EV0161
ePoster Viewing
Severe sepsis, bacteraemia & endocarditis

AQ sepsis: a large-scale programme for improving sepsis recognition and management in the North West region of England

Emmanuel Nsutebu[1], Conor Mcgrath[2], Liz Kanwar[3], Simon Hammond[3]

[1]*Royal Liverpool and Broadgreen University Hospitals Trust, Tropical and Infectious Disease Unit, Liverpool, United Kingdom*

[2]*Arrowe Park Hospital, Intensive Care, Wirral, United Kingdom*

[3]*Advancing Quality, Sale, United Kingdom*

Background: Advancing Quality (AQ) is an established approach to reducing variation and improving outcomes for patients in the North West of England. It aims to improve clinical care by producing and implementing evidence-based bundles of care across a collaborative network of hospitals. The AQ sepsis measure set was devised by a clinical expert group based on evidence produced by the British Medical Journal (Table 1). The measure set was launched in September 2015 and is consistent with recommendations from the International Surviving Sepsis Campaign, 2012.

Table 1: AQ Sepsis Measure set

SEPS-01	Early Warning Score recorded within 60 minutes of hospital arrival
SEPS-02	Evidence of 2 or more SIRS & documentation of suspected sepsis source within 2 hours of hospital arrival
SEPS-03	Blood cultures taken within 3 hours of hospital arrival
SEPS-04	Antibiotics administered within 3 hours of hospital arrival
SEPS-05	Serum lactate taken within 3 hours of hospital arrival
SEPS-06	Second litre of IV fluids commenced within 4 hours of hospital arrival if systolic BP < 90 mmHg or Lactate ≥ 4 mmol/l
SEPS-07	Oxygen therapy administered within 4 hours of hospital arrival if SpO2 < 94%
SEPS-08	Fluid Balance Chart commenced within 4 hours of hospital arrival if IV fluids commenced
SEPS-09	Senior Review or assessment by Critical Care Team within 4 hours of hospital arrival if lactate > 4 mmol/l

Material/methods: ICD10 codes were used to identify patients with sepsis. A standard data collection tool was used to assess management of patients with sepsis on a monthly basis. Patients without a documented suspected infection within the first 48 hours of hospital arrival, pregnant and terminally ill palliative care patients were excluded. Sepsis care was assessed by using performance on individual measures and an Appropriate Care Score – the percentage of patients who received all eligible measures.

Results: Data was available for over 9,500 patients with sepsis over 9 months. A higher proportion of patients are now receiving “appropriate care” - an increase of 34.7% patients (Figure 1). The proportion of patients with severe sepsis or septic shock, receiving antibiotics within 1 hour, has increased from 34.2% to 43% over the 9 month period an (increase of 8.8%). Patients who achieved “appropriate care” had a lower crude in-hospital mortality rate than those that did not (22.8% vs 26.3%).

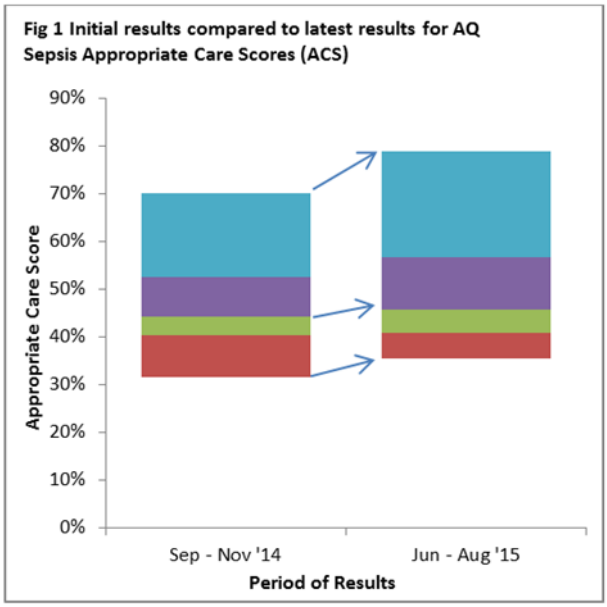

Fig 1. The performance of all hospitals for the initial three months of AQ Sepsis & the latest three months

Conclusions: Use of the AQ sepsis measure set and a collaborative network in the NW region of England appears to have improved management and outcomes of patients with sepsis.