

Deteriorating Patient Protocol: Care and Management Including Recognition and Escalation of Suspected Sepsis

Document Reference	Prot527
Version Number	1.2
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Director's Sign off Date	Hilary Gledhill, Director of Nursing, Allied Health and Social Care Professionals
Consultation (Date and nature of contact)	Physical Health and Medical Devices Group Clinical Networks Quality and Patient Safety Group
Date of Last Changes (this version)	14 December 2022
Date of Next Review	December 2025
Name of approving group/Committee Date of approval	Physical Health and Medical Devices Group 14 December 2022

VALIDITY – Protocols should be accessed via the Trust intranet to ensure the current version is used.

CHANGE RECORD

Version	Date	Change details
1.0	July 2019	<i>New protocol – supercedes Physical Health and Care of the Deteriorating Patient Policy. This protocol is a supporting document of the Deteriorating Patient Policy.</i>
1.1	July 2021	<i>Detailed A-E approach added Clarity regarding baseline assessment of community and inpatients Added FAST assessment Reference made to NEWS2 on Lorenzo Update Sepsis Six Update links to new Sepsis screening bundles Paediatric blood pressure and pulse ranges added Aligned with Resuscitation Guidelines 2021 Think Sepsis poster updated in Appendix 2</i>
1.2	Dec 22	<i>Reviewed with minor amends. Approved at Physical Health and Medical Devices Group (14/12/22).</i>

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1. INTRODUCTION

When patients are admitted to our services for care and treatment they should be assured they are entering a place of safety and will receive the best possible care. Patients should feel confident that if their condition deteriorates, they will receive prompt, appropriate and effective treatment.

Key determinants in effective recognition, care and management of the deteriorating patient are competent and confident health care professionals (HCPs), effective communication and high quality clinical record keeping.

This protocol aims to address the key questions of what should be done, when, where and by whom. It provides a framework for working in multi-disciplinary teams to standardise practice and reduces variation in the treatment of the deteriorating patients. This protocol should be read in conjunction with the [Deteriorating Patient Policy](#) which describes the actions the Trust is taking in relation to the recognition, care and management of the deteriorating patient including early recognition and escalation of patients with potential sepsis.

Section One of this protocol provides clear guidance for health care professionals working across the Trust on recognising the deteriorating patient and utilising the nationally recognised A to E approach.

Section Two of this protocol provides clear guidance for health care professionals working across the organisation on recognition, care and management of the deteriorating **Adult** including how to recognise and escalate the care of an **Adult** with potential sepsis.

Section Three of this protocol provides clear guidance for health care professionals working across the organisation on the recognition, care and management of the deteriorating **Paediatric** including how to recognise and escalate the care of a **Paediatric** with potential sepsis.

Section Four outlines the Trust's expectation in relation to record keeping standards when caring for a deteriorating patient.

Section Five describes the use of **SBARD** as a structured and standardised tool that provides a framework for improving communication.

Section Six outlines the safe and appropriate transfer of patients between Humber Teaching NHS Foundation Trust services and acute hospital services.

2. RECOGNISING THE DETERIORATING PATIENT

Early Warning Scores

All patients will be admitted to an adult in-patient area and will have their baseline observations monitored using the National Early Warning Score (NEWS2) tool within one hour of admission. For patients aged between 8 to 16 years the Paediatric Advanced Warning Score (PAWS) should be utilised. This can be used as a baseline for all other observations if there are concerns regarding the deterioration of the patient.

Where concerns for a patient's physical health are raised, the Early/Advanced Warning Score will be used to assess and monitor the patient's physical health (see Physical Health and Care of the Deteriorating Patient Policy & Procedure) After completing clinical observation on an early/advanced warning chart, a documented plan of care will be implemented specifying the agreed treatment, escalation plan and frequency of monitoring.

Community Patients.

It is recognised that it is neither always appropriate nor possible to undertake baseline observations as a matter of routine for all community-based patients for example CMHT, CTLD or

therapy. It is however expected that all patients receiving community nursing care within the community services division do have baseline observations completed on their initial assessment. It is imperative that staff can recognise and act upon soft signs. In patients with a known source of potential infection (i.e. a wound, urinary catheter, central venous access device) staff should maintain a high index of suspicion when abnormal signs are noted. This should prompt the measuring and recording of vital signs/ NEWS2 scoring and escalation of care as is appropriate to the case. It is recognised that certain interventions such as oxygen therapy will not usually be possible in a community setting.

The ABCDE approach:

Adapted from The Resuscitation Guidelines 2021

<https://www.resus.org.uk/resuscitation-guidelines/abcde-approach/>

Underlying principles

The approach to all deteriorating or critically ill patients is the same. The underlying principles are:

1. Use the Airway, Breathing, Circulation, Disability, Exposure (ABCDE) approach to assess and treat the patient.
2. Do a complete initial assessment and re-assess regularly.
3. Treat life-threatening problems before moving to the next part of assessment.
4. Assess the effects of treatment.
5. Recognise when you will need extra help. Call for appropriate help early.
6. Use all members of the team. This enables interventions to be undertaken simultaneously.
7. Communicate effectively - use the Situation, Background, Assessment, Recommendation and Decision (SBARD).
8. The aim of the initial treatment is to keep the patient alive and achieve some clinical improvement. This will buy time for further treatment and making a diagnosis.
9. Remember – it can take a few minutes for treatments to work, so wait a short while before reassessing the patient after an intervention.

First steps

1. Ensure personal safety. Wear personal protective equipment (PPE) as appropriate.
2. First, look at the patient in general to assess if the patient appears unwell part of this initial assessment should include a Face Arms Speech Time (FAST) test.
3. 'Soft Signs' recognition: It is now increasingly understood the 'soft signs' of deterioration may be more helpful in recognition of sepsis than previously acknowledged. Of particular note in current literature is the interest being paid to signs such as:
 - Changes in mood or outlook
 - Changes in behaviour
 - Altered sleeping patterns
 - Appetite changes
 - Sudden decline or apparent increase in medication effectiveness
4. If the patient is awake, ask "how are you?", "do you have any pain?" If the patient appears unconscious or has collapsed, gently shake them and ask, "are you alright?" If they respond normally, they have a patent airway, are breathing and have brain perfusion. If they speak only in short sentences, they may have breathing problems. Failure of the patient to respond is a clear marker of critical illness.

Monitor the vital signs early. Attach a pulse oximeter, blood pressure and other vital signs such as respiratory rate and pulse should be monitored in critically ill patients, as soon as possible.

Airway (A)

Airway obstruction is an emergency. Dial 999 immediately.

1. Look for the signs of airway obstruction:
 - Airway obstruction causes paradoxical chest and abdominal movements ('see-saw' respirations) and the use of the accessory muscles of respiration. Central cyanosis is a

late sign of airway obstruction. In complete airway obstruction, there are no breath sounds at the mouth or nose. In partial obstruction, air entry is diminished and often noisy.

- In the critically ill patient, depressed consciousness often leads to airway obstruction.
2. Treat airway obstruction as a medical emergency:
 - Obtain expert help immediately. Untreated, airway obstruction causes hypoxaemia (low PaO₂) with the risk of hypoxic injury to the brain, kidneys and heart, cardiac arrest and even death.
 3. In most cases, only simple methods of airway clearance are required (e.g. airway opening manoeuvres, airways suction, insertion of an oropharyngeal or nasopharyngeal airway).
 4. Give oxygen at high concentration:
 - Provide high-concentration oxygen (where available) using a mask with an oxygen reservoir. Ensure that the oxygen flow is sufficient (**usually 15 L min**) to prevent collapse of the reservoir during inspiration.

In acute respiratory failure, aim to maintain an oxygen saturation of 94-98%. In patients at risk of hypercapnic respiratory failure (see below), aim for an oxygen saturation of 88-92%.

Any Registered Nurse/Health Professional can commence oxygen therapy in an emergency situation until the patient can be appropriately reviewed (i.e. medical, clinical or paramedic).

In the emergency situation an oxygen prescription is **not** required, however a record of what oxygen was administered including the administration device should be documented later in the patient's record.

Breathing (B)

1. Look, listen and feel for the general signs of respiratory distress: sweating, central cyanosis, use of the accessory muscles of respiration and abdominal breathing.
2. Count the respiratory rate. The normal rate for an adult is 12–20 breaths min⁻¹. A high (> 25 min⁻¹) or increasing respiratory rate is a marker of illness and a warning that the patient may deteriorate suddenly. The normal respiratory rates for children are as below:

Respiratory Rates by Age	
Age (years)	Respiratory Rate (Breathes per minute)
<1	30-40
1-2	26-34
2-5	24-30
5-12	20-24
>12	12-20

3. Assess the depth of each breath, the pattern (rhythm) of respiration and whether chest expansion is equal on both sides.
4. Note any chest deformity.
5. Record the inspired oxygen concentration (%) and the SpO₂ reading of the pulse oximeter as soon as one is available. The pulse oximeter does not detect hypercapnia. If the patient is receiving supplemental oxygen, the SpO₂ may be normal in the presence of a very high PaCO₂.

6. Listen to the patient's breath sounds: rattling airway noises indicate the presence of airway secretions, usually caused by the inability of the patient to cough sufficiently or to take a deep breath. Stridor or wheeze suggests partial, but significant airway obstruction.

The specific treatment of respiratory disorders depends upon the cause. Nevertheless, all critically ill patients should be given oxygen. In a subgroup of patients with COPD, high concentrations of oxygen may depress breathing (i.e. they are at risk of hypercapnic respiratory failure - often referred to as type 2 respiratory failure). Nevertheless, these patients will also sustain end-organ damage or cardiac arrest if their blood oxygen tensions are allowed to decrease. In this group, aim for a lower than normal PaO₂ and oxygen saturation. Give oxygen via a Nasal Cannula (2 L min 28%) or (4L min 36%) or a 24% Venturi mask (2 L min) initially and reassess. Aim for target SpO₂ range of 88–92% in most COPD patients. Some patients with chronic lung disease carry an oxygen alert card (that documents their target saturation) and their own appropriate Venturi mask. Patients receiving nebuliser therapy via oxygen should be nebulised at 6 litres per minute. In an emergency situation for COPD patients, oxygen driven nebulisers may be used in the absence of an air driven compressor system. If oxygen is used it should be limited to 6 minutes for patients with known COPD. This will deliver most of the nebulised drug dose but limit the risk of hypercapnic respiratory failure.

Circulation (C)

1. Look at the colour of the hands and digits: are they blue, pink, pale or mottled?
2. Assess the limb temperature by feeling the patient's hands: are they cool or warm?
3. Measure the capillary refill time (CRT). Apply cutaneous pressure for 5s on a fingertip held at heart level (or just above) with enough pressure to cause blanching. Time how long it takes for the skin to return to the colour of the surrounding skin after releasing the pressure. The normal value for CRT is usually < 2s. A prolonged CRT suggests poor peripheral perfusion. Other factors (e.g. cold surroundings, poor lighting, old age) can prolong CRT.
4. Assess the state of the veins: they may be under filled or collapsed when hypovolaemia is present.
5. Count the patient's pulse rate (or preferably heart rate by listening to the heart with a stethoscope).
6. Palpate peripheral and central pulses, assessing for presence, rate, quality, regularity and equality. Barely palpable central pulses suggest a poor cardiac output, whilst a bounding pulse may indicate sepsis.
7. Measure the patient's blood pressure. Even in shock, the blood pressure may be normal, because compensatory mechanisms increase peripheral resistance in response to reduced cardiac output. A low diastolic blood pressure suggests arterial vasodilation (as in anaphylaxis or sepsis). A narrowed pulse pressure (difference between systolic and diastolic pressures; normally 35–45 mmHg) suggests arterial vasoconstriction (cardiogenic shock or hypovolaemia) and may occur with rapid tachyarrhythmia.
8. Look thoroughly for external haemorrhage from wounds or evidence of concealed haemorrhage (e.g. thoracic, intra-peritoneal, retroperitoneal or into gut).
9. When appropriate, trained and competent staff are present, insert one or more large (16 G) intravenous cannulae. Use short, wide bore cannulae because they enable the highest flow.
10. When appropriate, trained and competent staff are present give a bolus of 500 mL of crystalloid solution (e.g. 0.9% sodium chloride) over less than 15 min if the patient is hypotensive. Use smaller volumes (e.g. 250 mL) for patients with known cardiac failure or trauma and use closer monitoring (listen to the chest for crackles after each bolus).
11. Reassess the heart rate and BP regularly (every 5 min), aiming for the patient's normal BP or, if this is unknown, a target > 100 mmHg systolic.

Disability (D)

Common causes of unconsciousness include profound hypoxia, hypercapnia, cerebral hypoperfusion, or the recent administration of sedatives or analgesic drugs.

1. Review and treat (if possible) the ABCs: exclude or treat hypoxia and hypotension.

2. Check the patient's drug chart for reversible drug-induced causes of depressed consciousness. Give an antagonist where appropriate (e.g. naloxone for opioid toxicity).
3. Examine the pupils (size, equality and reaction to light).
4. Make a rapid initial assessment of the patient's conscious level using the ACVPU method: Alert, Confusion (new), responds to Vocal stimuli, responds to Painful stimuli or Unresponsive to all stimuli.
5. Measure the blood glucose to exclude hypoglycaemia using a rapid finger-prick bedside testing method. Follow local protocols/Patient Group Directions for management of hypoglycaemia.
6. Nurse unconscious patients in the lateral position if their airway is not protected.

Exposure (E)

To examine the patient properly, full exposure of the body may be necessary. Respect the patient's dignity and minimise heat loss.

Additional information

1. Take a full clinical history from the patient, any relatives or friends and other staff.
2. Review the patient's notes and charts:
 - Study both absolute and trended values of vital signs.
 - Check that important routine medications are prescribed and being given.
3. Make complete entries in the patient's notes of your findings, assessment and treatment. Provide a full and comprehensive hand over to the emergency services.

3. RECOGNITION AND CARE OF THE DETERIORATING PATIENT (ADULT)

NEWS2 has been widely adopted across the NHS. The NEWS tool was developed to improve the detection of and response to clinical deterioration in patients with acute illness.

The NEWS2 scoring systems should not be used in children (i.e. aged <16 years), women who are pregnant and patients with spinal cord injury (owing to functional disturbances of the autonomic nervous system). For advice for these patient groups please refer to the NICE guidance <https://www.nice.org.uk/guidance/ng51> . For specific advice on sepsis in pregnancy please refer to Royal College of Obstetricians and Gynaecologists Green Top Guideline 64 (www.rcog.org.uk).

3.1. The National Early Warning Score (NEWS2)

The NEWS2 is based on a simple aggregate scoring system in which a score is allocated to six physiological measurements, already recorded in routine practice, when a patient presents to, or are being monitored in hospital. The six physiological parameters form the basis of the scoring system:

- Respiration rate
- Oxygen saturation
- Temperature
- Systolic blood pressure
- Pulse rate
- Level of consciousness or new confusion

A score is allocated to each parameter as they are measured, with the magnitude of the score reflecting how extremely the parameter varies from the norm. The score is then aggregated. The score is uplifted by two points for people requiring supplemental oxygen to maintain their recommended oxygen saturation.

NEWS2 was updated by the Royal College of Physicians in 2017 with particular attention paid to four important themes:

- Determining how NEWS2 could be used to better identify patients likely to have sepsis who were at immediate risk of serious clinical deterioration and required urgent clinical intervention
- Highlighting that a NEWS2 score of 5 or more is a key threshold for urgent clinical alert and response
- Improving the recording of the use of oxygen and the NEWS2 scoring or recommended oxygen saturations in patients with hypercapnic respiratory failure (mostly due to COPD)
- Recognising the importance of new onset confusion, disorientation, delirium or any acute reduction in the Glasgow Coma Scale (GCS) score as a potentially serious clinical deterioration, by including new confusion as part of the AVPU scoring scale (which becomes ACPVU)

The NEWS2 tool is available both in paper format (A3/colour) and on Lorenzo. Where paper-based charts are used on discharge NEWS2 charts should be scanned into the clinical system.

3.2. Respiration Rate

In addition to the rate, observation of respiration includes noting the pattern or rhythm, effort (including use of accessory muscles), depth and equality of chest expansion. Observing respirations for two 30-second periods or for one 60-second interval provides a more accurate measure of respiratory rate than shorter intervals. Respiratory rate is considered a sensitive indicator of critical illness.

3.3. Oxygen Saturations and Supplemental Oxygen

Oxygen saturations should be recorded on one of two scales on the NEWS2 tool.

Scale 2 should be used in patients with hypercapnic respiratory failure (usually due to confirmed COPD) who have clinically recommended oxygen saturation of 88–92%. Scale 1 should be used for all other patients.

When measuring oxygen saturation levels ensure the pulse oximeter probe is attached to the specific part of the body it was designed for, i.e. finger or ear. Probes are not interchangeable and can produce a significantly inaccurate reading.

Factors that affect the accuracy in determining SpO₂ include any condition that decreases peripheral blood flow for example atherosclerosis, vasoconstrictors, peripheral oedema, hypothermia as well as conditions that interfere with transmission of light, e.g. nail polish, artificial nails, dark pigmented skin, moisture, jaundice and motion.

When supplemental oxygen is being used to maintain the desired oxygen saturation, the rate of oxygen delivery (L/min) and the delivery system/device should be documented on the NEWS2 chart using the delivery device codes as detailed on the NEWS2 chart.

The NEWS2 score is uplifted by 2 for patients requiring supplementary oxygen.

3.4. Temperature

A tympanic thermometer should be used for measuring a patient's core temperature. However, it is also good practice to touch the body's surface temperature to note whether the patient is hot or cold to the touch. The third dimension in assessing temperature is the environment, as extremes of environmental temperature can impact the measurement.

3.5. Systolic Blood Pressure

Blood pressure can be measured using either with a trust approved electronic blood pressure machine or manually sphygmomanometer. Ensure the selection of cuff size is appropriate to the size of the patient. Ensure the patient is in the recommended position (i.e. sitting with back and legs supported, with the patient's arm at heart height and supported at the elbow).

Only the systolic measure is recorded as part of the NEWS2; however, both the systolic and diastolic should be routinely recorded on the chart.

3.6. Pulse

Palpate the radial pulse for one full minute. In addition to the rate also note the strength and regularity. If a patient presents with a new irregular pulse this may be a sign of atrial fibrillation a twelve lead ECG should be undertaken and the medic should be informed. If the radial pulse is not palpable then a central pulse should be palpated, i.e. carotid.

3.7. Consciousness (ACVPU)

Consciousness is assessed using ACVPU; Alert, confusion (new), voice, painful stimuli, unconscious. Altered consciousness, i.e. anything other than alert, triggers a score of 3.

If it is unclear whether a patient's confusion is 'new' or their usual state, the altered mental state/confusion should be assumed to be new until confirmed to be otherwise.

3.8. Fluid Balance Monitoring

Timely and appropriate use of fluid balance observation and recording is an essential tool in assessing a patient's hydration level; however, it becomes vitally important when patients are actually or potentially acutely ill. They may show early warning signs which can be detected through accurate fluid balance.

Fluid balance charts must be completed for the following patients unless a decision has been made otherwise by a medical practitioner or a senior registered nurse.

- NEWS2 score >3
- Urinary Tract Infection or other cause of Polyuria
- Patients with suspected sepsis
- Temperature greater than 38°C
- Excessive vomiting or nasogastric output
- Diarrhoea and excessive output stoma/ileostomy
- Excessive fluid loss from surgical drains/ cavity drains, wounds/VAC therapy
- Intravenous fluids and drugs administration
- Enteral feeding i.e. PEG, NG, PEG-J, NJ
- Any patient who is nil by mouth for longer than 12 hours
- When any doubt exists over a patient's fluid status

3.9. Pain

Although pain is not recorded as part of the NEWS2, pain and /or its cause will usually but not always generate physiological disturbances that will be captured by the scoring system. Pain should always be assessed, responded to and recorded.

3.10. Additional Monitoring

Additional 'bedside' monitoring may also include, but is not be limited to, blood glucose monitoring, electrocardiogram (ECG), Glasgow Coma Scale (GCS) and/or capillary refill time.

3.11. Baseline Assessment (Inpatient services)

The National Early Warning Score (NEWS2) will be undertaken within one hour of admission where practicable, with the consent of the person. The NEWS2 should continue 12-hourly unless otherwise indicated. Increase in the frequency of monitoring will be determined by a competent registered nurse (or equivalent) or a medic based on previous NEWS2, clinical presentation and clinical risk.

3.12. Patients Admitted for Palliative or End of Life Care

Vital signs monitoring should not be routinely undertaken for patients who are palliative or at end of life. This should be determined by the medical and nursing team following discussion with the patient and/or family/carers and recorded in the clinical records.

3.13. Decision not to Escalate

It is recognised that the escalation of the patient may not be always be appropriate, however, there must be documented evidence that this decision has been agreed/discussed with the patient (or their family/carer as appropriate) and recorded in the clinical notes. If a plan has not been initiated or documented it is expected that the escalation process is followed.

3.14. Recommended Summary Plan for Emergency Care and Treatment (ReSPECT)

Recommended Summary Plan for Emergency Care and Treatment (ReSPECT) addresses treatment planning in relation to emergency, potentially life-extending treatment, including CPR. It should be considered for those patients who are at risk of a clinical deterioration that may place their life at risk. These patients may already have an existing life-limiting illness, such as advanced organ failure or cancer. The scope of ReSPECT can cover other treatments, e.g. antimicrobial therapy in those at risk of infection, ventilation in those at risk of respiratory failure or artificial nutrition/hydration in those at risk of aspiration.

For further information see [Do Not Attempt Cardiopulmonary Resuscitation \(DNACPR\) Policy and Procedure including Recommended Summary Plan for Emergency Care and Treatment \(ReSPECT\) Guidelines and Procedure.](#)

3.15. Clinical Response

NEWS2 should be used as part of routine clinical assessment to identify any potential deterioration in a person's physical health aiding the early identification of acute illness.

All observations should be recorded as a dot for each physiological parameter, unless the result has a score of 3, the result should be written numerically.

The Royal College of Physicians recommends four trigger levels requiring clinician assessment by a clinical competent responder based on the NEWS2:

NEWS2 Score	Frequency of Monitoring	Clinical Risk	Response	Clinical Competency of the Responder
Aggregate score 1-4	Minimum four- to six-hourly	Low	Ward-based response	Competent RN or equivalent who should decide whether a change to frequency of clinical monitoring or escalation of clinical care is required.
A single red score. Score of 3 in any individual parameter	Minimum one-hourly	Low-medium	Urgent ward-based response	Urgent review by a clinician with competencies in the assessment of acute illness. Determine probable cause, subsequent monitoring and whether escalation is required.
Aggregate score of 5 or 6	Minimum one-hourly	Medium	A score of 5 is a key threshold THINK SEPSIS	Urgent review by a clinician with competencies in the assessment of acute illness who should urgently decide whether escalation to the acute hospital is required.
Aggregate score of 7 or more	Continuous monitoring of vital signs	High	Urgent or emergency response THINK SEPSIS	DIAL 999

NEWS2 should be used to determine the urgency of the clinical response, however, concerns about a patient's clinical condition should always override the NEWS2 if the attending health care professional considers if necessary, to escalate care.

If a patient has a NEWS2 of 5 or above **THINK SEPSIS** and complete an appropriate sepsis screening tool (see section 3.12).

3.16. Recognition and Escalation of Adults with Sepsis or Potential Sepsis

NICE (2017) describe sepsis as being a 'rare but serious reaction to infection' in which the 'immune system response becomes overactive and starts to cause damage to the body itself'. Sepsis is a medical emergency with potentially devastating consequences and a high mortality rate.

The successful management of sepsis requires a high index of suspicion and early recognition. Patients cared for either within in their own home or within an inpatient setting must be identified quickly to improve outcomes.

3.17. The Recognition of Suspected Sepsis

Sepsis is often referred to as a 'silent killer', as the presenting symptoms often are present in less serious illnesses such as influenza. The main symptoms of sepsis can include, but are not limited to:

- high body temperature or low body temperature
- fast heartbeat/breathing
- feeling dizzy or faint/loss of consciousness
- a change in mental state, e.g. confusion or disorientation
- diarrhoea, nausea and vomiting
- slurred speech
- severe muscle pain
- breathlessness
- reduced urine production
- cold, clammy and pale or mottled skin

Sepsis must be suspected in any patient identified with a known infection, signs or symptoms of a suspected infection or in patients at high risk of infection as outlined below.

3.18. Risk Factors for Sepsis

Individuals in the groups below are at higher risk of developing sepsis:

- The very young (under one year) and older people (over 75 years) or people who are very frail
- people who have impaired immune systems because of illness or drugs, including:
 - people being treated for cancer with chemotherapy
 - people who have impaired immune function, e.g. people with diabetes, people who have had a splenectomy, or people with sickle cell disease)
 - people taking long-term steroids
 - people taking immunosuppressant drugs to treat non-malignant disorders such as rheumatoid arthritis
- people who have had surgery, or other invasive procedures, in the past six weeks
- people with any breach of skin integrity (for example, cuts, burns, blisters or skin infections)
- people who misuse drugs intravenously
- people with indwelling lines or catheters

3.19. NEWS2 Tool to Assist in the Recognition of Sepsis

NEWS2 has been nationally validated and has been adopted by the Trust as the standardised system for the assessment of a patient's clinical wellbeing within Trust inpatient units. The Trust also recommends that this is extended to include all other community and primary care settings to aid triage. This also includes any of the Trust's Urgent care facilities, e.g. Minor Injuries Units and the patient's own home.

The use of NEWS2 is seen as an aid to clinical assessment and not a substitute for competent clinical judgement. Any concern about a patient's clinical condition should prompt an urgent medical review or escalation to the acute sector regardless of the score attained.

A medium NEWS2 score 5 or above or a score of 3 identified within one parameter is a key trigger threshold and a **sepsis screen must be completed**.

Remember the score is uplifted by 2 for patients requiring supplementary oxygen.

Remember to record the level of consciousness. Any new onset confusion, disorientation and/or agitation, where previously their mental state was normal will score 3.

3.20. Sepsis Screening and Action Tool in the Recognition of Sepsis

The patient appropriate Sepsis Screening and Action tool must be completed when:

- The NEWS2 score is 5 or above
- The patient looks ill (to a health professional or an unusually concerned relative)
- Has any signs of infection

The Sepsis Screening and Action Tool is for use on all non-pregnant adults and young people 12 years and over. [Clinical Tools – Sepsis Trust](#)

Red Flag Sepsis is a definition from the National Sepsis Trust which identifies easy-to-identify clinical parameters.

Red Flags are:

- Objective evidence of new or altered mental state
- Systolic B.P \leq 90 mmHg (or drop $>$ 40 from normal)
- Heart rate $>$ 130 per minute
- Respiratory rate \geq 25 per minute
- Needs oxygen to keep SpO₂ \geq 92% (88%) in COPD
- Non-blanching rash, mottled / ashen / cyanotic
- Not passed urine in last 18 hours/UO $<$ 0.5 ml/kg/hr
- Lactate \geq 2 mmol/l
- Recent chemotherapy

The presence of one or more red flags indicates a high risk of sepsis and action is time critical. Red flag sepsis requires emergency admission to an acute hospital with critical care facilities.

Amber Flags

If one or more amber flags are present the patient is considered at risk of sepsis and will require appropriate level of monitoring and urgent review by a medic

- Relatives concerned about mental state/behaviour
- Acute deterioration in functional ability
- Immunocompromised
- Trauma, surgery or procedure in the last eight weeks
- Respiratory rate 21-24

- Systolic BP 91-100 mmHg
- Heart rate 91-130 or new dysrhythmia
- Tympanic temperature <36°C
- Clinical signs of wound, device or skin infection

3.21. The Sepsis Six

In order to manage sepsis and provide the patient with the best possible clinical outcome, a rapid response, managing the patient using the basics of care and timely and appropriate escalation, is required.

Action (complete ALL within 1 hour)	Time	Initials	Why we do this
1. Ensure senior clinician attends ST3+, or equivalent senior nurse			Sepsis is a complex condition. Experience is essential to deliver the right care and confirm diagnosis
2. Give oxygen if required Start if saturations less than 92%. Aim for saturations of 94-98%. If at risk of hypercarbia use target range of 88-92%			There's a critical imbalance between oxygen supply & demand in sepsis. Correcting low saturations helps to reduce tissue hypoxia
3. Obtain IV access, take bloods Include cultures, glucose, lactate, FBC, U&Es, CRP, Clotting. Consider lumbar puncture/ other samples as indicated			Lab. tests help stratify risk & identify causative pathogen allowing more targeted antibiotic therapy
4. Give IV antibiotics Maximum dose broad spectrum therapy. Consider local policy, allergies, antivirals			To control the source of infection, reducing the stimulus to the immune system
5. Give IV fluids Give fluid bolus of 20 ml/kg if age <16, 500ml if 16+. Repeat if clinically indicated. Use lactate to help guide further fluid therapy			Hypovolaemia (absolute & relative) contributes to shock in sepsis restoring volume can help correct
6. Monitor Use NEWS2. Measure urine output- may require catheter. Repeat lactate at least hourly if initial lactate elevated or clinical condition changes			Sepsis is a dynamic state. Urine output and lactate can help guide fluid therapy and determine need for ITU referral

Whilst the Sepsis Six is recognised as having a significant impact on patient outcomes Humber Teaching NHS Foundation Trust acknowledges that it is an organisation that provides a broad range of community and inpatient mental health services, community services (including therapies) and learning disability services, however, we are not an acute hospital trust and therefore do not have the critical care resources and skills to carry out the Sepsis Six in its entirety. As such the Trust recommends the following actions are taken where possible:

- Ensure appropriate escalation of care
- Where appropriate administer oxygen to keep saturation level above 94% (or 88% in COPD)
- Where appropriate commence IV fluid challenge
- Measure urine output

3.22. Blood Cultures and IV Antibiotics on Community Wards

As an organisation we would **not** recommend that blood cultures are taken and IV antibiotics commenced routinely in patients with suspected sepsis. To do so may have consequences for subsequent diagnosis and treatment. There is a risk of contamination of samples if staff are not proficient in the procedure. There is a risk that samples may not be transported at the optimal

temperature or within required timeframes. Ideally, IV antibiotic should not be administered prior to obtaining blood cultures.

If the attending medic, having assessed the patient, feels that the patient's condition will be significantly compromised if treatment is delayed and they have the appropriate knowledge and skills, then blood culture can be taken and IV antibiotics prescribed. The doctor should speak directly to the Emergency Department or consultant microbiologist at the acute hospital. As an organisation we do not have the facility to carry out lactate levels. This will be conducted following emergency admission to the acute hospital.

Obtaining blood cultures and administering IV antibiotic should not delay the emergency transfer of a patient with suspected sepsis and should only occur whilst the patient is awaiting transfer to the acute hospital.

4. RECOGNITION AND CARE OF THE DETERIORATING PATIENT (PAEDIATRIC)

All HCPs who observe and monitor paediatrics will be trained and competent in the accurate assessment and recording of vital signs including temperature, heart/pulse rate, respirations and blood pressure.

4.1. Physiological Parameters in Paediatrics

The physiological parameters in Paediatrics vary to those in adults. As children get older their physiology changes (e.g. larger stroke volume) leading to variation in heart rate, respiratory rate etc.

Practitioners should be aware of normal physiological parameters for blood pressure, respiratory rate and heart rate for the different ages ranges. HCPs will take appropriate action in response to changes in vital sign assessment and measurement.

4.2. Early Warning Scores (PAWS and NEWS2)

All adult patients cared for in UK hospitals will have their observations monitored using the NEWS2 tool. In paediatrics there is no single standardised Early Warning Score (EWS) that has yet been implemented. Humber Teaching NHS Foundation Trust has adopted the use of the Paediatric Advanced Warning Score (PAWS) for children under the age of 16. PAWS is used in paediatric settings within the local acute trust. For children 16 years and over the NEWS2 tool should be used (see section 1.1 of this protocol). However, it is acknowledged that PAWS will not identify all children at risk of deterioration, either due to the speed or the mechanism of deterioration. Therefore, it is essential that all clinical staff are trained to recognise common patterns of deterioration with or without the use of a PAWS and not just use the score for reassurance.

Within the CAMHS inpatient unit (Inspire), the PAWS (8+ years) tool is available both in paper format (A3/colour) and on Lorenzo. When necessary on discharge PAWS charts should be scanned into the clinical system. The PAWS chart should not be adapted or modified in any way.

4.3. Respiration rate

The work of breathing should be assessed (respiratory rate, rhythm, noises, intercostal recession, use of accessory muscles and nasal flaring etc.). Respirations should be counted for one full minute. Respiratory rate is considered a sensitive indicator of critical illness.

4.4. Oxygen Saturations and Supplemental Oxygen

When measuring oxygen saturation levels ensure the pulse oximeter probe MUST be attached to the specific part of the body it was designed for, i.e. finger or ear. Probes are not interchangeable and can produce a significantly inaccurate reading. Probes for children need to be selected according to the child's weight. Factors that affect the accuracy in determining SpO₂ include any condition that decreases peripheral blood flow for example oedema, hypothermia as well as

conditions that interfere with transmission of light for example nail polish, artificial nails, dark pigmented skin, moisture, jaundice and motion.

When supplemental oxygen is being used to maintain the desired oxygen saturation, the rate of oxygen delivery (L/min) should be documented on the PAWs chart. Note that the PAWS score is uplifted for patients requiring supplementary oxygen.

4.5. Temperature

Temperature should be recorded on All children who attend with an acute presentation of illness with the device applicable for their age. A tympanic thermometer should be used for measuring a patient's core temperature, however, for infants and children aged from four weeks to five years an electronic/chemical dot thermometer in the axilla or an infrared tympanic thermometer should be used NICE 2019.

4.6. Systolic Blood Pressure

Blood pressure may be measured using either with an electronic blood pressure machine or manually sphygmomanometer. Ensure the selection of cuff size is appropriate to the size of the child. Ensure the patient is in the recommended position (arm positioned at the level of the heart and well supported).

Only the systolic measure is recorded as part of the PAWS; however, both the systolic and diastolic should be routinely recorded on the chart.

Blood pressure ranges by age systolic and mean				
Age	Systolic BP 5 th centile mmHg	Systolic BP 50 th centile mmHg	Mean BP 5 th centile mmHg	Mean BP 50 th centile mmHg
0-1 month	50	60	35-45	45
1-12 months	70	80	40	55
1-10 years	$70 \div 2x$ age in years	$90 + 2x$ age in years	$40 + 1.5x$ age in years	$55 + 1.5x$ age in years
15years	75	60-100	50-90	80

4.7. Pulse

In paediatrics under the age of two a stethoscope may be used to auscultate the apex heart rate. Any electronic data (such as a pulse recorded upon a pulse oximeter MUST be cross-checked by auscultation/ palpation of the heart/pulse.

Heart rate should be counted for one full minute. In addition to the rate also note the strength and regularity.

Heart Rate Ranges (beats per minute)			
Age	Mean	Awake	Deep sleep
Newborn – 3 months	140	85-205	80-140
3 months – 2 years	130	100-180	75-160
2-10 years	80	60-140	60-90
>10years	75	60-100	50-90

4.8. Consciousness (AVPU)

Level of consciousness is a vital sign that is integral to assessing the acutely unwell child and should be recorded routinely (NICE, 2007). The AVPU system is sufficient for paediatrics in our care.

4.9. Capillary Refill Time

Capillary refill time (CRT) is the rate at which blood returns to the capillary bed after it has been compressed digitally. Measuring capillary refill time is recommended when assessing the circulation in sick infants and children.

- The skins of the forehead or chest (sternum) are better for estimating CRT in paediatrics.
- Where fingers are used, elevate the hand to the level of the heart and always record the site used giving consideration to any factors that may affect CRT, e.g. a cold environment.

4.10. Baseline Assessment on Admission to the CAMHS Inpatient unit

The PAWS will be undertaken within one hour of admission to the CAMHS inpatient unit where practicable, with the consent of the person. The PAWS should continue 12-hourly unless otherwise indicated. Increase in the frequency of monitoring will be determined by a competent registered nurse (or equivalent) or a medic based on previous the PAWS, clinical presentation and clinical risk.

4.11. PAWS and Clinical Response

All 7 parameters need to be recorded to create a PAWS score. For each parameter an item score of 0-10 will be generated. These are then added to create the total score. PAWS should be used to determine the urgency of the clinical response however, concern about a patient's clinical condition should always override the PAWS if the health care professional considers if necessary, to escalate or transfer care.

PAWS Score	Frequency of Monitoring	Clinical Risk	Response	Clinical Competency of the Responder
Score 3-5	Recheck immediately then Minimum one-hourly	Low-medium	Urgent ward-based response	Urgent review by a clinician with competencies in the assessment of acute illness. Determine probable cause, subsequent monitoring and whether escalation is required.
Score 6-9	Minimum one-hourly	Medium	A score of 6 Or more is a key threshold THINK SEPSIS	Urgent/emergency transfer to acute hospital required. Dial 999
Score greater than 10	Continuous monitoring of vital signs	High May be at risk of arrest	Urgent or emergency response THINK SEPSIS	Review ABC and treat accordingly Emergency transfer to acute hospital. DIAL 999

4.12. Recognition and Escalation of Children with Sepsis or Potential Sepsis

Signs and symptoms of sepsis in children can be subtle and deterioration can rapidly occur. Sepsis should be considered if a child displays any of the below.



A child presenting with the above-mentioned indicators and a suspected or proven infection represents a clinical emergency and immediate transfer to an acute hospital setting must take place. **Dial 999 and inform the call handler that this is a potential sepsis.**

Please see links for NICE sepsis risk stratification tools:

- [NICE sepsis risk stratification tool: for children under 5 out of hospital](#)
- [NICE Sepsis risk stratification tool: children aged 5-11 years out of hospital](#)
- [NICE Sepsis risk stratification tool: children and young people aged 12-17 years out of hospital](#)

Children Under 5

Children under 5 should have their blood pressure measured if heart rate or capillary refill time is abnormal and facilities to measure blood pressure, including a correctly sized blood pressure cuff, are available only.

Children Under 12

The clinical assessment of a child under the age of 12 years should include the measuring of temperature, heart rate, respiratory rate, level of consciousness, oxygen saturation and capillary refill time.

The blood pressure only to be measured in children under 12 years in community settings if facilities to measure blood pressure, including a correctly sized cuff, are available and taking a measurement does not cause a delay in assessment or treatment.

4.13. The Identification of the Deteriorating Child including Sepsis in a Primary Care Setting.

A child may present acutely unwell to our primary care services. In this instance a full set of observations and a physical assessment will be undertaken and recorded in the clinical records. Treatment and/or escalation will be determined as per the child's overall clinical presentation, taking into account the child's physiological parameters compared with normal values and other presenting features.

Significant challenges and barriers remain in the reliable identification of sepsis in a primary care setting due to the complexity and the variable presentations displayed by each patient.

Patients who are obviously critically ill are likely to be identified; however, there are some patients with severe sepsis with less immediately obvious signs of critical illness. Some of this group might be identified earlier with greater awareness and targeted clinical assessment. Consult the Think Sepsis flowchart (Appendix 2).

5. ASSESSING A PATIENT WITH SIGNIFICANT DETERIORATION

The results of Vital signs monitoring and the NEWS2 or PAWS score will give an indication of the patients' condition. If the patient is deteriorating, a more comprehensive assessment is warranted to fully understand any life-threatening presentations. The ABCDE model of assessment is recommended as it gives a rapid, initial assessment of the patients' condition. Details of this can be found within Medical Emergencies & Resuscitation Policy and Procedure (M-004).

Concern about a patient's clinical condition should always override the NEWS2 or PAWS if the attending healthcare professional considers it necessary to escalate care. Sepsis should be considered in any patient with a known infection, signs or symptoms of infection, or in patients at high risk of infection, and a NEWS2 score of 5 or more – 'think sepsis'. Patients with suspected infection and a NEWS2 score of 5 or more require urgent assessment and intervention by a clinical team competent in the management of sepsis and urgent transfer to hospital or transfer to a higher-dependency clinical area within hospitals for ongoing clinical care.

6. CLINICAL RECORDS, DOCUMENTATION AND COMMUNICATION

Ensure that the results of all observations are recorded on the NEWS2 or PAWS chart where applicable, with the outcome and follow-up actions required detailed within the patient's clinical record; record the actions taken and any escalation along with the rationale for decisions.

Staff should be cognisant of:

- Maintenance, cleanliness and whereabouts of all healthcare equipment ready for use
- Resuscitation equipment and its location
- Any Do Not Attempt Cardio Pulmonary Resuscitation (DNACPR) order or Recommended Summary Plan for Emergency Care and Treatment (ReSPECT)
- [Professional resources - Sepsis Trust](#)
- Signs and symptoms of stroke

6.1. Effective Communication Model for Escalation: SBARD

SBARD is a structured and standardised tool that provides a framework for improving communication. It is an easy to remember, concrete mechanism useful for framing any conversation, especially critical ones requiring clinicians' immediate attention and action. It allows for an easy and focused way to set expectations for what will be communicated and how between staff, which is essential for developing teamwork and fostering a culture of patient's safety.

6.2. How to use SBARD

Gather all the information required and have this to hand prior to making the telephone call or having a discussion with colleagues or other professionals. Familiarise yourself with the notes and assessments prior to using this tool. Ensure you document any calls or conversations within the patients' records.

6.3. When to use SBARD

This tool may be used in any situation when you are required to communicate information. This may include:

- Telephone calls
- Reviews
- Handovers
- Patient transfers
- Multi-disciplinary team meetings

7. TRANSFER OF PATIENTS

7.1. Transfer of a Deteriorating Patient into the Acute Trust

A patient who has a deteriorating physical health condition with or without a raised NEWS2 or PAWS score (for full escalation) will be transferred urgently to the acute trust.

- Dial 999
- Use the SBARD tool to communicate your concerns to the call handler
- Give details of the NEWS2 score (Adults) PAWS (CAMHS under 16 years)
- If the patient triggers **Red Flag Sepsis** ensure this is explicitly communicated to the call handler. This will trigger a priority response.
- Inform the call handler and, on arrival, the ambulance crew of any infection control risk*
- Inform the on-call medic/ward doctor
- Inform the patient's next of kin or significant other
- Continue to monitor patient's vital signs

*The Inter-Healthcare Infection Control Transfer Form can be located within the [Infection Prevention and Control: Admission, Transfer and Discharge Policy](#).

For the patient who has a deteriorating physical health condition with or without a raised early warning score and has a documented ceiling of care or Recommended Summary Plan for Emergency Care and Treatment escalation to the acute trust may not be an appropriate course of action. In such circumstances:

- Request urgent assess by a medic (within one hour)
- Inform the patient's next of kin or significant other
- Continue to monitor the patient's vital signs and record on the NEWS2 chart

Refer to the [Discharge and Transfer Policy](#) for further details.

This will enable them to ensure that isolation facilities are identified if appropriate. An Inter-Healthcare Infection Control Transfer Form should be provided with the patient handover notes or follow at the earliest opportunity.

7.2. Transfer of a Patient from the Acute Services into a Bedded Unit within Humber Teaching NHS Foundation Trust

For all people transferred from acute services, the accepting team will ensure that the patient's physical health care needs are clearly identified through use of NEWS2 (or PAWS) and SBARD, to ensure that the current physical needs can be effectively met within the Trust. This must be documented within the patient's clinical records. Any concerns should be fully discussed within the multi-disciplinary team (MDT), with the appropriate manager and with staff from the acute general hospital services, in line with the [Discharge and Transfer Policy](#).

A care plan should be developed that clearly identifies the physical health needs of the patient, with clear guidance of signs and symptoms of deterioration and actions to be taken should this occur.

An Inter-Healthcare Infection Control Transfer Form should have been completed by the transferring healthcare provider. The Humber Teaching NHS Foundation Trust inpatient unit accepting the patient should scan the form in to the patient's electronic record.

Transfers between 10pm and 7am significantly increase the risk of the patient's physical health deteriorating and these should be avoided where possible. Any admission out of hours should be discussed between medical staff in the acute hospital and Humber and between the nurse in charge of the acute hospital and Humber (NICE, 2007).

8. REFERENCES

National Institute of Clinical Excellence (NICE, 2007), [Acutely ill patients in hospital: recognition of and responses to acute illness in adults in hospital \(CG50\)](#), London, NICE.

NHS Institute for Innovation and Improvement (2006), [Safer Care – SBAR - Situation, Background, Assessment and Recommendation](#), Warwick, NHS Institute for Innovation and Improvement. [Improvement Hub » Safer Care – SBAR – Situation, Background, Assessment, Recommendation – Implementation and Training Guide \(england.nhs.uk\)](#)

National Patient Safety Agency (NPSA) (2007), [Recognising and responding appropriately to early signs of deterioration in hospitalised patients](#), London, Department of Health.

Royal College of Nursing (2017) [Standards for Assessing, Measuring and Monitoring Vital Signs in Infants, Children and Young People](#) Royal College of Nursing (rcn.org.uk)

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National Institute for Health And Care Excellence (2017) [Acutely ill adults in hospital: recognising and responding to deterioration \(CG50\)](#)

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Resuscitation Council UK Paediatric Immediate Life Support Manual 3rd Edition (2018)

Resuscitation Council UK Advanced Life Support Manual 8th Edition (2021)

Royal College Of Nursing (2013) [Standards for Assessing, Measuring and Monitoring Vital Signs in Infants, Children and Young People](#)

Royal college of obstetricians and gynaecologists Green Top Guideline Bacterial Sepsis in Pregnancy (rcog.org.uk)

UK Sepsis Trust Sepsis Manual 6th Edition (2022)

Appendix 1: SBARD Tool

Improving patient related communication: use the simple and effective SBARD tool.

Gather all the required information and have this to hand prior to making the telephone call, familiarise yourself with the notes and assessments. Document the call within the records. The framework can be used for transfers, handover & reviews.

S ituation	<ul style="list-style-type: none">• Give your name and designation, state where you are calling from• Describe who you are calling about• Describe the reason for your concern for example - physical health concerns, low mood, behavioural difficulties, suicidal ideation
B ackground	<ul style="list-style-type: none">• Give the date and reason for the admission• Describe the patient's diagnosis, mental health act status, relevant treatments, treatment plans and co-morbidities• Describe the patient's usual presentation
A ssessment	<ul style="list-style-type: none">• Have all the information to hand, describe the findings of your assessment of the patient• Physical observations to include temperature, pulse, respirations, blood pressure, level of consciousness and oxygen saturation levels• Describe what you think the problem is, or state you are not sure what is wrong but that you are concerned
R ecommendation	<ul style="list-style-type: none">• State what you would like to happen• Determine timeframes• State what you will do in the meantime, for example - increase observation levels
D ecision	<ul style="list-style-type: none">• Summarise and record what has been agreed - checking understanding of both yourself and the person you contacted, agree call back if needed• Record name and contact details of person contacted• Record date and time of contact

Appendix 2: Think Sepsis

'Think' 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 (<1 year) and older people (>75 years) or very frail people.
- Recent trauma or surgery or invasive procedure (within the last six 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, e.g. 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 six 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
[PowerPoint Presentation \(nice.org.uk\)](#)

Appendix 3: Sepsis Screening Tool and Care Bundles

Services	Screening tool required	Patient group specific
All adult inpatient units/wards/MIU	Pre-hospital/ambulance care	Screening and action tool for adult and children and young people aged over 12 (pre-hospital) Sepsis-Prehospital-Care-Over-16s.pdf (sepsistrust.org) Screening and action tool for use in pregnancy (pre-hospital) Sepsis-Prehospital-Care-Maternal.pdf (sepsistrust.org)
Children's services / MIU including CAMHS inpatient	Pre-hospital/ambulance	Screening and action tool for children aged under 5 Sepsis-Prehospital-Care-Under-5s.pdf (sepsistrust.org) Screening and action tool for children aged 5-11 (pre-hospital) Sepsis-Prehospital-Care-5-11-.pdf (sepsistrust.org) Screening and action tool for children and young people aged over 12 (pre-hospital) Sepsis-Prehospital-Care-Under-16s.pdf (sepsistrust.org)
Primary Care	General Practice	Screening and action tool for under 5s Sepsis-GP-u5-1.pdf (sepsistrust.org) Screening and action tool for children aged 5-11 (GP) Sepsis-GP-5-11.pdf (sepsistrust.org) Screening and action tool for adult and children and young people aged 12-16 (GP) Sepsis-General-Practice-Under-16.pdf (sepsistrust.org) Sepsis-General-Practice-16.pdf (sepsistrust.org) Screening and action tool for use in pregnancy (GP) Sepsis-General-Practice-Maternal.pdf (sepsistrust.org)
Community Services i.e. CMHT, CTLD and Community Nursing Services	Community Services	Screening and action tool for community nurses Sepsis-Community-Nurses.pdf (sepsistrust.org) Screening and action tool for use in pregnancy or 6 weeks post-pregnancy Sepsis-Community-Midwives.pdf (sepsistrust.org)
Out of hours services	Out of hours services and telephone triage	Screening and action tool under 5s (OOH) Sepsis-Telephone-Triage-Under-5.pdf (sepsistrust.org) Screening and action tool for children aged 5-11 (OOH) Sepsis-Telephone-Triage-Ages-5-11.pdf (sepsistrust.org) Screening and action tool for adult and children and young people aged over 12 (OOH) Sepsis-Telephone-Triage-Ages-12.pdf (sepsistrust.org) Screening and action tool for use in pregnancy (OOH) Sepsis-Telephone-Triage-Pregnant.pdf (sepsistrust.org)