

A Study of Transfers from Rural Hospitals in New Zealand

Trevor Lloyd

**Clinical Senior Lecturer
Dunedin School of Medicine
Otago University**

**Medical Officer
Dunstan Hospital**

Dunedin School of Medicine



Dunedin School of Medicine



**Garry
Nixon**



**Kati
Blattner**



**Trevor
Lloyd**

PGDipRPHP

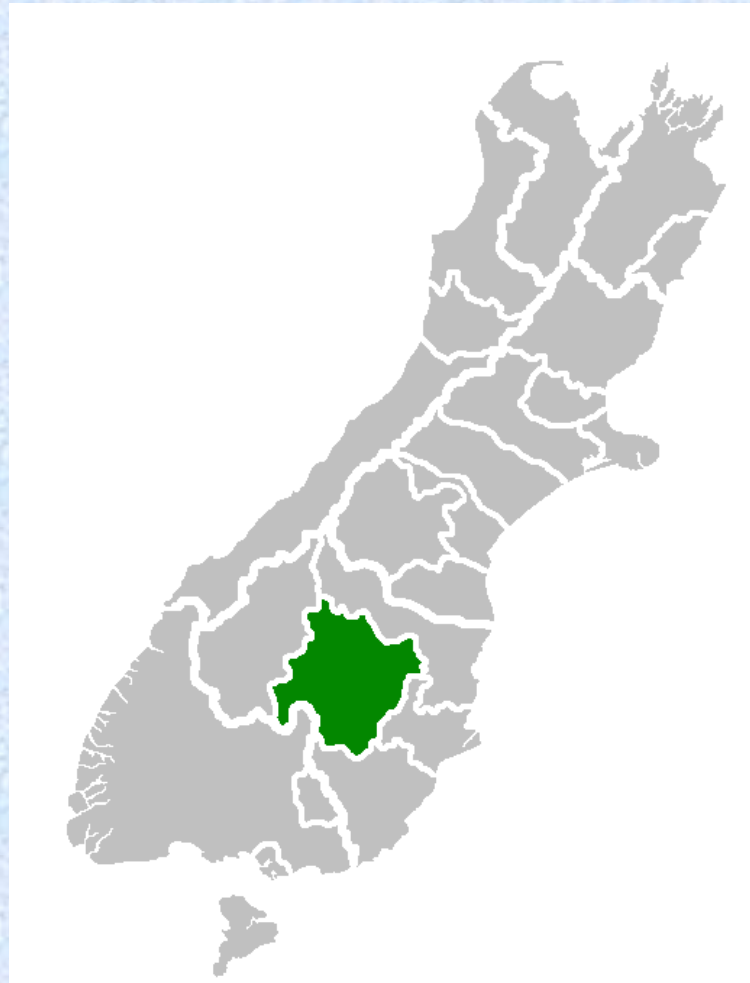
Postgraduate Diploma in Rural and Provincial
Hospital Practice



Medical Officer Dunstan Hospital Central Otago



Medical Officer Dunstan Hospital Central Otago

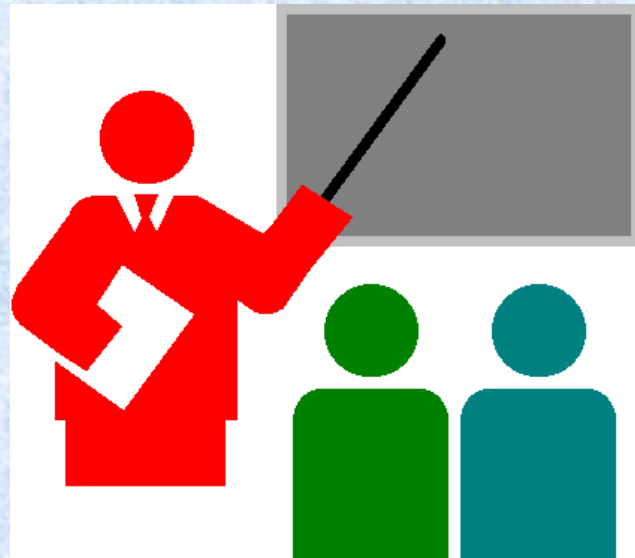




Patient transfers are an important part of our clinical work



Patient transfers are an important part of what we teach



Patient transfers are an important part of what we teach



**Mike
Hunter**



**David
Bowie**



Research on patient transfers



What do we know already?



Mainly from bigger countries



Hollins J, Vetch C, Hays R. Interpractitioner communication: telephone consultations between rural practitioners and specialists. Aust J Rural Health. 2000;8: 227-31.

Wong K. and Levy R. Interhospital transfer of patients with surgical emergencies: areas for improvement. Aust J Rural Health. 2005;13:290-4.

**Gupta R and Rao S. Major trauma transfer in Western Australia. ANZ Journal of Surgery. 2003;73:372-5.
Dodd GAA, Peterson I. Interhospital transfers from rural hospitals:**

suggestions for your jump kit (what you shouldn't leave home without). Can J Rural Med. 1998;3:142-5.

Moszczyński A. and Haney C. Stress and coping of Canadian rural nurses caring for trauma patients who are transferred out. Journal of Emergency Nursing. 2002;28:496-504.

Bigelow LK, Anderson KC, Camp J. (Hageman JR, section editor). Perinatal transport casebook. J Perinatology. 1997;17:411-15.

Wuerz R, Meador S. Adverse events during interfacility transfers by ground advanced life support services. Prehospital Disaster Med. 1994;9:50-3.

Rogers FB, Osler TM, Shackford SL et al. Study of the outcome of patients transferred to a level I hospital after stabilization at an outlying hospital in a rural setting. J Trauma. 1999;46:238-33.

Mann N., Pinckney K., Price D., Rowland D., Arthur M., Hedges J. and Mullins J. Injury mortality following the loss of air medical support

for rural interhospital transport. Academic Emergency Medicine. 2002;9:694-8.

Young JS, Bassam D, Cephas GA, et al. Interhospital versus direct scene transfer of major trauma patients in a rural trauma system. Am Surg. 1998;64:88-91;discussion 91-2.

Mainly about air transfers



- Wong K. and Levy R. Interhospital transfer of patients with surgical emergencies: areas for improvement. Aust J Rural Health. 2005;13:290-4.**
- Gupta R and Rao S. Major trauma transfer in Western Australia. ANZ Journal of Surgery. 2003;73:372-5.**
- Moszczyński A. and Haney C. Stress and coping of Canadian rural nurses caring for trauma patients who are transferred out. Journal of Emergency Nursing. 2002;28:496-504.**
- Dzendrowskyj P., Bowie D. and Shaw S. Transport services under stress: patient air transfers due to industrial action in Christchurch. NZMJ. 2003;116:1-11.**
- Nagappan R, Barker J Riddell, T et al. Helicopter in transit care of the critically ill—the Whangarei experience. NZMJ. 2000;113:303-304.**

Mainly relating to trauma



Gupta R and Rao S. Major trauma transfer in Western Australia. ANZ Journal of Surgery. 2003;73:372-5.

Rogers FB, Osler TM, Shackford SL et al. Study of the outcome of patients transferred to a level I hospital after stabilization at an outlying hospital in a rural setting. J Trauma. 1999;46:238-33.

Mann N., Pinckney K., Price D., Rowland D., Arthur M., Hedges J. and Mullins J. Injury mortality following the loss of air medical support for rural interhospital transport. Academic Emergency Medicine. 2002;9:694-8.

Young JS, Bassam D, Cephas GA, et al. Interhospital versus direct scene transfer of major trauma patients in a rural trauma system. Am Surg. 1998;64:88-91;discussion 91-2.

Some useful general advice



Some useful general advice

- **appropriate triage**
- **adequate resuscitation and stabilization prior to transfer**
- **good communication with the receiving hospital and transporting service**
- **having the right people and equipment to go with the patient so as to deal if possible with any deterioration during the transport**
- **transporting to a facility capable of delivering definitive care**
- **good documentation**
- **keeping relatives informed**

Two qualitative studies dealing with social and emotional factors



Moszczynski A. and Haney C. Stress and coping of Canadian rural nurses caring for trauma patients who are transferred out. *Journal of Emergency Nursing*. 2002;28:496-504.

Jeffries D. A view from the edge: professionalism in an island practice. *Medical Humanities*. 2004;30:101-5.

Social and emotional factors

- **not attending to other work while managing the transfer or needing to travel with the transferred patient**
- **having to deal with sick patients and their relatives with limited resources**
- **feeling criticised by specialists on retrieval teams**
- **feeling that their generalist skills were undervalued even by their own hospitals**
- **receiving limited feedback from the receiving hospitals**
- **having limited opportunities for debriefing**

Previous New Zealand studies



One audit from Rawene



**Montalvo V. GPEP1 audit: rural hospital transfers.
NZFP. 2008: 35:328-9.**

Helicopter retrievals in Northland



NagappanR, BarkerJ Riddell,T et al. Helicopter in transit care of the critically ill—the Whangarei experience. NZMJ. 2000:113:303-304.

One study from Christchurch



Dzendrowskyj P., Bowie D. and Shaw S. Transport services under stress: patient air transfers due to industrial action in Christchurch. NZMJ. 2003;116:1-11.



Our study





What did we do?



Ten rural hospital doctors

Tom Barry, Greymouth

Jim Corbett, Raetihi

Mohe Gonzalez, Dannevirke

Alison McAlwee, Kaeo

Steve Main, Rawene

Stuart Mologne, Westport

Alan Murray, Kawakawa

Cornelius van Dorp, Kaitiaki.

Rafik Wanis, Wairoa

Eric Wegener, Roxburgh



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GENX721

**Rural hospital Medical
Practice**

UNIVERSITY
of
OTAGO



Te Whare Wānanga o Ōtāgo

GENX722

**Rural Hospital
Surgical Practice**

GENX723

**Rural Hospital Clinical
Practice**

Optional Paper

Assignment

You will be required to write a project during the course of this paper. This project should attempt to illustrate the themes we have covered in this paper. The topic for the project is patient transfer. We have chosen this topic because transfer of patients, for various reasons, is an inevitable and regular part of our practice. It can lead on to an examination of our personal, our professional, our hospital's and our community's values (perhaps best understood in comparison with the doctors, the hospital and the urban centre that you are sending the patient to). It is also likely to highlight the disjunction that often exists between these sets of values (usually when there is disagreement or things go wrong). You can describe a particular transfer, or a number of transfers, or transfers from your hospital in general, as long as you take into account the wider issues that arise.

Assignment

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What did we find?



Six Themes

- **Resources at the rural hospital**
- **Clinical conditions**
- **Mode of transfer**
- **Communication**
- **Issues during transfers**
- **Health system issues**

Resources at the rural hospital

- **Isolation (10)**
- **Variable workload (4)**
- **Doctors (4)**
- **Locums (2)**
- **Nurses (5)**
- **Laboratory (4)**
- **Imaging (2)**

Resources at the rural hospital

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- **Variable workload (4)**
- **Doctors (4)**
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Resources at the rural hospital

“The area is large but the population is small. The region is isolated and not infrequently, especially in winter, unreachable by conventional means.”

Resources at the rural hospital

- Isolation (10)
- **Variable workload (4)**
- Doctors (4)
- Locums (2)
- Nurses (5)
- Laboratory (4)
- Imaging (2)

Resources at the rural hospital

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- **Variable workload (4)**
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- **Locums (2)**
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- **Imaging (2)**

Resources at the rural hospital

“ To get the management right needs good things to happen, including initial assessment, nursing observation at appropriate frequency, diagnostic tests as available and regular and frequent medical review.”

Resources at the rural hospital

“Rural transfers often happen as a team process.”

“Teamwork as ever is the key.”

Resources at the rural hospital

- **Isolation (10)**
- **Variable workload (4)**
- **Doctors (4)**
- **Locums (2)**
- **Nurses (5)**
- **Laboratory (4)**
- **Imaging (2)**

Clinical conditions

- **Acute coronary syndromes (3)**
- **Trauma (3)**
- **Bowel obstruction (3)**
- **Other surgical (4)**
- **Other medical (9)**
- **Paediatric (9)**
- **Obstetric (1)**
- **Dental (1)**
- **Unclear diagnosis (1)**
- **For investigation (3)**

Clinical conditions

- **Acute coronary syndromes (3)**
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- **Other surgical (4)**
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- **Paediatric (9)**
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- **Unclear diagnosis (1)**
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Clinical conditions

- **Acute coronary syndromes (3)**
- **Trauma (3)**
- **Bowel obstruction (3)**
- **Other surgical (4)**
- **Other medical (9)**
- **Paediatric (9)**
- **Obstetric (1)**
- **Dental (1)**
- **Unclear diagnosis (1)**
- **For investigation (3)**

Clinical conditions

**“No, I don’t always have a diagnosis ...
He knows I’m only guessing, I know I’m
only guessing”.**

Clinical conditions

“The patient’s symptoms in the emergency presentation often may not reflect the real diagnosis.”

Clinical conditions

“To await events in a doubtful situation in rural New Zealand and not transfer is a recipe for regret.”

Clinical conditions

- **Acute coronary syndromes (3)**
- **Trauma (3)**
- **Bowel obstruction (3)**
- **Other surgical (4)**
- **Other medical (9)**
- **Paediatric (9)**
- **Obstetric (1)**
- **Dental (1)**
- **Unclear diagnosis (1)**
- **For investigation (3)**

Mode of transfer

- **Air (7)**
- **Road (7)**
- **Private car (1)**

Mode of transfer

“Almost all emergency transfers are conducted by air. The small group transferred by ambulance is accounted for by weather not permitting flying.”

Mode of transfer

- **Air (7)**
- **Road (7)**
- **Private car (1)**

Mode of transfer

“Of all the patients transferred to a tertiary centre almost half are done so on a non urgent basis.”

“By far the majority of ... transfers are conducted by road ambulance.”

Mode of transfer

- **Air (7)**
- **Road (7)**
- **Private car (1)**

Communication

- **Nurses (2)**
- **Specialists (6)**
- **Registrars (2)**
- **Transport services (2)**
- **Feedback from base hospital (2)**

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Communication

“There is a perception in some quarters that, in some way, specialist treatment in a large hospital is intrinsically superior to anything that goes on at the periphery ... We’ve heard it all before of course – often from some newly qualified house officer of the ‘have you done a rectal?’ brigade.”

Communication

“Every time I ring him he makes me feel like an idiot.”

“Arguing with them takes time; time better spent stabilizing an ill patient.”

Communication

- **Nurses (2)**
- **Specialists (6)**
- **Registrars (2)**
- **Transport services (2)**
- **Feedback from base hospital (2)**

Communication

“The ambulance control centre is based in Auckland ... they have no understanding of the local geography or logistics.”

Communication

“The above emergency and transfer that took place went smoothly only due to the well coordinated effort of staff and telephone communication between our hospital and the staff of the other involved hospitals.”

“A new willingness for closer ties between peripheral hospital and base hospital practice is apparent.”

Issues during transfers

- **Level of escort (4)**
- **Treatments (4)**
- **Potential for patient to deteriorate (3)**

Issues during transfers

- **Level of escort (4)**
- **Treatments (4)**
- **Potential for patient to deteriorate (3)**

Issues during transfers

“It is my impression that St John provide an admirable service for the most part.”

“Our ambulance crews are almost all made up of volunteers and we rely on these volunteers heavily.”

Issues during transfers

- **Level of escort (4)**
- **Treatments (4)**
- **Potential for patient to deteriorate (3)**

Issues during transfers

- **Level of escort (4)**
- **Treatments (4)**
- **Potential for patient to deteriorate (3)**

Issues during transfers

“There is constant traffic between homes, rural hospitals, base hospitals and tertiary hospitals ... In all of these situations there is potential for harm during travel and in all, therefore, varying degrees of planning for safety during transfer need to be considered.”

Health system issues

- **Audits (2)**
- **Peer review (2)**
- **Most appropriate hospital to receive patient (6)**
- **Keeping patients at their local rural hospital (4)**
- **Equity issues (4)**
- **Education (4)**
- **Coordination (5)**

Health system issues

- **Audits (2)**
- **Peer review (2)**
- **Most appropriate hospital to receive patient (6)**
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Health system issues

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- **Education (4)**
- **Coordination (5)**

Health system issues

“The overriding principle in ... medical and surgical emergencies is timely arrival of the sufferer in a hospital with sufficient facilities and expertise to provide ... definitive care.”

Health system issues

- **Audits (2)**
- **Peer review (2)**
- **Most appropriate hospital to receive patient (6)**
- **Keeping patients at their local rural hospital (4)**
- **Equity issues (4)**
- **Education (4)**
- **Coordination (5)**

Health system issues

- **Audits (2)**
- **Peer review (2)**
- **Most appropriate hospital to receive patient (6)**
- **Keeping patients at their local rural hospital (4)**
- **Equity issues (4)**
- **Education (4)**
- **Coordination (5)**

Health system issues

“I believe that everyone should have equity of access to a high standard of health care. If there are problems with resource allocation or recruitment at the rural hospital then the patient should not suffer for this and should be referred to where these things are available.”

Health system issues

“We need to remain patient focused in our treatment, not health provider focused.”

“[We need to] advocate against a system trying not to use resources”.

“Money has become the core value.”

Health system issues

- **Audits (2)**
- **Peer review (2)**
- **Most appropriate hospital to receive patient (6)**
- **Keeping patients at their local rural hospital (4)**
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Health system issues

- **Audits (2)**
- **Peer review (2)**
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What does it mean?



- **Transport will become necessary when the care needs, or potential care needs, of the patient are beyond the scope of the facility at which the patient is receiving care.**
- **The number of patients requiring transfer is likely to vary depending upon the resources available.**

Patient transfer should only occur if there is a reasonable likelihood that it will improve the patient's clinical outcome.

(Report to the Health and Disability Commissioner)

Smaller hospitals require a system of support and back-up where potentially unstable patients can be easily transferred to a larger centre ... medical officers have a right to transfer patients to larger centres if they feel this is required.

The arrangement of the transfer can be frustrating to the attending physician and can actually become more stressful than the patient care.

- **To practise safely across a broad scope, as in rural hospitals, doctors need strong and healthy relationships with their specialist colleagues.**
- **Trust and “knowing the person you are talking to” are important elements of effective and satisfactory communication.**

There is now an opportunity to generate the skilled generalist medical workforce New Zealand rural hospitals need with the recognition of rural hospital medicine as a new scope of practice.



Elements of an Ideal Emergency Transfer





Elements of an Ideal Emergency Transfer



1. Transfers should occur as part of a regional transport system with guidelines agreed between rural hospitals, transport services, base hospital and tertiary centres.





Elements of an Ideal Emergency Transfer



2. Rural hospitals should be adequately resourced to properly triage sick and injured patients, provide care themselves when appropriate, and organise timely transfers when required.





Elements of an Ideal Emergency Transfer



3. Transfer when required should be to the nearest hospital capable of providing definitive care.





Elements of an Ideal Emergency Transfer



4. There should be one doctor at consultant level at both the referring and receiving hospitals who is responsible for initiating and organising each transfer.





Elements of an Ideal Emergency Transfer



5. Staff at the referring hospital need to liaise closely with transport services and the receiving hospital. The receiving hospital should be kept informed of any change in plan or change in the patient's clinical status.





Elements of an Ideal Emergency Transfer



6. Patients where possible should be adequately stabilised before transfer. For air transport or for longer journeys this will generally include a secure airway, two intravenous lines, an indwelling urinary catheter and a nasogastric tube.





Elements of an Ideal Emergency Transfer



7. Transporting personnel should have the expertise and equipment required to manage any deterioration that might occur en route. There should be an adequate handover to them from the referring hospital and from them to the receiving hospital.





Elements of an Ideal Emergency Transfer



8. A referral letter, copies of observations recorded, treatments given, laboratory test results, X-rays, medications, and any signed consents should accompany the patient.





Elements of an Ideal Emergency Transfer



9. Relatives should be kept informed, and assisted where necessary to make their own arrangements for transport and accommodation (or, where appropriate for family reasons, to go with the patient).





Elements of an Ideal Emergency Transfer



10. Every effort should be made to improve communication with transport services and between staff at the referring and receiving hospitals.





Questions or Comments?

