



Stage Two: Resources

Resources to support the prompt recognition of sepsis and the rapid initiation of treatment 2 September 2014

Alert reference number: NHS/PSA/R/2014/015

Alert stage: Two - Resources

This patient safety alert applies to all patient age groups

Sepsis is a time-critical medical emergency, which can occur as part of the body's response to infection. The resulting inflammatory response adversely affects tissues and organs. Unless treated quickly, sepsis can progress to severe sepsis, multi-organ failure, septic shock and ultimately death. Septic shock has a 50% mortality rate⁽¹⁾.

Sepsis is almost unique among acute conditions in that it affects all age groups and can present in any clinical area and health sector. Over 70% of cases arise in the community⁽²⁾. However, sepsis can be easily treated through timely intervention and basic, cost-effective therapies. Recent epidemiological studies^{(3),(4)} and data from the Intensive Care National Audit and Research Centre (ICNARC)⁽⁵⁾, estimate that 35,000 people die from sepsis in England each year. We are lacking in recent data, especially in the UK but the mortality rate for sepsis in children is estimated to be 10-15%. Key to reducing these figures are:

- Timely recognition and diagnosis of sepsis
- Fast administration of intravenous antibiotics
- Quick involvement of experts including intensive care specialists

It is estimated that the reliable delivery of basic elements of sepsis care could save 11,000 lives a year and £150 million annually⁽⁶⁾. This equates to 100 lives and £1.25 million in bed days for an average district general hospital each year. Furthermore, in 2010 the Centre for Maternal & Child Enquiries (CMACE) published the UK Confidential Enquiry into Maternal Deaths for the period 2006 – 2008 that found sepsis to be the commonest cause of direct maternal death⁽⁷⁾.

This stage 2 alert has been issued to continue to raise awareness of sepsis and to signpost clinicians in the ambulance service, primary and community services and secondary care to a set of resources developed by the UK Sepsis Trust, and others, to support the prompt recognition and initiation of treatments for all patients suspected of having sepsis. These resources include the Sepsis 6, a care bundle whose use is associated with significant numbers of lives saved and reduced length of hospital stays⁽⁸⁾.

The resources are available from here: UK Sepsis Trust's clinical toolkits

Actions

Who: Chief Executives of

NHS Trusts,

Foundation Trusts, Ambulance Trusts & General Practitioners

When: To commence

immediately and by no later than 31 October 2014 have a robust action plan developed to achieve compliance



Ensure staff have access to both adult, paediatric and infant sepsis screening and action tools that can be used for patients presenting on first attendance, or developing suspected infection as an in-patient. Examples of such tools can be found at the resource links given in this alert.



By either circulating this alert or through local alternatives (such as newsletters, local awareness campaigns, etc.) ensure that all relevant staff are aware of the key messages and the linked resources (or local equivalents) so they can be introduced into clinical practice; in particular the administration of antibiotics within one hour of suspicion of sepsis and early escalation to senior medical management.



Share local good practice or further locally developed resources relating to sepsis via the deterioration page of the Patient Safety First website.

Patient Safety | Domain 5 www.england.nhs.uk/patientsafety

Contact us: patientsafety.enquiries@nhs.net



Alert reference number: NHS/PSA/R/2014/015

Alert stage: Two - Resources

Stakeholder engagement

This patient Safety alert was circulated to the following Patient Safety Expert Groups who supported publication of the alert; Medical Services, Surgical Services, Infants Children and Young People, Women's Health, Primary Care.

References

- 1. Angus DC, Linde-Zwirble WT, Lidicker J, Clermont G, Carcillo J, et al. (2001) Epidemiology of severe sepsis in the United States: analysis of incidence, outcome, and associated costs of care. Crit Care Med 29: 1303–1310.
- 2. Esteban et al. Critical Care Medicine. 2007; 35(5):1284-1289
- 3. Vincent JL, Sakr Y, Sprung CL et al. Sepsis in European intensive care units: results of the SOAP study. Critical Care Medicine 2006; 34: 344–53
- 4. Hall MJ, Williams SN, DeFrances CJ, et al.: Inpatient care for septicemia or sepsis: A challenge for patients and hospitals. NCHS data brief Hyattsville, MD: National Center for Health Statistics 2011; 62
- 5. The Intensive Care National Audit and Research Centre (2006)
- 6. Daniels R. The incidence, mortality and economic burden of sepsis (2009) In: NHS Evidence emergency and urgent care
- 7. The Eighth Report of the Confidential Enquiries into Maternal Deaths in the United Kingdom (March 2011) British Journal of Obstetrics & Gynaecology Volume 118, Supplement 1, March 2011
- 8. Daniels R, Nutbeam T, McNamara G, Galvin C. The Sepsis Six and the Severe Sepsis resuscitation Bundle a prospective observational study. Emergency Medicine Journal 2011; 28(6): 507-512