Clinical Care Coordination Rounds:
Facilitating Early & Safe Discharge

A/Prof Golo Ahlenstiel
Dept. Gastroenterology & Hepatology, Westmead Hospital,
University of Sydney
Nature of the problem

- Increased hospital activity (compounding NEAT efforts)
- Increased length of stay (compounding NEAT efforts)
- Late discharge on the day (compounding NEAT efforts)
The Silos of Silence

[Modified from quotesgram.com/patient-centered-care-quotes/]
Aim

- To optimize discharge timing and length of stay without compromising patient care
- To improve ward communication between staff members and discharge planning for inpatients
- To understand what factors result in late discharge
Implementing solutions:
Care Coordination Meeting

- Daily at 9:30am on home ward
- Led by staff specialist + NUM
- Attendees (mandatory):
  - All GE Advanced trainees, basic physician trainees, JMOs
  - Team leader, Clinical Nurse Educator
- Attendees (if available):
  - Patient flow manager
  - Pharmacist
  - Social worker, Dietitian, Physiotherapist, Occupational Therapist
  - Ward nurses
Implementing solutions:
CCCM Agenda

For each patient everyday:
- To establish/review estimated date of discharge
- To assess ICU/HDU/telemetry needs
- To assess barriers to discharge
- To assess need for allied health intervention from day 1
- To discuss doctor/nurse/allied health concerns

Other discussion points:
- Patients with prolonged LOS to assess requirements for safe discharge.
- To consolidate outliers to home ward.
- Other business items (teams, GuidanceMS etc)
Performance Indicators

- Discharge time
- Reasons for after 12 pm discharges
- Length of stay
- Peer hospital comparison
- Safety – readmission rate
Performance Indicators

- Discharge time
- Reasons for after 12 pm discharges
- Length of stay
- Peer hospital comparison
- Safety – readmission rate
Discharge time improvement - Significant & Sustainable

[Includes 5 new rotations of JMOs; Excludes deaths and weekends]
Addressing negative impact of outlier status on discharge time
Performance Indicators

- Discharge time
- Reasons for after 12 pm discharges
- Length of stay
- Peer hospital comparison
- Safety – readmission rate
Are discharges after 12pm late?

Reasons for DC after 12pm (April 2014):
- Upgrading diet (N=8; 28%)
- Consult from other specialty (N=8; 28%)
- Same-day endoscopic procedure (N=6; 21%)
- Awaiting imaging (N=6; 21%)
- Delay by Gastro team (N=2; 5%)

Higher complexity in DC after 12pm:
<12pm: NWAU 1.5 vs >12pm: NWAU 2.3 (p<0.05)

Savings through DC after 12pm:
LOS: 19.7 h/patient or Costs $1030/patient
Performance Indicators

- Discharge time
- Reasons for after 12 pm discharges
- Length of stay
- Peer hospital comparison
- Safety – readmission rate
Decreased LOS within specific DRGs
Long stay proportion improved

[Graph showing the improvement in long stay proportion and bed days percentage from 07/13 to 12/13 and from 04/14 to 03/15.]

[Health Round Table]
Performance Indicators

- Discharge time
- Reasons for after 12 pm discharges
- Length of stay
- Peer hospital comparison
- Safety – readmission rate
Relative Stay Index

\[ RSI = \frac{\sum \text{(Actual LOS)}}{\sum \text{(Expected LOS)}}; \]

i.e. RSI < 1 indicates LOS less than expected

[Health Round Table]
### Comparison of episodes by DRGs

**Apr 2014-Mar 2015**

<table>
<thead>
<tr>
<th>DRG Family for department episodes</th>
<th>Episodes</th>
<th>Occupied bed days</th>
<th>ALOS</th>
<th>Relative stay index</th>
<th>Emergency episode %</th>
<th>Discharged home %</th>
<th>Same day %</th>
<th>Emergency readmit %</th>
<th>Peer RSI range</th>
<th>RSI trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>G46 - COMPLEX GASTROSCOPY</td>
<td>315</td>
<td>731</td>
<td>2.3</td>
<td>70%</td>
<td>30%</td>
<td>95%</td>
<td>55%</td>
<td>6%</td>
<td>62%</td>
<td>119%</td>
</tr>
<tr>
<td>G47 - OTHER GASTROSCOPY</td>
<td>414</td>
<td>720</td>
<td>1.7</td>
<td>62%</td>
<td>44%</td>
<td>95%</td>
<td>57%</td>
<td>7%</td>
<td>53%</td>
<td>106%</td>
</tr>
<tr>
<td>H43 - ERCP PROCEDURES</td>
<td>232</td>
<td>663</td>
<td>2.9</td>
<td>92%</td>
<td>28%</td>
<td>90%</td>
<td>59%</td>
<td>10%</td>
<td>70%</td>
<td>116%</td>
</tr>
<tr>
<td>G48 - COLONOSCOPY</td>
<td>377</td>
<td>540</td>
<td>1.4</td>
<td>79%</td>
<td>20%</td>
<td>96%</td>
<td>75%</td>
<td>5%</td>
<td>77%</td>
<td>122%</td>
</tr>
<tr>
<td>H63 - DSRD LVR-MAL,CIRR, ALC HEP</td>
<td>124</td>
<td>492</td>
<td>4.0</td>
<td>77%</td>
<td>71%</td>
<td>85%</td>
<td>27%</td>
<td>14%</td>
<td>67%</td>
<td>140%</td>
</tr>
<tr>
<td>G70 - OTHER DIGESTIVE SYSTEM DIAG</td>
<td>148</td>
<td>492</td>
<td>3.3</td>
<td>110%</td>
<td>68%</td>
<td>90%</td>
<td>21%</td>
<td>20%</td>
<td>80%</td>
<td>177%</td>
</tr>
<tr>
<td>H60 - CIRRHOSIS &amp; ALC HEPATITIS</td>
<td>59</td>
<td>373</td>
<td>6.3</td>
<td>80%</td>
<td>90%</td>
<td>75%</td>
<td>14%</td>
<td>22%</td>
<td>71%</td>
<td>130%</td>
</tr>
<tr>
<td>G67 - OESOPHAGITIS &amp; GASTROENTERITIS</td>
<td>117</td>
<td>372</td>
<td>3.2</td>
<td>95%</td>
<td>99%</td>
<td>91%</td>
<td>3%</td>
<td>12%</td>
<td>89%</td>
<td>131%</td>
</tr>
<tr>
<td>H62 - DISORDERS PANCREAS-MALIG</td>
<td>90</td>
<td>312</td>
<td>3.5</td>
<td>87%</td>
<td>76%</td>
<td>96%</td>
<td>26%</td>
<td>20%</td>
<td>47%</td>
<td>119%</td>
</tr>
<tr>
<td>G61 - GI HAEMORRHAGE</td>
<td>92</td>
<td>251</td>
<td>2.7</td>
<td>74%</td>
<td>97%</td>
<td>84%</td>
<td>5%</td>
<td>9%</td>
<td>55%</td>
<td>146%</td>
</tr>
</tbody>
</table>

†The boundaries of the coloured bands denote quartiles of the distribution of peer RSIs; The black line is the median.

‡RSI trend points are 6 month intervals.
Peer Comparison: LOS and Costs

<table>
<thead>
<tr>
<th>ALOS (days)</th>
<th>Cost/encounter (AUD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>G46A (12/13)</td>
<td>WMH: 10</td>
</tr>
<tr>
<td>G46A (14/15)</td>
<td>WMH: 3</td>
</tr>
<tr>
<td>G46B (12/13)</td>
<td>WMH: 10</td>
</tr>
<tr>
<td>G46B (14/15)</td>
<td>WMH: 1</td>
</tr>
</tbody>
</table>

[ABM Portal; numbers in white indicate rank of 13 peer hospitals]
Performance Indicators

- Discharge time
- Reasons for after 12 pm discharges
- Length of stay
- Peer hospital comparison
- Safety – readmission rate
Safety:
Readmissions not increased

[Graph showing readmissions for different time periods and duration categories]
Communication is the key

[Modified from quotesgram.com/patient-centered-care-quotes/]
Summary - Outcomes

- **Efficiency**
  - Discharge times improved
  - RSI improved
  - ALOS for common DRGs improved
  - Cost/encounter optimized
  - Discharges after 12pm appropriate and save beds and costs

- **Sustainability**
  - maintained for > 15 months

- **Safety**
  - readmissions not increased
Transferability

- The general challenges of meeting targets for performance and safety are similar all across specialties and LHDs.

- While developed for the needs of the Gastroenterology Department at WMH, the employed solutions are readily transferable.

- Close communication between all staff members involved in patient care is effective and sustainable.
Acknowledgements

Prof Jacob George (Head of Department)
Lucia Labib (NUM D3a)
Andrew Johnson (SNUM-Division 3)
Natasha Smith & Susan Tulloch (Coding)
Jun Bagus (Patient Flow)

D3a nursing staff and Gastro ATs/BPTs/JMOs
Guidance performance

Rank of gastro

Compliance (gastro)

Compliance (hospital)