



Facility:

FAMILY NAME		MRN
GIVEN NAME		<input type="checkbox"/> MALE <input type="checkbox"/> FEMALE
D.O.B. ____/____/____	M.O.	
ADDRESS		
LOCATION / WARD		
COMPLETE ALL DETAILS OR AFFIX PATIENT LABEL HERE		



### ADULT SEPSIS PATHWAY

## SEPSIS MANAGEMENT PLAN

Patients with presumed sepsis are at a high risk of deterioration despite initial resuscitation with intravenous antibiotics and fluids. These patients require a management plan which needs to be discussed with the Attending Medical Officer (AMO). The Infectious Diseases Physician/Clinical Microbiologist and Antimicrobial Stewardship (AMS) team are to be consulted where necessary. This plan needs to be communicated to the Senior Medical Officer, Nurse in Charge, patient and patient's family/carers.

Specific management plans are to be documented in the health care record

<b>Initial 24 hours</b>	<b>Continue monitoring</b>	<ul style="list-style-type: none"> <li>Prescribe the frequency of observations <b>Minimum recommendation every 30 minutes for 2 hours, then hourly for 4 hours</b></li> <li>Monitor and reassess for signs of deterioration which may include one or more of the following:               <div style="border: 1px solid gray; padding: 5px; margin-top: 5px;">                 Respiratory rate in the Red or Yellow Zone                  Systolic blood pressure &lt; 100mmHg                  Decreased or no improvement in level of consciousness                  Urine output less than 0.5mL/kg/hr                  No improvement in serum lactate level               </div> </li> </ul> <p>If deteriorating (has any Red or Yellow Zone criteria), escalate as per local CERS and inform AMO</p>	<input type="checkbox"/>
	<b>Repeat lactate 4 and 8 hours post recognition</b>	4 hours Date: ____/____/____ Time: ____:____ Result ____ mmol/L 8 hours Date: ____/____/____ Time: ____:____ Result ____ mmol/L	<input type="checkbox"/>
	<b>Fluid resuscitation</b>	<ul style="list-style-type: none"> <li>Prescribe IV fluids as appropriate based on the patient's condition</li> <li>Monitor for signs of pulmonary oedema</li> </ul>	<input type="checkbox"/>
	<b>Reassess</b>	<ul style="list-style-type: none"> <li>Confirm diagnosis and consider other causes of deterioration</li> <li>Check preliminary results</li> <li>If patient is neutropenic, review antibiotics and change if required</li> </ul>	<input type="checkbox"/>
	<b>Review treatment/management</b>	<ul style="list-style-type: none"> <li>Discuss with AMO</li> <li>Document plan to continue, change or cease antibiotics</li> <li>Continue monitoring for deterioration including urine output</li> <li>If the patient's recovery is uncertain discuss the goals of care with the patient and their family/carers</li> </ul>	<input type="checkbox"/>
<b>24 - 48 hours</b>	<b>Reassess</b>	<ul style="list-style-type: none"> <li>Actively seek microbiology/investigation results and review</li> <li>Confirm diagnosis, document source of sepsis in the health care record</li> <li>Discuss with AMO</li> <li>Consider seeking advice from infectious disease/microbiology physician</li> <li>Document plan to continue, change or cease antibiotics</li> <li>Obtain AMS approval for restricted antibiotics</li> <li>Repeat biochemistry as indicated</li> <li>Continue monitoring for deterioration including urine output</li> </ul>	<input type="checkbox"/>
	<b>Continue to monitor as per patient's condition – observations, medical review, antibiotics</b>		<input type="checkbox"/>

Adult sepsis pathway for use in all emergency departments and inpatient wards  
 Use relevant febrile neutropenia guidelines if the patient has haematology/oncology diagnosis  
 Use relevant nephrology guidelines for renal dialysis patients

### ARE YOU CONCERNED THAT YOUR PATIENT COULD HAVE SEPSIS?

Consider the following risk factors

- Re-presentation within 48 hours
- Immunocompromised
- Recent surgery or wound
- Age > 65 years
- Indwelling medical device
- Fall

Absence of risk factors does not exclude sepsis as a cause of deterioration

### Does your patient have any new onset of the following signs and symptoms of infection?

- Fever or rigors
- Line associated infection/redness/swelling/pain
- Dysuria/frequency
- Abdominal pain/distension/peritonism
- Cough/sputum/breathlessness
- Altered cognition

PLUS

#### Any RED ZONE observation OR additional criteria

- SBP < 90mmHg
- Lactate ≥ 4mmol/L
- Base excess < -5.0

#### TWO or more YELLOW ZONE observations OR additional criteria including clinician concern

- Respirations ≤ 10 or ≥ 25 per minute
- SpO<sub>2</sub> < 95%
- SBP < 100mmHg
- Heart rate ≤ 50 or ≥ 120 per minute
- Altered LOC or new onset of confusion
- Temperature < 35.5°C or > 38.5°C
- Obtain a blood gas**
- Lactate ≥ 2mmol/L is significant in sepsis

YES

YES

NO

#### Patient has SEVERE SEPSIS or SEPTIC SHOCK until proven otherwise

- Sepsis is a medical emergency
- Call for a Rapid Response (as per local CERS) unless already made
- Conduct targeted history and clinical examination

#### Patient may have SEPSIS

- Call for a Clinical Review (as per local CERS) unless already made
- Conduct targeted history and clinical examination
- Obtain SENIOR CLINICIAN review to confirm diagnosis and prioritise investigations and management

Does the senior clinician consider the patient has sepsis?

YES

NO

#### Look for other common causes of deterioration and treat

- New arrhythmia
- Hypovolaemia/haemorrhage
- Pulmonary embolus/DVT
- Atelectasis
- AMI
- Stroke
- Overdose/over sedation

- Repeat observations within 30 minutes AND increase the frequency of observations as indicated by the patient's condition

- Document decision/diagnosis and management plan in the health care record

- Re-evaluate for sepsis if observations remain abnormal or deteriorate

Commence treatment as per sepsis resuscitation guideline (over page)  
 AND inform the Attending Medical Officer as per local CERS

Discuss management plan with the patient and their family/carers  
 Adapt treatment to the patient's end of life care plan if applicable

ADULT SEPSIS PATHWAY

SMR060.400

Holes Punched as per AS2828.1: 2012  
BINDING MARGIN - NO WRITING



SMR060400

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Facility:



**Sepsis recognition**

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Time: \_\_\_\_:\_\_\_\_

**Emergency Department**

Triage category 1 2 3 4 5

**Inpatient** Ward: \_\_\_\_\_

**Clinical Review**  **Rapid Response**



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BINDING MARGIN - NO WRITING

**RESUSCITATE**

<b>A</b>	<b>Airway</b> - Assess and maintain patent airway
<b>B</b>	<b>Breathing</b> - Assess and administer oxygen if required; aim SpO <sub>2</sub> ≥ 95% (or 88-92% for COPD)
<b>C</b>	<b>Circulation - Vascular access, blood/culture collection, fluid resuscitation and antibiotics</b> <i>Consider intraosseous access after two failed attempts at cannulation</i>
	Collect Blood Cultures Take two (2) sets from two (2) separate sites
	<input type="checkbox"/> Yes <input type="checkbox"/> Not obtained <div style="border: 1px solid gray; padding: 2px; text-align: center; margin-top: 5px;">For patients with a central venous access device (CVAD), take one set from the CVAD plus one set peripherally</div>
	Collect Lactate Lactate ≥ 2mmol/L after adequate fluid resuscitation is significant
	<input type="checkbox"/> Yes <input type="checkbox"/> Not obtained Lactate: ____mmol/L
	Collect FBC, EUC, CRP/PCT, LFTs, coags and glucose BGL > 7.7mmol/L in the absence of diabetes may be significant
Order and collect other investigations and cultures prior to antibiotics (unless a <b>SENIOR CLINICIAN</b> assesses that this would result in an unacceptable delay in commencing antibiotic therapy) Eg. Urine, cerebrospinal fluid, wound swab, joint or organ space aspirate	Document investigations and cultures collected: _____ _____ _____
<b>Fluid Resuscitation</b> (intravenous or intraosseous)	<input type="checkbox"/> <b>Emergency Department</b> Give initial 20mL/kg bolus STAT, if no response repeat 20mL/kg STAT  <input type="checkbox"/> <b>Inpatient</b> Initial 250-500mL bolus STAT, if no response repeat 250-500mL STAT  <b>If no response in SBP after 1000mL call a Rapid Response</b>
Consider commencement of vasopressors	

**RESUSCITATE**

<b>C</b>	<p><b>Antibiotics</b> First/new antibiotic administered Date: ____/____/____ Time: ____:____</p> <p>Blood cultures (at least two sets) and other relevant cultures should be collected <b>PRIOR</b> to antibiotic administration. However in patients with severe sepsis or septic shock, if difficult to obtain cultures do not delay administration of antibiotic(s). Refer to local Antimicrobial Stewardship policies/procedures regarding antibiotic instructions. <b>Consult Infectious Diseases Physician or Clinical Microbiologist if required.</b></p> <div style="display: flex; justify-content: space-between;"> <div style="background-color: red; color: white; padding: 5px; border: 1px solid gray;"> <input type="checkbox"/> <b>Severe sepsis or septic shock</b> </div> <div style="border: 1px solid gray; padding: 5px; width: 150px;">                 Use <i>Therapeutic Guidelines: Antibiotic</i> or locally endorsed antibiotic prescribing guideline             </div> <div style="border: 1px solid gray; padding: 5px; width: 150px;">                 Prescribe and administer antibiotics <b>within 60 MINUTES</b> of sepsis recognition             </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="background-color: yellow; padding: 5px; border: 1px solid gray;"> <input type="checkbox"/> <b>Sepsis</b> </div> <div style="border: 1px solid gray; padding: 5px; width: 150px;">                 Use <i>Therapeutic Guidelines: Antibiotic</i> or locally endorsed antibiotic prescribing guideline             </div> <div style="border: 1px solid gray; padding: 5px; width: 150px;">                 Prescribe and administer antibiotics promptly in a <i>timeframe directed by senior clinician (must be within 2 hours)</i> </div> </div>
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<b>D</b>	<b>Disability - Assess level of consciousness (LOC)</b> using Alert, Voice, Pain, Unresponsive (AVPU)
<b>E</b>	<b>Exposure</b> - Re-examine the patient for other potential sources of infection to guide further investigations
<b>F</b>	<b>Fluid</b> - Monitor/document strict fluid input/output and consider IDC if not already inserted
<b>G</b>	<b>Check Blood Glucose Level</b> - Manage as per local guidelines

<b>Monitor and Reassess</b>	<p><b>Continue monitoring, assess for signs of deterioration and escalate as per local CERS</b></p> <ul style="list-style-type: none"> <li>Respiratory rate in the Red or Yellow Zone</li> <li>SBP &lt; 100mmHg</li> <li>Decreased or no improvement in level of consciousness</li> <li>Urine output &lt; 0.5mL/kg/hour</li> <li>Serum lactate level of ≥ 2mmol/L (or increasing) or no improvement after adequate fluid resuscitation may be indicative of septic shock</li> <li>Consider other causes of deterioration</li> </ul>
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**If no improvement Intensive Care may be required**

Update the Attending Medical Officer on the patient's condition using ISBAR

Discuss the management plan with the patient and their family/carers

Sepsis management plan documented by a medical officer in the health care record as per page 4 (over)

**REFER**

Name: \_\_\_\_\_ Designation: \_\_\_\_\_ Signature: \_\_\_\_\_