Clinical Excellence Queensland

Adult Emergency Department (ED) Sepsis PathwayFactsheet

This factsheet provides information about the adult emergency department (ED) sepsis pathways in tertiary, secondary, and rural and remote sites. The pathways are now available for Statewide use.

Sepsis is an important cause of preventable morbidity and mortality in adults and children in Australia. It is a **medical emergency** which occurs when the body is fighting an **infection**, but it starts to attack itself causing **organ dysfunction**.

Infection + Organ Dysfunction = Sepsis

The sepsis pathways have been developed to assist early recognition, escalation and treatment of sepsis patients, all key factors in reducing poor outcomes from sepsis.

Background

Clinical Excellence Queensland's (CEQ) Statewide Sepsis Program (the Program) was established to improve sepsis patient outcomes.

With over 80% of public hospital sepsis patients presenting to the ED, the program initially focused on EDs, and used quality improvement methodology to implement adult and paediatric sepsis pathways for tertiary, secondary and rural and remote facilities.

About the adult ED sepsis pathways

The adult sepsis screening tool and treatment bundle is housed within the Pathway, with optional antibiotic prescribing and administration guidelines attached (See Adult ED sepsis pathway FAQ 'Which antibiotic guideline should we use?') and is based on international best practice with input from a broad range of experts and consumers across the state.

The screening tool (page 1) supports sepsis recognition through helping the user to identify patients who may have an infection, patients more at risk of sepsis (sepsis risk factor prompts) and

any clinical parameters which might indicate organ dysfunction. Screening every eligible patient, means those with sepsis have a better chance of being recognised. It helps ensure patients who are at risk, are escalated promptly to a senior medical officer for review.

The treatment bundle (page 2) is aligned with Surviving Sepsis Campaign recommendations and should be completed as soon as possible after sepsis recognition; but, within one hour in patients with septic shock, and within 30 minutes for patients with neutropenia or meningococcal sepsis. The bundle elements include:

- Ensuring senior medical and nursing officers are aware the patient has sepsis by following your local escalation pathway
- Measure (or remeasure) lactate
- Obtaining IV access and blood cultures
- Commence IV antibiotics
- Commence IV fluids as clinically indicated

Antibiotic prescribing

Sepsis antibiotic prescribing and administration guidelines available for your ED have been developed considering eTG guidelines and are designed to achieve the most appropriate empirical therapy, accounting for local epidemiology and antimicrobial resistance.

The decision about which guidelines to use is made in consultation with local Infectious Diseases (ID) consultants or Antimicrobial Stewardship (AMS) services for your hospital. Where your ID/AMS experts choose to use the adult ED sepsis pathway that does not include antibiotic guidelines, antibiotic prescribing is based on eTG Guidelines or your hospital's local sepsis guidelines.

Accompanying the pathway is a factsheet for patients and carers, which describes the signs and symptoms of sepsis. Both the fact sheet and the adult ED sepsis pathway is available for order and use across the state.

Go to CEQ's <u>Queensland Sepsis Program page</u> to view a copy of the pathways.

Frequently asked questions (FAQ)

The pathways have been revised and simplified following stakeholder feedback and evaluation. For more details on the pathway changes refer to the Adult ED Sepsis Pathway Frequently Asked Questions (FAQ) guide

Stakeholder engagement

The adult ED sepsis pathways were developed following extensive consultation with multiple stakeholders across Queensland and have been trialed over 18 months following a pilot at Gold Coast University Hospital. They have been endorsed and approved by the following groups:

- Queensland Sepsis Steering Committee
- Sepsis Operational Planning Group
- Adult ED Sepsis Pathway Working Group
- Rural and Remote Sepsis Pathway Working Group
- Queensland Emergency Department Strategic Advisory Panel (QEDSAP).

Education

- ilearn Adult Sepsis 2020
- How to use the Adult Sepsis Pathway video
- Queensland Health Sepsis Resources

How to order

The pathway can be ordered directly via <u>WINC</u>. The <u>Adult ED Sepsis Pathway FAQ</u> provides more details and the product codes for each version.

Local Hospital and Health Service (HHS) guidelines should be followed to determine how to place the order. If your organisation does not have a WINC account, you will need to create an account to be able to place an order.

Next phase

The next phase of the Program will look at improving adult sepsis in inpatient areas. This will include pathway development as required, targeted education and support.

A digital pathway equivalent for EDs and inpatient areas in HHS's with iEMR, is also under

development. This will include decision support tools and will allow for local monitoring and feedback of performance.

Key documents

Adult ED Sepsis Pathway FAQ

Australian Sepsis Network National Action Plan
Surviving sepsis campaign international guidelines
Global Burden of Disease Study

More information

For more information about the adult ED sepsis pathways please contact us:

E: sepsis@health.qld.gov.au

Sepsis occurs when the body is fighting an infection, but it starts to attack itself causing organ dysfunction

Infection + Organ dysfunction = Sepsis

Screening every eligible patient, means those with sepsis have a better chance of being recognised and treated early.

