A review of the outcomes of the Princess Alexandra Hospital teleconference fracture clinics over six years

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Declaration
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Teleconference fracture clinic


Mt Isa Hospital
- 883km east of Townsville
- Local medical officer or nurse practitioner
- Biweekly fracture clinics
- Consultant assessment or operative management requires transfer of patient to Townsville Hospital
- Estimated cost of transfer is $1269 per adult; $2134 per child with accompanying adult

Telehealth at PAH
- Friday teleconsultation fracture clinic since January 2011
- Second weekly clinic since June 2015
- Team consists of
  - Orthopaedic surgeon
  - Radiographer
  - Radiology imaging system
  - Nurse
  - Charts
- Approximate additional cost $1285 per clinic

PAH Telehealth Centre
Successes and Failures in Telehealth
2017

Teleconference fracture clinic

- Average number of patients reviewed per clinic = 8
- Total of 304 clinics since 2011
- Approximately 2410 patients
- Cost of 304 clinics = $390 000
- Cost of transferring patients = $2.8 million
- Total cost saved over 6 years = $2.4 million
  = $400 000/year/HHS

Cost Analysis

Strengths

- Consultant led care
- Advantage for patients
  - Reduced cost of travel
  - Less time off work
  - Earlier diagnosis of serious pathology
  - Expert discussion of treatments
  - Coordination of treatment plans
  - Fewer transfers

Strengths

- Advantage for patients
  - Service to multiple centres
  - Shorter distance travelled
  - Post-operative care
- Support and educational opportunity for rural doctors
  - Access to specialist opinion
  - Support for managing simple cases

Case Study

- 50yo woman - Left distal fibula fracture 5 weeks previously, placed in short leg cast
- Presented to Teleconference clinic complaining of pain and unable to weight bear
- Consultant discovered past history of breast cancer, pathological nature of fracture and possible distal tibia lesion
Challenges

- Rely on local health practitioner for examination
- Need to be able to instruct
- Imperfect view on screen
- Failure to attend
  - Improve with education, advertising, and reminders
- Delay in transfer of radiographic images
  - Web based radiology access
  - Reduced visits to hospital for imaging for patients

Improvements

- Electronic appointment book and paperless clinical notes
  - Saving of cost of charts and administrative time
  - Could serve multiple locations
- Expand telehealth service to smaller, remote hospitals eg Birdsville, Burketown
- Provide training for local health practitioners

Conclusion

- Significant patient benefit
- Consultant directed care
- Cost saving of approx. $400 000/year/HHS
- Could be expanded to multiple rural and remote locations

Thank you