

PARENTERAL NUTRITION (PN) ADMINISTRATION POLICY FOR ADULT PATIENTS

		POLICY
Reference	CPG-TW-NUT-PN	
Approving Body	Nutrition & Hydration Steering Group	
Date Approved	1 st November 2022	
For publication to external SFH website	Positive confirmation received from the approving body that the content does not risk the safety of patients or the public:	
	YES	NO
	X	
Issue Date	30 th November 2022	
Version	v6.0	
Summary of Changes from Previous Version Author to complete	Scheduled review/ update undertaken with minor amends made in-line with current practice.	
Supersedes	v5.0, issued 2 nd September 2019 to Review Date November 2022 (ext ¹)	
Document Category	<ul style="list-style-type: none"> Clinical 	
Consultation Undertaken	<ul style="list-style-type: none"> Shila Hamzepur, Nutrition Lead Pharmacist Catherine Fletcher, Specialist Pharmacist Dietetic Department Chris Smith, Vascular Access Lead 	
Date of Completion of Equality Impact Assessment	Enter date assessment was undertaken. 16.11.22	
Date of Environmental Impact Assessment (if applicable)	Enter date assessment was undertaken. 16.11.22	
Legal and/or Accreditation Implications	This policy is required by the trust to support implementation and compliance with recognised safe practice in accordance with national guidelines and Patient Safety Alerts	
Target Audience	All clinical trust staff that treat and care for adults being considered for or requiring PN	
Review Date	November 2025	
Sponsor (Position)	Dr Foley, Nutrition Lead, Consultant Gastroenterologist	
Author (Position & Name)	<ul style="list-style-type: none"> Katie Townsend, Advanced Dietetic Practitioner Jenna Parsons, Nutrition Nurse Specialist 	
Lead Division/ Directorate	CSTO	
Lead Specialty/ Service/ Department	Therapy Services/ Nutrition and Dietetics Team	
Position of Person able to provide Further Guidance/Information	Consultant Gastroenterologist	
Associated Documents/ Information		Date Associated Documents/ Information was reviewed
1. PN prescription		February 2019

CONTENTS

Item	Title	Page
1.0	INTRODUCTION	3
2.0	POLICY STATEMENT	3
3.0	DEFINITIONS/ ABBREVIATIONS	3-4
4.0	ROLES AND RESPONSIBILITIES	4
5.0	APPROVAL	5
6.0	DOCUMENT REQUIREMENTS (POLICY NARRATIVE)	5-12
6.1	Nutrition Assessment	5
6.2	Venous Access for PN	5
6.3	Prescribing Guidelines for PN	7
6.4	Altering the Rate of Infusion	7
6.5	Blood / Fluid Monitoring of PN	7
6.6	Nursing Monitoring of Patients Receiving PN	9
6.7	Complications of PN	9
6.8	Important Notes	11
6.9	Home Parenteral Nutrition (HPN)	11
7.0	MONITORING COMPLIANCE AND EFFECTIVENESS	13
8.0	TRAINING AND IMPLEMENTATION	14
9.0	IMPACT ASSESSMENTS	14
10.0	EVIDENCE BASE (Relevant Legislation/ National Guidance) and RELATED SFHFT DOCUMENTS	14-15
11.0	KEYWORDS	15
12.0	APPENDICES	
Appendix A	Representational Copy of the Trust's Parenteral Nutrition Prescription	16
Appendix B	Equality Impact Assessment	17-18
Appendix C	Environment Impact Assessment	19

1.0 INTRODUCTION

Parenteral nutrition (PN) is the intravenous administration of a solution containing amino acids, glucose, fat, electrolytes, trace elements and vitamins as treatment for patients with non-functioning gut. Parenteral nutrition may be given as a sole source of nutrition or in conjunction with enteral nutrition, to meet a patient's nutritional requirements.

If the gut works - use it. Enteral feeding should always be the first route of choice as it is safer in terms of mechanical, septic and metabolic complications.

Parenteral Nutrition (PN) is used in preference to enteral feeding only when the gastro-intestinal tract is inaccessible, non-functioning or unable to absorb sufficient nutrients (NICE 2006)

Parenteral nutrition should be considered if:

- The gastro-intestinal (GI) tract is not functioning and it is anticipated that it will remain non-functional.
- All methods of enteral nutrition have been ruled out.
- Complete bowel rest is required.
- Total nutrient requirements cannot be met via oral or enteral routes.

Parenteral nutrition has a high risk of associated technical, metabolic, haemodynamic and septic complications. Therefore, when administering PN, special care must be taken to prevent and detect complications.

2.0 POLICY STATEMENT

This policy is intended to provide evidenced based care across the organisation for patients being considered for or requiring PN.

3.0 DEFINITIONS/ ABBREVIATIONS

The Trust (SFHFT):	Sherwood Forest Hospitals NHS Foundation Trust
Staff:	All employees of the Trust including those managed by a third party organisation on behalf of the Trust
PN	Parenteral nutrition
TPN	Total parenteral nutrition
EN	Enteral nutrition
ONS	Oral nutritional supplements
NJ	Nasojejunal
NG	Nasogastric
BG	Blood glucose
CVAD	Central venous access device
PICC	Peripherally inserted central catheter

CVC	Central venous catheter
Hickman Line	Skin tunnelled central venous catheter
HPN	Home parenteral nutrition
NST	Nutrition support team
Managing/ responsible clinician	Consultant/registrar managing the patients care.

4.0 ROLES AND RESPONSIBILITIES

Responsibly for ensuring the application of this policy lies with the Clinical Chair, Head of Nursing, Divisional Manager and Matron of each division

Nutrition and Hydration Steering Group

- The Nutrition and Hydration Steering Group is accountable to the Trust Board via the Patient Safety and Quality Group and will send activity reports to the Harms free Operational Group and Nursing, Midwifery and AHP Group.

Medical Staff

- Clinical chairs are responsible for ensuring the dissemination and implementation of this policy within Divisions.

Dietitian

- Dietitians are responsible for ensuring the dissemination and implementation of this policy within their clinical areas.

Matrons/ Sister/Charge Nurses

- Matrons/ Sister/Charge Nurses are responsible for ensuring the dissemination and implementation of this policy within their clinical ward areas.

Registered Nursing Staff

- Registered nursing staff are responsible for ensuring implementation and compliance with this policy.

Pharmacists

- Pharmacists are responsible for ensuring the dissemination and implementation of this policy within their clinical areas.

Nutrition Support Team (NST)

- The NST is responsible for the management of PN alongside the patients managing clinician. The NST consists of consultant gastroenterologist, nutrition nurse specialist, dietitian and pharmacist.

5.0 APPROVAL

Following consultation, this policy has been approved by the Trust’s Nutrition and Hydration Steering Group.

6.0 DOCUMENT REQUIREMENTS (POLICY NARRATIVE)

6.1 Nutrition Assessment

All patients are screened on admission using the MUST screening tool and a nutritional care plan implemented where appropriate. Patients unable to meet their nutritional requirements through oral or enteral routes or who have a non-functioning or inaccessible GI tract should be considered for PN and referred by a member of the clinical team to the Dietetic via ICE referral.

Pharmacist	3169
Specialist Dietitian	4034/vocera
Nutrition Nurse Specialist	4459/mobile
Consultant Gastroenterologist and Nutrition Support Team Lead/Service Lead	3545/6105

PN should be anticipated and a referral made to the NST as early in the day as possible to allow timely assessment of suitability for PN.

PN is not considered an emergency and cannot be commenced without an assessment by the NST (i.e., out of hours/at the weekend)

If after assessment from the team, PN is indicated, insertion of an appropriate Central Venous Access Device (CVAD) will need to be arranged by the managing clinician.

6.2 Venous Access for PN

Do **not** use peripheral access.

The following CVADs are suitable for the administration of PN:

- PICC
- CVC
- Hickman CVAD
- If a multi-lumen CVAD is used, **a dedicated lumen** must be allocated and labelled for PN use only

A current clotting screen and Full Blood Count must be available prior to the CVAD insertion taking place.

Risk factors to be considered:

- Previous neck, chest or breast surgery.
- Cervical mediastinal adenopathy
- Medication – anti-coagulants
- Previous Central Venous Catheter (CVC) placement
- Previous fractured clavicle
- Known venous anomalies
- Known venous congestion / blockage of existing sites.

Other considerations:

- Pre-existing infection.
- Mobility of patient, with regard to site of insertion, type and duration of catheterisation
- Can the patient be laid flat?

Ensure patients receive full information about:

- Procedure of inserting CVAD
- Reason for inserting CVAD
- Potential complications/risks

Prior to Insertion of the CVAD for PN – Ensure a consent form has been completed (See Trust’s Consent Policy; consent form 1 should be used for patients assessed as having capacity and consent form 4 for patients assessed as not having capacity).

All CVADs for PN are placed under complete aseptic technique within Critical Care Unit/Theatre. Please refer to the [Vascular Access Assistance Policy](#)

The patient does not usually require fasting for this procedure, but this should be confirmed with the clinician inserting the CVAD. The patient should wear a theatre gown and a pre-operative checklist will be completed. The CVAD tip position should be checked after insertion by chest radiography. The tip should be at the junction of the superior vena cava and right atrium (Royal College of Nursing (RCN) 2010; Dougherty and Lister 2008). **It is essential prior to the commencement of PN that the tip position of the CVAD is documented clearly in the medical notes.**

The CVAD must be accessed and managed in accordance with the [Intravenous \(IV\) Medication and Fluid Therapy Administration Through a Central Venous Access Device \(CVAD\) Policy](#)

The CVAD or allocated lumen of a multi-lumen CVAD must only be used for PN. No other medications or IV fluids can be administered via this.

If this is not available a decision must be made by the managing consultant/nutrition consultant as to the risks of using a previously used lumen. This should consider:

- What the lumen was used for and when
- If an additional lumen is likely to be needed again
- The risks associated with inserting an additional CVAD
- How long PN is likely to be required for

Blood should not be taken from the CVAD except for blood cultures if CVAD-related sepsis is suspected.

6.3 Prescribing Guidelines for PN

- PN must only be administered in the Critical Care Unit, Ward 31 and Ward 22.
- On weekdays the prescription must be completed and submitted to the aseptic dispensing unit before 11:00hrs.
- On weekends and bank holidays the prescription must have been completed and submitted to the aseptic dispensing unit on the previous working day before 11:00hrs.
- The prescription must be fully completed and signed by an authorised prescriber.
- Out of hours PN is not available for wards
- Out of hours PN in critical care, please refer to Critical Care Unit Nutrition Support Guidelines

6.4 Altering the Rate of Infusion

The initial rate of PN will be advised by NST and will be documented on the prescription. The alteration to the prescribed rate of PN infusion is to be discussed with NST or managing clinician.

A patient may be unable to tolerate an increased rate in volume. If an alteration is made to the infusion rate of the PN, medical staff must sanction the change by amending the patient's prescription accordingly. If the NST is available, this should be discussed with them first. If the NST is not available, they should be informed at the earliest opportunity.

6.5 Blood / Fluid Monitoring of PN

In order to optimise parenteral nutritional support, the following biochemical tests are necessary. Blood samples must be delivered to Chemical Pathology before 10 am on the day of request to enable the next day's feeding to be planned. The request should be highlighted '**For PN**'.

Please refer to table below:

<u>Before starting PN</u>		Evidence
Blood	U&E's Glucose* LBP (LFT, bone)*** Mg FBC Clotting screen CRP Folate & Vitamin B ₁₂ Zinc, Copper & Selenium (if risk of depletion)**	NICE 2006
<u>Daily if patient unstable or new</u>		
Blood	U&E's LFT's Phosphate Magnesium (if risk of refeeding syndrome) FBC Glucose*	
<u>Twice Weekly if Patient Stable</u>		
Blood	U&E's LFT's Phosphate Magnesium FBC	
<u>Weekly</u>		
Blood	FBC LBP (LFT, Bone) Clotting screen Magnesium Folate & Vitamin B ₁₂	NICE 2006
<u>As requested by the Nutrition Team</u>		
24h Urine	Electrolyte Urea Creatinine	NICE 2006
Blood	Zinc Copper Folate and Vitamin B ₁₂	NICE 2006
<ul style="list-style-type: none"> • Blood Glucose: If blood glucose consistently above 9 mmols, variable rate intravenous insulin infusion should be commenced (see separate guideline – “Guidelines for the Management of Hyperglycaemia / Diabetes Mellitus in patients on Total Parenteral Nutrition) (TPN)” 		

***Glucose 1-2 X daily (or more if required) until stable**

**** Selenium if there is a risk of depletion (Se deficiency likely in severe illness and sepsis, or long term nutrition support). Further results dependent on baseline.**

***** LBP would include, total protein, albumin, bilirubin, ALT, Alkaline phosphatase, Gamma GT, Calcium and phosphate.**

6.6 Nursing Monitoring of Patients Receiving PN

	Rationale	Frequency	Action	Evidence
Fluid Balance	To monitor hydration state	Constantly	Measure input/output. Observe for thirst, lethargy, low urine output, ankle oedema/postural hypotension or breathlessness.	NICE 2006
Weight	To monitor hydration state and effects of feeding	Weekly	Weigh weekly (in similar clothing, at same time of day, on same scales) Record Weight on Nervecentre	
Blood Glucose	To ensure patient tolerates glucose load of feed.	6 hourly for the first 72 hours then twice daily blood glucose remains within documented parameters.	Blood glucose recording 6 hourly for first 72 hours. If blood sugar remains within the documented parameters, reduce to twice daily. Consider variable rate intravenous insulin infusion if BM>9 mmols consistently	
Clinical observation monitoring and recording	To detect signs of infection/CVAD malposition (Tachycardia may indicate CVAD malposition)	4 hourly	Monitor 4 hourly whilst on PN and document accordingly	Hamilton H (2000)
CVAD site and Dressing monitoring and recording	To detect signs of localised infection. (Warmth, redness, tenderness, exudate and swelling)	Observe CVAD entry/exit site every shift. Dressing change weekly or earlier if required	Observe site/s every shift for warmth, redness, tenderness, exudates and swelling, complete CVAD VIP documentation CVAD monitoring chart . Review as part of full clinical condition review.	Hamilton H. (2000)

6.7 Complications of PN

Electrolyte disturbances should be identified and corrected prior to commencing PN wherever possible. Following the commencement of PN electrolyte disturbances are more frequent, therefore close monitoring is important to identify these before any clinical symptoms occur.

6.7.1 Refeeding syndrome

This is a life-threatening complication which occurs after the start of feeding in malnourished patients. Hypokalaemia, Hypomagnesaemia and Hypophosphataemia occurs with fluid and electrolyte shifts between intracellular and extracellular compartments which can result in arrhythmias, muscle weakness, signs of respiratory and/or cardiac failure, oedema, lethargy, seizures and can be fatal. Follow the [Re-Feeding Syndrome – Guidelines for the Prevention and Management in Adult Patients](#)

Complication	Signs and Symptoms	Action
Liver damage	Raised LFTs	Consider the possibility of a daily rest period, lipid free PN or stopping PN (discuss with NST)
Hyperglycaemia	Can lead to osmotic diuresis resulting in dehydration.	Please refer to: Guideline for the management of hyperglycaemia / diabetes mellitus in patients on Total Parenteral Nutrition (TPN)
Pneumothorax	Observe the patient for signs of respiratory distress, e.g. chest pain and/or breathlessness	If severe may need chest aspiration or chest drain insertion
Haemorrhage	The CVAD entry and/or exit site must be observed for signs of bleeding following insertion and observations monitored and recorded	Pressure dressing over exit site
Infection	<p>Suspect line related infection if any of the following:</p> <ul style="list-style-type: none"> • Exit site red, tender, warm, swollen or discharging pus • Rigors or chills • Core temperature >38°C or < 36°C • White cell count > 12 x10⁹/L or < 4 x10⁹/L • Focal signs of infection (pulse rate > 90 beats/min, systolic BP< 90mmHg, respiratory rate >20 breaths/min) <p>For further guidance: See Antibiotic guidelines on management of sepsis</p>	<p>To confirm line related infection, the following infection screen is recommended:</p> <ul style="list-style-type: none"> • Peripheral blood cultures. • Central line blood cultures. • Exit site swab. • If removed, send the line tip for culture. <p>Additional cultures, if clinically indicated, may include:</p> <ul style="list-style-type: none"> • Faeces for C.difficile toxin • Sputum • Urine
Venous Thrombosis	<p>Patients face or arm becomes swollen. May occur because:</p> <p>Catheter tip is situated high in the vena cava or in the subclavian vein. Solution infused has a very high osmolality. There is a catheter-related sepsis. Patient is dehydrated.</p>	Diagnosis should be confirmed by venogram.
CVAD occlusion	These can occur from debris, fibrin or lipids.	Refer to Intravenous (IV) Medication and Fluid Therapy Administration Through a Central Venous Access Device (CVAD) Policy for the management of occluded CVADs

6.8 Important notes

Inform the Pharmacist and report via the datix reporting system any problems in relation to the PN bag, this may include:

- Damaged, leaking bags
- Suspected infection
- A non-homogenous appearance to the bag (if seen)

Inform the NST if the feed is discontinued for any reason.

Any problems regarding feeding bags need to be reported as incidents via the Datix reporting system in line with the trust's [Incident Reporting Policy and Procedures](#).

In cases of suspected infection, where the CVAD is suspected please discuss with the patients managing clinician and the NST before removing the CVAD.

- Feeding pumps – PN must only be administered via a volumetric infusion pump. [Policy for the care of the patient undergoing intravenous therapy \(Bolus, Continuous and Intermittent\)](#)
- PN administration must be via a filter containing giving set
- The feed rate must be set by a registered nurse who is competent with setting up PN. The rate must not be increased in order to "catch up" if a feed is running behind as this can increase the risk of complications. PN should be discontinued gradually in accordance with the NST and/or managing clinicians guidance.
- The patient should be introduced to an oral or enteral diet in accordance with the NST and/or managing clinicians guidance.
- PN should only be discontinued following advice from the NST. The patient's oral/enteral intake will need to be considered before PN is discontinued.

6.9 Home Parenteral Nutrition (HPN)

Home Parenteral Nutrition patients may be admitted to SFHFT.

If an HPN patient is admitted:

The patient must be transferred either to ward 31 or 22.

The following information must be ascertained:

- Where is the patients HPN team based?
- Which company supplies the home PN?
- When is it delivered?

- Which type of bag is due on what day (usually patients are on lipid bags – white and/or aqueous bags – clear yellow). The exact day of the week for different bags must be determined. If no clear information is available, contact the Nutrition Unit (F22) at QMC or the patients HPN managing team if not QMC.
- At what rate does the PN run?
- What is the patient’s usual start and finish time for the PN?
- Type of CVAD, where and when it was placed

The responsible managing clinical team should ensure:

- Where possible, the patient’s PN is brought into the hospital for the duration of their admission.
- The PN is prescribed on the Adult Parenteral Nutrition Prescription Chart. PN must never be administered without a valid prescription in place.
- The type of bag (lipid or aqueous), rate and duration of the PN infusion should be clearly documented.
- The patient must be monitored as stated in the Multi-Disciplinary Guidelines for the Administration of Parenteral Nutrition.

If assistance is required with any of the above, the Dietitian, the Nutrition Nurse Specialist or PN Pharmacist should be contacted.

Where a new patient is likely to need long term PN

Please discuss this with the NST first. They will be able to advise on long term recommendations for the patient. If long term PN is likely to be required the patient must be referred to the Clinical Nutrition Unit (F22) at QMC.

The clinical team must contact QMC to discuss the patient and submit a referral via email.

7.0 Monitoring Compliance and Effectiveness

Minimum Requirement to be Monitored (WHAT – element of compliance or effectiveness within the document will be monitored)	Responsible Individual (WHO – is going to monitor this element)	Process for Monitoring e.g. Audit (HOW – will this element be monitored (method used))	Frequency of Monitoring (WHEN – will this element be monitored (frequency/ how often))	Responsible Individual or Committee/ Group for Review of Results (WHERE – Which individual/ committee or group will this be reported to, in what format (eg verbal, formal report etc) and by who)
CVAD for PN infection/complication rates	Nutrition Nurse Specialist/ Infection Prevention Team (IPT)	Audit	Annually	Formal written report from nutrition nurse specialist/IPT to the Nutrition and Hydration Steering Group, Harms Free Operational Group and Gastroenterology governance.
Incidents regarding PN bags	Any member of staff identifying an issue as part of the supplying and administration of PN	Datix	As incident occurs	Annual written formal report by the PN pharmacist to the Nutrition and Hydration Steering Group. Written formal report to the Medicines Safety Committee
Nutritional adequacy	PN dietitian	Audit	Annually	Written formal report from PN dietitian to the Nutrition and Hydration Steering Group

8.0 TRAINING AND IMPLEMENTATION

All Registered Nurses who undertake any activities within this policy must complete the **Care, Maintenance and Use of Central Venous Access Devices (CVAD)** competency training and be able to evidence competency

[Intravenous \(IV\) Medication and Fluid Therapy Administration Through a Central Venous Access Device \(CVAD\) Policy](#)

9.0 IMPACT ASSESSMENTS

- This document has been subject to an Equality Impact Assessment, see completed form at [Appendix B](#)
- This document has been subject to an Environmental Impact Assessment, see completed form at [Appendix C](#)

10.0 EVIDENCE BASE (Relevant Legislation/ National Guidance) AND RELATED SFHFT DOCUMENTS

Evidence Base:

- Kennedey JF, Nightingale J, Baker M (2002). Clinical Nutrition 22(Suppl 1).35
- Pickering K et al (2001) Clinical Nutrition 21(suppl 1), 85
- O’Grady N et al (2002) Infection Control and Hospital Epidemiology 23(12):759-69
- DOH (2001) J.Hosp Inf 47 (suppl): S47-67
- Hamilton H (2000) Total parenteral Nutrition: A practical guide for nurses. London. Churchill. Livingston
- NICE (updated 2016) CG32 Nutrition support in adults: oral nutrition support, enteral tube feeding and parenteral nutrition
- Loveday 2014 EPIC 3
- [EPIC 3: National evidence based guidelines for preventing healthcare associated infections in NHS hospitals in England](#)
- High Impact intervention 2008 DH
- Mixed Bag, NCEPOD 2010
- ESPEN Guidelines for adult parenteral nutrition **Clinical Nutrition 2009; 28:359-479**
- Parenteral Nutrition, BAPEN 2016

Related SFHFT Documents:

- Re-Feeding Syndrome – Guidelines for the Prevention and Management in Adult Patients
- Intravenous (IV) Medication and Fluid Therapy Administration Through a Central Venous Access Device (CVAD) Policy

- Nutrition and Hydration Policy
- Critical Care Nutrition Support Guidelines
- Policy for the care of the patient undergoing intravenous therapy (Bolus, Continuous and Intermittent)
- Vascular Access Assistance Policy
- Guidelines for the Management of Hyperglycaemia / Diabetes Mellitus in patients on Total Parenteral Nutrition) (TPN)
- Incident Reporting Policy and Procedures.

11.0 KEYWORDS

- Nutritional management; TPN;

12.0 APPENDICES

- [APPENDIX A](#) – *Representational* Copy of the Trust's Parenteral Nutrition Prescription
- [APPENDIX B](#) – Equality Impact Assessment Form
- [APPENDIX C](#) – Environmental Impact Assessment Form

Appendix A – Representational Copy of the Trust’s Parenteral Nutrition Prescription

ADULT PARENTERAL NUTRITION PRESCRIPTION		Sherwood Forest Hospitals											
<div style="border: 1px solid black; width: 100%; height: 100%; display: flex; align-items: center; justify-content: center;"> Patient ID Label </div>	Refer new patients to the PN team for assessment (Pharmacist 3169, Dietician 3252, Nutritional Nurse Specialist 6494). Clinical advice is also available from the gastroenterology team.												
Prescriptions must be sent to Pharmacy by 11:00am		Refer to regimens overleaf. Standard amounts and possible additions for the whole bag are indicated in the table overleaf. In each box write the total amount required or circle St for standard.											
WEIGHT:			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 50%;">PN Indication</td><td></td></tr> <tr><td>Date PN Started</td><td></td></tr> <tr><td>CVAD Type</td><td></td></tr> <tr><td>CVAD Site</td><td></td></tr> <tr><td>Date CVAD Placed</td><td></td></tr> </table>	PN Indication		Date PN Started		CVAD Type		CVAD Site		Date CVAD Placed	
PN Indication													
Date PN Started													
CVAD Type													
CVAD Site													
Date CVAD Placed													
CONSULTANT:	DATE:												
WARD:	REGIMEN:												
Sodium (mmol)	<i>Prescriber to complete</i>												
Potassium (mmol)	<i>total electrolyte content.</i>												
Calcium (mmol)	<i>See note on reverse</i>												
Phosphate (mmol)	<i>about weekend</i>												
Magnesium (mmol)	<i>prescribing</i>												
Trace Elements	Additrace 10ml		St St										
Fat Soluble Vitamins	Vitlipid Adult 10ml		St St										
Water Soluble Vitamins	Solivito 1 vial		St St										
Flow Period:	24 hours <small>unless indicated otherwise</small>												
Flow Rate:	Pharmacy to complete												
Proportion of bag to be given over 24 hours													
If bloods are not available for the prescribed day(s) tick here and discuss the plan with the pharmacist													
Comments:	PRESCRIBER: (Sign, date and print name)												
	PHARMACIST:	screen check											
	BATCH NUMBER:												
Nursing Staff Record of Administration	Start/Check by:	/ / / / / / / / / /											
	Date Started:												
	Time Started:												
	Finish Time:												

REPRESENTATIONAL COPY ONLY TO
SHOW IN THE POLICY

APPENDIX B - EQUALITY IMPACT ASSESSMENT FORM (EQIA)

Name of service/policy/procedure being reviewed: Administration of Parenteral Nutrition (PN) for Adults Policy			
New or existing service/policy/procedure: change from guideline to policy			
Date of Assessment: 16/11/22			
For the service/policy/procedure and its implementation answer the questions a – c below against each characteristic (if relevant consider breaking the policy or implementation down into areas)			
Protected Characteristic	a) Using data and supporting information, what issues, needs or barriers could the protected characteristic groups' experience? For example, are there any known health inequality or access issues to consider?	b) What is already in place in the policy or its implementation to address any inequalities or barriers to access including under representation at clinics, screening?	c) Please state any barriers that still need to be addressed and any proposed actions to eliminate inequality
The area of policy or its implementation being assessed:			
Race and Ethnicity	No direct impact identified	Not applicable	None identified
Gender	No direct impact identified	Not applicable	None identified
Age	This policy covers adults	Reference and links to age specific information	None identified
Religion	No direct impact identified	Not applicable	None identified
Disability	The policy promotes mandatory safe practice for all adults. Patients are assessed on referral for PN with regards to their individual requirements.	Traffic light documents are available for patients with learning disabilities. Allied health professional assessments of patients requirements. Patients with cognitive impairment through acute delirium or dementia are assessed where required using the two stage capacity assessment and best interest check list. All of these help to determine what reasonable adjustments may be required to meet individual PN requirements.	None identified

Sexuality	No direct impact identified	Not applicable	None identified
Pregnancy and Maternity	No direct impact identified	Not applicable	None identified
Gender Reassignment	No direct impact identified	Not applicable	None identified
Marriage and Civil Partnership	No direct impact identified	Not applicable	None identified
Socio-Economic Factors (i.e. living in a poorer neighbourhood / social deprivation)	No direct impact identified	Not applicable	None identified
What consultation with protected characteristic groups including patient groups have you carried out?			
<ul style="list-style-type: none"> No direct consultation undertaken as no specific barriers identified 			
What data or information did you use in support of this EqIA?			
<ul style="list-style-type: none"> Review of evidence from knowledge and library service review 			
As far as you are aware are there any Human Rights issues be taken into account such as arising from surveys, questionnaires, comments, concerns, complaints or compliments?			
<ul style="list-style-type: none"> None identified 			
Level of impact			
From the information provided above and following EQIA guidance document Guidance on how to complete an EIA (click here), please indicate the perceived level of impact:			
Low Level of Impact			
For high or medium levels of impact, please forward a copy of this form to the HR Secretaries for inclusion at the next Diversity and Inclusivity meeting.			
Name of Responsible Person undertaking this assessment: Katie Townsend			
Signature: <i>K.Townsend</i>			
Date: 16/11/22			

APPENDIX C – ENVIRONMENTAL IMPACT ASSESSMENT

The purpose of an environmental impact assessment is to identify the environmental impact, assess the significance of the consequences and, if required, reduce and mitigate the effect by either, a) amend the policy b) implement mitigating actions.

Area of impact	Environmental Risk/Impacts to consider	Yes/No	Action Taken (where necessary)
Waste and materials	<ul style="list-style-type: none"> Is the policy encouraging using more materials/supplies? Is the policy likely to increase the waste produced? Does the policy fail to utilise opportunities for introduction/replacement of materials that can be recycled? 	no	
Soil/Land	<ul style="list-style-type: none"> Is the policy likely to promote the use of substances dangerous to the land if released? (e.g. lubricants, liquid chemicals) Does the policy fail to consider the need to provide adequate containment for these substances? (For example bunded containers, etc.) 	no	
Water	<ul style="list-style-type: none"> Is the policy likely to result in an increase of water usage? (estimate quantities) Is the policy likely to result in water being polluted? (e.g. dangerous chemicals being introduced in the water) Does the policy fail to include a mitigating procedure? (e.g. modify procedure to prevent water from being polluted; polluted water containment for adequate disposal) 	no	
Air	<ul style="list-style-type: none"> Is the policy likely to result in the introduction of procedures and equipment with resulting emissions to air? (For example use of a furnaces; combustion of fuels, emission or particles to the atmosphere, etc.) Does the policy fail to include a procedure to mitigate the effects? Does the policy fail to require compliance with the limits of emission imposed by the relevant regulations? 	no	
Energy	<ul style="list-style-type: none"> Does the policy result in an increase in energy consumption levels in the Trust? (estimate quantities) 	no	
Nuisances	<ul style="list-style-type: none"> Would the policy result in the creation of nuisances such as noise or odour (for staff, patients, visitors, neighbours and other relevant stakeholders)? 	no	