SEPSIS KILLS: FREQUENTLY ASKED QUESTIONS

FOR INPATIENT WARDS

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Who will lead/champion this program?

Each LHD and health care facility have identified and appointed key position holders with operational responsibility for implementation of the program. These position holders will work closely with advisory committees, program teams and expert advisors. Leadership by both management and clinicians will enable a top-down, bottom-up approach to drive and sustain improved outcomes for patients with sepsis. Your Clinical Governance Unit will be able to provide contact details for your LHD Sepsis Lead.

I am going to implement the SEPSIS KILLS program in my ward. Who should I talk to?

Your facility and the LHD Sepsis Lead will coordinate the implementation of the sepsis program in collaboration with the facility Executive sponsor. They can provide advice on getting started with the program.

Are there tools to assist with implementation?

The Sepsis Toolkit provides tools and resources required for implementation. They are available on the CEC website www.cec.health.nsw.gov.au/programs/sepsis.

How does the SEPSIS KILLS program link with the Between the Flags system?

The SEPSIS KILLS program is built on the foundations of the Between the Flags (BTF) system. It is intrinsically linked with the 'track and trigger' NSW Standard Observation Charts and Clinical Emergency Response Systems. Sepsis is one of the top three causes of patient deterioration. Early recognition, escalation and treatment of sepsis will lead to improved patient outcomes.

Is it possible to adapt the pathways to best fit the needs of my hospital?

The sepsis pathways provide general guidance to improve the process of care for patients with sepsis. It may be necessary for some hospitals to make minor changes to the pathway and guidelines to “best fit” the needs of an individual ward or department. Please contact your LHD Sepsis Lead for advice on making these changes.

Why does a patient who is already on antibiotics and is newly diagnosed with sepsis, need to be reviewed by an Attending Medical Officer (AMO)?

It is not uncommon for patients to be on antibiotics in the inpatient setting. These antibiotics may not be the correct drug to target the organism which is causing sepsis in the patient. It is important to consider alternate sources of infection and/or resistance. The AMO and, in some cases, infectious disease experts, should be involved in determining the most appropriate drug for the patient.

Can the paediatric inpatient pathway be used for neonates?

The inpatient pathway can be used for neonates (babies less than one month of age) who re-present to hospital after going home and have a possible diagnosis of sepsis. It is not intended to be used in neonatal intensive care units, special care nurseries or post-natal wards where they have not been discharged home.

What resources are available for managing patients with sepsis who also have a haematology or oncology diagnosis?

Patients with a recent haematological or oncology diagnosis should be managed using relevant local guidelines for febrile neutropenia. The sepsis pathways are not intended for patients at risk of febrile neutropenia. Some hospitals have adapted protocols from the specialty paediatric hospitals or use the guideline from the paediatric patient's treating specialist hospital.

It is important to seek urgent advice from the patient's paediatrician or paediatric oncologist regarding treatment and management of this high risk group. A Clinical Practice Guideline (CPG) *Recognition and Management of Infection in Paediatric Oncology Patients* is being developed by the Ministry of Health.

Can I order the pathways through state forms?

The CEC are working with the NSW State Forms Committee to develop emergency and inpatient pathways which can be part of the medical record.

Is there a resource to guide clinicians on the most appropriate antibiotic to use?

An Inpatient Sepsis Intravenous Antibiotic Guideline is available in the Toolkit and on the CEC website www.cec.health.nsw.gov.au/programs/sepsis. The guideline aims to guide the prescription and timely administration of antibiotics for adult patients that have a diagnosis of sepsis and have been admitted to hospital for 48 hours or more. It is based on the recommendations in *Therapeutic Guidelines: Antibiotic* - Version 14, and is intended to provide an accessible resource which can be adapted to suit individual facility preferences in liaison with the antimicrobial stewardship team, local antimicrobial susceptibility patterns and senior clinicians. An inpatient paediatric antibiotic guideline is in development.

Is it safe to administer a 20mL/kg bolus of 0.9% sodium chloride solution (normal saline) to neonates or patients at risk of cardiac disease?

Neonates with a possible diagnosis of sepsis may require a 20mL/kg bolus of 0.9% sodium chloride solution. It is important to use caution in neonates and other patients at risk of cardiac disease who may not tolerate large volumes. If you have any concerns, it is suggested that 10mL/kg aliquots are administered with frequent assessment of the patient's response to the fluid bolus.

How do I manage a patient with sepsis after the initial resuscitation phase?

Patients with a diagnosis of sepsis are at high risk of deterioration and require close monitoring and follow up care. The sepsis pathways are intended for the immediate management of sepsis only. The CEC Sepsis 48 Hour Management Plan should be used for subsequent care. The plan can be adapted to meet individual facility preferences and can be found in the Sepsis Toolkit and on the CEC website www.cec.health.nsw.gov.au/programs/sepsis.

We do not have procalcitonin (PCT) testing at my hospital. Is this a problem?

PCT is an indicator for early bacteraemia with good sensitivity and specificity (around 90%) however it is not widely available. The test is not a standalone criterion on the pathway; it is another tool to assist clinicians in determining whether the patient is septic or in septic shock.

Can the sample from an EZ IO be used in the point of care testing machine?

There is currently not enough evidence on the accuracy of intraosseous (IO) sample results using point of care testing. It is possible that IO samples could damage point of care testing machines and it is advisable to check with your local pathology unit regarding testing capabilities. Blood samples obtained via the IO route can be used for a number of tests including blood cultures but it is important that they are labelled as an "intraosseous sample".

Are there education resources available for the SEPSIS KILLS program?

The SEPSIS KILLS program offers a diverse range of education resources. All resources can be found on the CEC website www.cec.health.nsw.gov.au/programs/sepsis.The resources include a video, PowerPoint presentations, multiple choice questions, Sepsis Learning Sessions and an eLearning sepsis module. These resources can be incorporated into DETECT scenarios, simulation training, case reviews, Grand Rounds and newsletters.

Why do we need to collect data?

Evaluation is a systematic process to determine the extent of the improvements. Measurement ensures that clinical practice changes are carried out and provide a source of feedback and learning. The SEPSIS KILLS program measures are provided in the Toolkit.

How is data collected and reported?

Audit tools have been developed for adult and paediatric sepsis and can be accessed via the CEC website www.cec.health.nsw.gov.au/programs/sepsis. The CEC sepsis database provides a tool to collect and analyse data. The LHD Sepsis Lead will advise you on how to access the sepsis database on the NSW Health intranet system.

The results should be monitored, reported and evaluated at ward, facility, LHD and state levels. This data will enable clinicians and key stakeholders to identify improvement in the management of patients with sepsis and areas where further development is required.