

# Gloucestershire Hospitals NHS FT

## Improving initial sepsis management

Gloucestershire Hospitals is a large acute trust with 1000 beds over two sites with approximately 135,000 patients attending the two emergency departments.

The sepsis programme was designed to embed sepsis management in the emergency pathway to ensure the changes became custom and practice rather than seen as another initiative. Key stakeholders included senior/junior medical staff, nursing and pharmacy staff from the emergency department (ED), admissions units, maternity, paediatrics and oncology. These staff were involved in the design and continual improvement of the programme. The work has led to improvements in the care that patients with sepsis receive.

### Objective

The focus of the work was to permanently change the clinical behaviour and supporting structures (such as education) at a local department level to enable local ownership and ongoing improvement indicated by data or new evidence. The project set out to build sepsis management into admission and assessment pathways to improve the timely treatment of patients with sepsis.

### Approach and actions taken

Sepsis was recognised as a key quality initiative by the trust and the Trust Board. Progress was reported locally to teams but also at board level as part of the quality dashboard, with update reports on progress. This increased visibility of sepsis as a clinical priority.

**Ownership** - Stakeholders from each emergency pathway stream were identified as clinical leaders of the project. They chose not to use an intensivist or sepsis nurse as leads, as they wanted to embed local behaviour change at the point of diagnosis. Local solutions needed to be developed and then built into local induction and competence, leaving responsibility in the clinical area for future changes as evidence emerges.

**Improvement** - The teams involved in the work (medical staff, nursing and pharmacy staff from the emergency department (ED), admissions units, maternity, paediatrics and oncology) were taken through the Gloucestershire Safety and Improvement Academy (GSQIA) training which helps to develop good quality QI projects and then provides coaching support to allow skill development and to embed QI skills. The teams were brought back together monthly to share progress and learning.

**Pathway**- Each team then designed or adapted their current pathway following the best evidence and tested their approach using PDSA methodology with sepsis monitoring data directing their work. Key areas of success include:

- Simple and fast screening in the emergency department and oncology department to get the patient onto the pathway
- Agreeing and then providing pre-prepared first line antibiotics

## Challenges and enabling factors

The main challenges were around the changing quality standards for the delivery of sepsis care, in particular the time to administer antibiotics which has had variable definitions. To combat this the trust continued to measure a range of stages in the pathway in order to understand the real improvement in the system despite the changes in definition.

If the trust was starting again, based on lessons learned, it would reduce the time spent on the clinical debate on content of the pathway and move more quickly into testing of the pathway and try and standardise clinical coding for sepsis.

The trust has reviewed mortality as an outcome with the commonly used clinical codes for sepsis. It found that coding data was not consistent and was influenced by the quality improvement (QI) programme in terms of what was written in the notes and then interpreted by the coding team.

Improving sepsis care is not just a project but requires continual improvement with changing evidence and increased pressure in clinical environments. The pathway also needs to consider the community response with the aim to align ambulance and GP care.

## Outcomes and impact

Local teams continue to own and adapt practice reflecting on the data, new evidence and adverse events, taking a multi-disciplinary approach to delivering sepsis care.

Sepsis management is now built into admission\assessment pathways e.g. ED Checklist, and pathways are standardised but locally adapted where clinically demanded e.g. oncology.

Teams use improvement methodology supported by an in-house improvement academy (Gloucestershire Safety and Quality Improvement Academy).

The data collected is used to assess the impact of changes to the system rather than being target driven.

The main measures used were taken from the national CQUIN which measures process of delivery of sepsis care through screening and time to delivery of antibiotics.

**Screening of patient with sepsis attending ED has been maintained between 90-95% since October 2015.**

**Timely treatment of antibiotics has improved in ED from 35% in 2015 to 85-90% in 2018.**

**Timely treatment of antibiotics has improved on wards has improved from 40% in April 2017 to 75 % in June 2018.**

### For more information please contact:

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