Our Journey with the Wessex Patient Safety Collaborative

As part of the UHS Sepsis CQUIN (Commission for Quality and Innovation) we aimed to meet set targets throughout the year to try and improve our management of patients with sepsis.

Our aims

Our aim was for prompt recognition and early management of patients with sepsis. We developed a sepsis screening tool to alert staff in the recognition of sepsis through ‘red flag’ indications and also directs medical staff to the ‘Sepsis 6’ actions.

Screening patients for sepsis on admission

At UHS we use a modified early warning score (MEWS) to identify the degree of illness of a patient through their physical observations. After reviewing patients with different MEWS scores we confirmed that scores above 3 would be our trigger for the screening tool.

Our tool was implemented in the Emergency Department (ED), Acute Surgical Unit and Acute Medical Unit. Alongside this a specialised paediatric sepsis screening tool was developed for any unwell child admitted to ED and the Paediatric Assessment Unit.

We had an opportunity to test this theory by having the screening tool electronically implemented in ED, so it would show when entering patient’s observations for any patient with a MEWS score of over 3.

Antibiotics administered within 60 minutes of admission

We hoped increasing the presence of the screening tool would prompt staff to our ‘admission to antibiotic administration within 60 minutes’ target; that increasing one would increase the other.

Methods

Our screening tool has been through 4 audit cycles. We conducted monthly retrospective audits of patient medical records. To review the use of our screening tool, a random sample of 50 patients with a MEWS score of over 3 were used. To review antibiotic administration we audited all patients clinically coded with sepsis on admission.

This chart includes all of our patients who required sepsis treatment from July 2015 until the end of 2015 (where times of admission and antibiotic delivery are available) with our electronic screening tool starting on 9th November 2015.

Our median line shows a slight improvement over time, with most of our antibiotic administrations now within the 60 minute target. Is our screening tool having an effect on antibiotic delivery?

Is the tool helping?

This graph shows the presence of a screening tool is contributing to the improved antibiotic administration within 60 minutes.

The overall trend for the whole trust shows an improvement. The percentage of patients screened for sepsis reaching 56% in December and the percentage of patients who required antibiotics being administered within 60 minutes reached 73%.

Achievements so far

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent of Patients who received our sepsis screening tool</th>
<th>Percent of Patients who required antibiotics successfully being administered within 60 minutes</th>
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</thead>
<tbody>
<tr>
<td>2015-16</td>
<td><img src="image" alt="Graph showing improvement in percentage of patients who received sepsis screening tool and percentage of patients who required antibiotics successfully being administered within 60 minutes over time." /></td>
<td><img src="image" alt="Graph showing improvement in percentage of patients who required antibiotics successfully being administered within 60 minutes over time." /></td>
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What next?

Plan to extend our screening tool to all other areas of the hospital, having already implemented the screening tool in Oncology and Gynaecology wards.

Development of the sepsis screening tool on the Electronic Patient Acuity Monitoring System.

Lessons learnt

- Ensure early consultant and senior engagement in the processes
- Rewarding success can encourage effort and motivation

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