People Make Change!
Improving outcomes and experience across the pathway of care

Calum McGregor
National Clinical Lead for Acute Care with Healthcare Improvement Scotland
Glasgow Transport Museum
People Make Change – Learn and design better systems

1. Share SPSP approach to whole system improvement

2. Examples from the deteriorating patient workstream – applying QI methods and developing culture of improvement

3. Focus on patient journey and co-production
• 25% of patients with severe sepsis receiving IV antibiotics within an hour

http://www.stag.scot.nhs.uk/SEPSIS/Main.html
BARRIERS to quality across the pathway of care

- Poorly designed systems
- A culture not receptive to quality improvement
- Unwanted variation
- Silo working with poor communication
- Patient/carer voice not being heard
Poorly Designed Systems
“The Aggregation of Marginal Gains”
Poorly Designed Systems / Opportunities to Improve

- Antibiotics not in department
- Patient going to X-ray prior to antibiotics and fluids
- Triage system not robust enough to prioritise sick patients
- Nursing staff not informed of STAT antibiotic prescription
- MEWS added incorrectly
- Not applicable section on form
- Medical Students....
- Lack of awareness

- WE’RE TOO BUSY!
AIM and STRATEGY

• To reduce mortality and harm for people in acute hospitals by reliable recognition and response to acutely unwell patients

• Outcome Measures:
  • HSMR
  • Sepsis Mortality Rate
  • Cardiac Arrest Rate
METHOD for improvement


Hopes without a method to achieve them will remain mere hopes.
## National Improvement

<table>
<thead>
<tr>
<th>Aim</th>
<th>Primary Drivers</th>
<th>Secondary Drivers</th>
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National Improvement

Have I got NEWS for you

Order your FREE NEWS resources now

NEWS implementation in Scotland’s acute hospitals

Sepsis Toolkit

NEWS & SEPSIS SCREENING

- National Early Warning Score
- Sepsis Screening Tool
- About this App
- Suggested Links

Last updated June 2013, Version 1.0
NEWS 2 – Lessons from Highland

![Image of people holding signs with safety-related messages]
### Where to focus? – Local Improvement

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Understand Own Systems

- The measurement and monitoring of safety. Vincent et al. 2013
Make it easy for staff to do the right thing
Reduce Unwanted Variation

Figure 1 - Case Note review identification of sub-optimal care

- Failure to recognise / Respond to Hypoxia: 8 cases identified, 40%
- Failure to recognise / Respond to Other: 6 cases identified, 70%
- Delay in escalation: 4 cases identified
- Incorrect obs frequency: 2 cases identified, 100%

Observation/MEWS Chart (Incorporating Head Injury Observations)
Progress:
Local Process and Outcome

Sepsis Mortality Rate
Pride in Work

All anyone asks for is a chance to work with pride.

W. Edwards Deming
Resilience Engineering

- “Learning from what went well”
- Safety 1 v Safety 2
Save of the Month!

- MDT Review
- Establish what went well
- Aim to increase reliability of desirable “thing”
- Apply model for improvement to test plan (PDSA)
Give power to patients / Carers
Shared Decision Making
Anticipatory care planning

- 29% of inpatients in last year of life

Cede Power to Patients
Help patients make informed decisions
Cede Power to Patients

- Patient Activated Consultant Response
- Nobody Phoned!
- Consultant Response to Activation by Patient (CRAP)
- ? Failed test
- "Felt safe." "Wasn't worried and could tell staff were busy." "No need." "Staff explained there would be a wait"
- Flatten hierarchy and show willing
Focus on Patient Journey
• Pre-Alerting in NHS Lanarkshire, GG and C, Highland and Grampian

Martin Carberry, and John Harden BMJ Qual Improv Report 2016;5:u212670.w5049
Dear Dr,

Unwell adult < ? dehydration

74 y/o, 45 mm Hg, BP 124/68, Resp 17/min, SpO2 98%, Temp 37.9°C, Blood glucose 4.4 mmol/l

Stated time of symptom 8pm ago. No food/water intake. No vomiting.

Vitals:
- Pulse: 94
- Respiration: 17
- BP: 124/68
- SpO2: 98%
- Temperature: 37.9°C
- Blood glucose: 4.4 mmol/l

History:
- Sepsis
- Pneumonia
- UTI
- Sepsis, Other infection

Physical exam:
- Slight dyspnea, dehydrated, mild confusion
- Deep, rapid respiration
- Chest clear
- Abdo non tender

Dr. Smith
Outcome Measures - Sepsis
30 Day Mortality (inpatients with Sepsis)

This is a 21% reduction

Data source: ISD Scotland
Cardiac Arrest rate in 17 Scottish Hospitals

Baseline Median 1.98

Median 2 = 1.76
Reduction from Baseline = 11%

Current Median 1.42
Reduction from Baseline = 28%

This is a 28% reduction, which means that there are approximately 25 fewer cardiac arrests per month.

Data source: SPSP returns
HSMR for deaths within 30 days of hospital admission

Data source: ISD Scotland
Can improve - requires whole system and local level QI input

Make it easier to do the right thing for patients

Learn and design better systems