Summary.

1. Assemble all your equipment before you start.
2. PN solutions should be removed from refrigeration 2-3 hours prior to infusion in order to reach approximate room temperature.
3. Explain and discuss the procedure with the patient.
4. Before administering any PN Consult the patient’s prescription chart. Check contents against prescription. Check the PN is without particles or any abnormality.
5. Ensure patient not allergic to CHG or any other allergies.

1. Dispose of waste, wash hands with soap and water and complete documentation.

Clinical Guideline for Setting Up and Connecting Parenteral Nutrition (PN)

1. Wash hands using Ayliffe technique
2. Open outer wrapping of PN to be infused and cover with silver protective cover hang bag on a drip stand, check all relevant details i.e. expiry date and volume.
3. Clean trolley
4. Alcogel hands
5. Draw up 10ml 0.9% sodium chloride solution for injection using ANTT
6. Place the syringe in a clinically clean receiver or tray on the bottom shelf of the dressing trolley.
7. Collect the other equipment and place it on the bottom shelf of the dressing trolley.
8. Alcogel or wash hands
9. Remove the protective covering from the giving set and insert it into the giving port of the bag (not applicable if PN already spiked in Pharmacy Technical Services Unit).
10. Prime the intravenous administration set and hang it on the infusion stand. Take care not to contaminate the giving set end and keep in the sterile pack until connection.
11. Insert giving set into the pump and set rate and volume.
12. Wash hands thoroughly using soap and water or alcohol hand rub before leaving the treatment room.
13. Proceed to the patient. Check patient’s identity against prescription chart and prepared drugs.
14. Open the sterile dressing pack by holding the corners, avoid touching the inside contents with your fingers. Arrange items for easy access using orange bag.
15. Place other equipment onto dressing pack. Place CHG swabs into sterile container and saline syringe on corner.
16. Alcogel hands put on sterile gloves.
17. Holding lumen in one hand slide dressing towel under the catheter.
18. Ensuring patients CVC exposed clean end of needle-free connector for 30 seconds with CHG swab including clamp allow to air dry completely.
19. If changing bionnector ensue lumen clamped, remove existing bionnector, clean end of lumen with CHG allow to air dry completely and replace with new bionnector.
20. Connect 10ml syringe containing the 0.9% saline into catheter hub and flush using push pause technique and end positive pressure. (this creates turbulence removing any debris and prevents blood back flowing).
21. Remove cover from the giving set and connect to the needle free connector.
22. Remove gloves and commence volumetric pump at prescribed rate and volume.
23. Ensure CVC is unclamped and start infusion.
1. **Aim/Purpose of this Guideline**

1.1. This procedure applies to all medical staff and registered nurses involved in managing patients receiving Parenteral Nutrition (PN). The procedure is in place to ensure compliance with Trust guidance.

1.1.1. Sugar-rich PN bags provide the perfect growth environment for a variety of potentially dangerous micro-organisms.

1.1.2. Patients receiving PN are often immuno-compromised increasing their risk of acquiring a catheter related blood stream infection (CR-BSI). As the PN is delivered directly into the intravenous system, bypassing the body’s natural defences against infection, asepsis when accessing the catheter is required at all times and an absolute necessity.

2. **The Guidance**

2.1. **Responsibilities**

2.2. Individual practitioners must ensure they are competent to undertake duties to the standards within this document and should have an appreciation and understanding of the vascular access device. The team leader is responsible for ensuring sufficient and appropriate training is available and undertaken.

2.3. **Method**

2.4. **Equipment**

- Patients prescription chart
- Prescribed bag of PN
- Intravenous infusion stand
- Volumetric pump
- Clean dressing trolley
- Clean receiver tray
- PN intravenous administration giving set and filter (unless bag pre-spiked with specific filtration and needle free system connector)
- Basic dressing pack – includes sterile gloves/ sterile towel/ gallipot/ gauze
- Swabs containing 2% chlorhexidine in 70% isopropyl alcohol (known allergy- contact pharmacy)
- 10ml Sodium chloride 0.9% for injection
- Sterile 10ml syringe (nothing smaller)
- 1x Green needle
- 1x Red cap
- Sharps bin

2.5. **Pre procedure**

1. Assemble all your equipment before you start.
2. PN solutions should be removed from refrigeration 2-3 hours prior to infusion in order to reach approximate room temperature
3. Explain and discuss the procedure with the patient.
4. Before administering any PN Consult the patient’s prescription chart.
Check contents against prescription. Check the PN is without particles or any abnormality
5. Ensure patient not allergic to CHG or any other allergies.

2.6. Procedure

1. Wash hands using Ayliffe technique
2. Open outer wrapping of PN to be infused and cover with silver protective cover hang bag on a drip stand, check all relevant details i.e. expiry date and volume.
3. Clean trolley
4. Alcogel hands
5. Draw up 10ml 0.9% sodium chloride solution for injection using ANTT
6. Place the syringe in a clinically clean receiver or tray on the bottom shelf of the dressing trolley.
7. Collect the other equipment and place it on the bottom shelf of the dressing trolley.
8. Alcogel or wash hands
9. Remove the protective covering from the giving set and insert it into the giving port of the bag (not applicable if PN already spiked in Pharmacy Technical Services Unit).
10. Prime the intravenous administration set and hang it on the infusion stand. Take care not to contaminate the giving set end and keep in the sterile pack until connection
11. Insert giving set into the pump and set rate and volume.
12. Wash hands thoroughly using soap and water or alcohol hand rub before leaving the treatment room
13. Proceed to the patient. Check patient’s identity against prescription chart and prepared drugs.
14. Open the sterile dressing pack by holding the corners, avoid touching the inside contents with your fingers. Arrange items for easy access using orange bag.
15. Place other equipment onto dressing pack. Place CHG swabs into sterile container and saline syringe on corner.
16. Alcogel wash hands put on sterile gloves
17. Holding lumen in one hand slide dressing towel under the catheter
18. Ensuring patients CVC exposed clean end of needle-free connector for 30 seconds with CHG swab including clamp allow to air dry completely
19. If changing bionnector ensue lumen clamped, remove existing bionnector, clean end of lumen with CHG allow to air dry completely and replace with new bionnector.
20. Connect 10ml syringe containing the 0.9% saline into catheter hub and flush using push pause technique and end positive pressure. (this creates turbulence removing any debris and prevents blood back flowing)
21. Remove cover from the giving set and connect to the needle free connector.
22. Remove gloves, wash hands with soap and water and commence volumetric pump at prescribed rate and volume.
23. Ensure CVC is unclamped and start infusion
2.7. Post procedure

1. Dispose of waste and complete documentation
2. Wash hands

3. Monitoring compliance and effectiveness

<table>
<thead>
<tr>
<th>Element to be monitored</th>
<th>Compliance with procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead</td>
<td>Tracy Lee Nutrition Nurse</td>
</tr>
<tr>
<td>Tool</td>
<td>Incident reporting/ Nutrition team database</td>
</tr>
<tr>
<td>Frequency</td>
<td>Annual</td>
</tr>
<tr>
<td>Reporting arrangements</td>
<td>Nutrition Steering Group</td>
</tr>
<tr>
<td>Acting on recommendations and Lead(s)</td>
<td>Chair Nutrition Steering Group</td>
</tr>
<tr>
<td>Change in practice and lessons to be shared</td>
<td>Senior Nurses Forum, Ward Safety Briefings</td>
</tr>
</tbody>
</table>

4. Equality and Diversity

4.1. This document complies with the Royal Cornwall Hospitals NHS Trust service Equality and Diversity statement which can be found in the 'Equality, Diversity & Human Rights Policy' or the Equality and Diversity website.

4.2. Equality Impact Assessment
The Initial Equality Impact Assessment Screening Form is at Appendix 2.
Appendix 1. Summary Guideline for Setting Up and Connecting Parenteral Nutrition (PN)

The summary guidance from page 1 has also been published separately as Appendix 1 and can be accessed via the Document Library by searching for 'Connecting Parenteral Nutrition' or click here.
Appendix 2. Governance Information

<table>
<thead>
<tr>
<th>Document Title</th>
<th>Clinical Guideline for Setting Up and Connecting Parenteral Nutrition (PN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date Issued/Approved:</td>
<td>17 Jun 15</td>
</tr>
<tr>
<td>Date Valid From:</td>
<td>17 Jun 15</td>
</tr>
<tr>
<td>Date Valid To:</td>
<td>17 Jun 18</td>
</tr>
<tr>
<td>Directorate / Department responsible (author/owner):</td>
<td>Tracy Lee, Nutrition Nurse</td>
</tr>
<tr>
<td>Contact details:</td>
<td>01872 252301 (or x 2409)</td>
</tr>
</tbody>
</table>

**Brief summary of contents**
This procedure applies to all medical staff and registered nurses involved in changing catheter exit site dressings. The procedure is in place to ensure compliance with Trust guidance.

**Suggested Keywords:** Catheter, infection, nutrition.

**Target Audience**

<table>
<thead>
<tr>
<th>RCHT</th>
<th>PCH</th>
<th>CFT</th>
<th>KCCG</th>
</tr>
</thead>
<tbody>
<tr>
<td>☑</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Executive Director responsible for Policy:**
Medical Director

**Date revised:**
New Document

**This document replaces (exact title of previous version):**
New Document

**Approval route (names of committees)/consultation:**
Nutrition Steering Group

**Divisional Manager confirming approval processes**
Sally Rowe, Divisional Director CSSC

**Name and Post Title of additional signatories**
Not Required

**Name and Signature of Divisional/Directorate Governance Lead confirming approval by specialty and divisional management meetings**
{Original Copy Signed}

**Signature of Executive Director giving approval**
{Original Copy Signed}

**Publication Location (refer to Policy on Policies – Approvals and Ratification):**
Internet & Intranet ☑ Intranet Only

**Document Library Folder/Sub Folder**
Clinical / Dieticians

Clinical Guideline for Setting Up and Connecting Parenteral Nutrition (PN)

Page 6 of 9
Links to key external standards

<table>
<thead>
<tr>
<th>Related Documents:</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCHT Patient Identification Policy</td>
</tr>
<tr>
<td>RCHT Consent to Treatment/Examination</td>
</tr>
<tr>
<td>RCHT Standards of Record keeping</td>
</tr>
<tr>
<td>RCHT Infection Control</td>
</tr>
<tr>
<td>RCHT Total Parenteral Nutrition for adults</td>
</tr>
<tr>
<td>RCHT Clinical guideline for the use of intravascular catheters in adults at RCHT</td>
</tr>
<tr>
<td>RCHT Aseptic non touch technique policy</td>
</tr>
</tbody>
</table>

Training Need Identified?

No

Version Control Table

<table>
<thead>
<tr>
<th>Date</th>
<th>Version No</th>
<th>Summary of Changes</th>
<th>Changes Made by (Name and Job Title)</th>
</tr>
</thead>
<tbody>
<tr>
<td>17 Jun 15</td>
<td>V1.0</td>
<td>Initial Issue</td>
<td>Tracy Lee, Nutrition Nurse</td>
</tr>
</tbody>
</table>

All or part of this document can be released under the Freedom of Information Act 2000

This document is to be retained for 10 years from the date of expiry.

This document is only valid on the day of printing

Controlled Document

This document has been created following the Royal Cornwall Hospitals NHS Trust Policy on Document Production. It should not be altered in any way without the express permission of the author or their Line Manager.
### Appendix 3. Initial Equality Impact Assessment Form

<table>
<thead>
<tr>
<th>Name of individual completing assessment: Tracy Lee, Nutrition Nurse</th>
<th>Telephone: 01872 252301 (or x 2409)</th>
</tr>
</thead>
</table>

#### 1. Policy Aim*
Who is the strategy / policy / proposal / service function aimed at?

#### 2. Policy Objectives*

#### 3. Policy – intended Outcomes*

#### 4. *How will you measure the outcome?

#### 5. Who is intended to benefit from the policy?
All patients

#### 6a) Is consultation required with the workforce, equality groups, local interest groups etc. around this policy?
No

#### 7. The Impact

<table>
<thead>
<tr>
<th>Equality Strands:</th>
<th>Yes</th>
<th>No</th>
<th>Rationale for Assessment / Existing Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sex</strong> (male, female, transgender / gender reassignment)</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td><strong>Race / Ethnic communities / groups</strong></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

Clinical Guideline for Setting Up and Connecting Parenteral Nutrition (PN)
### Disability -
Learning disability, physical disability, sensory impairment and mental health problems  
- Yes

### Religion / other beliefs
- Yes

### Marriage and civil partnership
- Yes

### Pregnancy and maternity
- Yes

### Sexual Orientation, Bisexual, Gay, heterosexual, Lesbian
- Yes

You will need to continue to a full Equality Impact Assessment if the following have been highlighted:
- You have ticked “Yes” in any column above and
- No consultation or evidence of there being consultation- this excludes any policies which have been identified as not requiring consultation. or
- Major service redesign or development

8. Please indicate if a full equality analysis is recommended.  
<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

9. If you are not recommending a Full Impact assessment please explain why.

<table>
<thead>
<tr>
<th>Signature of policy developer / lead manager / director</th>
<th>Date of completion and submission</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Names and signatures of members carrying out the Screening Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Tracy Lee</td>
</tr>
<tr>
<td>2.</td>
</tr>
</tbody>
</table>

Keep one copy and send a copy to the Human Rights, Equality and Inclusion Lead, c/o Royal Cornwall Hospitals NHS Trust, Human Resources Department, Knowledge Spa, Truro, Cornwall, TR1 3HD

A summary of the results will be published on the Trust’s web site.

Signed ____________________
Date ____________________