RIVERSIDE CITY COLLEGE
SCHOOL OF NURSING

Policy and Procedure: Storage and Maintenance of Equipment and Supplies

Supplies and equipment used in the Parkview Community Medical Center Virtual Hospital (PCMCVH) and Learning Labs (LLs) are to be used for simulation educational activity purposes only and never for actual patient care. Equipment and supplies used during simulation educational activities are to be used with the same safety precautions as in the actual patient care environment.

Storage:

There are two separate supply storage areas rooms that house healthcare supplies and equipment. There are locked storage cabinets that store supplies, syringes, and other Sharp's for use in the PCMCVH during assigned simulation educational activities. The storage cabinets in the PCMCVH are locked when simulation educational activities are not in progress. Frequently used supplies in the open LLs are in a locked storage closet within the room. Only authorized faculty/staff have access to the storage supply areas.

Maintenance of Equipment:

The Director of Simulation/LLs submits capital requests to replace equipment and technology (including Human Patient Simulators (HPS), computers, audio-visual and software systems) used in the PCMCVH and LLs on an annual basis as budget permits.

The Director of Simulation/LLs in collaboration with the Nursing Simulation Lab Specialist (NSLS) and Nursing Skills Lab Technician (NSLT) maintains the following equipment records: date of equipment purchases, serial numbers, HPS vendor, warranty expiration dates and records of annual preventative maintenance. For equipment covered under warranty agreements that include preventative maintenance, the NSLS and/or NSLT will contact the vendor several months prior to the date to schedule an onsite visit.

The NSLS is responsible for day-to-day service and care of all simulation-related equipment in the PCMCVH and the NSLT for equipment in the LL. This includes cleaning, refilling fluids, making basic repairs, and replacement disposable parts as needed. Both staff are to maintain records of the current maintenance status of all equipment in the PCMCVH and LL and will maintain a log of all requests, repairs, and preventative maintenance work conducted.

The NSLS and NSLT will alert the Director of Simulation/LLs when there are issues with equipment, software, etc. in the PCMCVH and LL. The NSLS and NSLT will troubleshoot the problem, and when possible, resolve the situation. If the problem cannot be resolved by the NSLS and/or NSLT, the vendor will be contacted to troubleshot either by phone, returning the equipment by mail to the vendor for repair, or arranging an onsite visit from the vendor.

Student use of the equipment must be directly supervised by an employee of the SON. If there are any questions as to the proper use of a piece of equipment, the NSLS, NSLT, or course-level faculty should be consulted.

Simulated Headwalls:

The simulated headwalls at each simulated patient bedside do not connect to real oxygen gas or medical gas used for suction equipment. The simulated oxygen and suction devices are connected to compressors and are for simulated patient use only.

Maintenance of Supplies:

The SON uses an inventory software program to assist in the management and ordering of healthcare supplies. The supplies needed for the PCMCVH and LL are scanned by faculty/staff and par levels adjusted accordingly. This software assists in determining supplies frequently used in PCMCVH and LLs so that simulation and learning activities can be contextualized and optimized.

Below is a maintenance plan with timeline for all task trainers, manikins and medical equipment.

Maintenance Plan for Task-trainers/HPS/Equipment

Maintenance in the PCMCVH is primarily conducted by the NSLS. It consists of the following key elements:

1. Maintenance of equipment.
2. Stocking supplies in the medication room and patient rooms.
3. Stocking medications in the Automated Medication Dispensing System.
4. Daily maintenance of HPS.
5. Intersession maintenance.

"Spot treating" is done at the conclusion of simulation educational activity on a daily basis and more thorough cleaning is conducted during down times (usually during intersessions).

Maintenance of equipment:

Every H in the PCMCVH is a high-fidelity HPS that has several potential failure points. To prevent issues that would impact a simulation educational activity the following actions will be taken:

- Monitoring and inspection of HPSs will be conducted on a weekly basis to prevent issues that would impact a simulation educational activity.

- The wireless network functionality will be checked routinely (once a week and as needed) and troubleshooting will be a top priority.
- Power supplies require monitoring and inspection. All Link Box-based HPS (Sim Junior, Sim Newborn and Sim Mom) have removable batteries. These batteries must be kept charged. Batteries should be removed from the Link Box and plugged in for charging when not in use.
- Sim Man and Sim Man 3G HPS have internal power supplies. The power cable will be plugged in to maintain charge.
- Laptops and SimPad+ related to each of the HPS will be kept charged when not in use.
- Biomedical contracted company to provide annual maintenance and certification of hospital equipment.

The NSLS and Simulation Facilitators will report any issues that may require additional repair and/or troubleshooting to keep the simulators functional, to the Director of Simulation/LLs. Priority will be given to making needed repairs to ensure that simulation educational activities are not greatly disrupted. Alternate simulators will be substituted as appropriate and available.

Stocking of supplies in the medication room and patient rooms:

The NSLS will be responsible for maintaining and stocking supplies for simulation educational activities in the cabinets and in the simulation rooms.

- Inventory of supplies will be done on a weekly basis and supplies will be restocked as necessary.
- Simulation rooms will be inspected weekly to ensure that equipment is functional and Sharp's containers have been replaced when full.
- Glove boxes are to be checked daily to ensure that they are stocked.
- The NSLS will notify the NSLT when there is a need to order additional supplies.

Stocking medications in Automated Medication Dispensing System:

The NSLS will be responsible for maintaining and stocking medications needed for all simulation educational activities in the automated medication dispensing system.

- Patient profiles and medication orders are to be entered in advance of the first day of the semester for all simulation educational activities scheduled for the semester.
- Simulated medications should have labels with current expiration dates.
- All medications must have a green highlighted marker indicating that the medication is not for patient use.

Daily maintenance of HPS:

The NSLS and NSLT will be responsible for daily maintenance of the task-trainers and HPS in PCMCVH and LLs. Course-level and LL faculty will assist in the daily maintenance in the LLs.

- At the end of the day's activities, all adhesives and moulage will be removed from the HPS.
- Furniture (gurneys, cribs, warmers and other bulky items) will be returned to their original location.
- All simulated patient beds will be maintained based on hospital standards.
- Loose supplies will be put away into designated storage areas.

Intersession maintenance:

The NSLS and NSLT are responsible for maintenance conducted during the intersessions. Prior to each semester the following will be done:

- Thorough cleaning and maintenance check will be performed on the entire PCMCVH.
- All bedding and patient gowns will be laundered.
- All HPS will be inspected for cleanliness and functionality.
- All supplies will be fully stocked and the automated medication dispensing system should be filled in preparation for all simulations (not applicable for the LLs).
- Yearly preventative maintenance visits will be scheduled during intersessions in order to reduce impact on scheduled simulation educational activities.

Warranties:

Warranties are maintained on all medium and high-fidelity HPS by the SON to cover costs of technical repairs that may be required to keep the HPS functional. These warranties are kept by the Director of Simulation/LLs and are considered a priority expense for the department. The NSLS maintains a log of all warranty related issues, as applicable.