

## Home Healthcare Brings New Issues for Biomed

**I**nsect infestation isn't something biomed usually come across when servicing and repairing medical equipment in a hospital, but it's just another part of the job when it comes to servicing medical equipment in the home.

As the home healthcare industry grows, more medical equipment is finding its way into the home environment. This shift brings a slew of different and unique challenges for biomed and clinical engineers.

In some instances, healthcare facilities assign medical equipment to patients. This can cause complications when it comes to servicing or maintaining the devices. "It is very difficult to do a preventive maintenance (PM) check as the home users do not know that they have to bring in their equipment for a regular service," says Salah Alkhalagi, MD, director of clinical engineering at King Abdulaziz Medical City in Jeddah, Saudi Arabia. Sometimes it can even be hard to find the equipment when it is needed for PM. "The patients can change their location or telephone number, or healthcare professionals may donate their equipment to somebody else if their patient passed away," says Alkhalagi.

George F. Syll, a field service technician at Universal Hospital Services in Sioux Falls, SD, agrees that PMs on



home equipment can be complicated. "The patient could possibly have a unit for well over a year, so equipment has to be swapped out of patient homes so we can do scheduled checks and services."

Sometimes patients will bring their own medical equipment into a hospital, raising safety questions. "If it is a 'personal' item (i.e., a blood

pressure machine bought at a pharmacy) and the hospital allows the patient to have the unit with them in the hospital, then the unit will get a functional checkout to verify safe and correct operation for the duration of their stay in the hospital," says Syll.

Alkhalagi says his hospital has a policy that all medical and non-medical equipment owned by a patient must be inspected, tested, approved, and labeled by his clinical engineering department. "It is the responsibility of the ward nurse manager to report any equipment brought to the hospital by the patient," he says.

"We do allow patients to bring their own equipment if written as an order by the physician, the patient signs a waiver, and the equipment passes a simple visual test," says Craig Bakuzonis, CCE, director of clinical engineering for Shands at the University of Florida in Gainesville, FL. "We will attempt to use our own equipment first." ■

### Remember These Tips

Biomed who are well-versed in home healthcare equipment maintenance and repair offer these tips for managing equipment in a home healthcare environment:

- **Be Patient and Flexible.** "The customer is your top priority as a field service technician and good, open communication between the two of you will go a long way," Syll says. "Try to inform them a month in advance of your visit, and send a simple reminder once or twice before your visit."
- **Set Up Policies in Advance.** Managing home healthcare equipment takes diligent planning. Steven Matowik, CBET, biomedical services supervisor at Yuma Regional Medical Center in

Yuma, AZ, recommends that biomed discuss their intent to service these devices with risk management and the chief financial officer "to clarify liability, acquisition of and billing for parts, the appropriate labor charges, and who owns the billing process."

- **Keep Good Records.** "I would recommend making a well-organized database of all equipment that would include the supplier and details of the contact names and addresses of the suppliers," Alkhalagi says. "Record the locations of each piece of equipment, the patient contact number, and movement of the equipment through its life cycle."