

Human resources

Competency matrix modeled on ski trail difficulty validates staff skills at Vail center

urgeon concerns about staff competency and high turnover of surgical technologists at Vail Valley Medical Center (VVMC), Vail, Colorado, prompted the development of a staffing skills competency matrix.

VVMC is a community hospital with 4 rooms in its main OR, 4 rooms in its adjoining surgery center, and 4 rooms in its surgery center in Edwards, Colorado, which is 12 miles from Vail. VVMC also includes the Steadman Clinic, a worldrenowned orthopedic clinic, and the Steadman Philippon Research Institute, where 9 orthopedic fellows a year hone their surgical skills on cadaver knees, shoulders, and hips.

The matrix, which is divided into skills needed by RNs and surgical technologists, consists of different levels of expertise. Implementation of the matrix not only has helped OR leaders structure and train their staff more appropriately, it has also motivated staff to enhance their skills and has boosted surgeon satisfaction, according to Mary Jo Steiert, BSN, RN, CNOR, director of perioperative services at VVMC.

Patterned after the colors and symbols that designate the level of difficulty of the ski trails at Vail, the matrix gives OR team members a visual and up-to-date representation of RNs' and surgical technologists' skill sets in 4 levels for procedures. There are 2 staffing skills matrix boards—1 for the scrub role and nurses who function in the scrub role and 1 for circulating nurses. The boards are 5 ft by 5 ft and include all 31 staff RNs and surgical technologists.

Moving to expert

The OR clinical specialty coordinators decided on the ski slope symbols because they wanted the skills matrix to reflect Vail, says Steiert.

"We really wanted to trademark it to where we work," she says. "A lot of people come from all over the world to have their surgery here because of our world-class surgeons, so we wanted to create a world-class model for our staff to match our surgeons."

The 4 levels are orange, green, blue, and black (sidebar, p 27).

Orange. An orange triangle signifies orientation. This is a new staff member, a new graduate who participated in an AORN Periop 101 course, or someone who needs assistance with a particular specialty or procedure. "Though the orange triangle isn't a ski slope symbol, orange is a warm color and represents patient safety, and that's where we wanted everyone to start," notes Steiert.

All new staff members at VVMC come in at the orange level. "They may have experience, but they have to learn our surgeons, the way we do things, and our positioning devices," she says. "They have to prove themselves, show us what they know, and that they are able to apply their skills and knowledge learned at other facilities."

Before moving to the green level, new staff must have their competence verified and signed off by a "blue" team member, and a "black" team member or designated mentor, the educator, and the charge nurse.

Criteria to move from orange to green include understanding the basic equipment



setup for a case, understanding surgeon preferences and where to find them, demonstrating and verbalizing basic knowledge of a procedure, and displaying critical thinking for technical skills.

Green. A green circle, which indicates easier ski slopes, signifies limited assistance on the skills matrix. This is a staff member who may require limited back-up help. "This person may be able to do a case but needs help getting started and at the end," says Steiert.

Before moving from green to blue, staff must have their competence verified and signed off by a specialty team leader, a scrub technologist or RN, and the charge nurse.

Criteria to move from green to blue include setting up a room/case independently, functioning independently during a case, and displaying critical thinking in analyzing and prioritizing tasks, equipment, etc.

Blue. A blue square, which specifies ski slopes for intermediate skiers, means independent on the matrix. This is a staff member who can keep up with the surgeon during a case, is competent and fully qualified, and can do cases safely and independently.

Before moving to the black level, staff must have their competence verified and signed off by a specialty team leader, a surgeon, and the charge nurse.

Criteria to move from blue to black include anticipating and preparing for unexpected deviations from the norm, demonstrating the ability to teach, and taking the initiative to create in-services, mock simulations, and pamphlets for staff or patient education.

Black. A black diamond signifies an expert on the ski slopes and the matrix. This is a staff member who can stay 1 step ahead of the surgeon, can teach and trouble-shoot, and whose expertise level is acknowledged by the surgeon. "Going from blue to black has to have confirmation from the surgeon on a particular procedure," says Steiert. "I will ask him if he thinks a person should be considered expert on a certain procedure, such as multi-ligament knee repairs, and he can say 'yes' or 'no, she needs a few more cases.""

About 10% of the staff are experts, and Steiert believes there will never be more than 20%. "We really want the majority of our staff to be blue in the traditional bell curve, with 80% in the middle and 10% on either side. That is the ideal model we are looking for," she says.

RN scrub fellowship

"When we first plotted out our skills matrix boards at the beginning of 2013, we found we had huge holes in our staff who could scrub," says Steiert. "It was a real wake-up call for us because we discovered that what the surgeons were telling us was true."

Steiert and the OR educator, Jan Stull, MS, RN, CNOR, met with staff and developed a scrub fellowship program for RNs. Four RNs have completed the first class, and 2 are at the expert level. The first class began in April 2013 when the ski slopes closed and ended December 1 when the slopes reopened. This was the off season when the OR schedule was slower.

"Two experienced surgical techs took the 4 RNs under their wings and wrote the program," says Steiert. It was based on a scrub fellowship program developed at Scottsdale Healthcare, Scottsdale, Arizona (Ritchie, 2009). "They did a marvelous job tweaking this program to make it work for Vail," she says.

"The 2 techs came to us with the resources they wanted to order for the RNs," says Stull, "and they created pictures and videos to share with staff or found videos of our surgeons demonstrating procedures on YouTube."



They also made arrangements for the RNs to go to the Steadman Philippon Research Institute Surgical Skills Laboratory, which has 10 workstations. The RNs worked with the fellows on different procedures. "The techs really had this very well thought out," notes Stull.

The surgical technologists also associated a point system with the scrubbing skills, which the RNs have to earn in order to progress through sports medicine, spine, total joints, and trauma.

"It is criteria-based and nonjudgmental," says Stull. "The RN has to earn the points to be checked off for each specialty area."

Going forward

In January 2014, Stull began meeting with staff every other month to work with them on 2 or 3 skills they want to develop this year. "For example," says Stull, "an RN may come to me who is a blue on ORIF [open reduction internal fixation] of the distal radius and say she wants to be a black. I will work with her to move her to the next level."

The skills matrix is a great model that shows scrubbing and circulating in the OR is a lifelong journey, says Steiert. "It shows me where I am and where I can go if I want to work for it."

Steiert adds that "the model also shows the surgeons that 'we are not talking the talk, we are walking the walk' to get our staff at an independent, competent, and confident level."

Surgeon satisfaction has increased, she says. Instead of complaining about staff competency, they are saying, "good work, good work."

The matrix is also breeding competition among staff members. Some of the long-time staff are seeing new graduates moving up the skills matrix, and surgeons are asking for them by name.

"This motivates someone who has been there for 20 years to think, 'I should step up my game a notch because he isn't asking for me anymore,'" says Steiert.

In addition, some of the experts are asking for a double black diamond designation, which also signifies very difficult ski slopes, for a staff person who is an expert and also certified. "We will be adding this level," she says. �

—Judith M. Mathias, MA, RN

Reference

Ritchie C R. Fundamental perioperative nursing: Decompartmentalizing the scrub and circulating roles. Perioperative Nursing Clinics. 2009;4(2):167-180.

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