Reference Number: *UHB 529* **Version Number:** 1	**Date of Next Review:** *13.05.2028* **Previous Trust/LHB Reference Number:** *n/a*

POLICY FOR THE MANAGEMENT OF SUSPECTED AND PROVEN NEUTROPENIC SEPSIS IN ADULTS

Policy Statement

To ensure the Health Board delivers its aims, objectives, responsibilities and legal requirements transparently and consistently, we will:

Ensure that the risk of neutropenic sepsis is managed appropriately.

Ensure all patients with suspected or proven neutropenic sepsis are treated appropriately.

Comply with national evidence-based guidelines on the management of neutropenic sepsis (NICE 2012).

Policy Commitment

This document provides guidance on the prevention and treatment of suspected and proven neutropenic sepsis.

- To ensure all patients who are admitted with suspected neutropenic sepsis have the correct treatment commenced within one hour of admission in accordance with national guidelines.

- To ensure all patients receiving systemic anti-cancer treatment are educated about the signs and symptoms of neutropenic sepsis and know how to contact the health board.

Supporting Procedures and Written Control Documents

Other supporting documents are:

- *C&V UHB Antimicrobial guidelines* - CAV UHB Antimicrobial guidelines (Microguide) - Access CAV Microguide via CAV intranet/ SharePoint or via Eolas Medical app.
- *Velindre Cancer Centre (VCC) Neutropenic Sepsis Policy- http://nww.velindrecc.wales.nhs.uk/document/358487*
- *UKONS triage tool - https://www.ukacuteoncology.co.uk/information-hub/ao-guidelines#*
- *NICE guidelines- https://www.nice.org.uk/guidance/cg151/chapter/1-Guidance*
- *C&V UHB Inpatient sepsis screening and action tool* - ***Appendix 1***
- *Haematology Sepsis Pathway and Tazocin PGD* – ***Appendix 2***
- NEWS scoring system - **Appendix 3**
- *Oncology Chemotherapy alert card* - ***Appendix 4***
- *MASCC scoring tool*- ***Appendix 5***
- *Early discharge criteria* – ***Appendix 6***
- *Post exposure to infectious diseases* – ***Appendix 7***
- *Equality and Health Impact Assessment* – ***Appendix 8***

Scope

This policy applies to all of our staff in all locations including those with honorary contracts.	
Equality and Health Impact Assessment	An equality and health impact assessment (EHIA) has been completed and this found there to be a positive impact.

Policy Approved by	Quality Committee
Group with authority to approve procedures written to explain how this policy will be implemented	Quality Committee
Accountable Executive or Clinical Board Director	Executive Medical Director

Disclaimer

If the review date of this document has passed please ensure that the version you are using is the most up to date either by contacting the document author or the Governanc Directorate.

Summary of reviews/amendments

Version Number	Date Review Approved	Date Published	Summary of Amendments
1	13.05.2025	15/05/2025	*New document*
2			

Purpose and Summary of Document:

To ensure a safe, standardised evidence-based approach (adhering to NICE guidance) for the prompt assessment and initial clinical management of adult patients (>16 years of age) with potential Neutropenic Sepsis (NS) who present to the health board. To ensure all patients with suspected neutropenic sepsis receive antibiotics within an hour of arrival at the healthcare setting.

It is imperative that those working in front line services without an extensive knowledge of Systemic Anti-Cancer Therapy (SACT) have the knowledge and confidence to recognise and promptly initiate treatment of NS. This will ensure a reduction in morbidity and mortality for patients presenting with NS whilst recognising that NS is a “time-dependent condition”. The Acute Oncology Service (AOS) will provide education to front line staff on NS.

All of the Wales Cancer Network patients receiving SACT will have been issued with an information card detailing their regimen, hospital number and immediate contact details for advice 24 hours a day. This policy provides a concise guide of what needs to be achieved during the first hour of presentation with suspected NS and subsequent 48 hours and will support clinicians in the recognition and initiation of prompt and appropriate clinical management.

Contents

1.0 Introduction

Patients with neutropenia can develop life-threatening, rapidly progressive infection and sepsis.

Neutropenic sepsis (NS) can occur in patients with haematological and solid organ malignancy and be a fatal complication of cytotoxic chemotherapy given for malignant or non-malignant conditions. A mortality rate of approximately 5% has been reported in patients with solid tumors undergoing cytotoxic therapy (Naurois et al. 2010).

Several reports have highlighted the risks of NS and have made recommendations to develop systems for urgent assessment and organisational level policies for the management of neutropenic sepsis (NCEPOD 2008, NCAG 2009).

Neutropenic sepsis must be considered an acute emergency requiring prompt identification and treatment (Naurois et al. 2010). With correct and rapid responses, morbidity and mortality can be improved (Crawford 2004, Larche et al. 2003 and NICE 2012).

This policy is based on the National Institute for Health and Care Excellence (NICE) guidance 2012. [Neutropenic Sepsis: Prevention and Management of Neutropenic Sepsis in people with cancer]. A review of the guideline in 2020 resulted in minor changes to the use of fluoroquinolones only.

2.0 Definitions

Sepsis	A life-threatening organ dysfunction due to deregulated host response to infection. It should be considered whenever there is an acute deterioration, raised NEWS-2 score
Neutropenia	Moderate neutropenia: neutrophils ≥0.5x10^9/L and < 1x10^9/L Severe neutropenia: neutrophils < 0.5x10^9/L
Neutropenic Sepsis	Clinical signs of infection, and/or a temperature ≥ 38°C (or ≤ 36°C), in the presence of moderate or severe neutropenia (< 1x10^9)
Sepsis 6	IV antibiotics IV fluids Oxygen Blood cultures Lactate Hourly urine output (**See appendix 1**)
NEWS-2	National Early Warning Score 2 (**See appendix 3**)
SACT	Systemic anti-cancer therapy
AKI	Acute kidney injury
MASCC Risk Index	Multi-national association for supportive care in cancer scoring system - ***For use in patients with solid malignancy only*** (**See appendix 5**). MASCC < 21 suggests *high risk* MASCC ≥ 21 suggests *low risk*

3.0 Roles and Responsibilities

This section outlines the roles and responsibilities of all staff involved in promoting the highest standard of practice in relation to neutropenic sepsis. It is the responsibility of health care professionals involved in the management of patients with potential NS, to familiarise themselves with the content of this policy. This includes staff working across care settings in primary care (out of hours, GP's) secondary care (A&E, Acute Receiving Units), third sector, independent sector and all those involved in the care and management of oncology patients.

3.1 Medical Director

The Medical Director has overall responsibility in ensuring the organisation adheres to the standards set out in this clinical guideline. The Medical Director also ensures all medicines are handled in a safe and secure manner and has oversight of antibiotic stewardship.

3.2 Ward/Departmental Managers

Department managers and Ward managers are responsible for:

- Implementing the clinical guidance for the management of neutropenic sepsis and monitoring compliance in their clinical area
- Ensuring that any sepsis related clinical incidents are reported via the UHB incident reporting system.
- Taking any remedial action where needed
- Ensuring all staff for whom they have responsibility have undertaken essential training appropriate to their role
- Investigate non-compliance with essential training sessions
- Support ward staff in completion of the iv antibiotic process competency assessment packages

3.3 Ward and departmental Staff

All ward and departmental staff have a responsibility to:

- Adhere to all UHB clinical guidance for the appropriate management of a patient with suspicion or confirmation of neutropenic sepsis
- Complete the UHB approved sepsis training relevant to their position and role in a timely fashion
- Complete clinical one-to-one iv antibiotic PGD competencies relevant to their role (where applicable)
- Work within the professional scope of their registered bodies
- Report any sepsis related clinical incidents via the UHB incident reporting systems

- Report all clinical incidents or events, and near misses, to the nurse in charge

3.4 Medical Teams

All doctors have the responsibility to:

- Adhere to all UHB clinical guidance, policies and procedures for the appropriate management of neutropenic sepsis
- Ensure documentation adheres to the local and national coding guidelines
- Ensure all sepsis related clinical incidents and events, and near misses, are reported via the UHB clinical incident reporting system
- Keep up to date with current UHB guidelines ensuring early recognition, management and treatment for suspected sepsis, including prompt prescribing of antibiotic cover where appropriate

3.5 Clinical Committees

Acute Oncology Steering group
Medicine Q&S
Acute Medicine Q&S
Haematology Q&S
Corporate Medicines Management Group
Quality Committee

4.0 Patient and Carer education and antibiotic prophylaxis

4.1 Patient alert cards

Alert information cards will be given to all patients on commencement of systemic anti-cancer treatments, including for non-malignant conditions, advising and educating them on the symptoms and signs of infection and sepsis. The cards will contain details for 24-hour emergency advice on triage and admission. All patients will be provided with a thermometer and instructed in its correct use.

Example of the alert cards in **Appendix 4**

4.2 Antibiotic prophylaxis

Patients and their carers will be instructed on the use of prophylactic antimicrobials and given information on potential side effects and interactions with their cancer medications. Necessary prophylaxis will differ dependent on the

patient's diagnosis and treatment. Treatment schedules will be initiated by the Oncology/Haematology teams.

5.0 Initial Assessment

Suspect neutropenic sepsis if the patient is receiving or has received anti-cancer treatment in the last 6 weeks and the patient is unwell, has signs or symptoms of an infection, or a temperature over 38◦C or under 36◦C.

All patients with suspected neutropenic sepsis must be seen and assessed urgently. If possible, the patient should be admitted to a cubicle, but prompt assessment and treatment is a higher priority than isolation. The same principles apply in neutropenic sepsis if suspected in an inpatient.

Initial clinical observations include:

- Temperature
- Pulse
- Blood pressure
- Respiratory rate
- Oxygen saturations on air, and on oxygen
- Level of consciousness

Results of observations will be recorded on the NEWS2 charts. The NEWS2 score will be reported immediately to the admitting doctor or senior nurse. If this is not possible and there is concern, escalate via the NEWS 2 escalation procedure.

Undertake a full history and thorough clinical examination. Initiate appropriate antibiotic treatment within ONE HOUR of presentation with suspected neutropenic sepsis.

Do NOT wait for blood count results before starting antibiotics.

Commence the Sepsis Six pathway first hour responsibilities (See appendix 1).

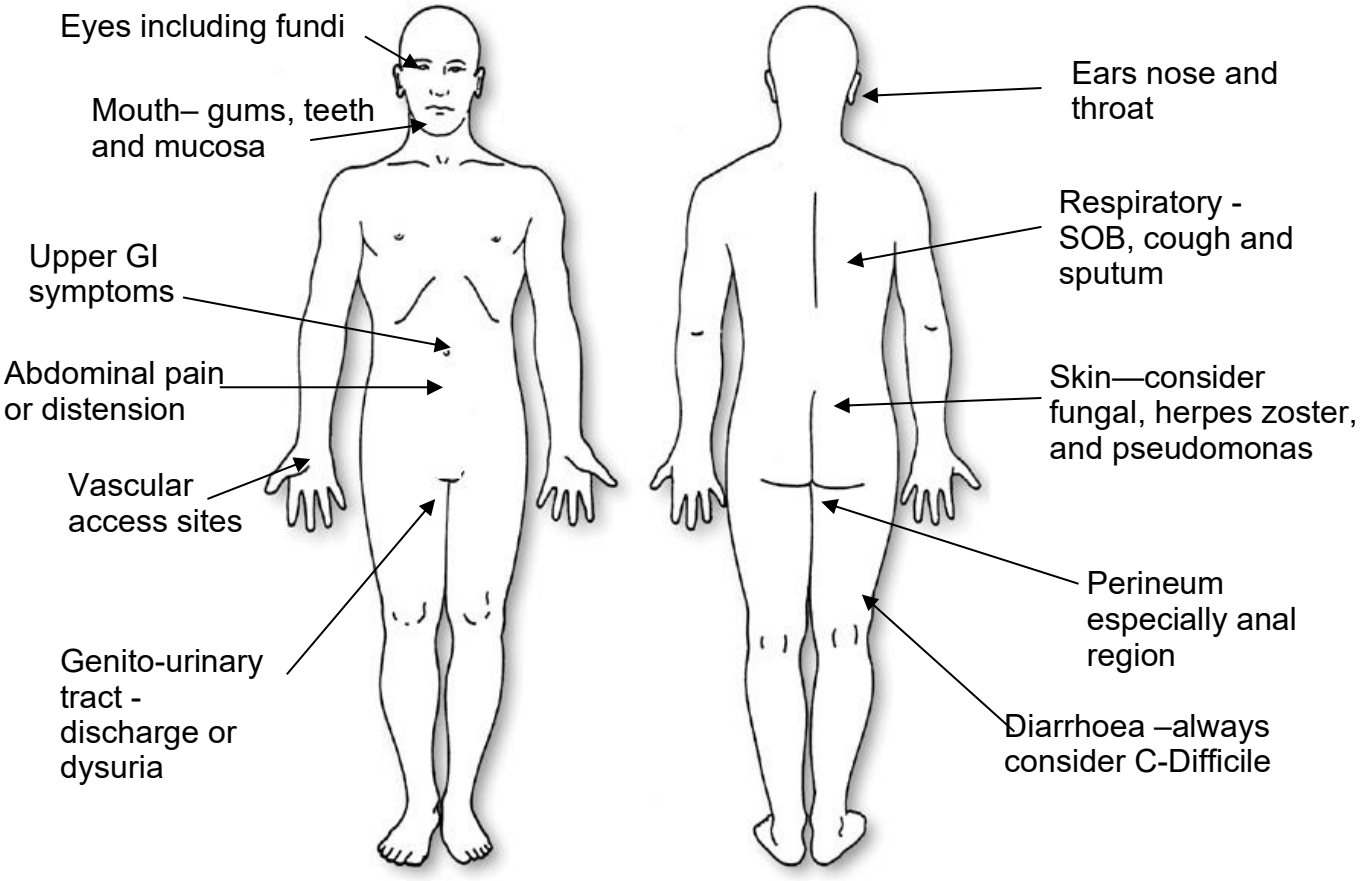
STANDARD - IV antibiotics will be administered within 60 minutes of presentation

A detailed history should include:

- Time of onset of symptoms including fever or rigors
- Timing of fever or rigor in relation to line flushing
- Any recent blood products
- Nature of current or recent chemotherapy/systemic anti-cancer treatment
- Prior prophylactic antibiotics
- Concomitant steroid use (Which may mask signs of infection, including fever)
- Recent surgical procedures
- Details of known allergies

A detailed examination includes:

- Ears, nose and throat
- Cervical, axillary and inguinal lymphadenopathy
- Skin
- Respiratory and cardiovascular systems
- Abdomen and perineum
- Other systems as directed by symptoms
- Assessment of any indwelling lines and catheters



5.1 Diagnostic Tests

Initial test to confirm the diagnosis should include:

- FBC
- Renal and liver function
- Coagulation screen
- C-reactive protein
- Lactate (arterial or venous)
- Blood cultures (before antibiotics are given) **(Central line and peripheral)**
- Chest X-ray
- Blood sugars

5.2 Initial Treatment

Do NOT wait for blood count results before starting antibiotics.

Refer to Micro Guide for Treatment Options.

In Haematology where the Piperacillin-Tazobactam (Tazocin) Patient Group Directive (PGD) has been approved and implemented - nurses who have been assessed as competent can initiate first dose administration in line with a strict inclusion/exclusion criterion.

PENICILLIN ALLERGIC ADVICE

- Document the nature of the allergy

Refer to Micro Guide for Treatment Options.

5.3 Risk Assessment Scoring (Solid Organ malignancy only)

The Multinational Association for Supportive Care in Cancer (MASCC) scoring index is a risk assessment for identifying low-risk febrile neutropenic cancer patients and is validated for use in solid malignancy by NICE (2012) and Klaterskry (2000).

The MASSC risk tool can be used by a healthcare professional familiar with and competent to use it, and applied within 24 hours of presentation, basing the risk on presenting features (NICE 2012). The Acute Oncology Service (AOS) can provide advice on MASSC scoring.

The score **DOES NOT APPLY** in Haematology patients.

The MASSC scoring system appears in **Appendix 5.**

5.4 Monitoring

Patients with neutropenic sepsis should be examined daily and the following investigations undertaken:

- NEWS monitoring
- Full blood count
- Renal and liver function
- Coagulation screen based on clinical assessment
- Serial C-reactive protein
- Repeat blood and other cultures if fever persists (consider fungal and viral screens)
- Reassess the patient's risk of septic complications using MASSC, if appropriate.

5.5 Follow up Assessments

Review patient's clinical status daily and consider changing antibiotics from iv to oral after 48 hours of treatment in patients whose fever has settled quickly and who are low risk of complications. (See **Appendix 6** for early discharge criteria)

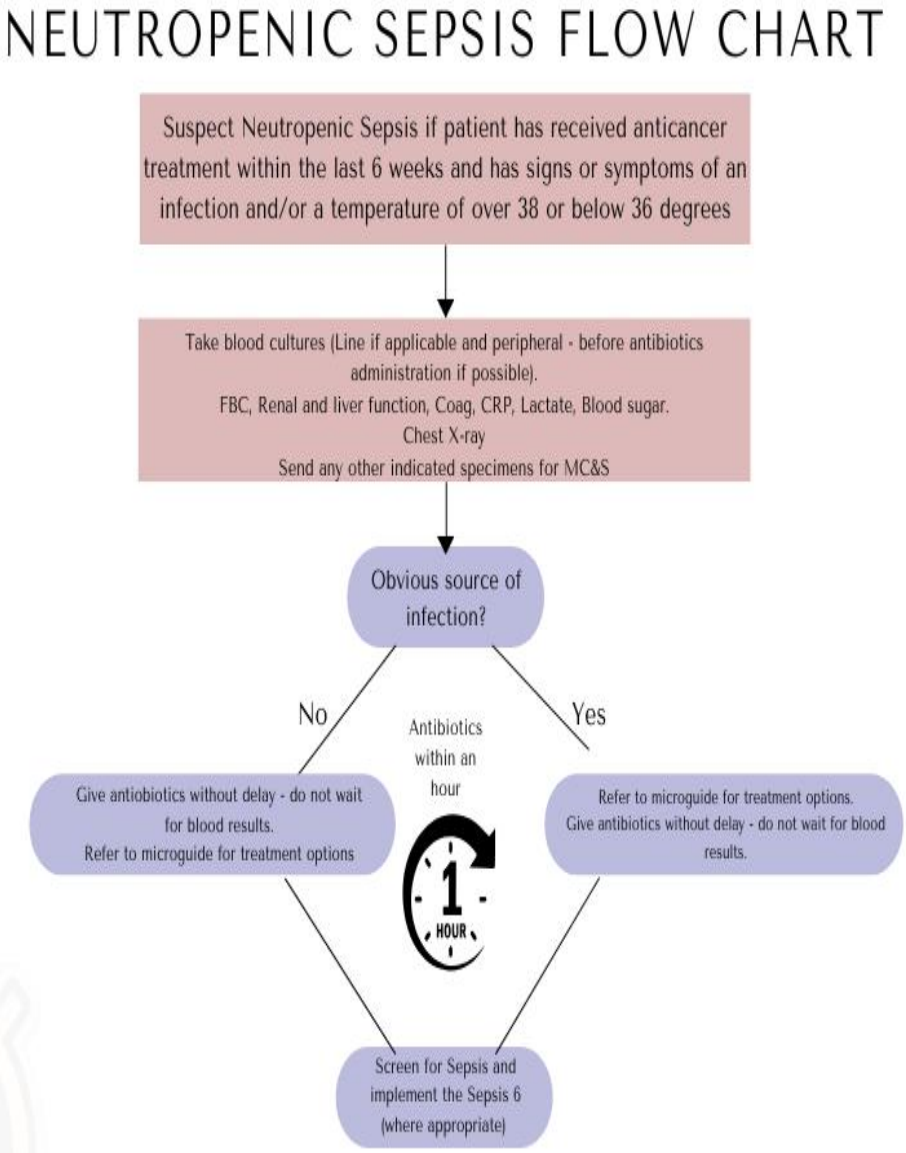
Change antibiotics to appropriate targeted therapy in liaison with Microbiology if a source of infection is identified.

Seek advice from senior colleagues and from medical microbiology and virology for patients whose temperature is not settling, or who are deteriorating clinically despite maximal therapy.

5.6 Use of GCSF in Neutropenic Sepsis

Peg filgrastim should not be used for the treatment of neutropenic sepsis. However, if a patient is not responding to appropriate antibiotic management and developing life threatening infection (such as severe sepsis, pneumonia or invasive fungal infection) then administration of GCSF can be considered (Crawford et al. 2010, Aapro et al 2006) after discussion with Oncology/Haematology.

6.0 Neutropenic Sepsis Flowchart



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8.1 APPENDIX 1. Inpatient Sepsis Screening Tool.

SEPSIS SCREENING TOOL ACUTE ASSESSMENT — **AGE 16+**

PATIENT DETAILS:

DATE: TIME:
NAME:
DESIGNATION:
SIGNATURE:

01 START THIS CHART IF SEPSIS IS SUSPECTED
Factors prompting screening for sepsis include:

- ☐ NEWS2 has triggered
- ☐ Carer or relative concern
- ☐ Recent chemotherapy / risk of neutropenia
- ☐ Patient looks unwell
- ☐ Evidence of organ dysfunction (e.g. lactate >2mmol/l)
- ☐ Assessment gives clinical cause for concern

YES

CALL FY2+ TO COMPREHENSIVELY RISK ASSESS

Measure lactate and calculate NEWS2 using latest vital signs

Always interpret vital signs and NEWS2 in context of medical history, medications and response to treatment

02 IS NEWS2 7 OR ABOVE?
OR IS NEWS2 5 OR 6 AND ONE OF:

- ☐ Any one NEWS2 parameter with score of 3
- ☐ Mottled or ashen skin
- ☐ Non-blanching rash
- ☐ Cyanosis of skin, lips or tongue
- ☐ Deterioration since last assessment
- ☐ Deterioration since recent intervention
- ☐ Lactate > 2 mmol/L OR known AKI

NO

03 IS NEWS2 5 OR 6?
OR IS NEWS2 1-4 AND ONE OF:

- ☐ Any one NEWS2 parameter with score of 3
- ☐ Mottled or ashen skin
- ☐ Non-blanching rash
- ☐ Cyanosis of skin, lips or tongue
- ☐ Deterioration since last assessment
- ☐ Deterioration since recent intervention

YES

HIGH RISK

START SEPSIS SIX

YES

MODERATE RISK

1. Send full set of bloods including VBG
2. Consider discussing with a senior decision-maker
3. If antimicrobials needed, ALWAYS give within 3h

I have prescribed antimicrobials ☐

This patient does not require antimicrobials as:

- I don't think this patient has an infection ☐
- Patient already on appropriate antimicrobials ☐
- Escalation is not appropriate ☐
- Other_____

NAME: GRADE:
DATE: TIME: ☐☐:☐☐

NO AMBER CRITERIA = FY2+ TO CONSIDER ANTIBIOTICS/ OTHER DIAGNOSIS
ALWAYS REASSESS IF PATIENT DETERIORATES OR SITUATION CHANGES
DOCUMENT RISK ASSESSMENT IN MEDICAL NOTES

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SEPSIS SCREENING TOOL - THE SEPSIS SIX

AGE 16+

PATIENT DETAILS:

DATE: TIME:
NAME:
DESIGNATION:
SIGNATURE:

COMPLETE ALL ACTIONS WITHIN ONE HOUR

01 INFORM SENIOR CLINICIAN

NOT ALL PATIENTS WITH RED FLAGS WILL NEED THE 'SEPSIS 6' URGENTLY. A SENIOR DECISION MAKER (ST3+ or equivalent) MAY SEEK ALTERNATIVE DIAGNOSES/ DE-ESCALATE CARE.

TIME

02 GIVE OXYGEN IF REQUIRED

START IF O_2 SATURATIONS LESS THAN 92% - AIM FOR O_2 SATURATIONS OF 94-98%
IF AT RISK OF HYPERCARBIA AIM FOR SATURATIONS OF 88-92%

TIME

03 SEND BLOODS INCLUDING CULTURES

BLOOD CULTURES, VBG, BLOOD GLUCOSE, LACTATE, FBC, U&Es, LFTs, CRP AND CLOTTING. LUMBAR PUNCTURE IF INDICATED, . CONSIDER RAPID PATHOGEN ID

TIME

04 GIVE IV ANTIBIOTICS, THINK SOURCE CONTROL

MAXIMUM DOSE BROAD SPECTRUM THERAPY (CONSIDER ESCALATION IF ALREADY ON ANTIBIOTICS)

CONSIDER: LOCAL POLICY /ALLERGY STATUS /ANTIVIRALS

EVALUATE NEED FOR IMAGING/ SPECIALIST REVIEW TO HELP IDENTIFY SOURCE

IF SOURCE AMENABLE TO DRAINAGE ENSURE ACHIEVED AS SOON AS POSSIBLE BUT ALWAYS WITHIN 12H

TIME

05 GIVE IV FLUIDS

GIVE BOLUS OF 500mL OVER 15 MINS IF LACTATE > 2mmol/L OR SBP < 90 mmHg. REPEAT IF NO

IMPROVEMENT, IF NO IMPROVEMENT AFTER SECOND BOLUS CALL SENIOR (ST3+) TO ATTEND

TIME

06 MONITOR

USE NEWS2. MEASURE URINARY OUTPUT: THIS MAY REQUIRE A URINARY CATHETER
REPEAT LACTATE AT LEAST HOURLY IF INITIAL LACTATE ELEVATED OR IF CLINICAL CONDITION CHANGES

TIME

IF WORSENING/ NOT IMPROVING AFTER ONE HOUR – ESCALATE TO CONSULTANT
REASSESS NEWS2 AT LEAST EVERY 30 MINS

RECORD ADDITIONAL NOTES HERE:
e.g. allergy status, arrival of specialist teams, de-escalation of care, delayed antimicrobial decision making, variance from Sepsis Six

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8.2 APPENDIX 2. PGD. HAEMATOLOGY USE ONLY.

Patient Group Direction for the administration of Piperacillin/tazobactam in suspected neutropenic sepsis within the Haematology Directorate

PGD review date	
Time of next review	3 years from above date
Expiry date	
Name of Medicine	Piperacillin/ tazobactam
Professionals to which PGD applies	Registered nurses working at Band 6 or senior band 5 employed within the Haematology Directorate at Cardiff & Vale University Health Board who have demonstrated competency
Clinical Director for Haematology / Specialist services	Dr Raza Alikhan Dr Thomas Holmes/ Dr Mike Stephens
On behalf of Cardiff & Vale University Health Board **Service Director for Pharmacy and Medicines Management**	Mr Timothy Banner  1/11/23
Medical Director	Professor Meriel Jenney  1/11/23
Executive Nurse Director	Mr Jason Roberts  01/11/2023

Clinical Condition	**Patient presenting with suspected untreated neutropenic sepsis**
Criteria for Inclusion	Patients who have received systemic anti-cancer treatment (oral, subcutaneous or intravenous chemotherapy) within the last 4 weeks and presenting suspected neutropenic sepsis, with any one of; pyrexial, hypotensive, tachycardia, hypothermic unwell or NEWS greater than 3. Patient known to be neutropenic due to pre-existing disorder (eg. bone marrow failure, cyclical neutropenia, leukaemia etc.) Patients receiving systemic immunosuppression following an allogenic bone marrow transplant Note: pregnant patients **may** be treated under the PGD if appropriate
Criteria for exclusion	Anaphylaxis or type 1 allergic reaction to penicillin, cephalosporin or betalactam containing antibiotic (eg. dizziness, shortness of breath, wheezing, bullous skin eruptions, swelling of eyes, lips, hands or feet and angioedema) Unable to ascertain allergy status Patient refusal Patient <14 years old Patient weight <40 kgs Patient receiving high dose methotrexate >1g/m^2
Seek further advice	Patient must be reviewed by medical team within 1 hour of presentation Contact medical team for urgent review if any of exclusion criteria are met May reduce excretion of methotrexate

Description of treatment	
Name of medicine	Piperacillin with Tazobactam combined 4.5g
Legal status of Medicine	POM (Prescription Only Medication)
Form	Powder for solution for infusion
Strength	4.5g in 50ml Sodium Chloride 0.9% when reconstituted
Dosage	4.5g
Total daily dose	Only first dose to be given under PGD
Route of administration	Intravenous infusion to be given over 30 minutes
Frequency of administration	Only first dose to be given under PGD
Duration of treatment	Only first dose to be given under PGD
Total treatment quantity	Only first dose to be given under PGD

Adverse reactions	□ See current BNF □ Diarrhoea □ Rash □ Vomiting
Written & verbal advice for patient/carer	□ Verbal information to be given to the patient
Follow up	Relevant medical team to review patient within 1 hour, prescribe aminoglycoside antibiotic if indicated within 1 hour and review blood results when available to make ongoing treatment decision/prescribe further doses
Arrangements for referral for medical advice	Refer to appropriate Doctor as required (ward/unit)
Records of administration for audit	Record following on applicable patient documents: □ description, quantity and time of administration □ signature of person administering medicine □ any adverse events □ Use Piperacillin/tazobactam PGD sticker on ‘stat’ dose prescription chart (see appendix 2)

Professional qualifications	NMC Registered Nurse
Training	Completion of Anaphylaxis training Competent in intravenous drug administration Completion of PGD competence framework and assessment, updated annually (See appendix 1)

Continuing education	Maintenance of personal education as outlined by NMC and legislation. Recognise own limitations and act accordingly. Demonstrates competency to initiate treatment, supply or administration of the medicine to which the PGD relates		
Signature of individual accepting responsibility and accountability to perform this PGD **Register to be maintained electronically**	Name	Date	Signature

Individual Record of Competence in using Patient Group Directive (PGD)

Neutropenic Sepsis Algorithm for
Piperacillin Tazobactam 4.5g PGD & Meropenem 1g PGD

Nurse's Name _____ **Signature/ Date** _____

Assessor's Name _____ **Signature/ Date** _____

Assessors must have relevant cancer nursing experience and have demonstrated their own competence in using this PGD

Date assessed as competent to administer intravenous medication:

Date completed ILS/ ALERT/ Anaphylaxis similar:

Before you attempt to work according to a PGD, you must:

- Have been deemed competent to administer intravenous medication at Cardiff and Vale UHB
- Completed Anaphylaxis training /ILS/ ALERT/ Similar of care of the unwell patient • Be able to identify which patients meet the inclusion criteria
- Be able to follow up and provide continued care of the patient following administration of Piperacillin-Tazobactam under the PGD or Meropenem PGD
- Know how to correctly document use of the PGD
- Be able to identify patients who are excluded from the PGD and how to manage them safely
- Be authorised by name under the current version. i.e. be on the register for this PGD

Individual Record of Competence in using Patient Group Directive (PGD)
Neutropenic Sepsis Algorithm for
Piperacillin - Tazobactam 4.5g PGD & Meropenem 1g PGD

Completion of this document demonstrates you have the appropriate skills and knowledge to work under this PGD. It should be completed with the guidance of your mentor and retained for future reference. Once you have completed it, you can be added to the PGD register.

A PGD, signed by a doctor and agreed by a pharmacist, can act as a direction to a nurse to supply and/or administer prescription-only medicines to patients using their own assessment of patient need, without necessarily referring back to a doctor for an individual prescription (RCN 2006).

The prescription and administration are documented on a pre-prepared sticker, which must be placed on the stat side of the drug chart.

Defining the clinical situation

Define suspected neutropenic sepsis?

Who needs to be informed that you have given first line Piperacillin-Tazobactam

Within what time scale should a doctor prescribe second line antibiotics for the patient?

A patient identifies they are allergic to Penicillin. Where would you look to confirm your decision to give (or not) Meropenem under the PGD?

If there is no documented allergy status or plan to administer IV Meropenem as an alternative to Piperacillin- tazobactam what would your actions be?

What is anaphylaxis?

What initial management would you instigate is anaphylaxis occurred?

Where would you look for sides effects of Piperacillin Tazobactam 4.5g or Meropenem 1g?

List your next steps following administration of Piperacillin Tazobactam 4.5 PGD or Meropenum 1g PGD:

A patient arrives on the unit from home at 01.15. They are 10 days post chemotherapy and have a temperature of 38.5°C, respiratory rate 30 rpm, heart rate 121 bpm, blood pressure 75/48mmHg, oxygen saturations 91% on air. What action would you take?

A patient arrives on the unit from home at 16.30. They had a bone marrow transplant 3 months ago and are currently taking systemic immunosuppression. They have a temperature of 38.2°C, respiratory rate 18rpm, heart rate 85 bpm, blood pressure 100/52mmHg, oxygen saturations 97% on air. What action would you take?

You assessing a patient prior to commencing the PGD pathway. The patient reports a rash in childhood with penicillin. What action would you take?

You assessing a patient prior to commencing the PGD pathway. The patient reports some wheezing after taking penicillin tablets. What action would you take?

When checking the patients allergy patients' allergy status prior to commencing the PGD pathway, the patient reports a rash when they have previously received Meropenem. Where would you look for advice and what action would you take?

Individual Record of Competence in using the Patient Group Directive (PGD) for the administration of intravenous Piperacillin - Tazobactam 4.5g PGD & Meropenem 1g

I confirm that I have the required skills and knowledge to use the above named PGD

Nurse's name/signature: _____ Date: _____

I have assessed the nurse named above as having the required skills and knowledge to use this PGD

The above nurse has:

- **Successfully completed this workbook**
- **Attended a 1:1 training session**
- **Been observed in clinical practice successfully apply the Sepsis pathway and initiating Piperacillin – Tazobactam 4.5g IV PGD and Meropenem 1g IV**

Assessor's name/signature:_____ Date: _____

Assessors must have relevant nursing experience and have demonstrated their own competence in using this PGD

Date assessed as competent to administer intravenous medication:
_____

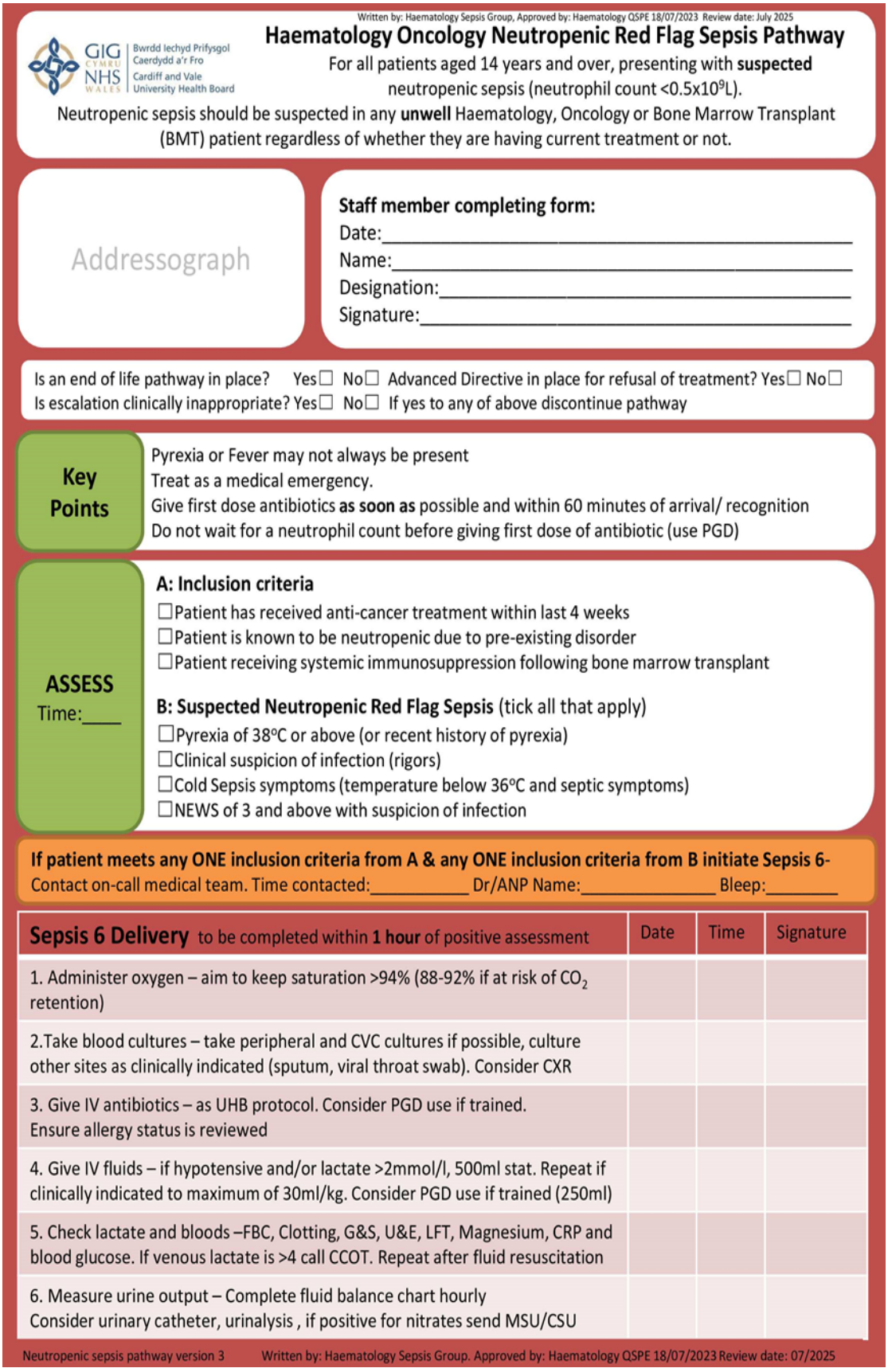
Practical Sign off for:
Individual Record of Competence in using Patient Group Directive (PGD) Neutropenic Sepsis Algorithm, Piperacillin - Tazobactam 4.5g PGD,

Name of Nurse:

Objective	Mentor Sign off, comment & date:	Nurse Sign off:
Correctly identifies sepsis and initiates Neutropenic Sepsis Pathway • Can demonstrate knowledge of inclusion criteria		
Undertakes First hour duties as per Sepsis 6 • Can provide rationale for excluding specific tasks if not complete • Escalates for more support when required		
Correctly identifies if patient should be excluded or not from Piperacillin-Tazobactam 4.5g IV PGD and meropenem 1g IV PGD • Checks allergy status • Age • Weight • Consent		
Able to access Welsh Clinical portal and identifies where allergy status is documented		
Informs medic and nurse in charge • Escalates for urgent assistance if required • Requests review within 60 minutes		
Correctly prepares Piperacillin – Tazobactam IV 4.5g/ meropenem IV 1gfor administration • Via IV infusion		
Administers Piperacillin – Tazobactam IV 4.5g/ meropenem IV 1g and documents correctly • Document of drug chart • Document on pathway • Document audit		
Monitors patient for side effects, and reviews Sepsis 6		
Can identify the following reference points: • Antibiotic Prescribing in Penicillin Allergy Poster • Copy of PGD • BNF		
Comments:		

Assessors must have relevant nursing experience and have demonstrated their own competence in using this PG

Tazocin® (Piperacillin/ Tazobactam)	4.5g	I.V.	Within 60 minutes of arrival	Given as per PGD. no contraindications Nurse print _____ Nurse sign _____



Written by: Haematology Sepsis Group, Approved by: Haematology QSPE 18/07/2023 Review date: July 2025

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Haematology Oncology Neutropenic Red Flag Sepsis Pathway

For all patients aged 14 years and over, presenting with **suspected** neutropenic sepsis (neutrophil count <0.5x10^{9}L).

Neutropenic sepsis should be suspected in any **unwell** Haematology, Oncology or Bone Marrow Transplant (BMT) patient regardless of whether they are having current treatment or not.

Addressograph

Staff member completing form:

Date:_____

Name:_____

Designation:_____

Signature:_____

Is an end of life pathway in place? Yes☐ No☐ Advanced Directive in place for refusal of treatment? Yes☐ No☐

Is escalation clinically inappropriate? Yes☐ No☐ If yes to any of above discontinue pathway

Key Points

Pyrexia or Fever may not always be present

Treat as a medical emergency.

Give first dose antibiotics **as soon as** possible and within 60 minutes of arrival/ recognition

Do not wait for a neutrophil count before giving first dose of antibiotic (use PGD)

ASSESS

Time:____

A: Inclusion criteria

☐Patient has received anti-cancer treatment within last 4 weeks

☐Patient is known to be neutropenic due to pre-existing disorder

☐Patient receiving systemic immunosuppression following bone marrow transplant

B: Suspected Neutropenic Red Flag Sepsis (tick all that apply)

☐Pyrexia of 38ºC or above (or recent history of pyrexia)

☐Clinical suspicion of infection (rigors)

☐Cold Sepsis symptoms (temperature below 36ºC and septic symptoms)

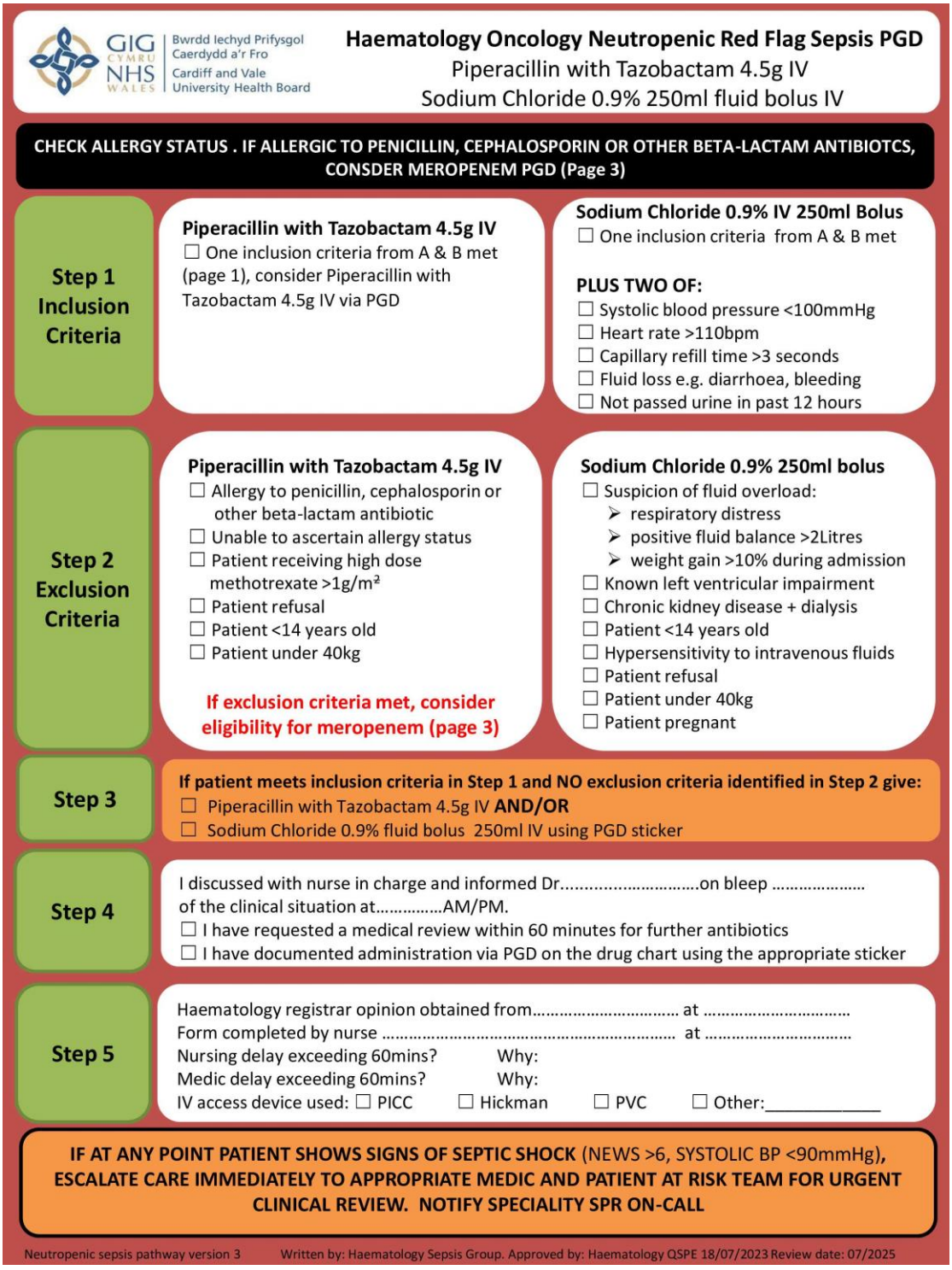
☐NEWS of 3 and above with suspicion of infection

If patient meets any ONE inclusion criteria from A & any ONE inclusion criteria from B initiate Sepsis 6-

Contact on-call medical team. Time contacted:_____ Dr/ANP Name:_____ Bleep:_____

Sepsis 6 Delivery to be completed within **1 hour** of positive assessment	Date	Time	Signature
1. Administer oxygen – aim to keep saturation >94% (88-92% if at risk of CO_2 retention)			
2.Take blood cultures – take peripheral and CVC cultures if possible, culture other sites as clinically indicated (sputum, viral throat swab). Consider CXR			
3. Give IV antibiotics – as UHB protocol. Consider PGD use if trained. Ensure allergy status is reviewed			
4. Give IV fluids – if hypotensive and/or lactate >2mmol/l, 500ml stat. Repeat if clinically indicated to maximum of 30ml/kg. Consider PGD use if trained (250ml)			
5. Check lactate and bloods –FBC, Clotting, G&S, U&E, LFT, Magnesium, CRP and blood glucose. If venous lactate is >4 call CCOT. Repeat after fluid resuscitation			
6. Measure urine output – Complete fluid balance chart hourly Consider urinary catheter, urinalysis , if positive for nitrates send MSU/CSU			

Neutropenic sepsis pathway version 3 Written by: Haematology Sepsis Group. Approved by: Haematology QSPE 18/07/2023 Review date: 07/2025



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Cardiff and Vale University Health Board

Haematology Oncology Neutropenic Red Flag Sepsis PGD
Piperacillin with Tazobactam 4.5g IV
Sodium Chloride 0.9% 250ml fluid bolus IV

CHECK ALLERGY STATUS . IF ALLERGIC TO PENICILLIN, CEPHALOSPORIN OR OTHER BETA-LACTAM ANTIBIOTCS, CONSDER MEROPENEM PGD (Page 3)

Step 1 Inclusion Criteria

Piperacillin with Tazobactam 4.5g IV
☐ One inclusion criteria from A & B met (page 1), consider Piperacillin with Tazobactam 4.5g IV via PGD

Sodium Chloride 0.9% IV 250ml Bolus
☐ One inclusion criteria from A & B met

PLUS TWO OF:
☐ Systolic blood pressure <100mmHg
☐ Heart rate >110bpm
☐ Capillary refill time >3 seconds
☐ Fluid loss e.g. diarrhoea, bleeding
☐ Not passed urine in past 12 hours

Step 2 Exclusion Criteria

Piperacillin with Tazobactam 4.5g IV
☐ Allergy to penicillin, cephalosporin or other beta-lactam antibiotic
☐ Unable to ascertain allergy status
☐ Patient receiving high dose methotrexate >1g/m²
☐ Patient refusal
☐ Patient <14 years old
☐ Patient under 40kg

If exclusion criteria met, consider eligibility for meropenem (page 3)

Sodium Chloride 0.9% 250ml bolus
☐ Suspicion of fluid overload:
- ➢ respiratory distress
- ➢ positive fluid balance >2Litres
- ➢ weight gain >10% during admission

☐ Known left ventricular impairment
☐ Chronic kidney disease + dialysis
☐ Patient <14 years old
☐ Hypersensitivity to intravenous fluids
☐ Patient refusal
☐ Patient under 40kg
☐ Patient pregnant

Step 3

If patient meets inclusion criteria in Step 1 and NO exclusion criteria identified in Step 2 give:
☐ Piperacillin with Tazobactam 4.5g IV **AND/OR**
☐ Sodium Chloride 0.9% fluid bolus 250ml IV using PGD sticker

Step 4

I discussed with nurse in charge and informed Dr.....on bleep ..... of the clinical situation at.....AM/PM.
☐ I have requested a medical review within 60 minutes for further antibiotics
☐ I have documented administration via PGD on the drug chart using the appropriate sticker

Step 5

Haematology registrar opinion obtained from..... at .....
Form completed by nurse ..... at .....
Nursing delay exceeding 60mins? Why:
Medic delay exceeding 60mins? Why:
IV access device used: ☐ PICC ☐ Hickman ☐ PVC ☐ Other:_____

IF AT ANY POINT PATIENT SHOWS SIGNS OF SEPTIC SHOCK (NEWS >6, SYSTOLIC BP <90mmHg), **ESCALATE CARE IMMEDIATELY TO APPROPRIATE MEDIC AND PATIENT AT RISK TEAM FOR URGENT CLINICAL REVIEW. NOTIFY SPECIALITY SPR ON-CALL**

Neutropenic sepsis pathway version 3 Written by: Haematology Sepsis Group. Approved by: Haematology QSPE 18/07/2023 Review date: 07/2025

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Bwrdd Iechyd Prifysgol Caerdydd a'r Fro
Cardiff and Vale University Health Board

Haematology Oncology Neutropenic Red Flag Sepsis
Patient Reassessment and Medical Review

RE-ASSESS PATIENT
Time:____

☐ Repeat observations/ NEWS assessment following Sepsis 6 Care Duties and review

If after delivering the Sepsis Six, patient still has:

- ☐ Systolic blood pressure < 90mmHg
- ☐ Reduced level of consciousness despite resuscitation
- ☐ Respiratory rate over 25 breaths per minute
- ☐ Lactate >4mmol/L or not reducing
- ☐ Patient clearly critically ill at any time

ESCALATE – CALL PATIENT AT RISK TEAM AND SPECIALITY SPR

MEDICAL REVIEW
Time:____

Name: **Position:** **Bleep:**

Neutropenic sepsis pathway version 3 Written by: Haematology Sepsis Group. Approved by: Haematology QSPE 18/07/2023 Review date: 07/2025

8.3 APPENDIX 3. NEWS-2

(updated NEWS charts will be place across the UHB from June 25)

Addressograph

NEWS CHART

Ward / Dept

Score	1	2	3

Date																				
Time of Observation																				
Frequency of Observations																				
Respiratory Rate	≥25																			
	21-24																			
Accept < ..... / >.....	12-20																			
	9-11																			
Signed:	≤8																			
O2 Saturations	≥96%																			
	94-95																			
Accept < ..... / >.....	92-93																			
Signed:	≤91																			
Inspired Oxygen																				
Temperature	≥39.1																			
	38.1-39																			
	36.1-38																			
	35.1-36																			
	≤35																			
Blood Pressure	≥220																			
	210-219																			
	200-209																			
Note record both systolic and diastolic pressures but use systolic only to score **Note:** In atrial fibrillation measure the BP manually	190-199																			
	180-189																			
	170-179																			
	160-169																			
	150-159																			
	140-149																			
	130-139																			
	120-129																			
	111-119																			
Accept systolic BP of ..... For this patient	101-110																			
	91-100																			
	80-90																			
	70-79																			
	60-69																			
Signed:	50-59																			
	40-49																			
Heart Rate	≥131																			
	121-130																			
	111-120																			
Accept Heart rate of .....bpm for as normal for this patient	101-110																			
	91-100																			
	81-90																			
	71-80																			
	61-70																			
	51-60																			
Signed:	41-50																			
	≤40																			
Neuro	Alert																			
	Voice																			
	Pain																			
	Unresponsive																			
Consider Glasgow Coma Score if any Neurological concerns																				
NEWS total score																				
OBS Performed by Initials																				
Qualified Nurse Initials																				

Cardiff and Vale Resuscitation Service

APPENDIX 3. NEWS-2 – Escalation.

NEWS CHART

	Physiological Parameters	3	2	1	0	1	2	3
A	Respiratory Rate (bpm)	≤8		9-11	12-20		21-24	25
B	O2 Saturations (%)	≤91	92-93	94-95	96			
	Any supplemental Oxygen		YES		NONE			
C	Systolic BP (mmHg)	≤90	91-100	101-110	111-219			220
	Pulse (BPM)	≤40		41-50	51-90	91-110	111-130	131
D	CAVPU score	C			ALERT			VPU
E	Temperature (°C)	≤35.0		35.1-36.0	36.1-38.0	38.1-39.0	39.1	

Concern about a patient should lead to escalation, regardless of the score.

NEWS	MINIMUM MONITORING	ALERT	REVIEW
Score 0-2	12 Hourly	If concerned inform Nurse in Charge (NIC)	
Score 3-5 **3 = THREAT!**	4 Hourly Increase frequency dependant on patient response	Inform Nurse in Charge, then immediately inform designated nurse/doctor	Review in 1 hour. SBAR
Score 6-8 **6 = SICK!**	1 Hourly	Inform Nurse in Charge, then immediately inform most senior designated nurse and doctor	Review within 30 minutes. SBAR
Score 9+ **9= NOW!**	30 mins	Inform Nurse in Charge, then Call Resuscitation Team via 2222	Immediate SBAR

The Nurse in Charge of each shift must ensure that the designated nurse/doctor names and bleep numbers are updated and clearly displayed on a Patient Status at a Glance Board (PSAG).

Frequency of Observations are increased in relation to the patients condition.
If there is any concern, please escalate regardless of the NEWS score.

RED FLAG SEPSIS SCREENING

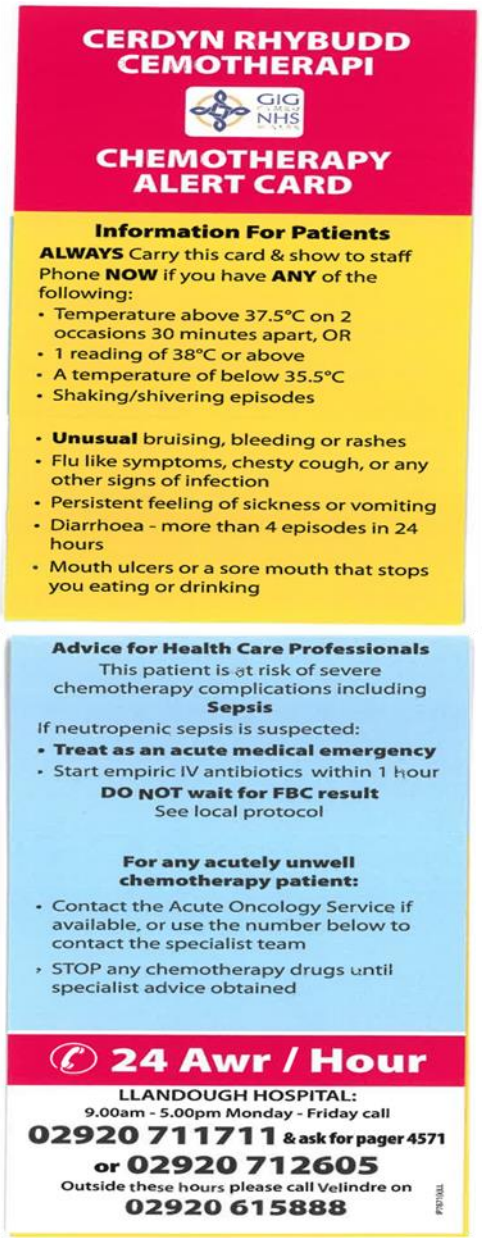
Use Sepsis Screening & action tool if NEWS is 3 or above and suspicion of infection plus any ONE of the following Red Flags

- ☐ Responds only to voice
- ☐ Systolic BP≤ 90mmHg (or drop from > 40 from normal)
- ☐ Heart rate > 130 per minute
- ☐ Respiratory rate ≥ 25 per minute
- ☐ Needs oxygen to keep Sa02 ≥ 92%
- ☐ Non-blanching rash, mottled, ashen, cyanotic
- ☐ Not passed urine in last 18 hours
- ☐ Urine output less than 0.5 mls/kg/hr
- ☐ Lactate ≥ 2 mmols/l
- ☐ Recent chemotherapy

RED FLAG SEPSIS - Start Sepsis 6 pathway NOW

NEWS version 2. Resuscitation Service 11/20

8.3 APPENDIX 4: Example of an Oncology Chemotherapy Alert Card



CERDYN RHYBUDD CEMOTHERAPI

GIG NHS

CHEMOTHERAPY ALERT CARD

Information For Patients

ALWAYS Carry this card & show to staff
Phone **NOW** if you have **ANY** of the following:

- Temperature above 37.5°C on 2 occasions 30 minutes apart, OR
- 1 reading of 38°C or above
- A temperature of below 35.5°C
- Shaking/shivering episodes

- **Unusual** bruising, bleeding or rashes
- Flu like symptoms, chesty cough, or any other signs of infection
- Persistent feeling of sickness or vomiting
- Diarrhoea - more than 4 episodes in 24 hours
- Mouth ulcers or a sore mouth that stops you eating or drinking

Advice for Health Care Professionals

This patient is at risk of severe chemotherapy complications including **Sepsis**

If neutropenic sepsis is suspected:

- **Treat as an acute medical emergency**
- Start empiric IV antibiotics within 1 hour

DO NOT wait for FBC result
See local protocol

For any acutely unwell chemotherapy patient:

- Contact the Acute Oncology Service if available, or use the number below to contact the specialist team
- STOP any chemotherapy drugs until specialist advice obtained

24 Awr / Hour

LLANDOUGH HOSPITAL:
9.00am - 5.00pm Monday - Friday call
02920 711711 & ask for pager 4571
or **02920 712605**
Outside these hours please call Velindre on
02920 615888

8.4 APPENIDIX 5 – MASSC Scoring – ONCOLOGY PATIENTS ONLY.

Characteristic		Score
Age	≥ 60 years	0
	< 60 years	2
Patient dehydrated, requiring fluids?	Yes	0
	No	3
Patient systolic blood pressure	Systolic BP <90mmHg	0
	Systolic BP ≥90mmHg	5
Does the patient have COPD?	Yes	0
	No	4
Does the patient have a solid tumour or no previous fungal infection in a haematological malignancy?	Solid tumour or no previous fungal infection in a haematological malignancy	4
	Haematological malignancy with previous fungal infection	0
Does the patient have symptoms related to this infective neutropenic episode?	None or mild symptoms	5
	Moderate symptoms	3
	Severe symptoms	0
Was the patient already an inpatient before this episode of infective neutropenia?	Admitted with this episode	3
	Already an inpatient	0

Patients with a score of < 21 = HIGH RISK of complications (consider IV antibiotic therapy)

Patients with a score of ≥ 21 = LOW RISK of complications. (consider oral antibiotic therapy and early discharge if fits criteria-see appendix six)

Note: scoring attributed to 'symptoms related to this infective neutropenic episode' is not cumulative; therefore, the maximum theoretical score is 26.

MASSC <21=HIGH RISK

Review microbiological cultures and sensitivities; seek advice from microbiology if needed. Consider IV to PO switch after 48 hours of treatment in patients whose risk of developing septic complications has been reassessed as low.

Consider discharge for this group of patients after patients' risk of developing septic complications has been reassessed as low.

MASSC ≥21=LOW RISK

After switching to oral antibiotics, consider discharge if the patient remains afebrile and stable for 24 hours, and fits early discharge criteria (See appendix six). Review microbiological cultures and sensitivities; seek advice from microbiology if needed.

8.6 APPENDIX 6: Assessment for early discharge: Oncology Patients ONLY.

Criteria for early discharge:

There is evidence to support early discharge in **low risk** patients after a **minimum of 24 hours in hospital** (Naurois et al. 2010). They must be clinically stable, symptomatically better and meet the criteria for early discharge (See below).

For low risk patients who are clinically stable and symptomatically well, if the following criteria are met you can consider early discharge:

- Does the patient have someone at home to support them?
- Does the patient have access to a telephone?
- Does the patient have access to transport if required?
- Does the patient live within a 30 minute travel time from the hospital?
- Is the patient registered with a GP surgery or health centre?

8.7 APPENDIX 7. Post exposure to infectious diseases

If you suspect a patient has come into contact with an infectious disease you can contact the Microbiology or Virology department at UHW for advice if you have any concerns. There is somebody available from both departments to provide telephone advice 24 hours a day, 7 days a week. Out of hours the service is provided via a non-resident on call system. Urgent queries out of hours should be dealt with immediately. Non-urgent queries should be dealt with during working hours of the next working day.

Advice regarding treatment can also be sought using the Green book, Immunisations against disease. Available from:

https://www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book

If the patient has been admitted to VCC and they have been in contact with an infectious disease please isolate the patient, contact Microbiology or Virology department at UHW for advice and inform the infection control team.

8.9 APPENDIX 8. Equality & Health Impact Assessment

Equality & Health Impact Assessment for

MANAGEMENT OF SUSPECTED AND PROVEN NEUTROPENIC SEPSIS POLICY (EXCLUDES PATIENTS WITH HAEMATOLOGICAL MALIGNANCY)

Please read the Guidance Notes in Appendix 1 prior to commencing this Assessment

Please note:

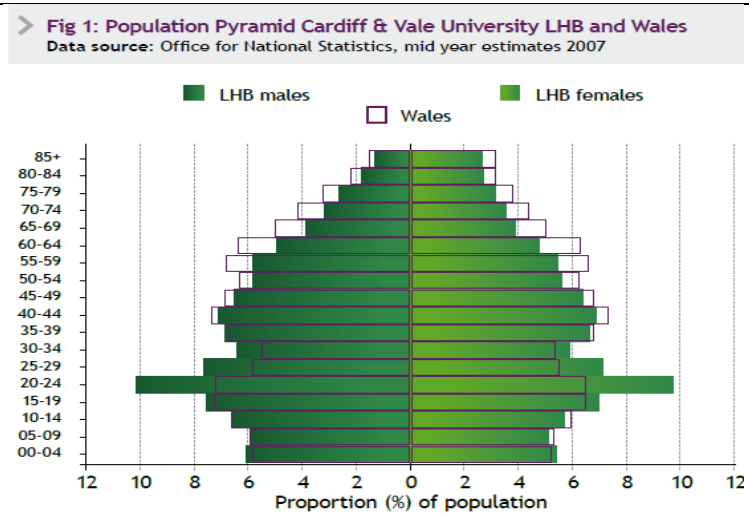
- The completed Equality & Health Impact Assessment (EHIA) must be
  - Included as an appendix with the cover report when the strategy, policy, plan, procedure and/or service change is submitted for approval
  - Published on the UHB intranet and internet pages as part of the consultation (if applicable) and once agreed.
- Formal consultation must be undertaken, as required[1]
- Appendices 1-3 must be deleted prior to submission for approval

Please answer all questions:-

1.	For service change, provide the title of the Project Outline Document or Business Case and Reference Number	*MANAGEMENT OF SUSPECTED AND PROVEN NEUTROPENIC SEPSIS POLICY*

[1] http://nww.cardiffandvale.wales.nhs.uk/portal/page?_pageid=253,73860407,253_73860411&_dad=portal&_schema=PORTAL

2.	Name of Clinical Board / Corporate Directorate and title of lead member of staff, including contact details	Haematology Dr Jonathan Kell Jonathan.kell@wales.nhs.uk (EHIA Assessment completed by Diane Parry) Acute Oncology – Dr Juliette Lewis Jones Juliette.Lewis-Jones@wales.nhs.uk
3.	Objectives of strategy/ policy/ plan/ procedure/ service	To provide a rationale and practical framework for the treatment and care of patients with NS. -Assist clinical staff with diagnosing NS -Initial management of patients with suspected/confirmed NS -Clinical management of patients with confirmed NS -To comply with NICE guidelines on NS
4.	Evidence and background information considered. For example • population data • staff and service user's data, as applicable • needs assessment • engagement and involvement findings • research • good practice guidelines • participant knowledge • list of stakeholders and how stakeholders have engaged in the development stages • comments from those involved in the designing and development stages	Cardiff & Vale University Local Health Board (LHB) area is the smallest and most densely populated LHB area in Wales, primarily due to Wales' capital city: Cardiff. 72.1 and 27.9 percent of the LHB area population live within Cardiff and the more rural Vale of Glamorgan respectively

	Population pyramids are available from Public Health Wales Observatory[2] and the UHB's 'Shaping Our Future Wellbeing' Strategy provides an overview of health need[3].	 • The UHB's usual arrangement with regard to consultation was followed (ie. 28 days on the intranet). No comments were received. • As part of good practice other policies from different organisations were considered. • Stakeholders engaged in the policy development(ns working group) • NICE guidelines considered • Data protection • Microguide

[2] http://nww2.nphs.wales.nhs.uk:8080/PubHObservatoryProjDocs.nsf
[3] http://www.cardiffandvaleuhb.wales.nhs.uk/the-challenges-we-face

		• Prescribing guides
5.	Who will be affected by the strategy/ policy/ plan/ procedure/ service	The policy applies to all UHB staff involved in the care of patients with NS. Applicable to patients aged 16 and over.

7. EQIA / How will the strategy, policy, plan, procedure and/or service impact on people?

Questions in this section relate to the impact on people on the basis of their 'protected characteristics'. Specific alignment with the 7 goals of the Well-being of Future Generations (Wales) Act 2015 is included against the relevant sections.

How will the strategy, policy, plan, procedure and/or service impact on:-	**Potential positive and/or negative impacts**	**Recommendations for improvement/ mitigation**	**Action taken by Clinical Board / Corporate Directorate.** Make reference to where the mitigation is included in the document, as appropriate
6.1 Age For most purposes, the main categories are: • under 16; • between 16 and 65; and • over 65	• Between 16 and 65 • Over 65 • No documented evidence found from the assessment review of the information available on the date the search was performed to suggest that there are any statements, condition, rules or requirements which could potentially exclude or where applied cause an adverse impact	• Mitigates under 16	n/a

How will the strategy, policy, plan, procedure and/or service impact on:-	Potential positive and/or negative impacts	Recommendations for improvement/ mitigation	Action taken by Clinical Board / Corporate Directorate. Make reference to where the mitigation is included in the document, as appropriate
	against any group of individuals in respect of age.		
6.2 Persons with a disability as defined in the Equality Act 2010 Those with physical impairments, learning disability, sensory loss or impairment, mental health conditions, long-term medical conditions such as diabetes	The UHB is aware from its demographic information that it employs staff who have disabilities as defined within the Act. As such, the Policy has been made accessible to staff in both electronic and paper copy.	n/a	n/a
6.3 People of different genders:	There appears not to be any impact on staff regarding gender. No	n/a	Policy put out for consultation within the organisation

How will the strategy, policy, plan, procedure and/or service impact on:-	**Potential positive and/or negative impacts**	**Recommendations for improvement/ mitigation**	**Action taken by Clinical Board / Corporate Directorate.** Make reference to where the mitigation is included in the document, as appropriate
Consider men, women, people undergoing gender reassignment **NB** Gender-reassignment is anyone who proposes to, starts, is going through or who has completed a process to change his or her gender with or without going through any medical procedures. Sometimes referred to as Trans or Transgender	documented evidence found from the assessment review of the information available on the date the search was performed to suggest that there are any statements, condition, rules or requirements which could potentially exclude or where applied cause an adverse impact against any group of individuals in respect of gender.		

How will the strategy, policy, plan, procedure and/or service impact on:-	**Potential positive and/or negative impacts**	**Recommendations for improvement/ mitigation**	**Action taken by Clinical Board / Corporate Directorate.** Make reference to where the mitigation is included in the document, as appropriate
6.4 People who are married or who have a civil partner.	There appears not to be any impact. No documented evidence found from the assessment review of the information available on the date the search was performed to suggest that there are any statements, condition, rules or requirements which could potentially exclude or where applied cause an adverse impact against any group of individuals in respect of sexual orientation.	n/a	Policy put out for consultation within the organisation
6.5 Women who are expecting a baby, who are on a break from work after having a baby, or who are breastfeeding. They are	There appears not to be any impact.	n/a	n/a

How will the strategy, policy, plan, procedure and/or service impact on:-	Potential positive and/or negative impacts	Recommendations for improvement/ mitigation	Action taken by Clinical Board / Corporate Directorate. Make reference to where the mitigation is included in the document, as appropriate
protected for 26 weeks after having a baby whether or not they are on maternity leave.			
6.6 People of a different race, nationality, colour, culture or ethnic origin including non-English speakers, gypsies/travellers, migrant workers	There appears not to be any impact regarding race, nationality, colour, culture or ethnic origin. No documented evidence found from the assessment review of the information available on the date the search was performed to suggest that there are any statements, condition, rules or requirements which could potentially exclude or where applied cause an adverse	Whilst there doesn't appear to be any impact, if a member of staff was known to have difficulties with the written word, good management would dictate that alternative arrangements be made, such as individual meetings. Members of the public would be supported by staff or family members as appropriate	All departments to be aware of their staff profiles. Policy put out for consultation within the organisation

How will the strategy, policy, plan, procedure and/or service impact on:-	**Potential positive and/or negative impacts**	**Recommendations for improvement/ mitigation**	**Action taken by Clinical Board / Corporate Directorate.** Make reference to where the mitigation is included in the document, as appropriate
	impact against any group of individuals in respect of race		
6.7 People with a religion or belief or with no religion or belief. The term 'religion' includes a religious or philosophical belief	It is unlikely to be any impact on staff regarding their religion.	n/a	n/a
6.8 People who are attracted to other people of: • the opposite sex (heterosexual); • the same sex (lesbian or gay); • both sexes (bisexual)	There appears not to be any impact on staff or patients.		Policy put out for consultation within the organisation

How will the strategy, policy, plan, procedure and/or service impact on:-	**Potential positive and/or negative impacts**	**Recommendations for improvement/ mitigation**	**Action taken by Clinical Board / Corporate Directorate.** Make reference to where the mitigation is included in the document, as appropriate
6.9 People who communicate using the Welsh language in terms of correspondence, information leaflets, or service plans and design Well-being Goal – A Wales of vibrant culture and thriving Welsh language	Bilingually patient information leaflets are available for patients. This is in line with our current Welsh Language Scheme and the future Welsh Language Standards. The leaflets are available in one the leaflet should be bilingual in one single document English on one side and Welsh on the other side. The aim of the 'active offer' is that staff should ask for the language choice (of either Welsh or English) of the patient. The language choice should then be integrated into the patient's treatment. In other words the	n/a	Policy put out for consultation within the organisation

How will the strategy, policy, plan, procedure and/or service impact on:-	Potential positive and/or negative impacts	Recommendations for improvement/ mitigation	Action taken by Clinical Board / Corporate Directorate. Make reference to where the mitigation is included in the document, as appropriate
	patient could request their treatment be in Welsh. If we are unable to provide a fully Welsh language service for the patient, we should then aim to maximise the coverage of treatment and care in Welsh for them using the staff and resources we already have.		
6.10 People according to their income related group: Consider people on low income, economically inactive, unemployed/workless, people who are unable to work due to ill-health	There appears not to be any impact	n/a	n/a

How will the strategy, policy, plan, procedure and/or service impact on:-	**Potential positive and/or negative impacts**	**Recommendations for improvement/ mitigation**	**Action taken by Clinical Board / Corporate Directorate.** Make reference to where the mitigation is included in the document, as appropriate
6.11 People according to where they live: Consider people living in areas known to exhibit poor economic and/or health indicators, people unable to access services and facilities	There appears not to be any impact on staff, and this policy has a positive impact on people on low income as the policy is applicable to all people.	n/a	Policy put out for consultation within the organisation
6.12 Consider any other groups and risk factors relevant to this strategy, policy, plan, procedure and/or service	People who speak other languages other than Welsh or English will be impacted positively as the policy refers to issues of language accessibility. There are no other groups including Carers or risk factors to take into account with regard to this Policy.	n/a	Policy put out for consultation within the organisation

8. HIA / How will the strategy, policy, plan, procedure and/or service impact on the health and well-being of our population and help address inequalities in health?

Questions in this section relate to the impact on the overall health of individual people and on the impact on our population. Specific alignment with the 7 goals of the Well-being of Future Generations (Wales) Act 2015 is included against the relevant sections.

How will the strategy, policy, plan, procedure and/or service impact on:-	**Potential positive and/or negative impacts and any particular groups affected**	**Recommendations for improvement/ mitigation**	**Action taken by Clinical Board / Corporate Directorate** Make reference to where the mitigation is included in the document, as appropriate
7.1 People being able to access the service offered: Consider access for those living in areas of deprivation and/or those experiencing health inequalities Well-being Goal - A more equal Wales	The aim is to standardise care for patients with NS based on national evidence based guidelines	n/a	n/a
7.2 People being able to improve /maintain healthy lifestyles: Consider the impact on healthy lifestyles, including healthy eating, being active,	As a policy, there will be no impact.	n/a	n/a

How will the strategy, policy, plan, procedure and/or service impact on:-	Potential positive and/or negative impacts and any particular groups affected	Recommendations for improvement/ mitigation	Action taken by Clinical Board / Corporate Directorate Make reference to where the mitigation is included in the document, as appropriate
no smoking /smoking cessation, reducing the harm caused by alcohol and /or non-prescribed drugs plus access to services that support disease prevention (eg immunisation and vaccination, falls prevention). Also consider impact on access to supportive services including smoking cessation services, weight management services etc Well-being Goal – A healthier Wales			
7.3 People in terms of their income and employment status: Consider the impact on the availability and accessibility	• May enable patients with NS to go home sooner	n/a	n/a

How will the strategy, policy, plan, procedure and/or service impact on:-	Potential positive and/or negative impacts and any particular groups affected	Recommendations for improvement/ mitigation	Action taken by Clinical Board / Corporate Directorate Make reference to where the mitigation is included in the document, as appropriate
of work, paid/ unpaid employment, wage levels, job security, working conditions Well-being Goal – A prosperous Wales			
7.4 People in terms of their use of the physical environment: Consider the impact on the availability and accessibility of transport, healthy food, leisure activities, green spaces; of the design of the built environment on the physical and mental health of patients, staff and visitors; on air quality, exposure to pollutants; safety of neighbourhoods, exposure to crime; road safety and	For this policy, there will be no impact.	n/a	n/a

How will the strategy, policy, plan, procedure and/or service impact on:-	Potential positive and/or negative impacts and any particular groups affected	Recommendations for improvement/ mitigation	Action taken by Clinical Board / Corporate Directorate Make reference to where the mitigation is included in the document, as appropriate
preventing injuries/accidents; quality and safety of play areas and open spaces Well-being Goal – A resilient Wales			
7.5 People in terms of social and community influences on their health: Consider the impact on family organisation and roles; social support and social networks; neighbourliness and sense of belonging; social isolation; peer pressure; community identity; cultural and spiritual ethos Well-being Goal – A Wales of cohesive communities	Positive impact for patients with NS potentially being able to go home sooner		

How will the strategy, policy, plan, procedure and/or service impact on:-	**Potential positive and/or negative impacts and any particular groups affected**	**Recommendations for improvement/ mitigation**	**Action taken by Clinical Board / Corporate Directorate** Make reference to where the mitigation is included in the document, as appropriate
7.6 People in terms of macro-economic, environmental and sustainability factors: Consider the impact of government policies; gross domestic product; economic development; biological diversity; climate Well-being Goal – A globally responsible Wales	Welsh Government Policy		

Please answer question 8.1 following the completion of the EHIA and complete the action plan

8.1 Please summarise the potential positive and/or negative impacts of the strategy, policy, plan or service	The positive impacts of the policy are that patients will get a standardised evidence based approach to their management to comply with NICE guidelines and it will enable eligible patients to go home sooner. Has the potential to improve morbidity and mortality rates from NS by getting their treatment sooner. Overall, there appears to be very limited impact on the protected characteristics and health inequalities as a result of this policy.

Action Plan for Mitigation / Improvement and Implementation

	Action	Lead	Timescale	Action taken by Clinical Board / Corporate Directorate
8.2 What are the key actions identified as a result of completing the EHIA?	None	n/a	n/a	

	Action	Lead	Timescale	Action taken by Clinical Board / Corporate Directorate
8.3 Is a more comprehensive Equalities Impact Assessment or Health Impact Assessment required? This means thinking about relevance and proportionality to the Equality Act and asking: is the impact significant enough that a more formal and full consultation is required?	As there has been potentially very limited impact identified is unnecessary to undertake a more detailed assessment.	n/a	n/a	

	Action	Lead	Timescale	Action taken by Clinical Board / Corporate Directorate
8.4 What are the next steps? Some suggestions:- • Decide whether the strategy, policy, plan, procedure and/or service proposal: o continues unchanged as there are no significant negative impacts o adjusts to account for the negative impacts o continues despite potential for adverse impact or missed opportunities to advance equality (set out the justifications for doing so) o stops. • Have your strategy, policy, plan, procedure and/or service proposal approved • Publish your report of this impact assessment • Monitor and review	On reviewing this policy minor positive changes have been made. The EHIA has been consulted. When this policy is reviewed, this EHIA will form part of that consultation exercise. This EHIA will be reviewed three years after approval unless changes to terms and conditions, legislation or best practice determine that an earlier review is required. The UHB standard is that all policies are reviewed within 3 years (1 year if a statutory requirement).	Dr Parry Dr J Kell Dr Juliette Lewis - Jones	6 months 3 years	