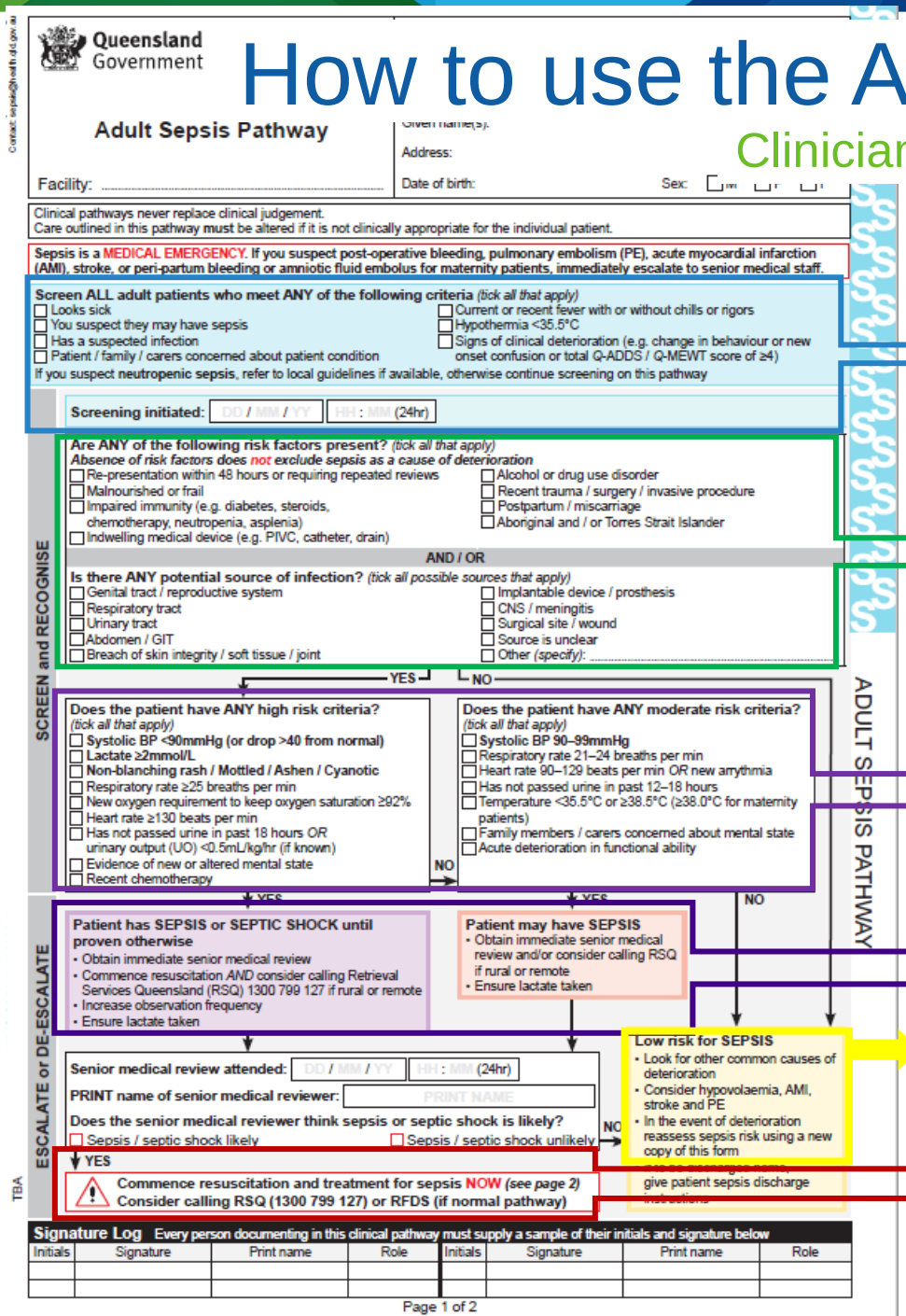
How to use the Adult Sepsis Pathway

Clinician Factsheet



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Adult Sepsis Pathway

Facility:

Given name(s):

Address:

Date of birth:

Sex:

Clinical pathways never replace clinical judgement.
Care outlined in this pathway must be altered if it is not clinically appropriate for the individual patient.

Sepsis is a MEDICAL EMERGENCY. If you suspect post-operative bleeding, pulmonary embolism (PE), acute myocardial infarction (AMI), stroke, or peri-partum bleeding or amniotic fluid embolus for maternity patients, immediately escalate to senior medical staff.

Screen ALL adult patients who meet ANY of the following criteria *(tick all that apply)*

- ☐ Looks sick
- ☐ You suspect they may have sepsis
- ☐ Has a suspected infection
- ☐ Patient / family / carers concerned about patient condition
- ☐ Current or recent fever with or without chills or rigors
- ☐ Hypothermia <35.5°C
- ☐ Signs of clinical deterioration (e.g. change in behaviour or new onset confusion or total Q-ADDS / Q-MEWT score of ≥4)

If you suspect **neutropenic sepsis**, refer to local guidelines if available, otherwise continue screening on this pathway

Screening initiated: DD / MM / YY HH : MM (24hr)

SCREEN and RECOGNISE

Are ANY of the following risk factors present? *(tick all that apply)*
Absence of risk factors does not exclude sepsis as a cause of deterioration

- ☐ Re-presentation within 48 hours or requiring repeated reviews
- ☐ Malnourished or frail
- ☐ Impaired immunity (e.g. diabetes, steroids, chemotherapy, neutropenia, asplenia)
- ☐ Indwelling medical device (e.g. PIVC, catheter, drain)
- ☐ Alcohol or drug use disorder
- ☐ Recent trauma / surgery / invasive procedure
- ☐ Postpartum / miscarriage
- ☐ Aboriginal and / or Torres Strait Islander

AND / OR

Is there ANY potential source of infection? *(tick all possible sources that apply)*

- ☐ Genital tract / reproductive system
- ☐ Respiratory tract
- ☐ Urinary tract
- ☐ Abdomen / GIT
- ☐ Breach of skin integrity / soft tissue / joint
- ☐ Implantable device / prosthesis
- ☐ CNS / meningitis
- ☐ Surgical site / wound
- ☐ Source is unclear
- ☐ Other *(specify)*:

YES / NO

Does the patient have ANY high risk criteria? *(tick all that apply)*

- ☐ **Systolic BP <90mmHg (or drop >40 from normal)**
- ☐ **Lactate ≥2mmol/L**
- ☐ **Non-blanching rash / Mottled / Ashen / Cyanotic**
- ☐ Respiratory rate ≥25 breaths per min
- ☐ New oxygen requirement to keep oxygen saturation ≥92%
- ☐ Heart rate ≥130 beats per min
- ☐ Has not passed urine in past 18 hours *OR* urinary output (UO) <0.5mL/kg/hr (if known)
- ☐ Evidence of new or altered mental state
- ☐ Recent chemotherapy

NO

Does the patient have ANY moderate risk criteria? *(tick all that apply)*

- ☐ **Systolic BP 90–99mmHg**
- ☐ Respiratory rate 21–24 breaths per min
- ☐ Heart rate 90–129 beats per min *OR* new arrythmia
- ☐ Has not passed urine in past 12–18 hours
- ☐ Temperature <35.5°C or ≥38.5°C (≥38.0°C for maternity patients)
- ☐ Family members / carers concerned about mental state
- ☐ Acute deterioration in functional ability

ADULT SEPSIS PATHWAY

ESCALATE or DE-ESCALATE

Patient has SEPSIS or SEPTIC SHOCK until proven otherwise

- Obtain immediate senior medical review
- Commence resuscitation *AND* consider calling Retrieval Services Queensland (RSQ) 1300 799 127 if rural or remote
- Increase observation frequency
- Ensure lactate taken

Patient may have SEPSIS

- Obtain immediate senior medical review and/or consider calling RSQ if rural or remote
- Ensure lactate taken

Low risk for SEPSIS

- Look for other common causes of deterioration
- Consider hypovolaemia, AMI, stroke and PE
- In the event of deterioration reassess sepsis risk using a new copy of this form

give patient sepsis discharge

Senior medical review attended: DD / MM / YY HH : MM (24hr)

PRINT name of senior medical reviewer: PRINT NAME

Does the senior medical reviewer think sepsis or septic shock is likely?

☐ Sepsis / septic shock likely ☐ Sepsis / septic shock unlikely

NO

YES

Commence resuscitation and treatment for sepsis NOW *(see page 2)*
Consider calling RSQ (1300 799 127) or RFDS (if normal pathway)

Signature Log Every person documenting in this clinical pathway must supply a sample of their initials and signature below

Initials	Signature	Print name	Role	Initials	Signature	Print name	Role

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TBA

SCREENING: Helps to identify those who may have an infection.

People with sepsis may have non-specific, non-localised symptoms, for example feeling very unwell.

RECOGNISE: Risk factors and reasons to suspect infection.

Think 'could it be sepsis' if the person presents with signs or symptoms that indicate infection, even if they don't have a high temperature.

RECOGNISE: Risk criteria help to identify organ dysfunction.

Early senior eyes on the patient improves outcomes.

ESCALATE: Immediate Senior medical review needed.

RESUSCITATE: Commence the SEPSIS bundle now

Provide patient information sheet SW1050 WINC 1NY37712

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Page 2 Treatment Bundle

RESUSCITATE

Notify nursing team leader ☐ **and senior medical staff** ☐ **the patient has potential sepsis or septic shock**
(tick when notified). Confirm treatment aligns with **Acute Resuscitation Plan (ARP)** if relevant.

Commence Actions 1–4 within:

30 minutes	From recognition of neutropenic or meningococcal sepsis
1 hour	From recognition of septic shock
1 hour	From triage or recognition of sepsis where there is high likelihood that organ dysfunction is due to infection
3 hours	From triage or recognition of organ disfunction where there is less certainty this is due to infection, but concern for infection persists after rapid clinical assessment

Document variance in medical record if key tasks not commenced within these time frames.

1. Measure (or remeasure) lactate
(Arterial / Venous / Point of care)
☐ **Lactate collected**
Date: / / Time: : Initials:

2. Take 2 sets of blood cultures
- Collect prior to antibiotics unless this would delay treatment for >1 hour
- If patient has a central line collect an additional (third) set of blood cultures via the line
- Collect FBC, UEC and glucose (or Chem8 iStat), LFT and lipase
- For septic shock add coagulation studies
- Collect urine, sputum and other relevant cultures but do not delay antibiotics

☐ **2 sets blood cultures collected**
Date: / / Time: : Initials:

3. Commence or review antibiotics
- Identify likely source of infection (including relevant imaging findings)
- Prescribe antibiotics according to guidelines. Modify for allergies or prior microbiological sensitivities
- Notify nursing staff of urgent need to administer antibiotics and ensure completed
- Consider referral to consulting microbiologist or infectious diseases physician (particularly if: septic shock, recent overseas travel, risk factors for multi-resistant organisms, IV drug use, morbid obesity or dialysis patient)

☐ **Antibiotics commenced**
Date: / / Time: : Initials:

4. Commence IV fluids if clinically indicated
- Consider volume of fluid based on patient's weight, cardiac function, comorbidities, current volume status and haemodynamics
- If bolus indicated, rapidly infuse 250–500mL IV or intraosseous Hartmann's or sodium chloride 0.9%
- Consider albumin 5% solution for patients with septic shock
- Assess response to fluid and consider repeating bolus if clinically indicated – do NOT exceed 30mL/kg without senior medical input
- If IV access not possible, consider intraosseous route

☐ **IV fluids commenced**
☐ **Not indicated**
Date: / / Time: : Initials:

5. Consider vasopressors / inotropes for hypotension during or after fluid resuscitation (e.g. Noradrenaline: usual commencing dose 5mcg/min) or consider referral to ICU or higher level of care
☐ **Vasopressors / inotropes considered**
☐ **Not indicated**

6. Facilitate source control
ATTENTION: Source control is URGENT – Ongoing sepsis treatment is unlikely to be effective without timely and comprehensive source control
- If source control requires operative intervention, immediately notify appropriate surgical or interventional team
- Consider removing or changing existing indwelling medical devices (e.g. IV lines or urinary catheters)

☐ **Source control facilitated**
☐ **Not indicated**

REVIEW

7. Reassess and monitor response to resuscitation – aim for:
- Oxygen saturation ≥92% and titrate to range of 92–96% (88–92% if COPD)
- Systolic BP >100mm Hg
- Urine output >0.5 to 1.0mL/kg/hr – consider IDC with hourly monitoring

If haemodynamic status is not improving seek urgent (further) senior medical advice and escalate to higher level of care

8. Document and communicate ongoing management:
- Document appropriate criteria to ensure escalation if signs of deterioration
- Notify treating team of change in clinical condition
- Document clear management plan
- Review antibiotics as soon as possible
- Refer to infectious diseases, microbiologist or AMS team for review, particularly for septic shock

Facilitate transfer and provide clinical handover if patient requires admission to higher level of care

☐ **Referral completed and documented**

Communicate the patient's risk of deterioration during handover to accepting clinician
An emergency call can be initiated at any time if clinically concerned

Date and time completed: DD / MM / YY HH : MM (24hr) INITIALS

Transferring staff name:	Accepting staff name:

Medical emergency. Have senior nursing/medical staff been notified?

Actions 1-4 are time critical to improve outcomes.

Lactate is a proxy measure for tissue perfusion and is indicative of organ dysfunction. Serial lactates are recommended.

2 sets of blood cultures (i.e. 4 bottles) helps identify causative organism and rule out contaminants.

Timely antimicrobial administration improves outcomes.

IV fluid boluses/inotropes/vasopressors are often indicated for sepsis/septic shock. Use your overall assessment of the patient's clinical picture to guide this decision.

Urgent source control is critical for effective management of sepsis. Refer early to operative or interventional team.

Continual reassessment and monitoring are critical.

Also available: Why use a sepsis pathway? clinician factsheet
Contact us: sepsis@health.qld.gov.au

V1 November 2024

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