

Communication is Key to Good Biomed-Nurse Relationships

Andrea Hall

“**W**hen a nurse describes a problem to a biomed, they may both be speaking English, but they may not be communicating well,” says Michael Dumais, RN, who worked for three years as a bedside technology specialist at Brigham & Women’s Hospital (BWH) in Boston. Each discipline has its own vocabulary, he explains, adding that when you don’t have good communication, you generally don’t have good relationships.

Dumais served as the liaison between the nursing and biomed departments at BWH, constantly working to understand both perspectives. But most hospitals don’t have the luxury of having such a link between the two departments. “I only know of two other hospitals that have a person in that position,” he notes. So without a bridge builder, how do nurses and biomed learn to communicate with each other and develop good relationships?

Nursing and biomed departments “need a common goal and purpose, and that needs to be identified by the leadership of both departments,” suggests Fran Koch, director of operating room services at Presbyterian Hospital of Dallas. Most biomed and nurses agree that the common goals should be patient safety and customer satisfaction, and that opening up the lines of communication and fostering good relationships between the two departments are the best ways to reach those goals. To do this, they suggest meeting each other one-on-one, keeping each other in the information loop, making service requests as detailed as possible, and gathering feedback.

Get to Know Each Other

“The most important thing you can do is get out there and meet people one-on-one,” says Virgil Smoot, CBET, biomed director at Children’s Hospital of the Kings Daughters in Norfolk, VA. “Quit relying on e-mail. However, e-mail is a very valuable tool when used prop-



At Inova Fairfax, Becky Arthur, a biomed, and Edward Pomianowski, a registered nurse, keep each others departments informed.

erly. I use e-mail a lot. But I still find it very helpful to actually meet with the people when possible, especially if it is a sensitive issue,” he says. When you do use e-mail, be very careful what you say. “Don’t put in anything you wouldn’t want misconstrued or anything you don’t want someone else to read,” explains Smoot, who adds that he has learned these lessons the hard way. With e-mail, you can’t always detect the writer’s tone, according to Smoot.

Some, however, feel that e-mail can be useful. BWH employs approximately 2,700 nurses, making it difficult for the biomed department to develop personal relationships with all of them. As the biomed department’s link to the nurses, Dumais used e-mail to keep in touch and designed a web page that he used as a portal for disseminating information to the nurses. For example, if a Friday afternoon phone call from a vendor revealed that a device component was defective, Dumais would quickly post a notice on the web page to let the nurses know exactly what they needed to do. “Any time you can help a nurse with timely information, they’re grateful,” he says. He also used e-mail to let nurses know in advance when a biomed would need to take a device out of the

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unit for servicing.

Whenever possible, get to know the people who work in the other department. “Managers should introduce all new employees, even interns to the people they’ll be working with,” says Smoot. Biomed managers can attend the nurse directors’ meetings, and a new nurse manager can set up a meeting with the biomed department. Biomed also can foster relationships with nurses by making occasional rounds in the patient areas, ensuring that all the equipment is operating well. “Once you build a relationship with a nurse, he or she trusts you to take care of things,” says Becky Arthur, a biomedical equipment technician (BMET) at Inova Fairfax Hospital in Virginia. By asking questions, nurses learn that the biomed “can be a great resource to provide training or assistance,” explains Smoot. “We’re there to help. Don’t be afraid to ask.”

In the Loop

Keeping the other department informed of what’s going on, such as Dumais did with his web site, can go a long way to building good relationships. The biomed department at Inova Fairfax strives to give nurses information on the status of the equipment that is being serviced, Arthur explains. “We let them know how long the repair will take, and whether it has to be sent out or will be fixed in-house, just to let them know what’s going on with their equipment.”

Biomed also like to be involved in any nurse training that involves devices, not just the training conducted for new equipment (see sidebar). “It may just show us a different way that nurses are using equipment that we weren’t aware of,” says Arthur. In addition, if a clinical department purchases a new device through materials management, let biomed know when it’s coming in. “We need to check it out to make sure it complies with NFPA (National Fire Protection Association) requirements,” says Arthur. Letting the biomed department examine new equipment first also allows them to give the nurses troubleshooting pointers.



Customer Service

For the biomed, the customer is usually a nurse. So how do BMETs ensure that their customers are satisfied? “Ask them,” says Dumais. Often, a biomed answers a service call by troubleshooting to the best of his or her ability and then walks away. Instead, the technician should immediately establish communication with the nurse by asking him or her exactly what happened and then staying at the bedside until the problem is solved. When you’re finished, ask the nurse, “Is everything fixed according to your expectations?,” Dumais suggests. For example, an epidural pump can be programmed in a variety of ways. If the nurse says the keypad isn’t automatically locking, and the biomed says it’s not supposed to, the nurse’s problem isn’t solved, he explains. “There’s a difference between a device not working properly and one that’s not working as expected,” he says.

Some nurses suggest that biomed get involved in the nurses’ skills days, where nurses review procedures and demonstrate competency in using equipment. This can encourage a “collaborative relationship so they can learn from each other,” says Koch. Biomed also can label equipment with signs explaining how to troubleshoot for the most common problems with each device. This can help the nurses resolve problems immediately, especially in critical care situations, and can lighten the biomed’s workload by eliminating unnecessary service calls.

Customer service cannot be over emphasized, according to both BMETs and nurses. Outside contractors can always be replaced, and an in-house department can be traded for a contractor. “We have to go above and beyond what an outside contractor will do or the hospital may farm us out,” Smoot says.

When it comes to being satisfied with the service that biomed provide, nurses carry some responsibility as well. “One of the things that nurses do poorly is provide adequate information for biomed to repair equip-

ment,” says Koch, who is also a nurse. Often, they fill out a work order and push the equipment out the door, she explains. Instead, tell the biomed exactly what happened and what you expect the device to do. Arthur says that biomed need specific information when repairing equipment, such as what error code the nurse saw and what mode the equipment was in when the problem occurred. “We usually can’t see the problem unless we know what setting the equipment was on when the problem occurred,” she says, adding that most of the nurses at Inova Fairfax do provide that level of detail when talking face-to-face.

By talking to the technician, a nurse also can learn what the most common, simple problems are, such as a device that is not plugged in and leaving the batteries uncharged. Another complaint is that some nurses react too quickly and make a service request call before taking a moment to assess the situation. However, incidents happen quickly and without warning, explains Edward Pomianowski, RN, who works in the cardiac care unit at Inova Fairfax. “If there’s a catastrophic equipment failure, we have to get it fixed right away,” he says. In attempting to convey the severity of a problem, “sometimes the emotional element comes into it when

Tips on Device Acquisition and Training Programs

One of the most important times for nurses and biomed to communicate properly is during the installation of and training on a new device or system. Patients cannot simply be put on hold until everyone has demonstrated competency with the new equipment, so the relationship between the two departments can be critical to reach a smooth transition. Following are some tips from the trenches on how to conduct a successful device acquisition and training program that involves both biomed and nurses.

Before purchasing any new major equipment, have the managers and educators of both departments meet to discuss the pros and cons of the new device or system and consider alternatives. Once the decision is made to purchase and install new equipment, do the following:

- Examine what you currently have in place.
- Understand what is coming in.
- Understand the differences between old and new equipment.
- Construct a customized curriculum.

“I cannot emphasize the word ‘customized’ enough,” explains Michael Dumais, a former bedside technology specialist who currently works as a learning systems administrator and instructional designer in the distance-learning program at Rivier College in Nashua, NH. “What you have now is hugely important.” Make sure the biomed understand exactly how the nurses are using the existing equipment. As an example, Dumais tells the story of obtaining and installing new IV pumps. With the old device, the user had to push a clamp for-

ward to engage the anti-free flow mechanism. With the new device, however, the anti-free flow mechanism would be engaged as long as the user did not push the clamp forward—“a completely 180 degree difference in operation,” Dumais explains, adding that the biomed department wasn’t aware of this difference at first, and mistakes were made with the unit’s operation. “If we’d realized that at the beginning, we could have customized the training to emphasize this point,” he adds.

Be aware that vendor educators usually give prepared lectures that may fail to take into consideration the equipment that the hospital staff is currently using. The biomed department at Brigham & Women’s Hospital (BWH) “insisted that educators knew where we were coming from and insisted on a customized curriculum. We would expect nothing less,” says Dumais.

In addition, BWH would not deploy a device until 95 percent of the nurses had received training. Dumais, who used to work as a professional ballet dancer, equates the process with staging a production. To have the nursing staff trained within a relatively short period of time (two weeks was the norm at BWH), the biomed department had to do a lot of advance advertising and scheduling, and asked the vendor to conduct training sessions on two consecutive weekends. The department then told hospital management to either staff-up or have nurses come in on their day off. “It did cost money, but there’s no way around it,” Dumais asserts. “From a safety perspective, it’s the absolute right thing to do. In fact, it’s the only thing to do.”

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we're frantic." Pomianowski notes that he "appreciates the biomed department, and I'm glad they're there when we need them. It gives me a lot of peace of mind because we spend so much time taking care of critically-ill patients."

When a biomed does discover what appears to be a user error, which Smoot's department now refers to as "improper operation," try to show the nurse what happened without embarrassing him or her, Smoot advises. "They're under pressure too, and we realize that," he says.

Feedback

The classic problem is that when a biomed does something good, there is no feedback. "But if something goes wrong, you hear about it," Dumais says. He addressed this issue by following up on all service requests, asking the secretary who took the initial call to touch base with

the nurse to make sure everything is okay. Some hospitals are experimenting with automated e-mail messages that instruct the nurse to "feel free to contact the biomed department" again if something goes wrong. But many on both sides of the equation feel that personal contact is better.

"Any time you can help a nurse with timely information, they're grateful."

—Michael Dumais

The biomed at Inova Fairfax are lucky enough to get both positive and negative feedback from the nurses, and "almost all the feedback we get is productive," Arthur says. It encourages the biomed to anticipate problems before

they happen, such as making sure they correctly estimate the number of devices a particular unit will need so that there's never a shortage, she explains.

Although many facilities do not have a formal conflict resolution process, problems are usually handled by managers in each department. Often, a biomed manager takes the "second call" from a nurse when a problem isn't resolved satisfactorily the first time. When this happened during his tenure at BWH, Dumais would take the technician back to the unit and show him or her what should have been done. "If there was a knowledge deficit, we wanted to fix that if we could," he explains. In addition, "the nurse saw that we were taking care of it."

Some departments use surveys to get feedback. The biomed department at Children's Hospital of the Kings Daughters sends a survey annually to all of the units that it serves. Through this survey, nurses and other employees have the opportunity to comment on everything from a BMET's competency to his or her demeanor and whether he or she cleans up any mess created. If any problems are noted, they are addressed immediately, Smoot says. Throughout the year, he makes an effort to speak to nurses in person about the biomed they work with directly. "I get verbal feedback constantly because I always ask the nurses when I see them," says Smoot, who also uses this information on the biomed's annual performance evaluations.

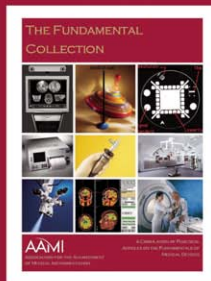
"The sky's the limit in developing relationships that can be beneficial to both nurses and biomed," says Koch. Even when the lines of communication are open and relationships are good, there is always room for improvement. "In an environment of enhancing patient safety, the two groups have the information to ensure the safe use and operation of devices," she adds. ■

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