

# Bariatric Patient Journey

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Identifying obstacles to safe patient handling in a large rural hospital in Australia

AAMHP 2014

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# Aims

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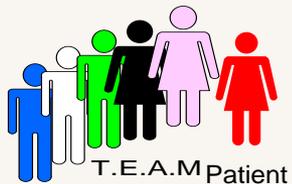


Compare rural **Australian** experience in a single hospital with a **British** bariatric patient journey study across a range of health service districts.



Map obstacles to safety in patient handling and mobility across the **inpatient** bariatric patient journey.

Compare obstacles to safety reported in **staff interviews** with obstacles identified in **mapped journeys**.



Present and analyse the patient journeys using an Australian **Patient Journey Modelling** graphics program.

Improve patient handling safety in the bariatric inpatient journey.

# This research did not

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This research did not:

- aim to explore the journey from the patients experience
- aim to apply Lean Thinking patient journey approaches to measure or improve efficiencies
- aim to use Action Research of a truly democratic nature

# Action Research

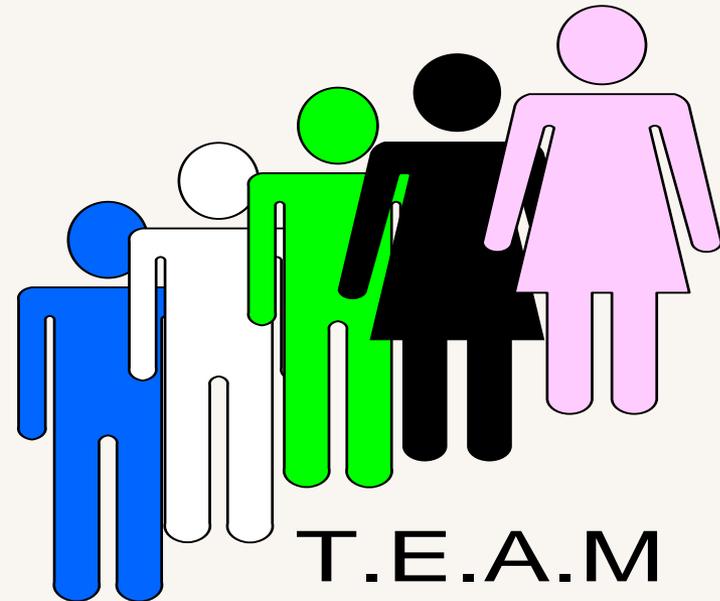
Involves people

Essomenic Patient Journey Modelling

presents people and processes



Patient



T.E.A.M

# Research Design



# Generic Risks

Hignett et.al 2007



- A. Patient Factors
- B. Building/Vehicle Space and Design
- C. Equipment & Furniture
- D. Communication
- E. Organisational and Staff Issues

*Will we find them in a large rural Australian hospital?*

# Patient Journey Mapping

## Mapping

In-depth Mapping tool  
for raw data collection



BARIATRIC PATIENT JOURNEY



Health  
Murrumbidgee  
Local Health Network

Proposal attachment A

### PATIENT PHYSICAL JOURNEY MAPPING (Data collection tool)

Use a new sheet for each transfer undertaken with the patient - see transfer type and technique below for explanation of transfer.

|  |   |   |
|--|---|---|
| <b>MAPPING</b>   | <b>Patient Code</b> (de-identified)   | <b>BMI</b>                                |
|  | <b>Ward/ Dept</b>   | <b>Staff code</b> (source of information) |
|  | <b>Patient Mobility Risk Assessment form completed</b> <input type="checkbox"/> Yes <input type="checkbox"/> No   |   |
|  | <b>Date</b>   | <b>Day of Journey</b>                     |
|  | <b>Time of transfer</b>   | <b>Time taken</b>                         |
|  | <b>Patient Factors</b> eg. Mobility status; no. co-morbidities; body shape; pressure areas; cognitive status; co-operation  |   |
|  | <b>Reason / task</b> eg. reposition; move up bed; ADL task; transport to a test; transfer between Departments;  |   |
|  | <b>Equipment used - type, SWL other details</b> eg. Lifter/hoist; standing hoist/lifter; sling type; spreader bar or coat hanger; slide sheet; commode chair; wheelchair; FASF; pat slide; hovermat                                 |   |
|  | <b>Transfer type &amp; technique used</b> eg. manual transfer; number of staff; ON BED: roll over; move up the bed; OFF BED: bed to chair; bed to x-ray table; chair to chair; bed to chair; chair to bed; chair to chair;          |   |
|  | <b>Staff roles &amp; issues</b> eg. Number of staff; Wardspersons; staff skill mix / experience; transfer team leader; insufficient staff numbers; any other factors; do staff report any symptoms or discomfort from the transfer? |   |
| <b>Physical Environment</b> eg. Space issues for equipment & no. of staff; negotiating turns & lift; variations in levels of floor/ slopes; assisting patient in toilet or shower; where was equipment stored for future use for this patient? |   |   |
| <b>Communication</b> eg. Staff informed; leader coordinates transfer; any other issues   |   |   |
| <b>Organizational</b> eg. Lack of education; was Bariatric Management Plan followed? Non-compliance with existing procedures; procedures not in place; breach of Facility, NSW Health, State or other Policy/Procedures/regulation.            |   |   |

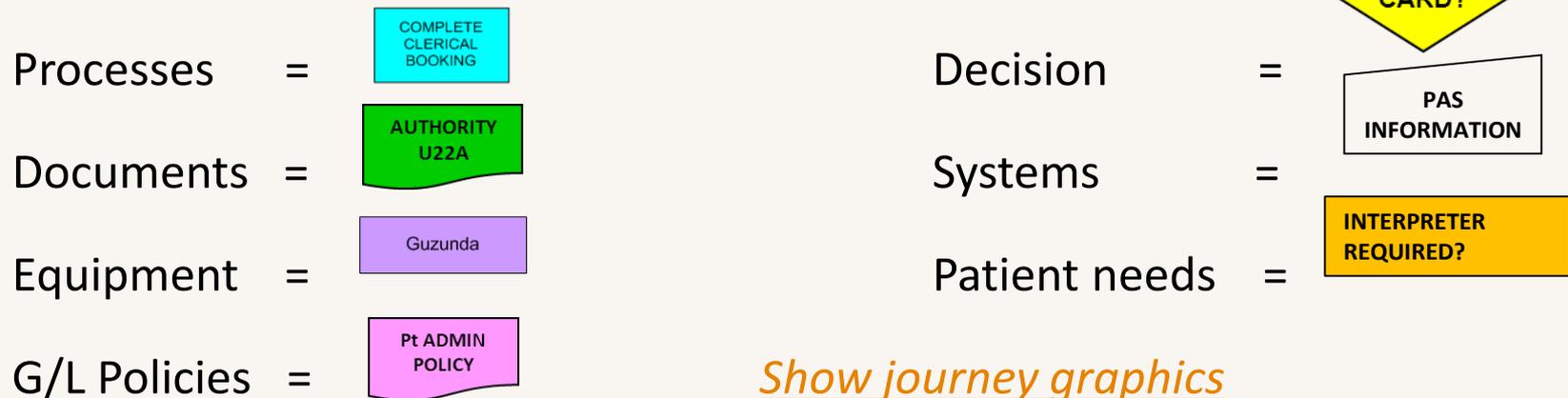
KEY BMI: body mass index SWL: safe working load in kgs FASF: forearm support frame

# Summary of pathway patient characteristics

| Pt. Code | Age yrs. | Sex | Height cm (feet, inches) | Weight Kg (lbs.)   | BMI  | Co-morbidities  | Reason for Admission   | Length of stay (days) | No. transfers mapped |
|----------|----------|-----|--------------------------|--------------------|------|---|--|-----------------------|----------------------|
| P1       | 22       | F   | 182 (6'2")               | 173 (380.6)        | 51   | Diabetes  | Gallstone pancreatitis (surgery within 30 days) – procedure laparoscopic cholecystectomy | 1.5                   | 5                    |
| P2       | 56       | F   | 155 (5'1")               | 100 (220)          | 42   | Diabetes<br>Right shoulder rotator cuff injury  | Right knee replacement   | 5                     | 14                   |
| P3       | 33       | F   | 161 (5'3")               | 140 (308)          | 51.5 | Diabetes<br>Kidney reflux – ureter implants   | Caesarean delivery   | 3                     | 9                    |
| P4       | 56       | M   | 185 (6'1") estimate      | 164 (363) estimate | 49   | Diabetes; Epilepsy<br>Hypertension; Depression<br>High cholesterol;<br>Hepatitis B ; Hepatitis C<br>Sleep apnoea; Cellulitis in leg;<br>Deep crack L foot<br>Laminectomy; Chronic pain;<br>Multiple medications | Fall at home due to black out;<br>Knee haematoma;<br>Falls risk                          | 5                     | 27                   |

# Patient Journey Modelling

**Modelling** – graphical presentation and analysis using Essomenic software package which runs in Microsoft Visio



Show journey graphics

\*Patent Pending\*

## Summary of obstacles identified

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beds                      RFAs                      notification of bariatric patients

IIMS                      patient mobility status                      SWL

bed movers                      wheelchairs                      patient bedside chairs

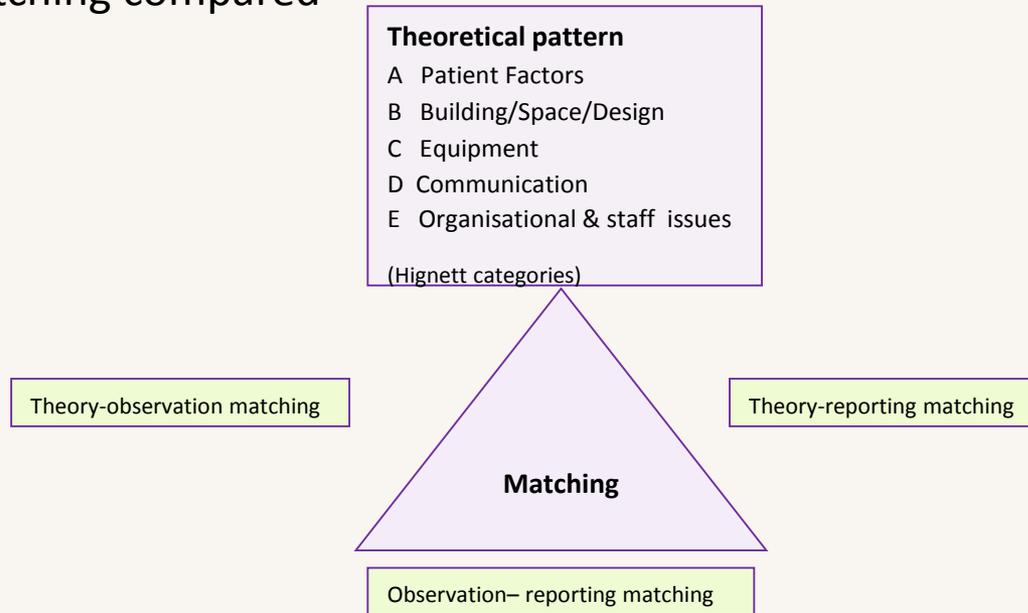
slide sheet                      safest transfer techniques

workplace culture                      maintenance

procedure for management of bariatric patient

# Pattern Matching

## Pattern matching compared



- All the categories of five generic risks groups were present in both data sets
- Staff interviews, **reported data**, identified less obstacles in Communication + Organisational & Staffing
- Patient journey mapping, **observed data**, identified more obstacles for Equipment, Communication, Organisational & staffing
- Observed data supported the reported data.

# Key Findings

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- ✿ Obstacles to safety were present with *normally independently mobile bariatric patients*
- ✿ Obstacles reported in *staff interviews* were supported by what was found in *patient journeys*
- ✿ *Combined obstacles* across risk categories had a compounding effect

# Recommendations to Hospital

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## Organisational

- Flow Charts to implement bariatric patient management plan
- Share patient handling tasks Wardspersons & Nursing
- Log & manage incidents on IIMS
- Resources for staff competencies

## Communication

- Advance notification of height weight & BMI/ activate alerts
- Patient Mobility Assessment & Handling Plan

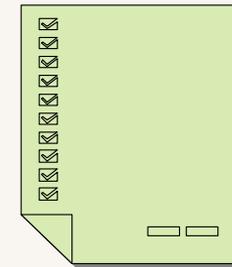
## Equipment

- Allocate electric beds
- Undertake bariatric equipment trials
- Mark SWL on equipment
- Replacement plan for bed movers
- Preventative maintenance

# Key Messages

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Identify the *specific obstacles* to *safe patient handling* in your facility to implement targeted *best practice interventions*.

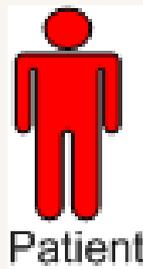


# Key Messages

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## *Essomenic Patient Journey Modelling:- an analysis and communication tool*

provides an alternative to  
Lean Thinking approaches in Clinical Redesign



# References

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2. Curry JM, McGregor C, Tracy S. A systems development life cycle approach to patient journey modelling projects. *Studies in Health Technology & Informatics*. 2007; 129(Pt2):905-9. PubMed PMID: 17911847. English.
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# Acknowledgements

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# Questions

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