Improving the recognition of deteriorating patients— one hospital's journey

Claire Rowley
Lead Nurse for the Critical Care Outreach Team,
East Surrey Hospital

Putting people first
Delivering excellent, accessible healthcare

An Associated University Hospital of
Brighton and Sussex Medical School
East Surrey Hospital, Redhill

DGH close to Gatwick airport
Approximately 700 inpatient beds
Critical care outreach

- Nine Outreach nurses
- One Physiotherapist
- 24/7
- Part of the critical care team (10 L3 beds and six L2 beds)

Main roles:
- Assessing and treating acutely unwell patients
- Following up L3 patients discharged from ICU/HDU
- Education of clinical staff
- NEWS2 in paper form (1 ward e-obs)
Medical emergency calls VS in hospital cardiac arrests 2010-2018

<table>
<thead>
<tr>
<th>Year</th>
<th>Cardiac arrests activated</th>
<th>MET calls activated</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>463</td>
<td>198</td>
</tr>
<tr>
<td>2011</td>
<td>493</td>
<td>359</td>
</tr>
<tr>
<td>2012</td>
<td>448</td>
<td>368</td>
</tr>
<tr>
<td>2013</td>
<td>449</td>
<td>545</td>
</tr>
<tr>
<td>2014</td>
<td>421</td>
<td>696</td>
</tr>
<tr>
<td>2015</td>
<td>383</td>
<td>814</td>
</tr>
<tr>
<td>2016</td>
<td>293</td>
<td>934</td>
</tr>
<tr>
<td>2017</td>
<td>301</td>
<td>1228</td>
</tr>
<tr>
<td>2018</td>
<td>297</td>
<td>1366</td>
</tr>
</tbody>
</table>
Medical emergency calls VS in hospital cardiac arrests 2010-2018

- Cardiac arrest calls activated
- MET calls activated

- **2010**: 463 MET calls started
  - 198 cardiac arrest calls activated
  - *Lead for CCOT appointed*  
  - *EWS updated*

- **2011**: 493 MET calls started
  - 359 cardiac arrest calls activated

- **2012**: 448 MET calls started
  - 368 cardiac arrest calls activated

- **2013**: 449 MET calls started
  - 545 cardiac arrest calls activated

- **2014**: 421 MET calls started
  - 814 cardiac arrest calls activated

- **2015**: 383 MET calls started
  - 293 cardiac arrest calls activated

- **2016**: 934 MET calls started
  - 301 cardiac arrest calls activated

- **2017**: 1228 MET calls started
  - 297 cardiac arrest calls activated

- **2018**: 1366 MET calls started
  - 297 cardiac arrest calls activated

- *Sepsis CQUIN*
- *Emergency Call Safety Huddle Introduced*
- *Increased CCOT proactivity*
- *NEWS2*
- *ERT Introduced*
Education of Clinical Staff

- Mandatory and Statutory Training day (NEWS2 and sepsis) for nursing and AHP
- ILS/ALS
- ALERT
- BEACH
- Preceptorship course (recognising deteriorating patient- 2hrs session)
- Non Invasive Ventilation and Optiflow training day
- Sepsis and Acute Kidney injury training day
- Point of Care SIM training
- NEWS2 and Sepsis session on Dr’s MAST

Nurses; Allied Health Professionals; Nursing Associates; Nursing Assistants; Doctors; Physicians Associates
Distribution of Medical emergency calls over the week

Data from MET call audit Feb 2018 (111 calls)
The Emergency Call Safety Huddle
The emergency call safety huddle

What happened before?

• First time the emergency team would meet was at the bedside of an acutely deteriorating patient
• We did not know each others competencies, skill set or roles, let alone names
• Ad Hoc/ poor team work
• Not doing best for the patient
• Surgical FY2 used to be part of emergency team
The emergency call safety huddle

What happens now?

- Started in October 2016
- Meet once a shift (9am and 10pm)
- Introduce selves to team
- Allocate roles
- Agree a lead
- Second lead if simultaneous calls
- Learning needs
- Common themes/ recycled learning
**Emergency Calls Safety Huddle**

**Introductions**

Night Team Handover
Anyone new to 2222?
Learning Needs?

Learning from recent calls?

**Allocate Roles**

- **Lead : AMU** (inc. ED, Radiology, OP, CDU, SAU, PGME, pharmacy, management blocks and front entrance)
- **Lead : Wards** (everywhere else)
- **AB** Airway / Breathing
- **AB** (when no anaesthetist)
- **C** CPR – relieve @ 2mins
- **C** ABG (& return to be reallocated)
- **C** Venflons / Bloods (& return...)
  
  IO after 2 attempts
- **C** Administer Drugs
- **C** Defibrillation / cardiac rhythm
- **DE** Extra information / decision support for lead
- **Timing and Scribe**

**Team Member** | **Attend Calls** | **Name** | **Bleep**
---|---|---|---
Med Reg (AMU / ED) | All | Med Reg (Wards) | All | Wards (everywhere else)
Medical SHO | 2222, Stroke | Medical SHO | 2222, MET | 251
Medical SHO | 2222, MET | Medical F1 | 2222, MBL, Stroke | 702
Medical F1 | 2222, MET | Medical F1 | 2222, MET | 704
CCOT | All | CCOT | All | 766
Anaesthetics | 2222, MBL, Stroke | Anaesthetics | 2222, MBL, Stroke | 730 930 831
ODP | 2222 | ODP | 2222 | 933
CCU SpN | 2222, CP | CCU SpN | 2222, CP | 772
Resus Officer | 2222, MET | Resus Officer | 2222, MET | 301/589

Remind Nurses to Handover when Lead arrives
Concurrent calls
Allocate Medical F1 and SHO to KF 12.30
**H@N 10pm Safety Huddle**

### Roles and分配

<table>
<thead>
<tr>
<th>Team Member</th>
<th>Attend Calls</th>
<th>Name</th>
<th>Bleep</th>
</tr>
</thead>
<tbody>
<tr>
<td>Night Matron</td>
<td>all</td>
<td>339</td>
<td></td>
</tr>
<tr>
<td>Medicine CSM</td>
<td>all</td>
<td>728</td>
<td></td>
</tr>
<tr>
<td>Surgery CSM</td>
<td>all</td>
<td>841</td>
<td></td>
</tr>
<tr>
<td>Med Reg</td>
<td>All</td>
<td>700</td>
<td></td>
</tr>
<tr>
<td>ICU Reg</td>
<td>2222 MBL trauma</td>
<td>830</td>
<td></td>
</tr>
<tr>
<td>Medical SHO</td>
<td>2222, Stroke</td>
<td>701</td>
<td></td>
</tr>
<tr>
<td>Medical SHO</td>
<td>2222, MET</td>
<td>702</td>
<td></td>
</tr>
<tr>
<td>Med Ward Dr</td>
<td>All wards not ED</td>
<td>703/4</td>
<td></td>
</tr>
<tr>
<td>Surgical SHO</td>
<td>Trauma, MBL</td>
<td>838</td>
<td></td>
</tr>
<tr>
<td>Surgical Reg</td>
<td>Trauma, MBL</td>
<td>839</td>
<td></td>
</tr>
<tr>
<td>CCOT</td>
<td>All</td>
<td>766/7</td>
<td></td>
</tr>
<tr>
<td>CCU SpN</td>
<td>2222, CP</td>
<td>772</td>
<td></td>
</tr>
<tr>
<td>Ortho SHO</td>
<td>trauma</td>
<td>220</td>
<td></td>
</tr>
<tr>
<td>ENT SHO/SpR</td>
<td>none</td>
<td>246</td>
<td></td>
</tr>
<tr>
<td>ED Registrar</td>
<td>All in ED</td>
<td>445</td>
<td></td>
</tr>
</tbody>
</table>

### Instructions

- **Remaining emergency team stay**
  - Anyone new to 2222?
  - Learning Needs?
  - Nurses to Handover when Lead arrives
  - Remember to offer Debrief

### Allocate Roles

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<tr>
<th>Role</th>
<th>Name</th>
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<tr>
<td>Lead</td>
<td>Med Reg / CCOT if concurrent calls</td>
</tr>
<tr>
<td>AB</td>
<td>Airway / Breathing</td>
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<td>AB</td>
<td>(when no anaesthetist)</td>
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<td>C</td>
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<td>Venflons / Bloods (&amp; return...) IO after 2 attempts</td>
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<td>Administer Drugs</td>
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<td>Extra information / decision support for lead</td>
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<td>Timing and Scribe</td>
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**Date**: Version 2  5/2018
The Emergency Call Safety Huddle

What improvements have we seen?

• Improved Patient safety

• Better Peer Support

• Continuous Improvement / Kaizen
1. Patient Safety - Short term outcomes from MET calls

We have also seen a reduction in Serious Incidents related to ‘failure to escalate’
2. Peer Support - User Survey monkey (26 staff)

- Found Huddle useful: 0% Disagree, 100% Agree
- Felt huddle improved team working: 0% Disagree, 100% Agree
- Felt patient safety improved: 4% Disagree, 96% Agree
- Allocated role been completed by you: 2% Disagree, 98% Agree
- Learning needs identified addressed: 5% Disagree, 95% Agree

Most recorded impact on team members was a reduction in stress when attending emergency calls
Escalation of Treatment form

- Introduced in 2017
- Used hand in hand with DNACPR form
- Currently being PDSA’ed
- Looking at ReSPECT
- Particularly useful ‘out of hours’
- Work still needed to encourage discussions with patients on this topic
• Bedside

• Emergency

• Response

• Trolley
Spaghetti Diagram

Standard Work Sheet

From: Arrival at MET call
To: End of MET call
Area: Neacvile Ward

Process: MET call efficient
Cycle: All
Operator Title: COT nurse

Flow Depicted: Process Engineer or Arc

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BERT

• Mobile clinical room
• Eliminates waste (time and movement - ensuring more time spent with the patient)
• Standardised contents list
• Sepsis drawer
Sepsis (and NEWS2)

- Education to clinical staff
- Sepsis as a Rapid Process Improvement Workshop
- Training video for staff
- Sepsis leaflet for patients
- Sepsis film night
- Sepsis/NEWS2 champions
NEWS2

• Implemented across ESH in Sept 2018
• Challenges - SpO2 scales
• Paper makes auditing slow and painful!
• Audit Jan ‘19 - 100% of NEWS2 scores added upcorrectly
• MET calls are the safety net for the acutely unwell patient
So, what’s next?

• Further auditing of our MET calls
• Increase in the CCOT establishment
• E- Observations
• Being more proactive with the patients scoring NEWS of 5+
• Deteriorating Patient Working Party
• Networking…….
Summary

• Improving the recognition of deteriorating patients is a continual quality improvement project

• Plan, do, study, act

• Improvement projects do not always have to cost financially

• CCOT are the eyes and ears of the hospital. The opportunities to improve patient safety are vast. And the rewards so high.

• Audit is your friend!

• MET calls are the safety net for acutely deteriorating patients
Thank you for listening!

Email: claire.rowley5@nhs.net