Inter-hospital patient transfer – A thematic analysis of the literature

This literature review was prepared as part of the Victorian Quality Council's project on improving state-wide inter-hospital transfer processes.

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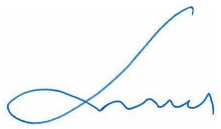
Foreword

In November 2007, the VQC conducted a survey of all Victorian public health services to identify current inter-hospital patient transfer practices. Analysis of the information collected showed that there are significant variations in transfer practices, in particular, the information flow (verbal and written) between health services. An Inter-hospital Patient Transfer Workshop was held in March 2008 with over 150 participants. Great concern was evident about transfers and a sense of urgency expressed over the need to improve current practice.

An Expert Panel was subsequently convened to streamline issues identified from the workshop and to determine a framework for future work. Following discussions with a broad range of stakeholders, it was identified that the transfer of non-critical patients is not the focus of any of the existing agencies responsible for this area. It was therefore agreed that standardising the information flow and providing decision support tools for the transfer of non-critical patients presented an opportunity to improve communication, reduce variation and address some of the concerns raised by rural hospitals.

As the Council approached the end of its second term, the project was put on hold to allow the third term Council, of which half were new members, the opportunity to assess its suitability in an unbiased way vis-à-vis other priorities. In February 2009 a project on improving inter-hospital transfer was endorsed by the new Council and a new Patient Transfer Working Group was established to advance the work outlined above.

This literature review was prepared to inform the direction of the project and identify current national and international initiatives that could be adapted for use in Victoria.



Dr Simon Fraser
Chair, Patient Transfer Working Group

Definition of Patient Transfer

There is a paucity of definitions for patient transfers in the literature. However a definition cited within the Australian literature provides a clear and logical description of common movement patterns of patients between hospitals:

Up transfer: Transfer of a patient to another hospital for inpatient specialist treatment not available at the primary hospital.

Down transfer: Either return transfer of an inpatient to the primary hospital, or transfer of a patient to another hospital for recovery.

Sideways transfer: Transfer of a patient to another hospital, because the required facilities at the referring hospital are fully occupied [1] .

To define patient transfer more broadly, we have drawn upon the definitions utilised in the clinical handover literature. Patient transfer is the 'transfer of information and professional responsibility and accountability between individuals and teams, within the overall system of care' [2].

Problems associated with Patient Transfer

- Transfer relies heavily on multiple health professionals having local knowledge of the system and the differing service delineations both in metropolitan and rural areas [3].
- There is a perceived lack of understanding in the metropolitan and larger regional hospitals about the limited resources and support in rural areas and smaller regional hospitals [4].
- There is a lack of defined processes for access to clinical advice, triage and coordination of transport and finding a bed in an appropriate facility [3].
- There is a low standard of hospital documentation provided to aged care facilities on transfer with 81% of facilities in Australia reporting problems with documentation provided by hospitals [5]. A recent study looking at hospital documentation to sub-acute facilities in the US found that 66.5% of discharge summaries were incomplete and only 6% were received on the day of transfer [6] .
- The severity of the patient's illness is often underestimated and the level of escort not appropriate [5, 6].
- There is a lack of clear accountability for transfers [7, 8].
- A survey of rural hospitals conducted by the Victorian Quality Council in June 2007 identified clinical information, communication and documentation associated with inter-hospital patient transfer as significant areas of concern requiring attention [9].

Implications of poorly executed transfers

- An observational study conducted in a regional Victorian hospital found that patients transferred with incomplete data to their Emergency Department (ED) had a longer ED stay, and significantly contributed to access block compared to the group with complete data [10].

- Duplication of services, increased costs, loss of continuity of care and increased mortality have been associated with poor transfer processes [1, 11-14].

- Analysis of adverse events in Victoria and interstate indicates that communication issues, particularly incomplete documentation for inter-hospital patient transfer can be a major contributor leading to patient harm. There have been seven sentinel events in Victoria during 2005-2008 in which patient transfer, retrieval or transport arrangements has been identified as a significant contributing factor [15]. Similar themes have also emerged from the Rural Limited Adverse Occurrence Screening (LAOS) program [16]. Other literature quotes adverse events occurring in 30-75% of transfers [7, 17].

- A team from the Royal Melbourne Hospital found that unexpected events occur in approximately two-thirds of transfers [5].

- A cross-sectional analysis of 176 intra-hospital transport reports of critically ill patients submitted to the Australian Incident Monitoring Study in Intensive Care over 6 years found that 31% included serious adverse events including four patient deaths [18].

Interventions shown to offer improvement for Patient Transfer

- The development of minimum data sets, creating new roles to assist handover, developing and implementing standard operating procedures, staff education and training, the use of electronic tools, reflective methods, changing practice through change management and addressing different types of handover (e.g. nonverbal/ documentation, bedside) have been demonstrated to improve clinical handover [8, 19].

- A combination of training for staff and improved documentation improves record keeping in transfer [20].

- A team from a Californian Psychiatric hospital utilised the Toyota Production System Principles to design a new transfer process. Key principles included:

  – specifying the process in detail –the content, sequence, timing and responsible person for each step
  – establishing connections between each step
  – designing a pathway that is simple
  – continuously assessing the outcome and striving to improve

  Outcomes have been sustained for 3 years and included more timely transfers and a reduction in communication errors by 89% [21].

- The establishment of performance standards for care transitions and monitoring performance against these standards provides opportunities for identifying improvement [8].

- Potential key performance indicators for measuring patient transfer processes include:

  – Structure: Protocol of shared accountability in effective transfer of information
  – Process: acceptance time and total transport time, completeness and accuracy of information provided
  – Outcome: adverse events, satisfaction Levels: patient, referring hospital and receiving hospital [22, 23].

Important considerations in implementing Patient Transfer improvement projects

- Engagement of medical staff is important [3].
- Engagement of transport providers early in the project [3].
- Culture at multiple sites within the one region/organisation can be very different and this needs to be considered in implementation support [3].
- There was sometimes resistance to imposing standardisation [3].
- As well as training for existing staff, training of new staff in orientation also needs to be considered [3].
- The Transfer form can be the focus rather than the concept [3].
- The extent of implementation required to support the change was larger than expected within the scope of the project [3].

Recommendations for principles of effective transfer

Patient-centred care

- The optimal health and well-being of the patient is the principal goal of patient transfer[17].
- Both referring and receiving hospitals shift their perspective from the concept of a patient discharge to that of a patient transfer with continuous management. Continuity of care is achieved for patients when a provider knows what has happened in the past and different providers agree on the management plan [8, 24].
- Patient/carer consent is obtained prior to transfer and this should include a discussion about the risks and benefits of transfer. The discussion should be documented and consent form signed by the patient [17, 25].
- The preferences of patients and caregivers is elicited and incorporated into the care plan, where appropriate [8, 26, 27].
- Easy to understand written information about the transfer is provided to the patient including patient's rights and complaints procedures [27, 28].
- Affirm patient/client's rights to privacy and safeguard confidentiality when patient information [27].

Personnel

- The decision to transfer involves a senior and experienced clinician [29].
- All doctors and other personnel undertaking transfers have the appropriate competencies, qualifications and experience. Minimum qualifications for non-emergency transfers are identified in the Non-Emergency Patient Transport (NEPT) Regulations [25, 28, 29].
- Initial and ongoing training for staff is provided in all aspects of patient transfer [30].
- Participants within the multi-disciplinary team responsible for transfer are defined and all members know their role [27].

Communication

- Agreement to accept the patient in transfer is obtained in advance from a clinician at the receiving hospital [17].
- The formulation of a common care plan is developed through communication and collaboration with practitioners across settings. This should include both a physician to physician discussion and nurse to nurse discussion [8, 25].
- Provision is made for feedback to the referring centre [30].

Documentation

- Documentation of the decision includes the name of the doctor making the decision with their level of seniority, contact details, date and time at which the decision was made and reason for transfer [29].
- Appropriate patient care records and results of investigations accompany the patient to the receiving hospital [25].
- The clinical record documents the patient's clinical status before, during and after the transfer. Minimum documentation requirements are identified with the NEPT regulations [28-30].

Protocols

- When transfer is part of a regional plan to provide optimal care at a specialised facility, inter-facility agreements are in place [5, 6, 8, 17].
- Written transfer protocols articulate processes and support practice in patient transfer [5, 6, 8, 17, 25].

Accountability

- Transferring hospitals take responsibility for the quality of care received in transfer. This may involve nominating a specialist responsible for all transfers from the organisation [7, 8, 17].
- Organisations should have an effective quality management system for transfer for monitoring and auditing performance and making recommendations for appropriate improvement [29, 30].

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