



Recognition and Management of Sepsis Policy

Policy Owner	Director of Infection Prevention & Control
Ratified By	Integrated Governance Committee
Ratification Date	7 November 2017
Responsible Committee	Policy Quality Review Team
Reference Number	CIR/IPC 14
Version	1
Issue Date	Nov 2017
Review Date	Nov 2020
Target Audience	All Circle Staff

Revision History

Version	Revision Date	Summary of Changes



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1. INTRODUCTION

Sepsis, is a potentially life- threatening condition triggered by an infection or injury. One in three people with Sepsis will die; the condition kills more people than breast, bowel and prostate cancer combined. Additionally, there is substantial long term physical and psychological health problems associated with Sepsis which significantly reduce patients' independence and increase their contact with the healthcare profession. As well as the impact on patient outcomes Sepsis costs the UK approximately £2.5 billion per year.

The National Institute for Health and Care Excellence (2017) Sepsis: recognition, diagnosis and early management guideline provides a tool for risk stratification and management of sepsis. It highlights the importance for clinical staff to think 'could this be sepsis' if a person presents with signs and symptoms that indicate possible infection.

2. PURPOSE

The purpose of this policy is to ensure:

- A raising of the awareness of the impact of sepsis
- An improvement in the knowledge of recognition and management of sepsis
- An improvement in outcomes of mortality and morbidity in patients with sepsis

3. SCOPE

This policy applies to patients in Circle Hospitals, it relates to patients with suspected or confirmed Sepsis. It also applies to all health care practitioners who identify and respond to patients with Sepsis in the course of their work.

4. DEFINITIONS

NEWS (National Early Warning Score)

NEWS is a nationally accredited patient observation which supports the early identification of deteriorating patients. It sets out clear escalation processes to be followed to ensure appropriate clinical assistance and intervention in a timely manner. .

5. DUTIES AND RESPONSIBILITIES

Duties in respect of the requirement of this document are as follows:

5.1 Circle Integrated Governance Committee

The Circle Integrated Governance Committee (CIGC) has overall responsibility for ensuring appropriate resources are made available for the provision of equipment, training, staffing and audit for Sepsis



5.2 **Hospital Directors and Clinical Leads** Have the responsibility to ensure the clinical areas in their hospitals implement and comply with the policy

5.3 **Nursing and Health Care Assistant staff** will be responsible for the recognition of deteriorating patients utilising the NEWS observation tool and escalation to ensure prompt medical review

5.3 **Medical staff & Registered Nurses** will respond to and prioritise patients with NEWS scores that trigger escalation ensuring prompt medical review in line with the escalation process and identification of patients with potential Sepsis. Diagnosis of infection in the presence of one or more Sepsis trigger will require activation of the Sepsis 6 pathway.

5.4 **Site Heads of Nursing and AHPs**

Will be responsible for ensuring:

- that equipment used for the management of Sepsis is available in all clinical areas and checked in line with site specific SOP.
- the clinical areas are advised of changes to recommended management algorithms and equipment levels/items
- the monitoring of the effectiveness of Sepsis management events within their facility

5.5 **Resuscitation Leads**

Will be responsible for:

- Audit of adherence to this policy
- Ensuring audit findings and action plans are forwarded to the appropriate staff Groups
- Ensuring training is provided to all staff as part of a planned programme of training on Sepsis and Resuscitation.

6. **DIAGNOSING AND TREATING SEPSIS**

Sepsis is a time critical condition. It is vital that it is recognised and treated promptly.

6.1 **Diagnosing Sepsis in ADULTS** (Appendix 1)

Sepsis risk stratification determines patients in three risk categories:

- I) Those at High Risk
- II) Those at moderate to high risk criteria
- III) Those who are a low risk

This policy will focus on those at high risk and those at moderate to high risk

High risk criteria are defined as follows:

- Behaviour – objective evidence of new or altered mental state
- Systolic blood pressure ≤ 90 or more than 40mmHg below normal
- Heart rate ≥ 130



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- Respiratory rate ≥ 25 or new need for 40% oxygen or more to maintain saturation more than 92% (or more than 88% in known chronic obstructive pulmonary disease)
 - Not passed urine in previous 18 hours, or for catheterised patients passed less than 0.5ml/kg of urine per hour
 - Mottled or ashen appearance
 - Cyanosis of skin, lips or tongue

Moderate to High risk criteria:

- Behaviour – history from patient, friend or relative of new onset altered behaviour of mental state; history of acute deterioration of functional ability
- Impaired immune system (illness or drugs, including oral steroids)
- Trauma, surgery or invasive procedures in the last 6 weeks
- Respiratory rate 21-24 breaths per minute
- Heart rate 91-130 beats per minute; for pregnant women 100-130 beats per minute
- New-onset arrhythmia
- Systolic blood pressure 91-100mmHg
- Not passed urine in past 12-18 hours or for catheterised patients passed 0.5 -1ml/kg of urine per hour
- Tympanic temperature less than 36°C
- Signs of potential infection: redness, swelling or discharge at surgical site, breakdown of wound

6.3 **Treating Sepsis in ADULTS** (see Appendix 2 for flow chart)

6.4 **On-going management of Sepsis**

The management of Sepsis may require a period of level two or level three care at very short notice, which will require urgent transfer to the local acute hospital as per the Transfer Policy. Once sepsis has been recognised or potential sepsis identified urgent transfer must be arranged. Treatment if sepsis must be commenced whilst awaiting transfer

7. **TRAINING**

7.1 The importance of prompt recognition and treatment will be included in Resuscitation training sessions at both Induction and on mandatory refresher sessions. The refresher training will be provided via an E-learning methodology.

7.2 All training will be recorded and kept on each facility's training database.

8. **INFORMATION FOR PATIENTS**

Due to the large number of short stay and day surgery patients Circle treats, not all episodes of confirmed or suspected Sepsis within our patients will occur within a Circle facility. It is therefore appropriate for patients to receive information in discharge literature indicating signs and symptoms of potential Sepsis in terminology they can understand along with instructions that should they occur to seek urgent medical advice from either Circle or their nearest NHS facility.



9. EQUALITY IMPACT STATEMENT

Circle is committed to ensuring that it treats its employees fairly, equitably and reasonably and that it does not discriminate against individuals or groups on the basis of their ethnic origin, physical or mental abilities, gender, age, religious beliefs or sexual orientation.

10. MONITORING OF COMPLIANCE WITH THE POLICY

NICE has set out a series of quality standards to be met in the management of Sepsis and the monitoring of the compliance with this policy is designed to ensure those quality standards are met.

Each episode of confirmed or suspected Sepsis will be reviewed by the facility lead nurse or their nominated deputy and the DIPC in order to assess compliance with this policy and identify any learning for future incidents. The following areas will be focused upon:

Quality Standard	Audit Process	Frequency
Patient observations are recorded on a NEWS chart	Patient Records Audit	Monthly of patients records and on review of confirmed or suspected Sepsis incident
All those suspected of having Sepsis will be reviewed by a senior clinician and receive appropriate antibiotics within 60 mins	Review of patients records	Review of confirmed or suspected Sepsis Incident
Patients with a BP of \leq 90mm Hg Systolic will receive a bolus of IV fluids within 60 mins	Review of patient records	Review of confirmed or suspected Sepsis incident
Patients who have been risk stratified as high risk or moderate to high risk of sepsis are reviewed and transferred for escalation of care within 60 mins if appropriate.	Review of patients records	Review post a confirmed or suspected sepsis incident
Patients identified as having the potential to become septic or are suspected of being Septic but deemed to be low risk of severe illness or death will receive information about symptoms to monitor	Review of patients records	Monthly review of patients discharge records and review of a suspected or confirmed sepsis incident



11. REFERENCES

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- NICE Quality Standard [QS161] released September 2017.
- NICE (2017) Sepsis: recognition, diagnosis and early management
- Society of Critical Care Medicine (2016) Surviving Sepsis Campaign Bundle

IDENTIFICATION OF SEPSIS

Could this be sepsis?

For a person of any age with a possible infection:

- Think **could this be sepsis?** if the person presents with **signs or symptoms that indicate infection**, even if they do not have a high temperature.
- Be aware that people with sepsis may have non-specific, non-localised presentations (for example, feeling very unwell).
- Pay particular attention to concerns expressed by the person and their family or carer.
- Take particular care in the assessment of people who might have sepsis if they, or their parents or carers, are unable to give a good history (for example, people with English as a second language or people with communication problems).

Assessment

Assess people with suspected infection to identify:

- possible source of infection
- risk factors for sepsis (see right-hand box)
- indicators of clinical concern such as new onset abnormalities of behaviour, circulation or respiration.

Healthcare professionals performing a remote assessment of a person with suspected infection should seek to identify factors that increase risk of sepsis or indications of clinical concern.

Risk factors for sepsis

- The very young (under 1 year) and older people (over 75 years) or very frail people.
- Recent trauma or surgery or invasive procedure (within the last 6 weeks).
- Impaired immunity due to illness (for example, diabetes) or drugs (for example, people receiving long-term steroids, chemotherapy or immunosuppressants).
- Indwelling lines, catheters, intravenous drug misusers, any breach of skin integrity (for example, any cuts, burns, blisters or skin infections).

If at risk of neutropenic sepsis – refer to secondary or tertiary care

Additional risk factors for women who are pregnant or who have been pregnant, given birth, had a termination or miscarriage within the past 6 weeks:

- gestational diabetes, diabetes or other comorbidities
- needed invasive procedure such as caesarean section, forceps delivery, removal of retained products of conception
- prolonged rupture of membranes
- close contact with someone with group A streptococcal infection
- continued vaginal bleeding or an offensive vaginal discharge.

Sepsis not suspected

- no clinical cause for concern
- no risk factors for sepsis.

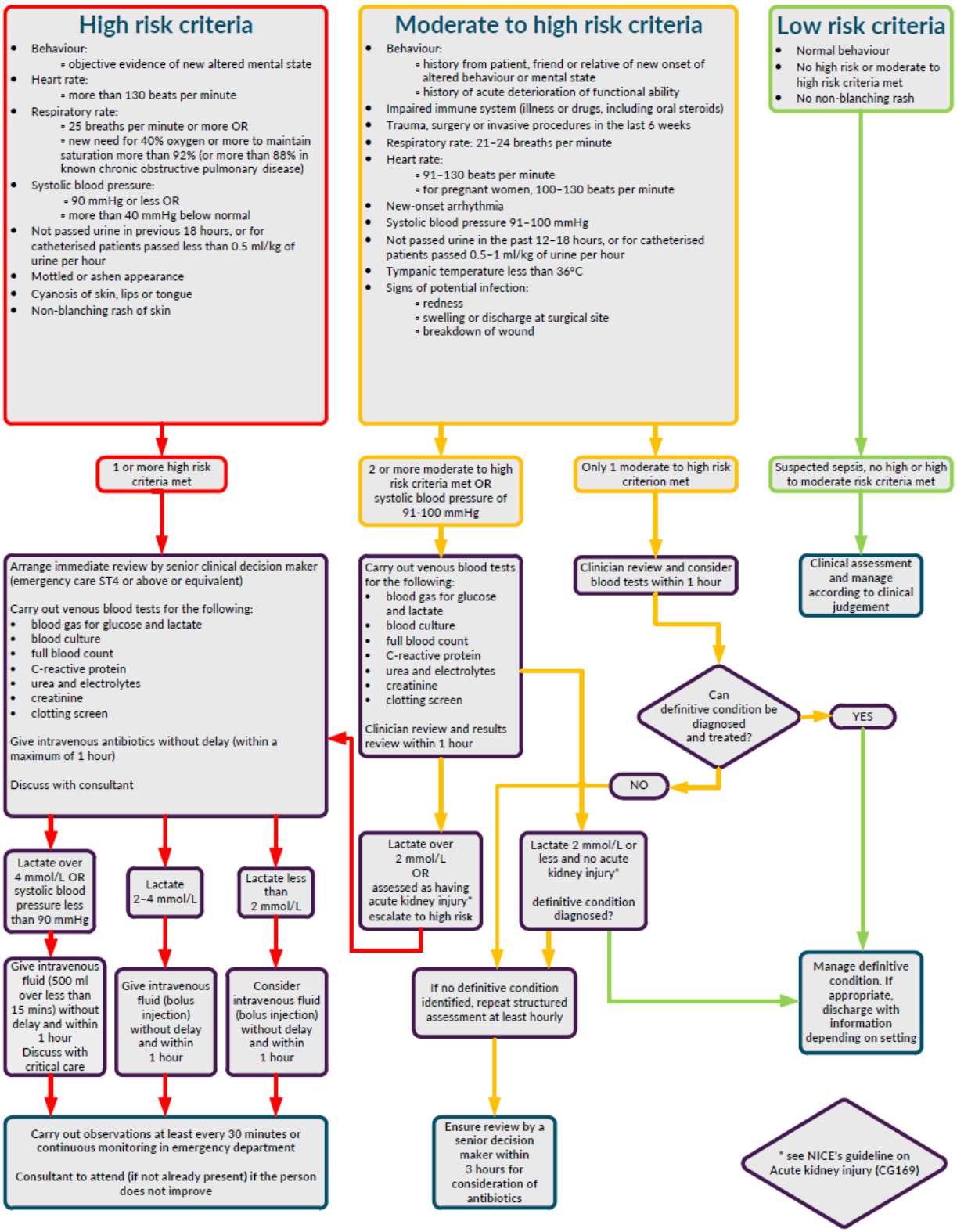
Use clinical judgement to treat the person, using NICE guidance relevant to their diagnosis when available.

SEPSIS SUSPECTED

If sepsis is suspected, use a structured set of observations to assess people in a face-to-face setting. Consider using early warning scores in acute hospital settings. Parental or carer concern is important and should be acknowledged.

Stratify risk of severe illness and death from sepsis using the tool appropriate to age and setting > > >

Sepsis risk stratification tool: people aged 18 and over in hospital



SEPSIS BUNDLES

Surviving Sepsis
Campaign

BUNDLES

**TO BE COMPLETED
WITHIN 3 HOURS:**

- 1) Measure lactate level.
- 2) Obtain blood cultures prior to administration of antibiotics.
- 3) Administer broad spectrum antibiotics.
- 4) Administer 30 ml/kg crystalloid for hypotension or lactate ≥ 4 mmol/L.

“Time of presentation” is defined as the time of triage in the emergency department or, if presenting from another care venue, from the earliest chart annotation consistent with all elements of severe sepsis or septic shock ascertained through chart review.

**TO BE COMPLETED
WITHIN 6 HOURS:**

- 5) Apply vasopressors (for hypotension that does not respond to initial fluid resuscitation) to maintain a mean arterial pressure (MAP) ≥ 65 mm Hg.
- 6) In the event of persistent hypotension after initial fluid administration (MAP < 65 mm Hg) or if initial lactate was ≥ 4 mmol/L, re-assess volume status and tissue perfusion and document findings according to Table 1.
7. Re-measure lactate if initial lactate elevated.

EQUALITY IMPACT ASSESSMENT TOOL

Equality Impact Assessment Tool		Yes/No	Comments
1.	Does the policy affect one group less or more favourably than another on the basis of:		
	• Race	No	
	• Ethnic origins (including gypsies and travellers)	No	
	• Nationality	No	
	• Gender	No	
	• Culture	No	
	• Religion or belief	No	
	• Sexual orientation including lesbian, gay and bisexual people	No	
	• Age	No	
	• Disability - learning disabilities, physical disability, sensory impairment and mental health problems	No	
2.	Is there any evidence that some groups are affected differently?	No	
3.	If you have identified potential discrimination, are any exceptions valid, legal and/or justifiable?	No	
4.	Is the impact of the policy/guidance likely to be negative?	No	
5.	If so can the impact be avoided?	N/A	
6.	What alternatives are there to achieving the policy/guidance without the impact?	No	
7.	Can we reduce the impact by taking different action?	No	

If you have identified a potential discriminatory impact of this procedural document, please refer it to the Group Director of Infection Prevention & Control, together with any suggestions as to the action required to avoid/reduce this impact. For advice in respect of answering the above questions, please contact Policy Quality Review Team