Identifying quality markers and improvement measures for ward-based surgical care: a semi-structured interview study

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Introduction

• Surgical care - not just about surgery

• Post-operative care plays a major role in determining patient outcomes
Causes for variation in postoperative outcome

Structure:
- Nurse staffing ratios
- Hospital resources
- Bed status
- Teaching status

Process:

Outcome:
- Morbidity
- Mortality
- Failure to rescue
Surgical ward rounds

- Ward rounds (WR) determine course of inpatient care
- Complex and demanding process
- Not subject to assessment or training
Calls for change

Restore ward rounds to former glory to improve patient care, say colleges

Zosia Kmiętowicz
Aims & Methods

• To explore key issues pertaining to the surgical ward round

• 25 semi-structured interviews
  • Patients
  • Nurses
  • Interns
  • Residents
  • Attendings
# Results: Demographics

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>M : F</th>
<th>Academic : community</th>
<th>Experience in post (median, range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendings</td>
<td>5</td>
<td>4 : 1</td>
<td>4 : 1</td>
<td>9 (1 – 22) years</td>
</tr>
<tr>
<td>Residents</td>
<td>5</td>
<td>3 : 2</td>
<td>2 : 3</td>
<td>PGY 7 (5 – 10)</td>
</tr>
<tr>
<td>Interns</td>
<td>5</td>
<td>2 : 3</td>
<td>1 : 4</td>
<td>PGY 1 (1 – 1)</td>
</tr>
<tr>
<td>Nurses</td>
<td>5</td>
<td>2 : 3</td>
<td>5 : 0</td>
<td>9 (2 – 20) years</td>
</tr>
<tr>
<td>Patients</td>
<td>5</td>
<td>3 : 2</td>
<td>4 : 1</td>
<td>21 (3 – 35) inpatient days</td>
</tr>
</tbody>
</table>

PGY: postgraduate year.
Results: Variability and impact on care?

Yes (92%)

No (8%)
Results: The surgical WR deconstructed

What?
- Assess (100%)
- Plan (92%)
- Review progress (72%)
- Communicate (64%)

Why?
- Thoroughness (72%)
- Communication (48%)
- Structure (36%)

How?
- Communication (100%)
- Assessment (72%)
- Knowledge (68%)
- Teamwork (44%)
- Leadership (40%)
"I want to know everything. Partly because if I know everything, I can push to keep the plan. Like I knew about [my prescribed diet], so I had to call the junior doctor because the caterer didn’t know anything about it. Every time it turns out they need to take blood, I say ‘what for?’"

(subject 21, patient)
# Results: Quality markers

<table>
<thead>
<tr>
<th>Category</th>
<th>n  (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patient assessment</strong></td>
<td></td>
</tr>
<tr>
<td>Physical examination</td>
<td>21 (84%)</td>
</tr>
<tr>
<td>History from patient</td>
<td>21 (84%)</td>
</tr>
<tr>
<td>Status charts (i.e. vitals, fluid balance)</td>
<td>21 (84%)</td>
</tr>
<tr>
<td>Prescription chart</td>
<td>19 (76%)</td>
</tr>
<tr>
<td>Pathology and lab results</td>
<td>18 (72%)</td>
</tr>
<tr>
<td>Review medical notes</td>
<td>17 (68%)</td>
</tr>
<tr>
<td>Radiology results</td>
<td>17 (68%)</td>
</tr>
<tr>
<td>History from nurse</td>
<td>12 (48%)</td>
</tr>
<tr>
<td>VTE prophylaxis</td>
<td>9 (36%)</td>
</tr>
<tr>
<td>Assess analgesia</td>
<td>6 (24%)</td>
</tr>
<tr>
<td><strong>Patient management</strong></td>
<td></td>
</tr>
<tr>
<td>Investigations or interventions</td>
<td>19 (76%)</td>
</tr>
<tr>
<td>Dietary status</td>
<td>14 (56%)</td>
</tr>
<tr>
<td>Appropriate documentation</td>
<td>13 (52%)</td>
</tr>
<tr>
<td>Communicate plan to nursing staff</td>
<td>12 (48%)</td>
</tr>
<tr>
<td>Appropriate prescribing</td>
<td>12 (48%)</td>
</tr>
<tr>
<td>Blood tests if required</td>
<td>11 (44%)</td>
</tr>
<tr>
<td>Discharge planning</td>
<td>10 (40%)</td>
</tr>
<tr>
<td>Communicate plan to team</td>
<td>9 (36%)</td>
</tr>
<tr>
<td>Communicate plan to patient</td>
<td>8 (32%)</td>
</tr>
</tbody>
</table>
Results: Improvement measures

- Assessment
- Simulation
- Standardization
- 1st
What does this mean?

• Variation is common and affects care
• The surgical WR defined
• Sources of variability identified
• Improvement measures recommended
Further work

- Validated assessment tool
- Development of simulation environment
- Interventions to standardise and improve care

Workshop: “Failure to rescue, failure to assess? Assessing the quality of clinician ward-based care”
  - Today Fri Oct 24, 3:30pm, Room 203B
Thank you

Supervisors

Prof Ara Darzi PC KBE FRCS FACS
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