Patient Flow

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Royal Infirmary Edinburgh

Emergency Care Pathways Workshop
Edinburgh
November 2012
4 hour Standard

- Overcrowded ED’s linked to increase in morbidity and mortality
- Link to an increase in errors
- Adverse effect on patient trust and experience

“Boarding”

- Unpublished data studying 3 million hospital admissions shows patients who are “boarded” show an -
  - Increase in morbidity and mortality rate
  - Increase in length of stay
  - Increase in readmission rate
What are we aiming to improve?

RIE Wards 101-109, 201-209
April 10- April 11
What are we aiming to improve?

RIE Wards 101-109, 201-209
April 2011 – April 2012
How will we know there has been an improvement?

Weekly Median Discharge Time
Ward 109, NRIE

12 month median
(Apr 11- Apr 12)
What change will get us there?

- Key Elements
- Daily Discharge Huddle
- Daily Action Plan
- Reliable Predictions

The Joint Commission Journal on Quality and Patient Safety

Timeliness and Efficiency
Using Real-Time Demand Capacity Management to Improve Hospitalwide Patient Flow

Roger Rest, M.D.; Kevin Nolen, M.A.; Deborah Kaczynski, M.S.; Kirk Jensen, M.D., M.B.A., FA.C.E.P.
Daily Discharge Huddle

- Daily MDT meeting
  - highlight potential discharges
  - Agree actions to aid discharge
  - Identify responsibility and timeframe

- Short and focused only on discharges

- Different starting times being tested to fit around already established practice
**Ward 109 Daily Discharge Action Plan**

<table>
<thead>
<tr>
<th>Room No.</th>
<th>Patient Name</th>
<th>Needed for Discharge</th>
<th>Predicted Discharge Time</th>
<th>Actual Discharge Time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>OT  PT  IDL  Trans.  Other</td>
<td>By 11am  By 2pm  After 2pm</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total predicted discharges ______

Predicted discharges by 2 pm ______

Patient Name | Reason for delay

Additional Discharges

Patient Name | Reason unpredicted and time of discharge

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Ward 109 Daily Discharge Action Plan v4.0 *This is a draft document. Please feel free to add comments and/or notes to aid its development.*
Daily Discharge Huddle

Successes
- Physio changed morning routine
- Discharge Scripts started earlier (ongoing problem)
- Trak updated
- Plans documented and recurrent problems evidenced

Challenges
- Starting in a timely fashion
- Continuous Engagement
- Unpredicted discharges
- Weekends and Bank Holidays
- Incorporating into Daily Bed Meetings
Pilot Ward Weekly
Median Discharge Time

Median Time of Discharge - Weekly

Report as at: 15/06/2012 - 14:42

04/03/2012  11/03/2012  18/03/2012  25/03/2012  01/04/2012  08/04/2012  15/04/2012  22/04/2012  29/04/2012  06/05/2012  13/05/2012  20/05/2012  27/05/2012  03/06/2012  10/06/2012  17/06/2012

Week Ending
- Median time of Discharge by hour of day
- Base Data

Testing Began

Jubilee Week
Sustainability and Success

- Supported Spread Plan

- Reliable data collection and interpretation
  - Outcome data now automatically generated from TRAC

- Forums to discuss ongoing issues
  - Local – QIT Meetings, Improvement Group
  - System – Emergency Access Meetings
“Pulling” Patients

Once we have an empty bed...
Filling the empty beds

- Currently there are approximately 200 transfers per week from Acute Medical Unit into the In-patient hospital area.

- On average, 1 in 4 of these transfers occur between the hours of 00:00 and 05:59. This has a profound effect on both patient safety and patient experience, also the staff compliment is reduced in comparison to during the day.

- Poor patient flow from Assessment Area into the Ward Area also has a direct effect on both boarding and A&E patient flow.

- An efficient system of transferring patients from CAA to the appropriate areas with minimal delay would have a positive knock on effect to all areas.
“Pulling” Patients

- A trial where staff physically go to Assessment Area and collect patients was run.

- Clock started when a patient was accepted for an empty bed and stopped when staff collected from Assessment area.

<table>
<thead>
<tr>
<th></th>
<th>Transfers from CAA to Wd. 207</th>
<th>Longest time from empty bed to admission</th>
<th>Average time from empty bed to admission</th>
<th>Out of Hours Transfers 00:00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>35</td>
<td>7 hours 2 mins</td>
<td>1 hour 50 mins</td>
<td>6</td>
</tr>
<tr>
<td>Trial Period</td>
<td>28</td>
<td>2 hours 5 mins</td>
<td>12 mins</td>
<td>0</td>
</tr>
</tbody>
</table>
“Pulling” Patients

- Following the success of the initial pilot a trial involving all 12 medical hospital wards was run for 2 days.
- Run between 8am and 8pm
- The pilot was supported by senior management and led by CNM group

<table>
<thead>
<tr>
<th>Speciality Area</th>
<th>SU</th>
<th>RESP</th>
<th>MOE</th>
<th>GM</th>
<th>GS</th>
<th>GI</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>5</td>
<td>3</td>
<td>25</td>
<td>5</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>10</td>
<td>10</td>
<td>30</td>
<td></td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>9</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>14</td>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>30</td>
<td>46</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>15</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>45</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>15</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average time (minutes)</td>
<td>12.5</td>
<td>8.25</td>
<td>16</td>
<td>27</td>
<td>5</td>
<td>17</td>
</tr>
</tbody>
</table>
For 2 days the following process will be followed:

- When it becomes apparent that a ward bed will be available soon, nursing staff will contact the AMU coordinator (07909-960-340) and arrange a suitable time to collect the patient. If the above number is unavailable please contact 07816-391-152.
- The bed will be closed at the time of booking.
- The ward staff will then collect the patient from AMU and escort them back to the ward.
- Nursing handover will be provided in the base in AMU using the Consultant SBAR.
- No patient will be transferred in the absence of this document.
- During the course of the trial if there are any issues arising please contact your respective CNM in real time.
**Consultant SBAR**

<table>
<thead>
<tr>
<th>AMU Please circle</th>
<th>Acute Medical Unit SBAR</th>
<th>Addressograph Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bases 1 2 6 7 Contact Bp 2241</td>
<td>Name of consultant: Ensure TRAK correct</td>
<td></td>
</tr>
<tr>
<td>Bases 3 4 5 Contact Bp 2112</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Situation</strong></th>
<th><strong>Background</strong></th>
<th><strong>Assessment</strong></th>
<th><strong>Recommendations</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Preventing complaint (e.g. Central chest pain, SOB, faint, Document positive findings (e.g. fever)</td>
<td>Include any recent operations / procedures include social circumstances and allergies</td>
<td></td>
<td>Most Recent SEWS Score</td>
</tr>
</tbody>
</table>

| | Relevant PMH | Medication changes |
| | | |

| | | |
| | | |

| | | |
| | | |

**Please circle**

<table>
<thead>
<tr>
<th>Suitable for escalation for critical care:</th>
<th>1. Yes</th>
<th>2. No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suitable for CPR:</td>
<td>1. Yes</td>
<td>2. No (complete red form)</td>
</tr>
</tbody>
</table>

| | Details of person completing SBAR: |
| | Name: | Grade: |

| | | |
| | | |

**Medication reconciliation** | **DVT prophylaxis** | **Allergies documented** | **Results signed off on TRAK** | **Oxygen prescribed** |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
</tbody>
</table>

**Preferred destination ward / service:**

1. SBAR must be completed
2. Refer to boarding guidance
3. Notify registrar and ward senior doctor in AMU
4. Contact NGN registrar for clinical and decision making support

**Consultant recommendation**

Signed

Date
“Pulling” Patients

- A comparison with the previous Monday and Tuesday showed a reduction in wait for bed breaches.

- It was quickly decided to continue with the change in practice and it ran from the following week.

<table>
<thead>
<tr>
<th></th>
<th>Activity</th>
<th>Wait for Bed Breaches</th>
<th>Starting Bed Base</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday 16th</td>
<td>62</td>
<td>20</td>
<td>52</td>
</tr>
<tr>
<td>(Trial Day 1) Monday 23rd</td>
<td>58</td>
<td>0</td>
<td>90</td>
</tr>
<tr>
<td>Tuesday 17th</td>
<td>58</td>
<td>24</td>
<td>48</td>
</tr>
<tr>
<td>(Trial Day 2) Tuesday 24th</td>
<td>60</td>
<td>1</td>
<td>56</td>
</tr>
</tbody>
</table>
Monthly Average from Sample Data

Pulling Patients (Average time to fill)

Time to Fill (Minutes)

Baseline
Sample 1
Sample 2
Sample 3
Sample 4
Challenges

- Current portering model is problematic.
- Episodes of Ward Staff coming to collect and patient not being ready.
- Mixed messages from AMU.
- Protected Mealtimes.
Staff Feedback

- We had concerns about the staff being out of the ward transferring; four weeks in we don’t want to change back

- It allows us to manage our workload

- This is how it should be done, it makes sense

- When I can actually see the patient, I can ask the right questions at handover

- This improves the handover and reduces duplication

- Transfers aren’t in my job description, I’m not a porter
I was surprised to be told that a nurse from the ward was coming down to collect me. I had been in many times before and from memory it was always a question of waiting for someone to take you to the ward. Sometimes you know in the morning you will be moving but it seemed like hours before you did.

The nurse was very pleasant, she introduced herself, and said she was going to be looking after me upstairs. I could hear her chatting to the other nurse about what had been happening and asking what the plan was. It was good to be able to have a chat with her on the way up in the lift. It made me feel wanted. I remember the last time I was sent to a ward and when I got there no one knew who I was and nobody was sure where to put me, but yesterday I was taken directly to my bed.

It was quite refreshing really and to be honest I was glad to get out of the very busy assessment place and the noisy man opposite.
I have been in hospital before because I suffer from a bad chest. I moved up from AMU to ward 207 with the nurse who is now looking after me - Mary. She came for me at visiting time and introduced herself to the family and myself.

I was moved up quickly with my family present. The nurse chatted and asked how I was feeling on the way.

When I arrived here my bed was ready and everything was prepared. This was different to before. This time I felt was much better. I felt expected and safe.