

# Improving patient Flows for Elective Surgery

A Service Integration Approach  
between Hospital and Community

# Ambulatory care reform project 1995-1997

To trial a client focussed allied health professional domiciliary service that meets the acute care and rehabilitation needs of patients of the QEII district

# Major Joint Elective Surgery Episode of care

1995      Hospital LOS

THR              10-11 days average

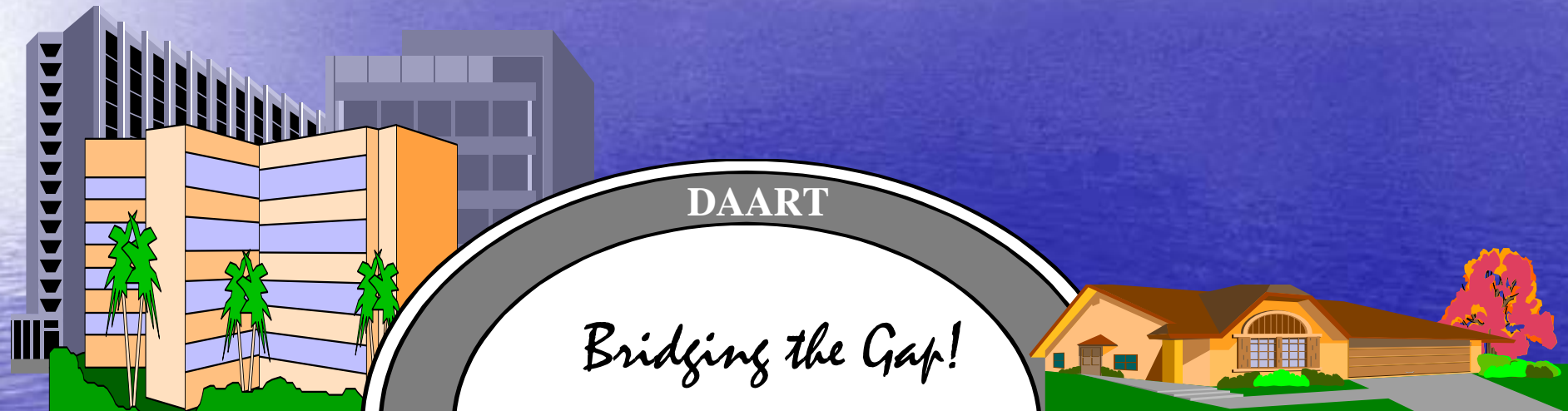
TKR              7 days average

# Barriers to timely discharge

- Inappropriate and ill equipped home environment
- Unsure of carer capacity
- Lack of access to rehabilitation to ensure maximum functional recovery and benefit from surgery
- Scarce/fragmented community programs
- Lack of confidence by hospital clinicians in community services
- Lack of reliable response times from community programs
- Lack of full geographical coverage

# THE LINKAGE MODEL

**D.A.A.R.T.:** Domicilliary Allied health Acute care and Rehabilitation Team



## **HOSPITAL SERVICES**

Mater Hospitals  
Princess Alexandra Hospital  
Queen Elizabeth II Hospital

## **COMMUNITY**

QEII District

# The Linkage Model

- A domiciliary allied health professional service delivered to clients residing in a defined geographical area
- It is patient focussed by delivering appropriate interventions according to identified need toward achieving optimal patient outcomes.
- Works closely with acute care sector in an integrated approach between hospital and community
- It works in a collaborative model with other community service providers in a team approach .

# Geographical coverage

Metropolitan Brisbane regardless of which hospital patient is referred from

Cost effective approach

# Confidence in community service

- Close working relationship with hospitals
- Developed systems and processes in collaboration
  - Referral processes/content/feedback
  - Attendance at hospital discharge planning meetings
  - Service liaison a requirement for DAART staff
  - Domiciliary experience for hospital staff
  - Shared inservices
  - Involved in carepath development

# Environment and carer capacity

- Occupational therapy pre admission visit
- Assess environment, carer capacity and knowledge of surgery and post op regime
- Commence equipment prescription and minor mods required
- Inform hospital team







# Rehabilitation –physical, social, psychological, environment

- Patient focussed with consideration of carer issues
- Individual needs based approach
- Patient/carer identify problems and functional requirements for their lifestyle
- Goal setting
- Implementation plan with time frames
- Outcome measurement
- Discharge plan

# Timely and responsive

- Clinical urgency categories
- Flexible staffing
- Weekend physiotherapy as required
- Vehicle available whenever working
- Streamlined workload management processes

*NDHP4*









# PAH, QE11, Mater, RBH numbers

1998 - 2003	Partial hip replacement	74
	Revision hip replacement	77
	THR	609
	TKR	928
2003 - 2007	Partial hip replacement	43
	Revision hip replacement	38
	THR	544
	TKR	486
<b>TOTAL</b>		<b>2799</b>

# PAH, QE11, Mater, RBH Visits

1998 - 2003	Partial hip replacement	6.1
	Revision hip replacement	4.7
	THR	4.9
	TKR	5.8
2003 - 2007	Partial hip replacement	4.3
	Revision hip replacement	5.2
	THR	4.2
	TKR	4.8

# PAH, QE11, Mater, RBH Hours

Procedure	Discipline	1999-2002	2003-2007
THR	Occupational Therapy	1.8	2.3
	Physiotherapy	4.0	3.7
	Dietetics	1.6	3.7
	Social work	1.9	3.7
TKR	Occupational Therapy	1.7	1.8
	Physiotherapy	4.8	4.1
	Dietetics	1.2	3.8
	Social work	3.4	3.9

# Funding model developed

- Average inputs per EOC per discipline
- Clinical time
  - Face to face
  - Documentation
  - Phone calls
  - Case conference

# Mater Health services 2004 - present

## Milliman Guidelines

Right care Right place Right time

- Episode of care approach (pre op, inpatient, post discharge)
- Milestone (outcomes) driven
- Best demonstrated practice
- Streamlined documentation
- Data collection through Trendcare for variances

# Length of stay

- THR

2003 – 2008

7.05 days – 6 days

- TKR

2003 – 2008

6.67 days – 5.81 days

# Variations measured

- Improvement in walking velocity and balance
- Optimal pelvic stability
- Optimal knee function
- Pain adequately controlled by oral analgesia
- Patient aware of s&s of DVT/PE and how to seek medical advice
- Wound clean/dry – nil inflammation/infection
- Patient understands and is compliant with THR precautions
- Patient attending to daily exercise regime/home program
- Safe mobility/appropriate walking aid outdoors
- Patient safe with hygiene, transfers & ADLs/IADLs

# Sample of 30 patients

5 variances (all in TKR)

- Range of knee flexion meets functional needs – pain inhibited
  - chronic arthritis
  - delayed progress
- Pain not controlled – DVT post surgery
- Optimal knee function – pain inhibited

# BENEFITS OF THE MODEL

- A clearly articulated vision which involves patients in their care, is outcome focussed and evidenced based
- Targets the inputs toward a cost effective outcome for both patients and the system
- Integrates the care process from the patient's perspective
- Produces findings which can be benchmarked and thereby challenged toward a process of continuous quality improvement

# DAART

The logo for DAART features the letters 'D', 'A', 'A', 'R', and 'T' in a bold, white, sans-serif font. The 'T' is positioned at the end of the word and is enclosed within three concentric white circles, creating a target-like symbol.

**Domiciliary  
Allied Health  
Acute Care and  
Rehabilitation  
Team**