IMED GEMINI

P.C. – 1 INFUSION PUMP

Independent assessment

Updated March 2003
Nov 2005
Nov 2008
Gemini Infusion Pump- Independent assessment

**INFUSION PUMP COMPETENCIES**

All new staff are to undertake an independently assessed competency assessment using one of the assessors listed on the intranet. Then every 2nd year staff can choose to undertake an independently assessed competency or a self-assessed competency assessment.

**Objectives**

Following a tutorial, demonstration of the Gemini Infusion pump, further reading and supervised practice the participant will be able to:

- Identify the indications for the utilisation of the Gemini Infusion Pump.
- State the nursing responsibilities when managing a patient with an infusion pump in progress.
- Describe the correct use of the Infusion Pump as per operators manual.
- Demonstrate the function parameters of the pump. E.g. Set up: priming line.
- Outline alarm parameters and state action taken with regard to the alarm settings.
- Demonstrate utilisation of the secondary infusion.
- Gain an understanding of infusion related problems and their subsequent management.
- Discuss possible complications resulting from the use of the Gemini Pump.
- Gain an understanding of safe practices in regard to Occupational Health & Safety.
- Understand requirements for regular maintenance and periodic testing of infusion pump.

**Expectations**

- Attainment of this competence, as outlined within the criteria that follows must be demonstrated by all RNs working in the areas relevant to this practice.
- Where an RN is unable to declare competence an action plan should be devised in collaboration with appropriate support to facilitate the RN in achieving set goals.
- Maintenance of records of competence remains the responsibility of the RN. Where necessary records may be maintained by Unit Managers for the purpose of audit / accreditation.
- This statement of competence should be revisited every 2 years or as learning needs are identified.
ASSESSMENT PROCESS

- The participant will negotiate competency assessment with an assessor.
- On completion of the assessment the signed assessment form a copy is to be forwarded to the unit manager for their records

TEACHING STRATEGIES

Resources will include:

- Tutorial/demonstration
- Policy and Procedure
- Operators Manual
- Clinical Supervision

Policies that must be read and understood to complete this competency

- Intravenous Management - Imed Gemini Pc-1 Volumetric
- Intravenous Insertion & Infusion

These can both be found in the Clinical Guidelines

ASSESSORS

- May include a Clinical Nurse Specialist or senior nurse appointed by the unit manager to undertake competency assessment. Refer competency assessor list on the intranet

- Nurse Teacher / Clinical support nurses

CAROLINE POLACK
Nurse Teacher

JENICE SMART
Education Manager
<table>
<thead>
<tr>
<th>Competency Statement</th>
<th>Instructional Strategies</th>
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<tbody>
<tr>
<td>Demonstrates proficiency in the management of an IMED Gemini PC-1 Infusion Pump.</td>
<td>1. Policy and Procedure</td>
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<tr>
<td></td>
<td>2. In-service Lectures/Operators Manual/Demo</td>
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<td></td>
<td>3. Self Assessment / Further reading</td>
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<table>
<thead>
<tr>
<th>Performance Criteria</th>
<th>Clinical Performance</th>
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<tbody>
<tr>
<td>1. Identifies indications and rational for utilisation of an infusion pump</td>
<td>Competent</td>
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<td>2. Identifies nursing responsibilities when managing a patient with an infusion pump</td>
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<td>3. Underlying principles of how pump functions.</td>
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<td>4. Demonstrates the following functions.</td>
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<tr>
<td>a. Correctly identify key operating functions of the pump</td>
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<tr>
<td>b. Turns machine on</td>
<td></td>
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<tr>
<td>c. Primes Gemini giving set</td>
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<tr>
<td>d. Installs Gemini giving set in the infusion pump</td>
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<tr>
<td>e. Sets volume to be infused</td>
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<tr>
<td>f. Changes volume to be infused</td>
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<tr>
<td>g. Sets rate of infusion</td>
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<tr>
<td>h. Changes rate of infusion</td>
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<tr>
<td>i. Pauses infusion by pressing pause/stop once</td>
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<tr>
<td>j. Stops infusion by pressing pause/stop twice</td>
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<td>5. States action taken for the following alarms:-</td>
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<tr>
<td>a. Low Battery</td>
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<tr>
<td>b. Air-in-line</td>
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<tr>
<td>c. Low Flow</td>
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<tr>
<td>d. Total Volume Infused</td>
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<tr>
<td>e. Occluded Patient Side</td>
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<tr>
<td>f. Close Door</td>
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<tr>
<td>g. Occluded Fluid Side</td>
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<td>7. Occupational Health &amp; Safety</td>
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<tr>
<td>• Secure mounting of infusion pumps</td>
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<tr>
<td>• Check for regular maintenance record</td>
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<tr>
<td>• 4/5 prong IV pole used</td>
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<tr>
<td>• Electrical cord/connections in excellent condition</td>
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<td>8. Cleaning</td>
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</table>
- Correct upright position
- Clean external surfaces only with ..... 
- Clean Air – In – Line Detector groove
- After cleaning and disinfection, dry

9. Evaluates the following problems.

   a. IV will not run
   b. Blood in IV giving set
   c. Fluid extravasation
   d. Cannula dislodged
   e. Free-flow protection test

### EVALUATION

<table>
<thead>
<tr>
<th>Competent</th>
<th>Unsuccessful</th>
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Date: ..............................

Signatures: ..............................

**Assessor/**

**Participant**

C Polack
Nurse Teacher
Updated Nov 2005 & 2008
IMED PUMP – Front Panel Controls and Indicators

Label by number, the following keypad controls and indicators.

1. Controller Infusion Mode Indicator
2. Volume to be Infused Display
3. Computer Control/Monitor Switch
4. Pause/Stop Control
5. Rate Control
6. Hundreds Digit Data Entry Control
7. Tens Digit Data Entry Control
8. Clear/Silence Control
9. P/C Mode Control
10. Battery Operation Indicator
11. AC Power Indicator
12. Sec/Piggy back Indicator
13. Sec/Piggy back Control
14. Volume Infused and Set Up Control
15. Pump Infusion Mode Indicator
16. Rate display
17. Operator Information Display
18. Rate Titration Controls
19. Power ON Control
20. Start Control
21. Volume to be Infused Control
22. Tenths Digit Data Entry Control
Operating Features

Label by number the following features

On Front Diagram, number:-

1. Upper Tubing
   Fitment
2. Pumping
   Mechanism
3. Train Beam
4. Door Latch
5. Flo-stop Recess
6. Air-In-Line Sensor
7. Door
8. Door handle Lock
9. Magnet (Door Sensor)
10. Door handle
11. Slide Clamp Sear

On Rear Diagram, number

1. Stain relief fitting
2. A.C. Power connector
3. Pole clamp
4. Auto/Tamper Resistance Control