Clinical Variation and Transparency

Dr. Linda Swan
Chief Medical Officer

Health system challenges

- Our growing but ageing population
- Increasing prevalence of chronic disease
- New technologies

A sustainable healthcare system continues to innovate and delivers efficiencies to offset these growing cost pressures.


For Better Health
Triple aim of healthcare

- Recognised international paradigm for health reform
- Core concept is that health reform needs to address all three areas
- Requires a balanced approach to ensure reform delivers optimal value

Reference: Institute for Healthcare Improvement

Three key steps to shift the focus to value

Step 1:
Leverage our data through targeted analytics to measure cost, quality and outcomes
Highlight variation in outcomes across our high volume and cost treatment areas
Identify data gaps (e.g. patient reported data) and implement means to collect

Step 2:
Benchmark providers and validate data, encourage behaviour change and build credibility
Clinician-led behaviour change through data sharing and validation of approach and findings
Working with industry partners (colleges), clinicians and hospitals

Step 3:
Design and introduce new funding models that reward outcomes
Funding models to align with agreed outcome measures and reward providers for better value
Hospital Performance Measurement

- Clinical outcomes
  - Does the hospital perform better than peers
  - Linked to evidence based best practice
- Patient Experience
  - Does the patient report a great experience
- Low Value Care
  Are there ways to reduce
  - Inappropriate care setting (e.g., inpatient rehab)
  - Inefficient or ineffective care (e.g., arthroscopy)
  - Low volume procedures (e.g., Whipples)
### Clinical Outcome Measures

<table>
<thead>
<tr>
<th></th>
<th>Orthopaedic</th>
<th>Cardiac</th>
<th>Ophthalm</th>
<th>Obstetric</th>
<th>Urology</th>
<th>Gastro</th>
<th>Gen Surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td>28 day Readmission</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Complication Rate (HAC)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>% discharged home</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>ICU Admission Rate</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Length of Stay</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Same day rates</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>PREMS</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Total Cost (&lt; 30 day post)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>PROMs</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

These measures track over 40% of Medibank volumes and over 50% of outlays.

### Risk Adjustment

- **Case Mix**
  - Takes into account the hospital’s unique mix of patient types
- **Age**
- **Complexity**
  - 3 or more complex conditions (diabetes, heart disease etc)
  - Peer Hospitals = AIHW peer group
  - Comparators = All other hospitals (excluding the subject hospital)

Developed through wide consultation with private hospitals, other insurers and industry bodies (ACSQHC, Health Roundtable etc)

External independent advice from University of Melbourne & Monash University

Dependence on Health Roundtable methodology for complexity identification
Outcomes by Individual Hospital

Reported by quartile, compared with peer group
- Dark Green (1) is good
- Red (4) is major opportunity for improvement

Comparative Performance
(Risk Adjusted)
PREMS

Process

- Using HCAHPS survey
  - emailed at 45 days
  - Highly validated survey out of the US
  - 28% response rate
- Over 10,000 responses
  - Over 8,000 matched to HCP data
- Reported when > 25 responses
  - From hospital or craft group
- Able to provide report within 3 months of discharge
- Reported by hospital, Group, Peer Group and All Hospitals
  - Includes Public Hospital responses
PREMS – Large Hospitals (Group 1A)

Hospitals ranked by patient overall rating of that hospital
PREMS results are independent of hospital size
Patient experience does not appear to correlate with clinical outcome measures

Low Value Care
Inpatient Rehabilitation
### Background

**2003 – 2014**

The number of knee replacements undertaken in Australia per year increased by 88%.

*The Australian Atlas of Healthcare Variation (2017)*

**The number of knee replacements undertaken in Australia per year increased by 88%**

**70% of joint replacements take place in the private health sector and are supported by private health insurance.**

*Private Healthcare Australia (2017) Pre-Budget Submission, p. 16*

**70% of joint replacements take place in the private health sector and are supported by private health insurance.**

**1 in 3 patients in Australia would prefer home-based rehab after knee replacement rather than inpatient rehabilitation.**

*Buhagiar 2017*

---

**MPL inpatient rehabilitation referral rates in private hospitals after single knee replacements, FY16**

#### Unadjusted

50% of private hospitals have referral rates to inpatient rehab above 31%

#### Adjusted for 11 patient factors

52% of hospitals had rates above 31%

---

Large variation exists in unadjusted referral rates to inpatient rehabilitation after TKR—rates at individual hospitals ranging from 1 to 95%. Referral rates are 50 times higher at the highest referring hospital relative to the lowest even after adjustment for important patient factors.

Provider response: “Our patients are more unwell/older than average & therefore comparisons are not fair.”

After adjusting for patient case-mix, large variation in referral rates persists.
Many MPL TKR patients have high FIM scores on admission to inpatient rehabilitation and make small improvements during their rehab stay.

Lower FIM @ admission = higher FIM change ↑ benefit from inpatient rehab

47% of inpatient rehab admissions have a FIM score of ≥ 100

Minimally clinically important difference = 22

Rehabilitation Performance Report

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Separations</th>
<th>Average Age</th>
<th>ALOS (days)</th>
<th>% Readmitted to Acute</th>
<th>Admission FIM</th>
<th>Discharge FIM</th>
<th>Average FIM Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPL All</td>
<td>73</td>
<td>12.5</td>
<td>4.8%</td>
<td>96.3</td>
<td>112.4</td>
<td>16.1</td>
<td></td>
</tr>
<tr>
<td>Group A</td>
<td>299</td>
<td>76</td>
<td>11</td>
<td>7.1%</td>
<td>92.3</td>
<td>112</td>
<td>19.8</td>
</tr>
<tr>
<td>Hospital 1</td>
<td>39</td>
<td>80</td>
<td>13.3</td>
<td>10.3%</td>
<td>92.6</td>
<td>113.8</td>
<td>21.3</td>
</tr>
<tr>
<td>Hospital 2</td>
<td>7</td>
<td>68</td>
<td>16.9</td>
<td>0%</td>
<td>101.1</td>
<td>116.1</td>
<td>15</td>
</tr>
<tr>
<td>Hospital 3</td>
<td>92</td>
<td>76</td>
<td>10.5</td>
<td>3.3%</td>
<td>91</td>
<td>10.3</td>
<td>15.2</td>
</tr>
<tr>
<td>Hospital 4</td>
<td>88</td>
<td>75</td>
<td>10.4</td>
<td>10.2%</td>
<td>92.5</td>
<td>112.5</td>
<td>20.1</td>
</tr>
</tbody>
</table>

Hospital 2
- Low volume, but
  - Younger age
  - Healthy on admission
  - Long length of stay
  - Lowest change in function

Hospital 4
- Average age
- Low function on admission
- Short length of stay
- High change in function
## Surgical Variation Reports

<table>
<thead>
<tr>
<th>General Surgery</th>
<th>Urology</th>
<th>ENT</th>
<th>Vascular Surgery</th>
<th>Orthopaedics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lap. Chole.</td>
<td>Cystoscopy</td>
<td>Sinus surgery</td>
<td>Varicose veins</td>
<td>Hip replacement</td>
</tr>
<tr>
<td>Gastric banding</td>
<td>• with resection</td>
<td>Tonsils and adenoids</td>
<td>Endarterectomy</td>
<td>Knee replacement</td>
</tr>
<tr>
<td>Gastric sleeve</td>
<td>• w/out resection</td>
<td>Myringotomy</td>
<td></td>
<td>ACL repair</td>
</tr>
<tr>
<td>Hernia</td>
<td>Prostatectomy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bowel resection</td>
<td>• Endoscopic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gastroscopy</td>
<td>• Radical</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• with polyp</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• w/out polyp</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sinus surgery</td>
<td>Tonsils and adenoids</td>
<td>Myringotomy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tonsils and adenoids</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Myringotomy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Varicose veins</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Endarterectomy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hip replacement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knee replacement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACL repair</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Laparoscopic cholecystectomy: % of procedures with an operative cholangiogram

Source: Surgical Variance Report 2017: General Surgery, RACS & Medibank

Gastric banding procedures: Average number of MBS items charged by the surgeon

Source: Surgical Variance Report 2017: General Surgery, RACS & Medibank
Medibank Transparency Initiatives

• Standardising industry terminology and simplifying products

• Enhancing surgeons’ and hospitals’ understanding of variance in practice – Medibank/RACS variance reports

• Reducing bill shock by creating greater transparency around out-of-pocket costs – HealthShare

• Sharing insights and creating a momentum for change – health sector engagement