the Achieving Benchmarks through Collaboration Project, which was composed of 32 projects and a number of subprojects. One such subproject dealt with the reconfiguration of the nursing shift-to-shift report. Its mandate was to improve report, thus making it more efficient, effective, and consistent. This article is a review of this reconfiguration.


INTRODUCTION: With the increase in shift pattern work for junior doctors in the NHS, accurate handover of patient clinical information is of great importance. There is no published method that forms the gold standard of handover and there are large variations in practice. This study aims to compare the reliability of three different handover methods.

PATIENTS AND METHODS: We observed the handover of 12 simulated patients over five consecutive handover cycles between SHOs on a one-to-one basis. Three handover styles were used and a numerical scoring system assessed clinical information lost per handover cycle.
RESULTS: After five handover cycles, only 2.5% of patient information was retained using the verbal-only handover method, 85.5% was retained when using the verbal with note taking method and 99% was retained when a printed handout containing all patient information was used.

CONCLUSIONS: When patient information is handed over by the verbal only method, very few facts are retained; therefore, this method should be avoided whenever possible. Verbal handover with note taking is shown to be an effective method of handover in our study, although we accept that this is an artificial scenario and may not reflect the reality of a busy hospital. Nearly all information is retained by the printed handout method but this relies on the handout being regularly updated.


Handover of patient care has been an ongoing problem within the health care sector. The process remains highly variable and there is a threat to patient safety. Despite the general belief that handover transitions in patient care have become routine, not enough attention or research has been directed at improving this period of care. For this reason there is a need to provide an analysis of the communication processes during handover. A study was conducted of the handover process among doctors during shift changes within a hospital setting. The results suggested a need for process change. Results revealed a handover process which was unstructured, informal and error prone, with the majority of doctors noting that there was no standard or formal procedure for handover. The research found that the majority of hospital doctors recognised the potential benefits of formalising and computerising this process.


This article explores the use of readback/hearback, a communication strategy intended to support safe and effective care in a wide variety of clinical settings and situations. Consistent use of this communication tool assists us in avoiding or limiting errors that result from miscommunication in many aspects of clinical care and decision making, as it has in aviation and other industries.

BACKGROUND: We aimed to improve the quality and safety of handover of patients from surgery to intensive care using the analogy of a Formula 1 pit stop and expertise from aviation.

METHODS: A prospective intervention study measured the change in performance before and after the implementation of a new handover protocol that was developed through detailed discussions with a Formula 1 racing team and aviation training captains. Fifty (23 before and 27 after) postsurgery patient handovers were observed. Technical errors and information omissions were measured using checklists, and teamwork was scored using a Likert scale. Duration of the handover was also measured.

RESULTS: The mean number of technical errors was reduced from 5.42 (95% CI +/-1.24) to 3.15 (95% CI +/-0.71), the mean number of information handover omissions was reduced from 2.09 (95% CI +/-1.14) to 1.07 (95% CI +/-0.55), and duration of handover was reduced from 10.8 min (95% CI +/-1.6) to 9.4 min (95% CI +/-1.29). Nine out of twenty-three (39%) precondition patients had more than one error in both technical and information handover prior to the new protocol, compared with three out of twenty-seven (11.5%) with the new handover. Regression analysis showed that the number of technical errors were significantly reduced with the new handover (t = -3.63, P < 0.001), and an interaction suggested that teamwork (t = 3.04, P = 0.004) had a different effect with the new handover protocol.

CONCLUSIONS: The introduction of the new handover protocol lead to improvements in all aspects of the handover. Expertise from other industries can be extrapolated to improve patient safety, and in particular, areas of medicine involving the handover of patients or information.


As the working hours of junior doctors decrease, adequate handover of patients becomes more important to maintain continuity of care and avoid errors caused by information gaps. A minimum dataset for surgical handover should include the patient's name, location (ward and bed number), date of admission, diagnosis, procedure (with date), complications and progress, management plan, resuscitation plan, consultant availability (and instructions if not available), expected need for review, and name of doctor completing handover and date to confirm that information is current. An electronic handover system is a potential solution, but our survey shows that free-text entry into such systems may be inadequate; prompts or predefined fields for handover content are possible solutions.

Publication Types: Evaluation Studies

The results of a study into A&E handover.


**AIM OF THE STUDY:** To investigate the effect that manipulating the style and content of the nurse change of shift report had on an individual's ability to plan patient care.

**BACKGROUND:** The nurse change of shift report occurs on most hospital wards at least two if not three times a day. However, little research exists examining how changing the style and information content of the shift report may affect an individual's ability to process the information they hear. It is suggested that how individuals structure their knowledge, in the form of schema, is an important consideration when examining how they process information.

**DESIGN:** This was an experimental study where two independent variables, report style (retrospective vs. prospective) and schema information (schema consistent vs. schema inconsistent) were compared in a factorial design. A convenience sample of 48 registered nurses from acute medical and acute surgical wards were randomly allocated to one of the four experimental conditions. Outcome measures included the amount of information that subjects accurately recorded and recalled from the shift report, together with their ability to plan patient care.

**RESULTS:** Results indicated that the type of report had a significant effect on an individual's ability to plan patient care, and type of information content on their ability to accurately record and recall the information they heard.

**CONCLUSIONS:** The implications of the results, both for schema theory as an explanation of nursing knowledge, and for the type of report which should be used in acute medical and acute surgical wards are discussed, together with the implications of the study for further research.


This article considers the importance of handover as a means of communicating important patient information from one nursing shift to the next. It describes the development of a guide, based on Essence of Care benchmarks, intended to improve the quality of nursing handover. A post implementation audit suggests that once staff were familiar with the guide, handovers became more structured and informative.

BACKGROUND: Communication breakdowns are a common threat to surgical safety, but there are little data to guide initiatives to improve communication.

STUDY DESIGN: In surgeon-review of 444 surgical malpractice claims from 4 liability insurers, we identified 60 cases involving communication breakdowns resulting in harm to patients. Two surgeon-reviewers analyzed these cases to identify common characteristics and associated factors. Based on identified patterns, potential interventions to prevent communication breakdowns were developed and their potential impact was assessed.

RESULTS: The 60 cases involved 81 communication breakdowns, occurring in the preoperative (38%), intraoperative (30%), and postoperative periods (32%). Seventy-two percent of cases involved one communication breakdown. The majority of breakdowns were verbal communications (92%) involving 1 transmitter and 1 receiver (64%). Attending surgeons were the most common team member involved. Status asymmetry (74%) and ambiguity about responsibilities (73%) were commonly associated factors. Forty-three percent of communication breakdowns occurred with handoffs and 39% with transfers in the patient's location. The most common communication breakdowns involved residents failing to notify the attending surgeon of critical events and a failure of attending-to-attending handoffs. Proposed interventions could prevent 45% to 73% of communication breakdowns in this cases series.

CONCLUSIONS: Serious communication breakdowns occur across the continuum of care, typically result from a failure in verbal communication between a surgical attending and another caregiver, and often involve ambiguity about responsibilities. Interventions to prevent these breakdowns should involve: defined triggers that mandate communication with an attending surgeon; structured handoffs and transfer protocols; and standard use of read-backs.


The hospital discharge is a handoff, ripe embedded structural risks and hazards that can result in passive or active failures among "sharp end" providers. These failures can result in medical errors and an array of postdischarge adverse events. There are now emerging data to suggest that postdischarge-related adverse events and rehospitalizations can be reduced through interventions at the time of hospital discharge. This article reviews
the modifiable components of the hospital discharge process related to adverse events and rehospitalizations, including those relating to the characteristics of the hospital, patient, and clinician. Using multimethod analysis, our group described the principles thought to be important to the discharge process and delineated what we now call the reengineered discharge, a set of 11 discrete and mutually reinforcing components that we believe should be consistently part of every hospital discharge. Finally, we discuss the work of the National Quality Forum Consensus Standards Maintenance committee who, in 2006, added the hospital discharge as one of its "safe practices for better healthcare."

Publication Types: Literature Review


BACKGROUND: Discharge from the hospital is a critical transition point in a patient's care. Incomplete handoffs at discharge can lead to adverse events for patients and result in avoidable rehospitalization. Care transitions are especially important for elderly patients and other high-risk patients who have multiple comorbidities. Standardizing the elements of the discharge process may help to address the gaps in quality and safety that occur when patients transition from the hospital to an outpatient setting.

METHODS: The Society of Hospital Medicine's Hospital Quality and Patient Safety committee assembled a panel of care transition researchers, process improvement experts, and hospitalists to review the literature and develop a checklist of processes and elements required for ideal discharge of adult patients. The discharge checklist was presented at the Society of Hospital Medicine's Annual Meeting in April 2005, where it was reviewed and revised by more than 120 practicing hospitalists and hospital-based nurses, case managers, and pharmacists. The final checklist was endorsed by the Society of Hospital Medicine.

RESULTS: The finalized checklist is a comprehensive list of the processes and elements considered necessary for optimal patient handoff at hospital discharge. This checklist focused on medication safety, patient education, and follow-up plans.

CONCLUSIONS: The development of content and process standards for discharge is the first step in improving the handoff of care from the inpatient to the posthospital setting. Refining this checklist for patients with specific diagnoses, in specific age categories, and with specific discharge destinations may further improve information transfer and ultimately affect patient outcomes. (c) 2006 Society of Hospital Medicine.

Anaesthesia is a critical and complex process that extends from the pre-operative assessment through to the postoperative management of patients. Handover of responsibility for logistical as opposed to patient-orientated reasons may compromise that process of care. If such handover becomes inevitable with shift-based patterns of working, the implications need to be considered and procedures developed in order to minimise adverse consequences. This survey of national practice reveals little formalisation of procedure and a spectrum of opinion on the relevance of the key considerations. There is, however, a majority view amongst respondents that national guidelines would be of value and that professional defensibility would be aided by standardisation and documentation of any handover.


BACKGROUND: Transfer of responsibility for patient care between physicians is a key process in the care of hospitalized patients. Systems of transfer management and transfer frequency may affect clinical outcomes. METHODS: To characterize the systems by which patient information is transferred ("signed out") between resident physicians in internal medicine residency programs and to determine the impact of recently enacted resident work-hour regulations on the frequency of transfers, we mailed a self-administered survey to chief residents at 324 accredited US internal medicine residency programs outside of New York State. The main outcome measures were sign-out practices, skills training, and transfer frequency. RESULTS: Surveys were returned from 202 programs (62%). Transfer systems varied among and within institutions: 55% did not consistently require both a written and an oral sign-out at transfers of care, 34% left sign-out to interns alone, and 59% had no means of informing nurses that a transfer had taken place. In addition, 60% of the programs did not provide any lectures or workshops on sign-out skills. After work-hour regulations were instituted, transfers of care for a hypothetical patient increased by a mean of 11% (from 7.0 to 7.8 transfers; P<.001) during a Monday-Friday hospitalization. A member of the primary team was in the hospital for 47% of the hospitalization. CONCLUSION: Although transfers of care are increasingly frequent, few internal medicine residency programs have comprehensive transfer of care systems in place, and most do not provide formal training in sign-out skills to all residents.

**BACKGROUND:** A qualitative study of shift handover practice and function from a socio-technical perspective. Background. Shift handover plays a pivotal role in the continuity of patient care in 24-hour nursing contexts. The critical nature of this communication system is recognized within the literature and by the nursing profession; however, there are few in-depth studies. The rationale for this study is to gain a better understanding of handover practices and functions and their implications for effectiveness.

**METHOD:** Handover systems on two very different paediatric wards were selected as case studies. In each case, 20 handovers were observed and audio-taped and 12 individual and two-group interviews with nursing staff about handover were also conducted. Analysis involved categorizing the data and characterizing handover practices and functions using an inductive approach to generate qualitative themes. The ethics committees of the hospital and the university approved the research. All involved were fully informed about the study, with confidentiality maintained throughout.

**RESULTS:** Handover practices are distributed over time, socially among the staff and technologically through a range of artifacts, while the system also accomplishes informational, social and educational functions. Handover effectiveness is characterized by flexibility in managing competing demands and tensions, such as maintaining confidentiality while practising family centred care. There are limitations in how far the findings can be generalized to other nursing contexts, and the possible effects of the researcher's presence are also recognized.

**CONCLUSIONS:** Handover is a complex system based on several sound socio-technical principles and the value of this nurse-to-nurse communication should be acknowledged. The multiple functions highlight the knowledge and expertise currently hidden within handover, which could be promoted in terms of nursing professionalism.

Publication Types: Comparative Study


**CONTEXT:** Delayed or inaccurate communication between hospital-based and primary care physicians at hospital discharge may negatively affect continuity of care and contribute to adverse events.
OBJECTIVES: To characterize the prevalence of deficits in communication and information transfer at hospital discharge and to identify interventions to improve this process.

DATA SOURCES: MEDLINE (through November 2006), Cochrane Database of Systematic Reviews, and hand search of article bibliographies.

STUDY SELECTION: Observational studies investigating communication and information transfer at hospital discharge (n = 55) and controlled studies evaluating the efficacy of interventions to improve information transfer (n = 18).

DATA EXTRACTION: Data from observational studies were extracted on the availability, timeliness, content, and format of discharge communications, as well as primary care physician satisfaction. Results of interventions were summarized by their effect on timeliness, accuracy, completeness, and overall quality of the information transfer.

DATA SYNTHESIS: Direct communication between hospital physicians and primary care physicians occurred infrequently (3%-20%). The availability of a discharge summary at the first postdischarge visit was low (12%-34%) and remained poor at 4 weeks (51%-77%), affecting the quality of care in approximately 25% of follow-up visits and contributing to primary care physician dissatisfaction. Discharge summaries often lacked important information such as diagnostic test results (missing from 33%-63%), treatment or hospital course (7%-22%), discharge medications (2%-40%), test results pending at discharge (65%), patient or family counseling (90%-92%), and follow-up plans (2%-43%). Several interventions, including computer-generated discharge summaries and using patients as couriers, shortened the delivery time of discharge communications. Use of standardized formats to highlight the most pertinent information improved the perceived quality of documents.

CONCLUSIONS: Deficits in communication and information transfer at hospital discharge are common and may adversely affect patient care. Interventions such as computer-generated summaries and standardized formats may facilitate more timely transfer of pertinent patient information to primary care physicians and make discharge summaries more consistently available during follow-up care.

Publication Types: Review


BACKGROUND: Ineffective team communication is frequently at the root of medical error. The objective of this study was to describe the characteristics of communication failures in the operating room (OR) and to classify their effects. This study was part of a larger project to develop a team checklist to improve communication in the OR.
METHODS: Trained observers recorded 90 hours of observation during 48 surgical procedures. Ninety-four team members participated from anesthesia (16 staff, 6 fellows, 3 residents), surgery (14 staff, 8 fellows, 13 residents, 3 clerks), and nursing (31 staff). Field notes recording procedurally relevant communication events were analysed using a framework which considered the content, audience, purpose, and occasion of a communication exchange. A communication failure was defined as an event that was flawed in one or more of these dimensions.

RESULTS: 421 communication events were noted, of which 129 were categorized as communication failures. Failure types included "occasion" (45.7% of instances) where timing was poor; "content" (35.7%) where information was missing or inaccurate, "purpose" (24.0%) where issues were not resolved, and "audience" (20.9%) where key individuals were excluded. 36.4% of failures resulted in visible effects on system processes including inefficiency, team tension, resource waste, workaround, delay, patient inconvenience and procedural error.

CONCLUSION: Communication failures in the OR exhibited a common set of problems. They occurred in approximately 30% of team exchanges and a third of these resulted in effects which jeopardized patient safety by increasing cognitive load, interrupting routine, and increasing tension in the OR.


This paper considers the ways in which the nursing handover involves a complex network of communication that impacts on nursing interactions. The critical ethnographic study upon which this paper is based involved a research group of six nurses who worked in one critical care unit. Data-collection methods involved professional journalling, participant observation, and individual and focus group interviews. The nursing handover took on many forms and served different purposes. At the start of a shift, the nurse coordinator of the previous shift presented a 'global' handover of all patients to oncoming nurses. Nurses proceeded then to the bedside handover, where the intention changed from one that involved a broad overview of patients, to one that concentrated on a patient's individual needs. Data analysis identified five practices for consideration: the global handover serving the needs of nurse coordinators; the examination; the tyranny of tidiness; the tyranny of busyness; and the need to create a sense of finality. In challenging nurses' understanding of these practices, they can become more sensitive to other nurses' needs, thus promoting the handover process as a site for collaborative and supportive communication.

AIMS: To survey house officers and nurses regarding timing, structure and content of clinical handover and compare these results. Secondary aims included the development of an 'on-call' sheet and the development of guidelines for handovers from the results collated.

METHODS: 60 house officers (post graduate years 1-3) and 60 nurses working at Auckland City Hospital were asked to complete a survey covering various aspects of clinical handover in their current department.

RESULTS: This study showed that nurses have more handovers than house officers in a 24-hour period. Nurses had an average of 3.2 handovers compared with the 1.2 handovers reported by house officers. Nurses rated their handovers as 'good', with a mean score of 7.8/10, while house officers rated the standard of their handovers as only 'average', with a mean score of 5.1/10. This was noted to be a statistically significant difference with a p-value of 0.01. Our study found that 60.9% of house officers reported that they had encountered a problem at least seven times in their most recent clinical rotation that they could directly attribute to a poor handover. However, nurses reported a much lower incidence of problems relating to poor handover standards, with 37.5% of this group indicating that they had experienced a clinical problem with a patient related to a nursing handover.

CONCLUSIONS: In this study, we identified that health professionals perceive that clinical problems can be attributed to poor clinical handover. The majority of respondents in the study felt that an effective handover system should include a set location for handover, a standardised 'on-call' sheet and training related to handovers.


The transfer of information between nurses from emergency departments (EDs) and critical care units is essential to achieve a continuity of effective, individualized and safe patient care. There has been much written in the nursing literature pertaining to the function and process of patient handover in general nursing practice; however, no studies were found pertaining to this handover process between nurses in the ED environment and those in the critical care environment. The aim was to explore the process of patient handover between ED and intensive care unit (ICU) nurses when transferring a patient from ED to the ICU. This study used a multi-method design that combined documentation review, semistructured individual interviews and focus group interviews. A multi-method approach combining individual interviews, focus group interviews and documentation review was used in this study. The respondents were selected from the ED and ICU of two acute hospitals within Northern Ireland. A total of 12 respondents were selected for individual interviews,
three nurses from ED and ICU, respectively, from each acute hospital. Two focus groups interviews were carried out, each consisting of four ED and four ICU nurses, respectively. Qualitative analysis of the data revealed that there was no structured and consistent approach to how handovers actually occurred. Nurses from both ED and ICU lacked clarity as to when the actual handover process began. Nurses from both settings recognized the importance of the information given and received during handover and deemed it to have an important role in influencing quality and continuity of care. Nurses from both departments would benefit from a structured framework or aide memoir to guide the handover process. Collaborative work between the nursing teams in both departments would further enhance understanding of each other’s roles and expectations.


AIM: This paper reports a study exploring nurses' perceptions of the shift handover and the possible reasons for reported dissatisfaction in 10 European countries.

BACKGROUND: The nursing handover fulfils a number of purposes and has important consequences for the continuity of patient care and nurses' satisfaction with the quality of care they are able to provide. However, the performance and function of shift handovers in health care is a widely neglected topic in practice and research.

METHOD: The Nurses' Early Exit Study (http://www.next-study.net) investigates the working conditions of nurses and variables influencing nursing retention. The data for this analysis were collected between 2002 and 2003 by self-report questionnaires in 10 European countries.

FINDINGS: The percentage of nurses dissatisfied with shift handovers ranged from 22% in England to 61% in France. In most countries the main reason for dissatisfaction with shift handovers was 'too many disturbances', followed by 'lack of time'. Most countries showed similar associations of dissatisfaction with qualification level and occupational seniority, but not with position and type of shift. 'Poor quality of leadership' and 'poor support from colleagues', were strongly associated with dissatisfaction.

CONCLUSIONS: In several (but not all) European countries, shift handovers may be a frequent cause for nurses' irritation. The underlying causes appear to be of an organizational nature. The findings have implications for solutions. Further debate and research should clarify the different purposes of shift handovers and relate them to handover style and to the quality of patient care.

Communicating nursing care during the patient's total hospital stay is a difficult task to achieve within the context of high patient turnover, a lack of overlap time between shifts, and time constraints. Clear and accurate communication is pivotal to delivering high quality care and should be the gold standard in any clinical setting. Handover is a commonly used communication medium that requires review and critique. This study was conducted in five acute care settings at a major teaching hospital. Using a grounded theory approach, it explored the use of three types of handover techniques (verbal in the office, tape-recorded, and bedside handovers). Data were obtained from semistructured interviews with nurses and participant field observations. Textual data were managed using NUD*IST. Transcripts were critically reviewed and major themes identified from the three types of handovers that illustrated their strengths and weaknesses. The findings of this study revealed that handover is more than just a forum for communicating patient care. It is also used as a place where nurses can debrief, clarify information and update knowledge. Overall, each type of handover had particular strengths and limitations; however, no one type of handover was appraised as being more effective. Achieving the multiple goals of handover presents researchers and clinicians with a challenging task. It is necessary to explore more creative ways of conducting the handover of patient care, so that an important aspect of nursing practice does not get classified as just another ritual.


A good nursing handover process is a crucial part of providing quality nursing care in a modern health care environment. The conservation of patient data during the handover process is vital to ensure good continuity of care and safe practice. Any errors or omissions made during the handover process may have dangerous consequences. The authors observed the handover of 12 simulated patients over five consecutive handover cycles between nurses. Three handover styles were used and the amount of data loss was recorded for each style. A purely verbal handover style resulted in the loss of all data after three cycles. A note-taking style (the traditional style used in most hospital wards) resulted in only 31% of data being transferred correctly after five cycles. When a typed sheet was included with the verbal handover, data loss was minimal. Current handover methods may result in significant loss of important data that may impact on patient care. The authors recommend that prior to handover, a formal handover sheet be constructed that can be transferred as part of the handover process.

AIM: To provide an evidence base for strategies, and effectiveness of the transfer of patient information between hospital and community for older people with physical illness.

DESIGN: A systematic review of qualitative and quantitative literature.

SEARCH STRATEGY: Literature from medical, health-related and social science databases as well as work in progress from national databases, the Internet, British PhD theses and other grey literature and policy documents.

SELECTION CRITERIA: Literature relating to similar health care systems published between January 1994 and June 2000 on hospital discharge planning. Empirical studies from peer reviewed sources; theoretical papers from non-peer reviewed sources; research papers from non-peer reviewed sources and professional documents.

DATA COLLECTION AND ANALYSIS: Extracted data from empirical studies under the headings of location, sector, research questions and study design and duration. We made structured summaries of all other data sources and used them to supply context and background. We categorized literature and analysed it in terms of method and analysis, quality and strength of evidence and its relevance to the research questions. We synthesized the results and presented them in terms of answers to our research questions.

RESULTS: A database of 373 potentially relevant studies and of these, 53 were accepted for further analysis. Thirty-one were empirical studies, most of which were qualitative or a combination of qualitative and quantitative in design. The most effective strategy for transferring information is the appointment of a 'key worker', who can provide a point of contact for workers from hospital and community. Nevertheless, problems have arisen because both settings are under pressure and pursuing different goals. Neither setting is fully aware of the needs, limitations and pressures of the other.

CONCLUSION: Raised awareness and the establishment of common goals are the first steps needed to bridge the divide between health and social care staff in hospital and the community.

Publication Types: Systematic Review

The handover of patient information between shifts enables continuity of care and increases patient safety. We surveyed UK practice during handovers in obstetric anaesthesia. A questionnaire was sent to 239 lead consultant obstetric anaesthetists to record routine practice in their unit and individual opinion about handover procedures. Responses were received from 168 anaesthetists, a 70% response rate. Handover policies were available in 10% of units. Most (76%) responding units had an allocated time for handover. In most units (76%), the duration of handover was reported as being < 15 min but the actual duration and depth of any discussion involved were not specified. Handovers were rarely documented in writing (7%). Consultant anaesthetists were most likely to be present at the morning handover and few handovers were multidisciplinary. Four percent of units reported critical incidents following inadequate handovers in the past 12 months. We identify features in handover procedures that could be improved.

Publication Types: Multicenter Study


AIM: This study attempts to address the content of nursing handover when compared with formal documentation sources.

BACKGROUND: The nursing handover has attracted criticism in the literature in relation to its continuing role in modern nursing. Criticisms include those related to time expenditure, content, accuracy and the derogatory terms in which patients are sometimes being discussed.

METHODS: Twenty-three handovers, covering all shifts, from one general medical ward were audio-taped. Their content was analysed and classified according to where, within a ward's documentation systems, the information conveyed could be located.

FINDINGS: Results showed that almost 84.6% of information discussed could be located within existing ward documentation structures and 9.5% of information discussed was not relevant to ongoing patient care. Only 5.9% of handover content involved discussions related to ongoing care or ward management issues that could not be recorded in an existing documentation source.

LIMITATIONS: The results of this study are representative of only one ward in one Australian Hospital. Specific documentation sources were also not checked to determine their content.
CONCLUSION: Streamlining the nursing handover may improve the quality of the information presented and reduce the amount of time spent in handover.


The emergency department intershift transfer of patient care is a universal event. Despite the frequency of its occurrence and complexity of issues surrounding the exchange, emergency department patient handover is insufficiently explored in our literature. This article reviews the effectiveness and efficiencies of the handover practice. The authors provide personal opinion regarding favorable parameters for the prehandover, intershift meeting, and posthandover activities.

Publication Types: Review


OBJECTIVES: To determine the existing patterns of sign-out processes prevalent in emergency departments (EDs) nationwide. In addition, to assess whether training programs provide specific guidance to their trainees regarding sign-outs and attitudes of emergency medicine (EM) residency and pediatric EM fellowship program directors toward the need for the development of standardized guidelines relating to sign-outs. METHODS: A Web-based survey of training program directors of each Accreditation Council for Graduate Medical Education (ACGME)-accredited EM residency and pediatric EM fellowship program was conducted in March 2006. RESULTS: Overall, 185 (61.1%) program directors responded to the survey. One hundred thirty-six (73.5%) program directors reported that sign-outs at change of shift occurred in a common area within the ED, and 79 (42.7%) respondents indicated combined sign-outs in the presence of both attending and resident physicians. A majority of the programs, 119 (89.5%), stated that there was no uniform written policy regarding patient sign-out in their ED. Half (50.3%) of all those surveyed reported that physicians sign out patient details "verbally only," and 79 (42.9%) noted that transfer of attending responsibility was "rarely documented." Only 34 (25.6%) programs affirmed that they had formal didactic sessions focused on sign-outs. A majority (71.6%) of program directors surveyed agreed that specific practice parameters regarding transfer of care in the ED would improve patient care; 80 (72.3%) agreed that a standardized sign-out system in the ED would improve communication and reduce medical error.
CONCLUSIONS: There is wide variation in the sign-out processes followed by different EDs. A majority of those surveyed expressed the need for standardized sign-out systems.


Handoffs involve the transfer of rights, duties, and obligations from one person or team to another. In many high-precision, high-risk contexts such as a relay race or handling air traffic, handoff skills are practiced repetitively to optimize precision and anticipate errors. In medicine, wide variation exists in handoffs of hospitalized patients from one physician or team to another. Effective information transfer requires a solid foundation in communication skills. While these skills have received much attention in the medical literature, scholarship has focused on physician-to-patient, not physician-to-physician, communication. Little formal attention or education is available to reinforce this vital link in the continuity of patient care. The authors reviewed the literature on patient handoffs and evaluated the patient handoff process at Indiana University School of Medicine's internal medicine residency. House officers there rotate through four hospitals with three different computer systems. Two of the hospitals employ a computer-assisted patient handoff system; the other two utilize the standard pen-to-paper method. Considerable variation was observed in the quality and content of handoffs across these settings. Four major barriers to effective handoffs were identified: (1) the physical setting, (2) the social setting, (3) language barriers, and 4) communication barriers. The authors conclude that irrespective of local context, precise, unambiguous, face-to-face communication is the best way to ensure effective handoffs of hospitalized patients. They also maintain that the handoff process must be standardized and that students and residents must be taught the most effective, safe, satisfying, and efficient ways to perform handoffs.

Shift report is a multifaceted process that serves to provide nurses with vital patient information to facilitate clinical decisions and patient care planning. A shift report also provides nurses with a forum for functions, such as patient problem solving and collaboration. The authors conducted a literature review, which indicates that current methodologies used to collect and convey patient information are ineffective and may contribute to negative patient outcomes. Data incongruence, legal implications, time constraints augmented by the nursing shortage, and the financial impact of shift report are also addressed. The literature reveals significant rationale for pioneering new and innovative methods of shift-to-shift communication. In the report To Err is Human: Building a Safe Health System, the Institute of Medicine attributes the deaths of up to 98,000 hospitalized Americans to medical errors, including communication failures [Institute of Medicine. (1999). *To err is human: Building a safe health system*. Report by the Committee on Quality of Health Care in America. Washington, DC: National Academy Press]. As a result, government policy makers and health care agencies have focused their attention on determining the root cause of errors to identify preventative measures, including the use of information technology [Institute of Medicine. (2004). *Keeping patients safe: Transforming the work environment of nurses*. Report by the Committee on Quality of Health Care in America. Washington, DC: National Academy Press]. Under these premises, the authors examined the process of nursing shift report and how it impacts patient outcomes. The use of computer technology and wireless modes of communication is explored as a means of improving the shift report process and, subsequently, health care outcomes and patient safety. Copyright (C) 2006 by Elsevier Inc.

Publication Types: Review


**OBJECTIVE:** To determine problems resulting from ED handover, deficiencies in current procedures and whether patient care or ED processes are adversely affected.

**METHODS:** A prospective observational study at three large metropolitan ED comprising three components: observation of handover sessions, 2 h post-handover surveys of the receiving doctors and a general survey of ED doctors.

**RESULTS:** The handovers of 914 patients were observed during 60 handover sessions in a 3-month period. Medical information, including
presenting complaints, was handed over better than communication and disposition information. Seven hundred and seven (77.4%) of 914 potential post-handover interviews were undertaken. Most (88.3%) doctors thought the handover was 'adequate/good'. However, information was perceived as lacking in 109 (15.4%) handovers, especially details of management (35, 5.0%), investigations (33, 4.7%) and disposition (33, 4.7%). There was a significant difference in the perceived quality of handovers (1-5 scale where 5 = excellent) when all required information was handed over and when it was not (median scores 4.0 vs. 3.0, respectively, P < 0.001). As a result of perceived inadequate handovers, the doctor/ED and patient were affected adversely in 62 (8.8%) and 33 (4.7%) cases, respectively, for example, repetition of assessment, delays in disposition and care. Fifty doctors completed the general survey. Most believed communications made to inpatient units, inaccurate/incomplete information and disorganization were problematic.

CONCLUSION: Deficiencies in handover processes exist, especially in communication and disposition information. These affect doctors, the ED and patients adversely. Recommendations for improvement include guideline development to standardize handover processes, the greater use of information technology facilities, ongoing feedback to staff, and quality assurance and education activities.

Role of patients and family


Bedside nurse shift report is a process where nurses provide shift-to-shift report at the patient's bedside so the patient can be more involved in his or her care. There are many benefits of bedside report, including relationship building between staff members and increased patient satisfaction, to both the patient and to the health care team. Concerns about the traditional methods of communication between the various shifts helped drive a nursing unit's decision to move to a more patient-involved model of shift-to-shift report. The change from the traditional taped report between health care providers to bedside reporting focused on patients wanting more involvement in their care, activities, and current status. Patients also wanted updates about their health status, their medical plan as well as information about their progress toward their goals. This, coupled with Banner Desert Medical Center's Care Model, embraces patient-centered care, King's Theory of Goal Attainment, and keeps the patient informed. The current nursing shift report did not meet the medical center's model of care on any of these aspects. This article will include information on the benefits of bedside nurse shift-to-shift report, how one unit implemented
bedside reporting, and some of the outcomes achieved after implementing this change at a 600-bed urban medical center.


For the most part, discharge from hospital is routine and uneventful. However, for a percentage of people, discharge from acute care requires careful planning to ensure continuity of care. This is particularly the case with older patients who have complex medical needs. This literature review reveals that the essential elements for discharge planning are: communication, coordination, education, patient participation and collaboration between medical personnel. Outcomes measures of successful discharge planning include patient satisfaction and quality of life. Smooth and efficient coordination of this process reduces stress and anxiety for the patient, family, nurse, doctor, hospital and community services.

Publication Types: Review


BACKGROUND: Evidence that both quality and patient safety are jeopardized for patients undergoing transitions across care settings continues to expand. Performance measurement is one potential strategy towards improving the quality of transitional care. A valid and reliable self-report measure of the quality of care transitions is needed that is both consistent with the concept of patient-centeredness and useful for the purpose of performance measurement and quality improvement.

OBJECTIVE: We sought to develop and test a self-report measure of the quality of care transitions that captures the patient's perspective and has demonstrated utility for quality improvement.

SUBJECTS: Patients aged 18 years and older discharged from one of the 3 hospitals of a vertically integrated health system were included.


RESULTS: The Care Transitions Measure (CTM), a 15-item unidimensional measure of the quality of preparation for care transitions, was found to have high internal consistency, reliability, and reflect 4 focus group-derived content domains. The measure was shown to discriminate between patients discharged from the hospital who did and did not have a subsequent emergency department visit or rehospitalization for their index condition. CTM scores were significantly different between health care facilities known to vary in level of system integration.
CONCLUSIONS: The CTM not only provides meaningful, patient-centered insight into the quality of care transitions, but because of the association between CTM scores and undesirable utilization outcomes, it also provides information that may be useful to clinicians, hospital administrators, quality improvement entities, and third party payers.


BACKGROUND: Patients with complex care needs who require care across different health care settings are vulnerable to experiencing serious quality problems. A care transitions intervention designed to encourage patients and their caregivers to assert a more active role during care transitions may reduce rehospitalization rates.

METHODS: Randomized controlled trial. Between September 1, 2002, and August 31, 2003, patients were identified at the time of hospitalization and were randomized to receive the intervention or usual care. The setting was a large integrated delivery system located in Colorado. Subjects (N = 750) included community-dwelling adults 65 years or older admitted to the study hospital with 1 of 11 selected conditions. Intervention patients received (1) tools to promote cross-site communication, (2) encouragement to take a more active role in their care and to assert their preferences, and (3) continuity across settings and guidance from a "transition coach." Rates of rehospitalization were measured at 30, 90, and 180 days.

RESULTS: Intervention patients had lower rehospitalization rates at 30 days (8.3 vs. 11.9, P = .048) and at 90 days (16.7 vs. 22.5, P = .04) than control subjects. Intervention patients had lower rehospitalization rates for the same condition that precipitated the index hospitalization at 90 days (5.3 vs. 9.8, P = .04) and at 180 days (8.6 vs. 13.9, P = .046) than controls. The mean hospital costs were lower for intervention patients ($2058) vs. controls ($2546) at 180 days (log-transformed P = .049).

CONCLUSION: Coaching chronically ill older patients and their caregivers to ensure that their needs are met during care transitions may reduce the rates of subsequent rehospitalization.


During an episode of illness, older patients may receive care in multiple settings; often resulting in fragmented care and poorly-executed care transitions. The negative consequences of fragmented care include duplication of services; inappropriate or conflicting care recommendations, medication errors, patient/caregiver distress, and higher costs of care.
Despite the critical need to reduce fragmented care in this population, few interventions have been developed to assist older patients and their family members in making smooth transitions. This article introduces a patient-centered interdisciplinary team intervention designed to improve transitions across sites of geriatric care.

Publication Types: Clinical Trial
Randomized Controlled Trial


OBJECTIVES: To investigate patients' experience with coordination of their postsurgical care across multiple settings and the effects on key outcomes.

DATA SOURCES: Primary data collected over 18 months from 222 unilateral knee-replacement patients at Brigham and Women's Hospital in Boston, MA.

STUDY DESIGN: Patients were surveyed about the coordination of their postdischarge care during the 6-week period postdischarge when they received care from rehabilitation facilities and/or home care agencies and follow-up care from the surgeon.

DATA COLLECTION: Patients were surveyed before surgery and at 6 and 12 weeks postsurgery.

PRINCIPAL FINDINGS: Patient reports highlight problems with coordination across settings and between providers and themselves. These problems, measured at 6 weeks, were associated with greater joint pain, lower functioning, and lower patient satisfaction at 6 weeks after surgery. At 12 weeks after surgery, coordination problems were associated with greater joint pain, but were not associated with functional status.

CONCLUSION: Coordination across settings affects patients' clinical outcomes and satisfaction with their care. Although accountable for transfer to the next care setting, providers are neither accountable for nor supported to coordinate across the continuum. Addressing this system problem requires both introducing coordinating mechanisms and also supporting their use through changes in providers' incentives, resources, and time.
Appendix B

College of Nurses of Ontario
Transfer of Accountability
Knowledge Translation Fellowship

The Best Patient Transfer

Interview Package
**Completed by:**

- Outreach Consultant
- Community Partner (CPSO, CPO, St Michael's Hospital, York School of Nursing)
- CNO (Director and Managers of Policy & Practice)

**Date Completed:** ________________________________
CNO Transfer of Accountability Interview Guide

Patient transfers from one care giver to another are frequent and of critical importance to patient safety. Health care providers make key decisions and share critical information along the way. While these caregivers work amidst competing priorities, safe, timely, effective and efficient patient care is at the core. Nurses and other health care providers play a major role in this process. Throughout our experience there have no doubt been some highs and lows with respect to this process. Ideally we want exceptional patient transfer experiences to be the new normal.

<table>
<thead>
<tr>
<th>Q1: ABOUT YOU</th>
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<tr>
<td>As a starting point I would like to find out a little more about you.</td>
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<td>What experience have you had with patient transfers? (identify as many as apply)</td>
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<tr>
<td>☐ Provider (e.g. nurse, pharmacist, physician)</td>
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<td>☐ Policy Analyst / Decision-maker</td>
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<td>☐ Patient / family member</td>
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<th>Q2: THE HANDOFF PROCESS</th>
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<tr>
<td>Lets begin with your perspective of the transfer process.</td>
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<tr>
<td>What would you describe as the key steps in the transfer process?</td>
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</table>
Q3: BEST EXPERIENCE

Reflecting on your own experience, tell me a story about a time when you experienced an “exceptional patient transfer” - a high point - where you may have felt “Wow, wouldn't it be wonderful if the patient transfer experience was like this all the time?”

Include as much detail in your story as you can remember, including:

- When was it?
- Where?
- Who was involved?
- What was happening?
- Who made the decision?
- What was your role? What were people in the story doing that had such a positive effect?
- Were there any guidelines in use?
- What was the outcome?

Q4: WHERE IN THE CONTINUUM OF CARE DID THIS STORY TAKE PLACE?

☐ Hospital (including hospital based programs and outpatient services)
☐ Rehabilitation Facility
**Q5: LEARNING FROM DIFFICULT TIMES**

Sometimes our work requires us to deal with delays, bottlenecks, unanticipated problems or other obstacles that make our jobs difficult. Fortunately, over time, we all learn about or discover tricks and workarounds to help us overcome these barriers. We do this in an effort to deliver quality care.

Tell me about the tips or creative workarounds you've learned in this handoff!
**Q6: VISION**
In your opinion, how might the College of Nurses or other regulatory and / or professional bodies provide better support for exceptional patient transfer?

**Q7: WISHES FOR THE FUTURE**
Imagine that a nurse (who is a good friend and colleague) just called you to tell you that a decision is about to be made about the transfer of your loved one to another health care setting.

- What would you ask your nurse friend to do to ensure the best possible transfer?
- Who do you want included in the decision-making?
- What request(s) would you make?
- What information/ documentation would you request?
Q8: SEEING THE FUTURE

As a final question, imagine it is three years from now and exceptional patient transfer experiences are the new normal.

Please describe in detail how you see the process functioning.

- What are we doing that is new, different or better?
- What 3 changes have been implemented?
- What barriers needed to be broken down to achieve the changes?
- What did we do to make sure the changes occurred in a smooth and rapid fashion?

THANK YOU