Improving early detection and management Sepsis following 'Just Say Sepsis' NCEPOD report

L. Jordan, V. Selby, C Edmonds, D Greenman. Royal United Hospitals Bath NHS Foundation Trust

INTRODUCTION:

Sepsis affects 260,000 people in the UK/ year resulting in 44,000 deaths[1]

Early recognition and treatment improve outcome[2]

Sepsis is a common cause of inpatient deterioration, but can be challenging to identify and treat promptly.[3]

We aimed to develop simple processes to improve this across the trust, in line with new NICE guidelines published in July 2016, empowering frontline staff to act promptly.

Aim: Sepsis screening in 80% of at risk inpatients (Adult, Paediatric and Maternity) and 80% inpatients with Sepsis receive antibiotics in an hour by July 2018

METHODS:

Launched '60 days for Sepsis 6 campaign' , innovative awareness campaign aiming to train at least 600 staff in 60 days. The campaign was spread to other trusts regionally. Training then continued regularly.

Using the Model for improvement methodology, Sepsis screening and management tools were developed for Adults, Paediatric and Maternity patients based on NICE guidelines. These were tested using PDSA (Plan,Do,See Act) cycles, and amended with input from teams, ensuring team ownership and sustainable implementation.

Key stakeholders in each area were actively involved

MEASURES:

Electronic data was not available. Screening data was collected from random note review of over 100 patients/month trust-wide, based on those eligible for screening if the NEWS score ↑ by ≥2 or there was clinical concern.

Between 10 - 25 patients/month were identified with sepsis - time from signs of deterioration to antibiotic delivery were recorded

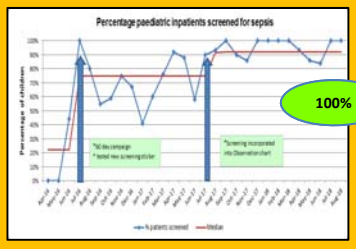
RESULTS:

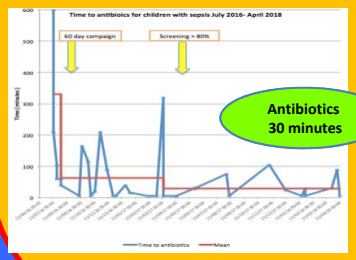
Following multiple PDSAs, Sepsis screening tools and management proformas are now embedded trust-wide.

Over 600 staff at RUH trained in 60 days . Now >2500

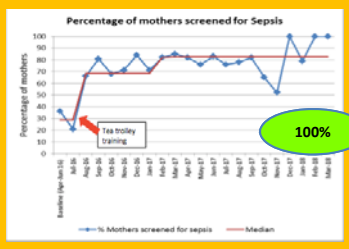
3200 staff trained regionally in just 60 days!

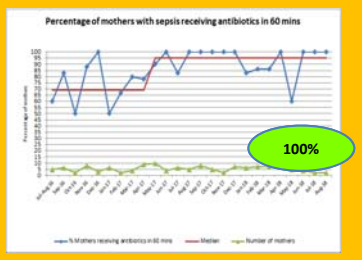
PAEDIATRIC SEPSIS:



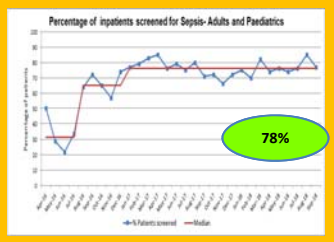


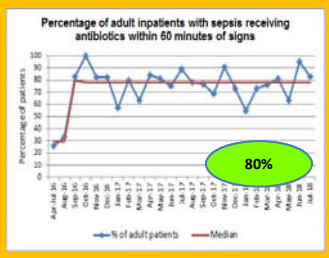
MATERNAL SEPSIS:





OVERALL INPATIENT SEPSIS:





OUTCOMES[4]:

2016-18

17% ↓ Mortality
Suspicion of Sepsis diagnoses (SOS)
12% ↓ ICU bed days (av 28 days/ month= £40m),
10% ↓ length of stay (11,500 bed days =£3.5m)

Despite ↑ incidence SOS 500/ year

CONCLUSION:

We have significantly improved detection and treatment of sepsis in inpatients using quality improvement methodology, ensuring team ownership to support sustained improvement, which has resulted improved patient outcomes with improved mortality and morbidity and significant cost savings.

1. NCEPOD Just say sepsis. www.ncepod.org.uk/2015sepsis.html
2. Daniels et al. The Sepsis Six and the Severe Sepsis Resuscitation Bundle: A Prospective Observational Cohort Study. Emergency Medicine Journal. 2011;(28): 507-512.
3. Sepsis NICE guidelines. https://www.nice.org.uk/guidance/gs161
4. Suspicion of sepsis dashboard. psmu.improvement.nhs.uk/workstreams/deterioration/sos-dashboard