Bariatric Patient Journey

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

AAMHP 2014

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Aims

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:

- 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

Essomonic Patient Journey Modelling

presents people and processes

Patient

T.E.A.M
Research Design

Propose a new model with an Action Plan for the implementation of recommendations.

Staff focus group
- Review obstacles identified, discuss, and verify proposed recommendations.

Essomenic PJ Modelling
- Write textual descriptions for all patient journeys; and prepare diagrammatic patient journeys; analyse results.

What happens now? Patient journey mapping n=4
- Shadow three planned and one unplanned admission patients; collects and maps raw data of patient transfers and handling; interviewer-administered patient feedback questionnaire.

How do staff members see it? Key Staff interviews n=6
- Content analysis of transcripts and second level thematic analysis of transcripts.
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

<table>
<thead>
<tr>
<th>MAPPING</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Code (de-identified)</td>
<td>BMI</td>
</tr>
<tr>
<td>Ward/ Dept</td>
<td>Staff code (source of information)</td>
</tr>
<tr>
<td>Patient Mobility Risk Assessment form completed</td>
<td>Yes</td>
</tr>
<tr>
<td>Date</td>
<td>Day of Journey</td>
</tr>
<tr>
<td>Time of transfer</td>
<td>Time taken</td>
</tr>
<tr>
<td>Patient Factors</td>
<td>eg. Mobility status; no. co-morbidities; body shape; pressure areas; cognitive status; co-operation</td>
</tr>
<tr>
<td>Reason / task</td>
<td>eg. reposition; move up bed; ADL task; transport to a test; transfer between Departments;</td>
</tr>
<tr>
<td>Equipment used - type, SWL other details</td>
<td>eg. Lifter/heist; standing heist/lifter; sling type; spreader bar or coat hanger; slide sheet: commode chair; wheelchair; FASF/ pat slide; hoist/hoist</td>
</tr>
<tr>
<td>Transfer type &amp; technique used</td>
<td>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;</td>
</tr>
<tr>
<td>Staff roles &amp; issues</td>
<td>eg. Number of staff; Wordspersons; staff skill mix / experience; transfer team leader; insufficient staff numbers; any other factors; do staff report any symptoms or discomfort from the transfer?</td>
</tr>
<tr>
<td>Physical Environment</td>
<td>eg. Space issues for equipment &amp; no. of staff; negotiating turns &amp; lift; variations in levels of floor/ slope; assisting patient in toilet or shower; where was equipment stored for future use for this patient?</td>
</tr>
<tr>
<td>Communication</td>
<td>eg. Staff informed; leader coordinates transfer; any other issues</td>
</tr>
<tr>
<td>Organisational</td>
<td>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.</td>
</tr>
</tbody>
</table>

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

F:/Julie Revision/Attachment A Patient Physical Journey Mapping Tool.doc 3 May 2011 Version 4
### Summary of pathway patient characteristics

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

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

Processes = Decision =

Documents = Systems =

Equipment = Patient needs =

G/L Policies = *Patent Pending*

*Show journey graphics*
Summary of obstacles identified

- 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
PATIENT FACTORS
- Patient weight, shape
- Patient width in sitting

EQUIPMENT
- No bariatric wheelchair for Ward
- Bed mover not used to move bed

ORGANISATIONAL ISSUES
- Limited staff to move birthing bariatric woman in bed
- Patient does not fit in wheelchair; when arms removed Patient hips sit on wheels

BUILDING / SPACE / DESIGN
- Delivery suite on floor above maternity

High FORCE involved in moving the patient in bed
- through ward to lift
- into & out of the lift
- through a long corridor
- into Delivery Suite
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

- 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

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
New Wagga Wagga Hospital

- More space
- Bariatric Beds and Ceiling Hoists
- Opportunity for best practice
- Better patient journey

- Preparation time for planning best practice over 2015
- Reduction in safety risks for patients and staff in patient handling/mobility from 2016
Bariatric Equipment
Key Messages

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

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

provides an alternative to

Lean Thinking approaches in Clinical Redesign
References


2. Full Report 2012 e-publication
Acknowledgements

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