

Processing of Patient Care Equipment

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****This in-service has been Approved by the CBSPD, Inc. for 1 CEU.**

Background: Patient care equipment is used throughout the healthcare facility to provide essential services to patients. The general type of patient care equipment (used on the Nursing units) is usually cleaned, disinfected, reassembled, and distributed from the CS/SPD Department. Examples of patient care equipment include; infusion pumps (to regulate the amount of fluids administered intravenously; also called IV pumps), feeding pumps (to administer feedings to a patient via a tube inserted into the stomach), hypo/hyperthermia blankets (machines attached to a blanket to cool down or warm up a patient's temperature), K-pad modules (a heating pad using water to provide heat to various areas of the body), Emerson pumps (used to drain air/fluids from the chest), PCA pumps also known as patient controlled anesthesia pumps (used to administer pain medications to patients - the patient controls the administration of the medication), Oral suction machines (continuous suction); Intermittent suction (used for gastro-intestinal suction - also known as Wagenstein suction); CPM machine (continuous passive motion also known as a knee exerciser); DVT (deep vein thrombosis) or SCS (sequential compression sleeves) to prevent blood clot formation post surgery; commodes, walkers and traction devices.

Depending on the healthcare facility, the procedures for collecting used patient care equipment and distributing cleaned equipment can vary significantly. In some healthcare facilities, CS/SPD collects the used equipment; in others, the nursing units are responsible to bring the used equipment to CS/SPD. Distribution can vary as well. In some facilities CS/SPD distributes the equipment, nursing may be responsible to pick the equipment up and in others a general dispatch department distributes the equipment along with other supplies. In some facilities, the CS/SPD Department is responsible to clean/disinfect and re-assemble the equipment but another department (e.g. Materiels Management) is responsible for the distribution.

Regardless of the methodology for the collection and distribution of these devices, good procedures need to be developed and followed at all times.

Proper processing - All used equipment is considered contaminated/soiled. Therefore, when used equipment is collected, standard precautions should be used. All used equipment should be returned to the Decontamination area for cleaning/disinfection. It is recommended that all equipment be processed after each patient use. Soiled equipment should be contained during transport, if possible (i.e. on a covered cart, covered with plastic bags). Wear protective attire to protect yourself from blood and body fluids. Gloves

should be changed after handling the equipment so that elevators and doorknobs are not contaminated.

Cleaning - Policies and procedures for cleaning, disassembly, disinfection and re-assembly should be developed *based upon the equipment manufacturer's written instructions*. CS/SPD personnel should be inserviced in all equipment procedures. Equipment should be cleaned prior to disinfection. Disassemble parts, which can be disassembled. It is important to wear appropriate personal protective attire (PPE) during this process. The equipment manufacturer may recommend special detergents/chemicals to clean the equipment to ensure proper cleaning and compatibility with the materials used in the equipment.

Disinfection - Follow the equipment manufacturer's instructions for disinfection because not all disinfectants can be used on all materials. Don't assume that the disinfectant being used in the department for other purposes can automatically be used to disinfect patient care equipment. Some disinfectants can harm the materials in the equipment.

Follow the disinfectant manufacturer's instructions for proper dilution, use, contact time, temperature, etc. Wear appropriate protective attire (PPE) during the disinfection process.

Re-assembly, testing, inspection - Final preparation of the patient care equipment is essential to ensure proper function of the device. Final preparation should include: 1) proper re-assembly of all parts which were disassembled for cleaning/disinfection; 2) addition of necessary accessories (i.e. tubing clamp on Emerson pump); 3) lubrication of moveable parts, if indicated by the equipment manufacturer; 4) minimal function testing (e.g. using a gauge to verify the suction in an intermittent suction machine); 5) timely repair of malfunctioning devices (after cleaning/disinfection devices should be referred to the Biomedical department for repair); 6) last preventative maintenance and inspection date (if the equipment is due or overdue for its annual safety inspection, send the equipment to the Biomedical department) and 7) inspection for a) cleanliness; b) hospital ID (equipment tag); c) signs of abuse/damage and/or missing parts. CS/SPD personnel should also observe for *frayed cords, damaged plugs, presence of grounding pin, loose legs, non-working wheels, etc.* Any defects should be immediately reported to a Supervisor and the equipment taken out of service until repaired.

Other considerations - There should be a process in place to monitor the quality of equipment processing by initial audit and ongoing monitoring. All patient care equipment owned, leased or rented should be maintained in a functional manner to ensure safe and effective patient care. A policy and procedure regarding safety inspection of borrowed/rental equipment should be developed in conjunction with the facility's safety and/or risk managers. In addition, all patient care equipment must perform as expected when used. To ensure this, electrical equipment should be properly maintained using a preventative maintenance (PM) program. The PM should be performed by qualified personnel using the manufacturer's service manual as a reference. Records of the PM should be retained (either by CS/SPD or the Repair service).

Storage - All patient care equipment should be properly stored, available and distributed in a timely manner in order to meet patient care needs. The quality, safety and level of patient care are directly related to the availability of patient care equipment. Procedures should be in place to ensure an adequate supply of equipment is available at all times. During high usage times, frequent rounds on nursing units to pick up used equipment. Equipment should be organized to enhance accurate selection, careful handling and timely availability. Recalled equipment should be removed from service immediately. An adequate supply of equipment should be on hand to meet patients' needs. Back-up mechanisms should be in place to meet unanticipated demand (e.g. rental).

Miscellaneous - A catalog of all patient care equipment should be available to all departments. At least one copy of the User Manual for each type of patient care equipment should be available in CS/SPD for reference by the users if needed. Establish equipment control mechanisms to identify each piece of patient care equipment. This mechanism should include: a) name of equipment; b) hospital ID number; c) C S/SPD identification number; d) serial number; e) Manufacturer's name; f) Model number; g) date purchased; and h) date placed into use. The usage should be documented by patient and department, date dispensed and date returned. Follow patient charge procedures to ensure accurate charging for equipment use. In the event of a safety problem with patient care equipment; refer to the facility's Safe Medical Device procedure for reporting medical device problems.

Summary - Patient care equipment is an essential part of treatment for patient care. The CS/SPD Department plays an integral part in the processing and availability of such equipment. Following good policies and procedures for processing of patient care equipment based upon the equipment manufacturer's instructions will help achieve this goal.

POST TEST QUESTIONS: Processing of Patient Care Equipment

This in-service is Approved by the CBSPD for 1 CEU. Complete this post test and follow the directions at the end of the test for payment and results.

1. A feeding pump is returned marked "not working". The pump should be:
 - a) immediately sent for repair
 - b) set aside
 - c) cleaned then sent for repair
 - d) cleaned/disinfected then sent for repair

2. An Emerson pump is used to drain:
 - a) wounds
 - b) oral fluids
 - c) the chest
 - d) the abdomen

3. Before processing patient care equipment, the SPD technician should
 - a) check the equipment manufacturer's instructions
 - b) prepare the departmental disinfection solution
 - c) clean using the department's usual detergent
 - d) disassemble the equipment

4. A Wagenstein suction machine uses
 - a) high suction
 - b) low suction
 - c) continuous suction
 - d) intermittent suction

5. Patient care equipment should be processed:
 - a) as soon as it becomes available
 - b) after each use
 - c) after it is returned to CS/SPD
 - d) after return from repair

6. Safety inspections by CS/SPD technicians include all of the following **EXCEPT**:
 - a) loose legs
 - b) missing third prong grounding pin
 - c) electrical leakage
 - d) frayed cord

7. After disinfection, patient care equipment should be:
 - a) stored
 - b) re-assembled/tested
 - c) sterilized
 - d) distributed

8. The following information on all patient care equipment should be available to the user if requested:
 - a) Manufacturer's sales brochure
 - b) Repair logs
 - c) User Manual
 - d) Departmental policy/procedure for cleaning

9. A record keeping system for each type of patient care equipment should be developed. The log should include all of the following information **EXCEPT**:
- a) name (type) of equipment
 - b) price
 - c) serial number
 - d) equipment manufacturer's name
10. The least expensive means to ensure having patient care equipment when needed would be to:
- a) make frequent rounds of nursing units to pick up soiled equipment
 - b) purchase additional equipment
 - c) borrow from another hospital
 - d) rent equipment

Directions for Payment and Results

This in-service = \$10

Re-do's = \$10 each

No refunds (all sales are FINAL), prices subject to change.

Payment is accepted in the form of a Credit Card, Facility Check, or Money Order only.
Sorry, no personal checks.

Please see the form on the following page.

Upon passing this in-service, your certificate will be mailed to you within 7-10 business days.

Please fill out the form below and submit it with your payment and the quiz to:

Sterile Processing University, 59 Allerton Road, Lebanon, NJ 08833.

Name: _____

Mail to: Home Work

Full Address: _____

Phone: _____

Email: _____

For Credit Card Orders Only: Visa MasterCard Discover

Credit Card Number: _____ Exp. Date: _____

Person's Name on Card: _____

Card Billing Address: _____

If you have any questions, please email heidi@spdceus.com

Thank you!