AGED CARE MOBILE XRAY SERVICE –
an ED Avoidance project
October 2013
THE EVOLUTION OF A NEW HOME-BASED IMAGING SERVICE

Government approach by Dr Suzanne Daly and Dr Stephen Ginsborg for local community need for aged patients to be imaged in their place of residence via a hospital-based Mobile X-Ray Service.

...TOGETHER WITH

an aging population and ED overcrowding requiring innovative hospital avoidance strategies.

...RESULTED IN

MTEC Grant (Ministerial Taskforce into Emergency Care- NSW) , $355K for first hospital-based pilot
Reduced ED demand by aged care facility residents through improved primary care services.

Presented by Jackie Frankel

Co-prepared with Dr Jim Codde & Mary Ivey

1 Fremantle GP Network
2 SMAHS Health Service Planning Unit
3 Fremantle Hospital Residential Care Line Service

AGPN Conference Darwin
Thursday 30 October, 2008
INVESTIGATIVE PHASE

- Total ED presentations for the month of March 2011 (Mona Vale + Manly Hospitals) was N = 4,235.

- The overall (month) percentage for RACF/Nursing home/Aged residential ED presentations = 4.4% (Compares well with Freemantle study of 4.6% ).

- When including all residential patients >70 yrs of age this becomes 15.4% of total ED presentations.
AIMS and OBJECTIVES

To provide all general radiography diagnostic services to:

- local Aged Care Facilities (ACFs)
- immobile patients in private homes
- disabled of all ages.

through GP referral and Emergency Department avoidance. (10% target of reduced ED (ACF) presentations from baseline data)
IMPLEMENTATION-
Digital Equipment Evaluation
IMPLEMENTATION - The Van

Acknowledgement: Promotional Support from Sydney North Shore and Beaches Medicare Locals – Kris Hume and Sarah van De Scheur
IMPLEMENTATION- The “A” Team

- Two RADIOGRAPHERS: Shawn Thomson, Alex Wait

- TECHNICAL ASSISTANTs: Safal Pokharel, Denys McNaulty
SAFE WORK METHODS
Report by WHS consultant

WHS e.g. Lifting arm procedures by Deb McHugh, Katherine OKeefe
IMPLEMENTATION - Image and report transfer

Digital images available to Nursing homes (DVD) immediately.

Images sent to GP and reporting radiologist by the end of the mobile imaging session Monday to Friday.

Radiology report within 24-48 hours.
IMPLEMENTATION - Policy and Procedures

1. Inclusion and Exclusion criteria (patient is assessed as “low risk“)

2. Workforce Health and Safety Issues:
   - OHS review/report
   - one step policy

3. Alerts procedure.
   Radiographer places an image alert for abnormal cases requiring ED/call to GP/notify NUM
POST IMPLEMENTATION FINDINGS

1. ED Avoidance data

- The literature suggests an avoidance of 7-48% of all emergency presentations
  
  (Bergman et al 1991, Finn et al 2006, Bellatonio 2008, Juge-Boulogne et al 2001 if including all other home-based services)

- A 23.2% reduction of Aged Care Facility (ACF) patients presenting to ED departments was been demonstrated with 87.5% of these van patients not presenting later to ED.
2. Volume Data  \( n = 2037 \)

Northern Beaches Mobile XRay Service
Volume Data 2012-13
3. Types of cases to date
An incidental finding…
4. Financial and Staff Savings

• Emergency department avoidance savings are significant. The average cost per hour for a patient of triage category 4 to 5 is $71- $80. For ave. of 109 less patients per month (average stay of 5 hours @ $75/hour), $40,875 per month is saved.

• NSW Ambulance Service costs are also avoided at approximately $8,000/month.
5. LIMITATIONS

1. No Medicare rebate category - hospital ward mobile rebate in use.

2. Access to sites/patients.
THE FUTURE????
Mobile Ultrasound!
Godsend for the disabled

John and Shirley Chamberlain at home with radiographer Bill Trinh.

‘IT WAS A DREAM. IT TOOK HALF AN HOUR’
FOLLOWING SLIDES ARE RESERVED TO ANSWER QUESTIONS ONLY
References


KEY
1. Hospital Avoided- no return to ED
2. Questionable- perhaps should have come to ED
3. Patient came to ED in related timeframe for related treatment
INCLUSION CRITERIA

• Patient resides in an Aged Care Facility or residing in a private residence; with disabilities/immobility

• The patient is clinically stable. Does not require immediate transfer to an Emergency Department, but needs a general x-ray for exclusion of condition and to help guide management at place of residence.

• There is a non-critical provisional diagnosis (i.e. no suspicion of a life threatening condition or need for immediate hospital medical intervention)

• Progress review for ongoing management
EXCLUSION CRITERIA:

• A mobile x-ray should **NOT be ordered for:**

• Patients who require immediate medical or surgical in-hospital treatment

• Patients who need CT or Ultrasound