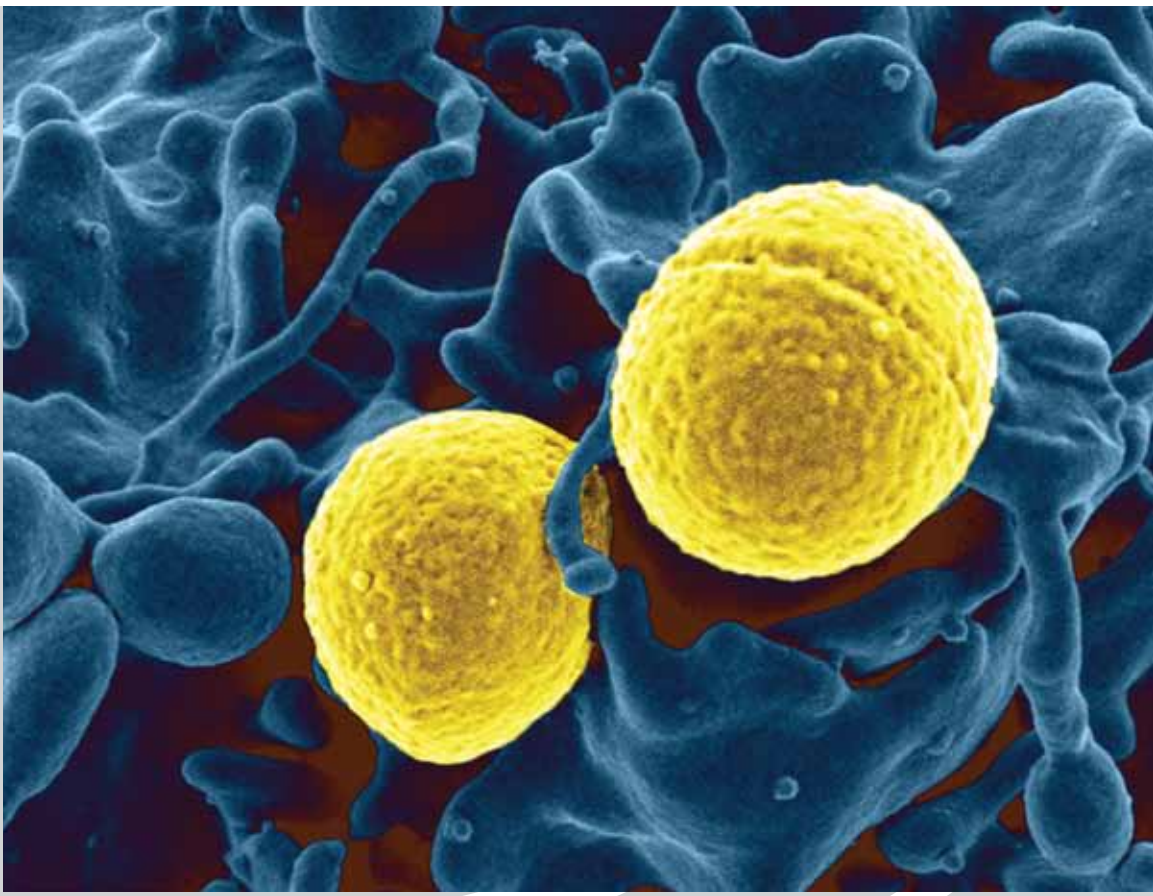
Just Say Sepsis!

A review of the process of care received by patients with sepsis



NCEPOD

Improving the quality of healthcare

Summary

This study set out to identify and explore avoidable and remediable factors in the process of care for patients with known or suspected sepsis.

The study confirmed that there is huge variability in the clinical presentation of sepsis. Patients seen in the community present diagnostic dilemmas and whilst the difficulty is recognised, it was of note that there was poor recording of clinical observations by primary and secondary care providers that may have assisted with both the immediate management and handover between primary and secondary care.

It was noted that a possible source of infection was only recorded at triage in 46% of patients admitted via the ED. And in those patients in whom a source was amenable to control, that control was delayed in 43% of cases which could have affected the outcome in 26/41 patients in the view of the case Reviewers.

One quarter of the patients in this study acquired their infection whilst in hospital. In half of these patients the infection was diagnosed following an invasive procedure.

The Reviewers considered that there was a delay in identifying sepsis in 182/505 (36%) cases, severe sepsis in 167/324 (51%) and septic shock in 63/193 (32%), and identified that good documentation of sepsis was associated with more timely diagnosis. Despite the presence of protocols, investigations considered essential in the diagnosis of sepsis were missed in 39% of patients and delayed in 39%. Management on a care bundle reduced delays in the treatment of patients with sepsis. However, only 39.4% of patients were started on a sepsis care bundle. This study highlights the absolute requirement for hospitals accepting emergency admission to have a formal protocol for the early identification and immediate management of patients with sepsis. Only 55/215 (25.6%) acute hospitals used standard proformas to identify and monitor patients with sepsis, and less than half (90/204; 44%) audited the timely treatment of severe sepsis against their own protocols. It is recognised that if clinical management is to improve, clinical leadership is important. However, only half of the hospitals in the study (166/322; 52%) had appointed a lead clinician for sepsis.

This is a group of patients who benefit from the use of antimicrobials, but with the current awareness of over use of antimicrobials, antimicrobial stewardship is important; not only in the management of sepsis but also the in broader environment of healthcare.

Morbidity following sepsis is common and 22% of patients had evidence of complications at discharge. There was little evidence of information being given to sepsis patients on the disease and its consequences.

For those patients who died, an autopsy was only performed in 12.1% of cases, sepsis was only included on the death certificate in 40.8% and only 63.8% of cases were discussed at mortality and morbidity reviews, missing opportunities to learn from the care provided.

Throughout the patient pathway areas for improvement were identified and the Reviewers were of the opinion that good care was delivered in only 36% of cases. Early recognition, better documentation and prompt treatment of sepsis would all lead to improved care for this group of patients. Using the word 'sepsis' as soon as it is considered would also raise awareness amongst healthcare professionals and patients.

Principal recommendations

All hospitals should have a formal protocol for the early identification and immediate management of patients with sepsis. The protocol should be easily available to all clinical staff, who should receive training in its use. Compliance with the protocol should be regularly audited. This protocol should be updated in line with changes to national and international guidelines and local antimicrobial policies. *(Medical Directors)*

An early warning score, such as the National Early Warning Score (NEWS) should be used in both primary care and secondary care for patients where sepsis is suspected. This will aid the recognition of the severity of sepsis and can be used to prioritise urgency of care. *(General Practitioners, Ambulance Trusts, Health Boards, NHSE, Clinical Directors, Royal Colleges)*

On arrival in the emergency department a full set of vital signs, as stated in the Royal College of Emergency Medicine standards for sepsis and septic shock should be undertaken. *(Emergency Medicine Physicians, Clinical Directors, Nursing Directors)*
In line with previous NCEPOD and other national reports' recommendations on recognising and caring for the acutely deteriorating patients, hospitals should ensure that their staffing and resources enable:

a. All acutely ill patients to be reviewed by a consultant within the recommended national timeframes (max of 14 hours after admission)
b. Formal arrangements for handover
c. Access to critical care facilities if escalation is required; and
d. Hospitals with critical care facilities to provide a Critical Care Outreach service (or equivalent) 24/7. *(Medical Directors, Nursing Directors, Commissioners)*

All patients diagnosed with sepsis should benefit from management on a care bundle as part of their care pathway. The implementation of this bundle should be audited and reported on regularly. Trusts/Health Boards should aim to reach 100% compliance and this should be encouraged by local and national commissioning arrangements. *(Medical Directors, Clinical Directors, Commissioners)*