Discovering the cultural and social shift necessary for the adoption of ubiquitous technologies in a small rural healthcare setting.

### The Plan

# The setting



# The setting

#### Julia Creek

550 town residents 1200 out of town dependents Seasonal Itinerant population Main industries

> Grazing, Mining and Tourism



Julia Creek Hospital 10 beds

3 Aged Care

1 Palliative Care

1 Paediatric

5 General Medical

**Outpatients Department** 

**Emergency Resuscitation Room** 

X Ray Department

Dispensary

#### The staff

- One Director of Nursing
- One Medical Superintendent
  - Currently on leave
  - Locums stay 2-4 weeks each
- 10 Nursing Staff
- 5 Operational Staff
- 1 Administration Officer
- Physiotherapist 2 days per week
- Visiting specialist and therapists.

# The technology

- Five computers (all desktops)
  - One for DON
  - One for Admin Officer
  - One for All Nurses
  - One for Med Super and visiting specialists and therapists
  - One in training room for general use and videoconferencing
- Queensland Health Intranet and network access
- Analog PABX –based telephone system

#### Issues

- Staff not generally busy throughout shift.
- PABX does not support keypad navigation when choices offered.
- Computers not available in any patient care areas.
- Staff not trained in using corporate systems.
- Not all corporate systems available to staff.
- Low bandwidth makes network access slow.

#### Other factors

- End of power grid
- Seasonal variations
  - Flood
  - Plague
  - Cold/heat
  - Humidity
- Transport costs
- Specialist availability

#### The dream

- Telecommunications develop to allow Mobile wireless access within the hospital.
- Mobile devices (laptops/PDAs/smartphones) replace desktop PCs
- Staff adopt electronic documentation and access to information.
- Patient care improves.

# What does technology have to do with better patient care?

- Access to best available evidence just in time.
- Point of discovery lodgment of data is more timely and more likely to be accurate.
- Ability to coordinate care better using standardized pathways.
- Better Medication Management with fewer errors.
- Improved reporting leads to better remuneration and access to more resources.

## The Proposal

- Diarizing the difficulties encountered by staff and comments made in relation to documentation rules and access to information
- Comparing changes in behavior and attitude following implementation of a hospital-wide mobile solution.
- Developing a tool to measure the social and cultural shift forced by the implementation.
- Determining the social and cultural mores that need to be targeted to ensure a successful technology implementation.

# Thank you

#### Questions?