Health Informatics trends and issues – Telehealth and Telenursing

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Overview

- Healthcare systems and the current environment
- Why Telehealth?
- Why Telenursing?
- What is GP Assist (Tasmania)
- How does GP Assist use Telenursing to provide patient care?
- What are the benefits?
How are health care systems changing?

- Easing the pressure on hospitals through promotion of community and home care.
- Age of Australian population over 65 growing
- Healthcare systems historically designed to manage acute illness
- Increased spending on Chronic disease
- Management of Chronic disease needs to be improved
- Telehealth offers significant and increasing opportunities to contribute to this paradigm shift.
Telehealth

“The delivery of healthcare services, where distance is a critical factor, by healthcare professionals using information and communication technologies for the exchange of valid information for diagnosis, treatment and prevention of disease and injuries, and for the continuing education of healthcare providers as well as research and evaluation, all in the interests of advancing health of individuals and their communities”

The World Health Organisation 1997
Telenursing

• Telephone triage is not new

• Why has it changed?

• Registered Nurses using decision support software

“Decision support systems couple the intellectual resources of individuals with the capability of the computer to improve the quality of decisions”

Gorry and Scott-Morton 1971

“Telephone triage can reduce unnecessary presentations to health services such as emergency departments and general practitioners by enabling patients to self-care more confidently”

Delichatsios et al 1998
Tasmania

- South Island
- Population 458,000
- Capital Hobart 220,000
- Half State World Heritage
- General Practice essentially rural beyond Hobart
- 521 General Practitioners
- 4 Major Public Hospitals
- Many Community/Rural Hospitals and Health Centres
GP Assist (Tasmania)

- GP Assist (Tasmania) state wide nurse telephone triage and doctor medical advice service
- Supports rural GPs and their communities by providing workforce relief
- Funded by the Australian Government’s Department of Health and Ageing (DoHA) and the Tasmanian Department of Health and Human Services (DHHS)
  - provides after hours workforce relief to rural GPs throughout the State
  - covers 89% of the states GPs
  - is an innovative, successful and working application of available technology used to drive service change
  - integrates a nurse triage centre, GPs and other health care providers
  - Reduced GP after hours calls by > 90%
  - widely acknowledged by Tasmanian rural GPs to be an indispensable service -Recent Rural Workforce Survey for GPACT 40% leave rural practice if not for GP Assist
Clinical Solutions

- UK based provider of triage software solutions internationally (UK NHS Direct and NHS 24)
- **Australia**: Queensland Health (13Health), Hunter Urban Division of General Practice and NHCCN SA for 12 months (July 2008 – July 2009)
- **Acquired AHD & GP Assist in May 2007** – first service provision for the company
Existing arrangements for rural after hours GP care
GP Assist (Tasmania) Model

1300

Self Care

Ambulance
Other triage doctor options:

- Prescriptions and medication orders
- Pathology results
- Life extinct declarations
- Direction to scheduled in and after hours clinics
GP Assist uses ICT

- **Decision-support software**
  To provide a systematic and evidenced-based response

- **SMS messaging**
  To provide freedom of movement for triage doctors

- **Remote access via VPN**
  (broadband, dial-up and wireless, (LAN, Next G, CDMA, GPRS etc) to allow access to and updating of medical records)
  This encourages recruitment of scarce GPs as triage doctors

- **Detailed web-based database of service providers - GPs and pharmaceutical etc.**
  To provide ‘live’, up-to-date health service information.

- **Automated electronic dispatch of health summaries to GPs**
  To enhance continuity of patient care
Triage Outcomes

For every 100 calls made by patients after hours...

100

All calls are diverted to the GP ASSIST TRIAGE NURSE for assessment.

70

22 have health related enquiries answered.

22

5 are referred to the Emergency Department.

5

12 are referred to a scheduled after hours GP clinic or allied health services.

12

35 receive advice for self-care at home.

35

30 are passed by the nurse to the GP ASSIST TRIAGE DOCTOR for further assessment.

30

23

Around 30 calls are assessed by the GP ASSIST TRIAGE DOCTOR for further assessment.

7

...only 7 end up being referred to the LOCAL ON-CALL GP.

7
SUMMARY OF CALL HANDLING AND NURSE DISPOSITIONS

- Self care
- Health Enquiry
- Scheduled AH clinic
- Ambulance or ED
- TO NEXT LEVEL
DOCTOR DISPOSITIONS

- Self care: 31%
- Prescription: 25%
- Rural GP: 14%
- 000/ED: 15%
- Home visit (Hobart): 2%
- Sched. AH clinic: 7%
- Other: 3%
- Reported Death: 3%
ED Attendances National comparison

Emergency Department attendances per 1000 resident population
(AIH/ABS)
After Hours MBS GP Items of Service

Tasmania

Rest of Australia

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Benefits

• **Rural GPs** (90% reduction in after hours workload)
• **Patients acceptance high** (timely and guaranteed access to care)
• **GP Assist Staff** (new and professionally rewarding career option)
• **Government** (cost savings, staff support and GP retention)
• **Support for Community/Rural Hospitals, RACFS, District Nursing and Ambulance Services**
Thank you

Awards:

2005 Tasmanian ICT Industry Award for e-health

2006 Health Informatics Society of Australia, Don Walker Award for Efficiency

2007 Customer Institute of Australia Runner up National Not For Profit

Contact:

www.gpat.com.au

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References
