

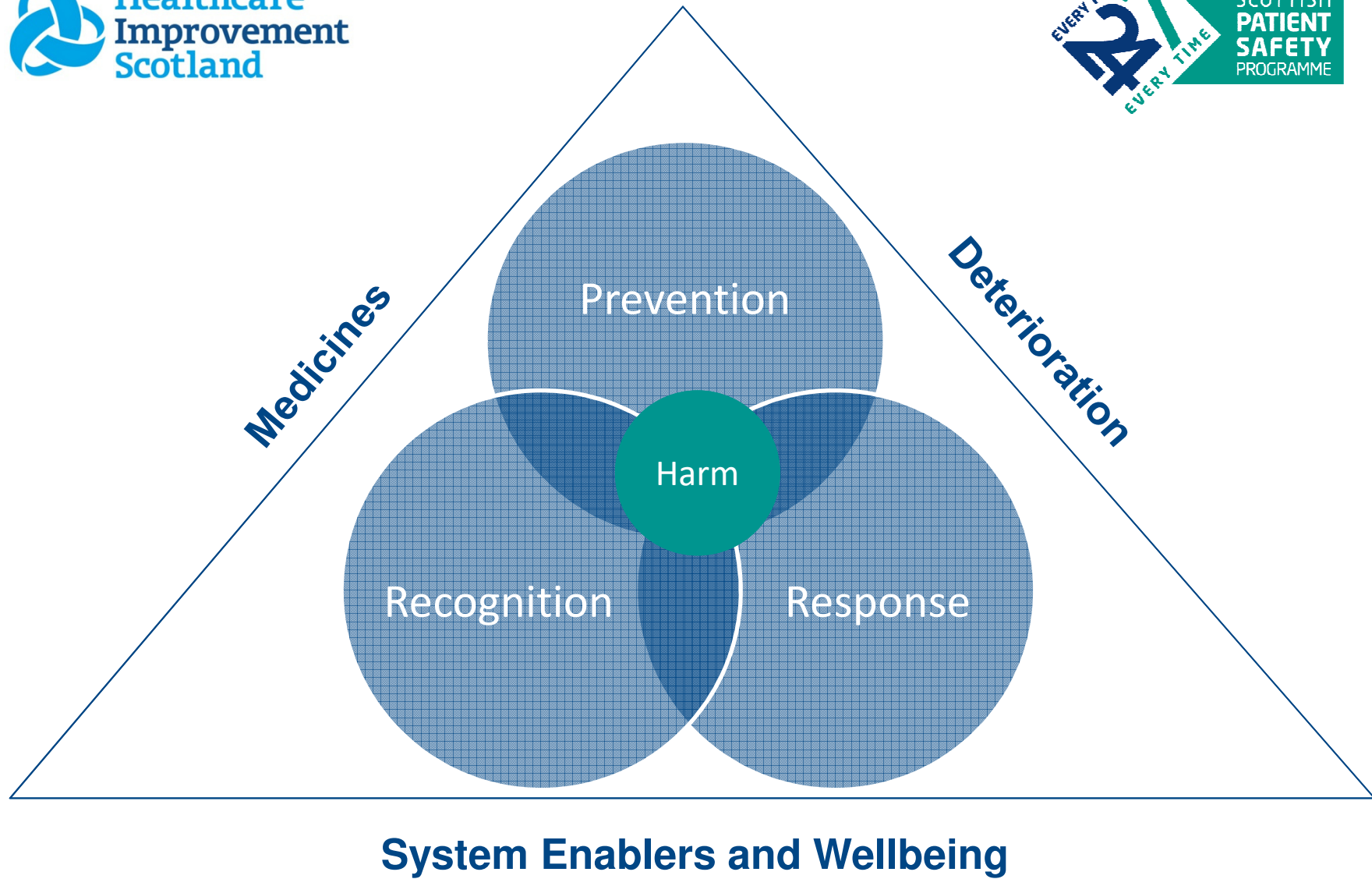


Improving outcomes for patients with Sepsis in Scotland

Alison Hunter – Improvement Advisor, SPSP



Healthcare
Improvement
Scotland



Early recognition in wards



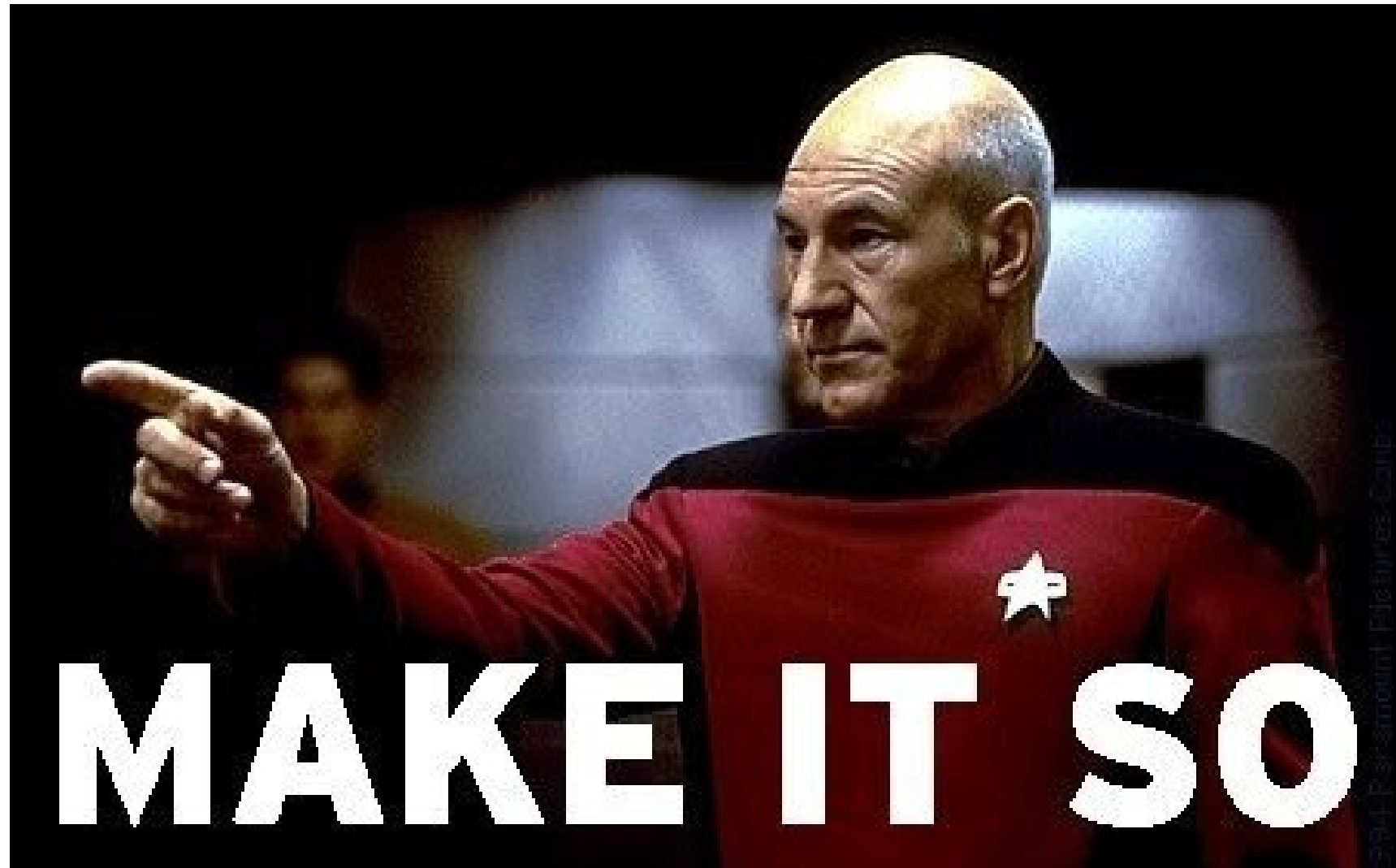
Could this be
sepsis ?

System factors



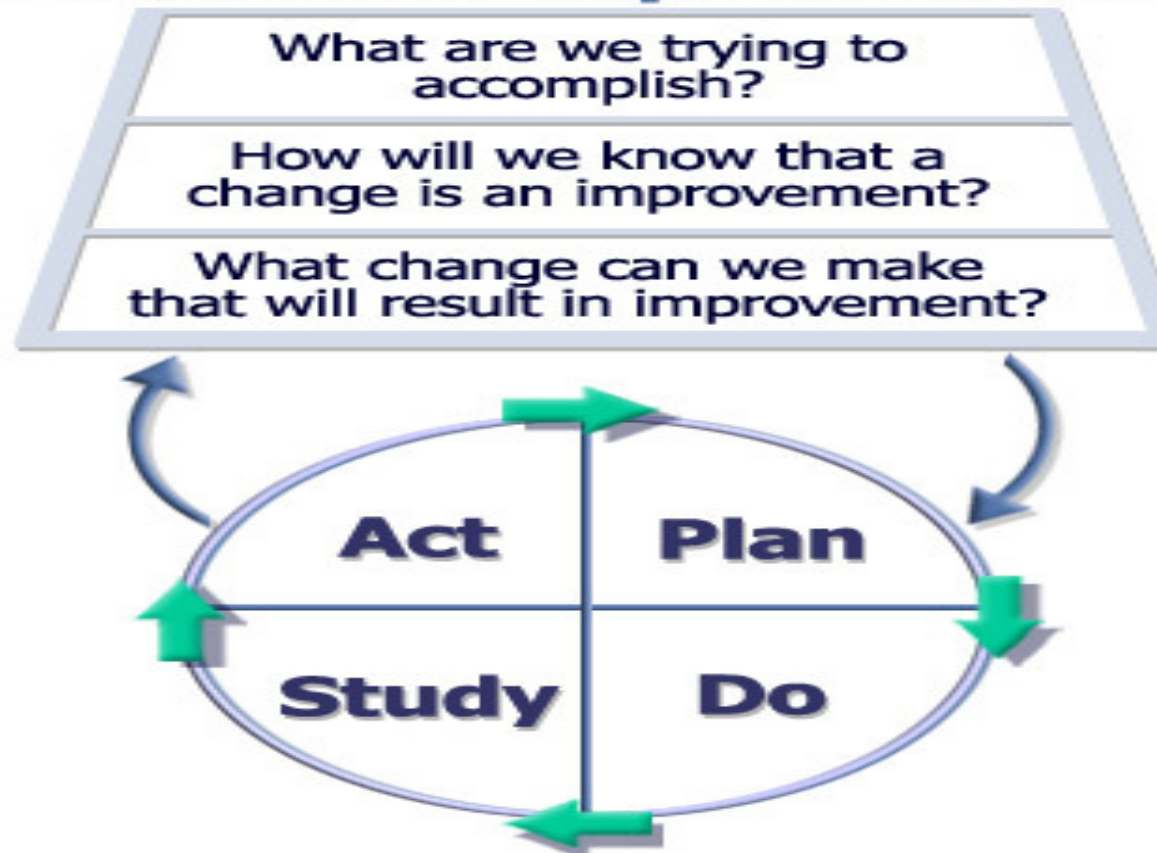
You can not achieve an aim
unless you have a method.

W Edwards Deming



A method

Model for Improvement



This is my Bundle. There are many like it, but this one is mine

Look for Signs of Systemic Inflammation in every patient with an elevated NEWS(>4) OR where infection is likely

<p>Signs of Systemic Inflammation Criteria:</p> <ol style="list-style-type: none"> 1. Respiratory rate >20 2. Temperature <36 or >38°C 3. Heart Rate >90 4. White cell count <4 or >12 5. Acutely altered mental state (AMT<8 or <A on AVPU) 6. Bedside glucose >7.7mmol/L without diabetes <p>If SSI 2 or more AND Infection suspected :THIS IS SEPSIS</p> <p>Commence the Sepsis Six Immediately and make a rapid assessment for the presence of ANY organ dysfunction.</p>	<p>Likely Source of Infection?</p> <table border="0"> <tr> <td>Resp.</td> <td>Soft tissue</td> </tr> <tr> <td>Urinary</td> <td>Abdo</td> </tr> <tr> <td>Bone/joint</td> <td>Unknown</td> </tr> </table> <p>Neutropenic?</p>	Resp.	Soft tissue	Urinary	Abdo	Bone/joint	Unknown
Resp.	Soft tissue						
Urinary	Abdo						
Bone/joint	Unknown						

Place Sepsis Six Sticker in notes

Sepsis Six: Aim to complete within 1 hour of arrival in hospital (OR for inpatients: within 1 hour since SSI criteria reached)

1. Oxygen to achieve Saturations >94%, ≤ 98% (Caution COPD)
2. IV fluids (≥500ml/hr OR 20ml/kg stat if organ dysfunction)
3. Blood Cultures
4. Intravenous antibiotics as per local guidelines
5. Measure Lactate and FBC
6. Catheterise if organ dysfunction apparent

Look for sign of organ dysfunction (laboratory tests should be requested as emergencies, and results must be available and acted upon within 1 hour)

<p>Signs of organ dysfunction:</p> <p>Systolic BP <90 OR MAP <65 OR Systolic > 40 below patient's normal New need for O₂ to achieve sats >90% Lactate >2 mmol/L</p>	<p>Urine <0.5ml/kg/hr for 2 hours Creatinine >177mmol/L Bilirubin > 34 micromol/L INR>1.5 or aPTT>60s Platelets <100 x 10⁹/L</p>
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ANY organ dysfunction. **THIS IS SEVERE SEPSIS**
Phone Team Leader and inform of Patient consider transfer to HDU

Reassess frequently in first hour. Consider other investigations and management. Look for septic shock:

Lactate >4 Hypotensive after after 20ml/kg fluid
(Systolic BP <90 or MAP < 70 or systolic >40 below baseline)

THIS IS SEPTIC SHOCK.

Immediately contact Senior if not already present.
If possible move to high dependency area
Immediately commence 6-hour resuscitation bundle

EXIT/MODIFICATION OF GUIDELINE:

Not all patients with a high SSI/SIRS score have sepsis. OR there may be additional problems requiring different management (Current, CCF, DKA, MI, GI bleed, etc). OR patients may be palliated.

Sepsis: Lessons learned

- Awareness is critical but not sufficient
- Importance of resources, staff availability, technical skills and expertise in completing sepsis 6
- Distractions, lapses, and coordination issues
- Requires decision-making at several points

Evaluation of the Scottish Patient Safety Programme sepsis VTE collaborative: Short Report

Carolyn Tarrant, Barbara O'Donnell, Graham Martin, Julian Bion



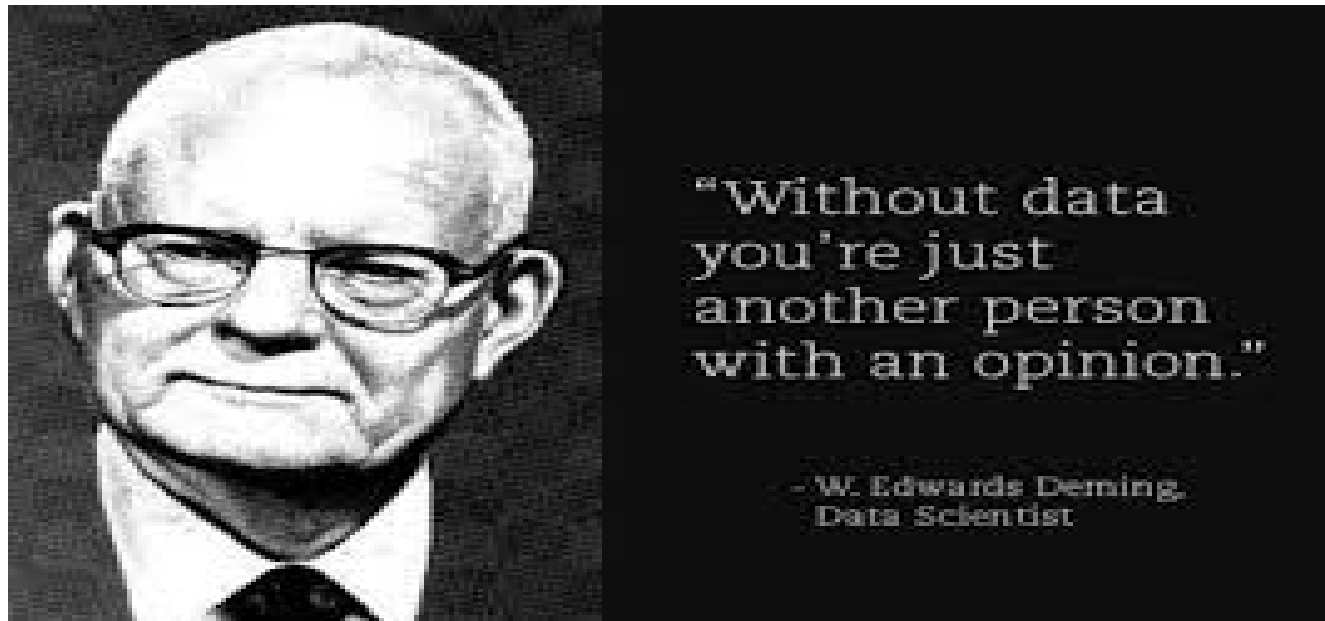
SEPSIS ~~6~~ 60

Implementation - solutions

- What does it take to complete the sepsis 6 in an hour ? Where are the weaknesses in the system?
 - Process mapping
 - Engaging MDT
- Availability of staff & expertise
 - Response / outreach team (but risk of delays , and deskilling ward staff)
 - Technical skills, IV access, ownership
- Supporting decision making
 - Availability of senior decision maker
 - PGDs

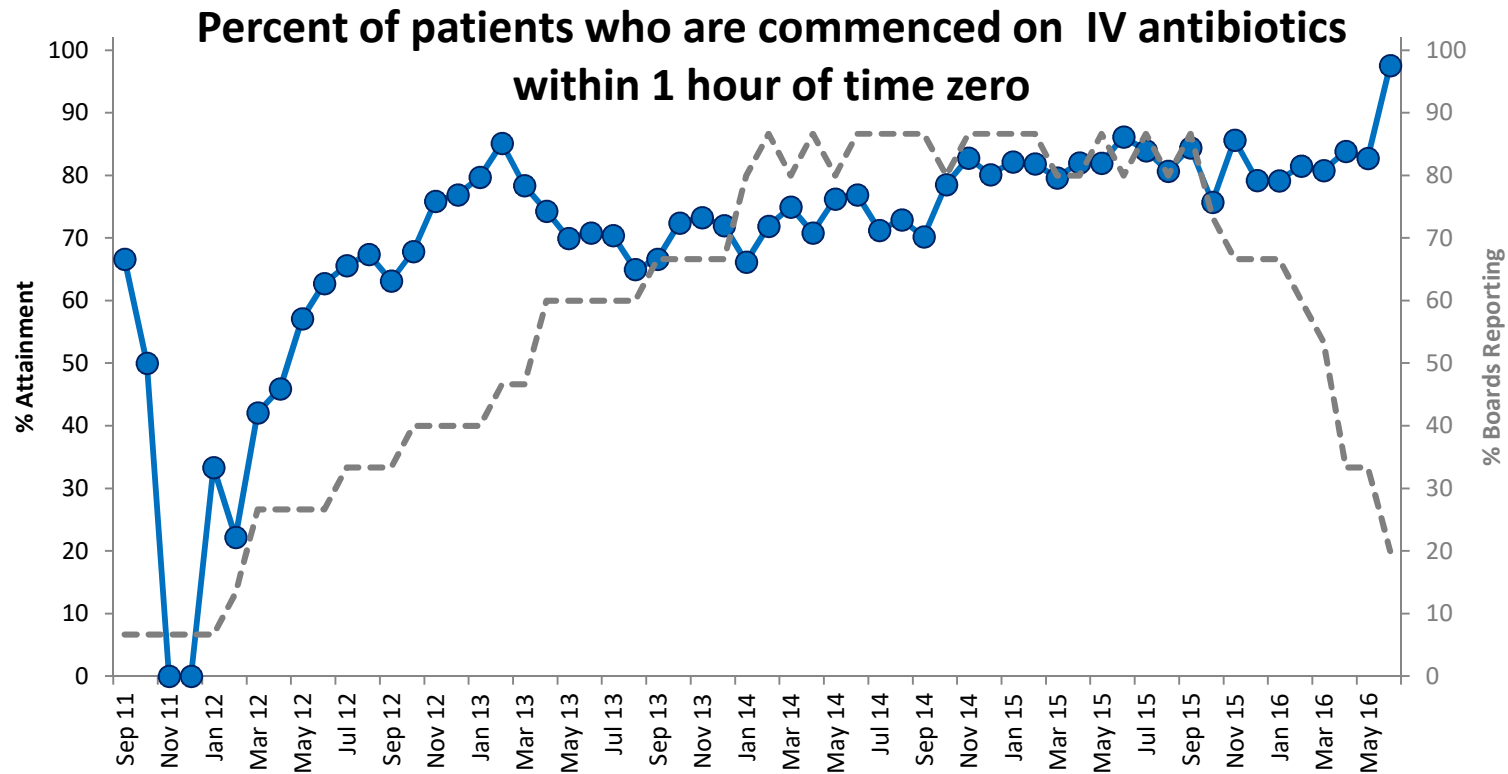
How can Critical Care staff help

- Outreach and teach
- Education – formal and informal
- Feedback on good practice and missed patients
- Where are most of your sepsis admissions from – where are there opportunities to improve



How do we know if we have made a difference ?

NHS Scotland



NHS Scotland

