

CONFERENCE ABSTRACT

National Clinical Guideline No 6: Sepsis Management - A Quality Improvement & Safety Initiative

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Introduction: The management of sepsis is a significant burden on the Irish health service and delays in recognition and treatment can result in significant morbidity and increased mortality. The aim of the National Clinical Sepsis Programme is to reduce mortality and enhance the quality of life in sepsis survivors by promoting early recognition, appropriate treatment and referral of patients with sepsis, thereby affording maximum survival opportunity with reduced chronic sequelae. Secondary aims include reduction in length of stay.

Problem: Sepsis is a time-dependant medical emergency with a crude hospital mortality rate of 22.7% in Ireland (HIPE 2015). The introduction of time-dependant sepsis pathways in the form of clinical decision support tools (CDST) aims to enhance recognition and treatment ultimately reducing mortality rates. Introduction of CDSTs involves behaviour change to achieve the desired outcome, therefore requires buy-in as well as awareness, education and training. Initial rollout was targeted at Emergency Departments (EDs) and inpatient settings in acute hospitals.

Targeted population: In 2015 sepsis affected 2.1% of all adult hospital patients and contributed to 18.8% of all hospital deaths. 70-80% of all sepsis cases are admitted from the community via the ED (CDC 2016). Implementation of CDSTs using a top-down, bottom-up approach in the acute setting identified roles and responsibilities for leadership teams and treating clinicians, and the formation of local hospital sepsis committees. An integrated approach to sepsis recognition and management is being developed through collaboration with specialist programmes, maternity, paediatrics, neonates, and primary care to develop a common language and approach to ensure consistency in care and communication.

Highlights: Three sepsis summits, hospital site visits and the launch of the sepsis e-learning programme have promoted awareness and enhanced learning resulting in improved practice when CDSTs are used as demonstrated in 3 process audits undertaken in 2016.

The first National Sepsis Report published in December 2016 highlights the burden of sepsis to the community and healthcare system and provides baseline data for future monitoring of

effectiveness of implementation and programme aims of mortality reduction and decreased healthcare usage over the five year roll-out.

Comments on transferability: Tools for assessing patient severity of illness (NEWS) and for effective communication (ISBAR) developed in the acute hospital sector are being transferred into the primary as part of development of a integrated approach to sepsis screening, management and communication. All CDST's have a common language, diagnostic criteria and treatment approach to support flow from Primary Care, Ambulance Care into the acute setting until discharge. As sepsis definitions and treatments change updated CDSTs will act as a platform to quickly and safely introduce change into clinical practice.

Conclusions: Sepsis affects patients in all specialities, at home, in residential care and in the acute sector. Early recognition, treatment and appropriate referral has been demonstrated to reduce mortality². A common approach across specialities and clinical areas facilitates good communication and effective, seamless care. Using the CDST improves sepsis diagnosis and documentation, including risk stratification, leading to the appropriate person-centred response and best outcomes. Introducing new practice is hard in a busy environment. Proven benefits and sustained support facilitate this culture change. Education programmes and hospital-based training supported by data and involving end-users in the design of the tools helps drive this change. Secondary drivers include improved documentation leading to correct case-mix allocation and a shortened length of stay leading to increased bed capacity that can be used for patients on trolleys and on elective waiting lists. Effective strategies with proven beneficial outcomes empower health care professionals with potential benefits in stress reduction and improved morale.

- With Form Without Form

Diagnosis made and documented	87%	44%
Risk stratification correct	74%	24%
1st dose antimicrobials within 1 hour	74.5%	46.5%

Keywords: sepsis; screening; mortality; support tool; integrated
