Surgeon-nurse duo delivers excellent, efficient patient care

The number of nurse practitioners is expected to double by 2025, and the need for surgical first assistants is growing as residents’ work hours are reduced and surgeon assistants are eliminated to cut costs.

This situation offers a great opportunity for advanced practice perioperative nurses. A double certification of nurse practitioner (NP-C) and RN first assistant (CRNFA) allows nurses to fill 3 roles: preparing patients for surgery, assisting at surgery, and following patients postoperatively.

Hospitals and surgical practices are beginning to realize the value of these qualifications.

OR Manager spoke with an advanced practice nurse (APRN) and a surgeon whose partnership has increased patient satisfaction, shortened operating time and hospital length of stay, and reduced costs.

Christy Schatz, MSN, RN, FNP-BC, CRNFA, is a board-certified nurse practitioner and first assistant in thoracic surgery at Inova Fairfax Hospital, Falls Church, Virginia.

Sandeep J. Khandhar, MD, FACS, a cardiovascular and thoracic surgeon and the director of Inova’s thoracic oncology program, specializes in video-assisted thorascopic surgery.

Schatz and Dr. Khandhar have been working as a team for nearly 6 years and are described as “interprofessional exemplars” by Patricia Seifert, MSN, RN, CNOR, CRNFA, FAAN, nurse educator for the Inova Heart and Vascular Institute.

“The use of an APRN preoperatively, intraoperatively, and postoperatively has great potential for implementing many of the recommendations of the 2010 Institute of Medicine’s Future of Nursing report,” says Seifert. “It is the way of the future.” (See sidebar, p 13.)

OR experience makes all the difference

“My OR experience has made all the difference in my work as an NP,” says Schatz, who worked in cardiac surgery for 16 years as a perioperative nurse and an RNFA before becoming an NP.

“Having the OR experience first is key,” she says. “NPs don’t get intraoperative training in school, and those who graduate and then want to become RNFAs have a difficult time.”

Among Schatz’s responsibilities are making sure the patient is positioned correctly and the right equipment is present before Dr. Khandhar comes into the OR. “If you don’t have any OR experience and you are trying to tell OR nurses what to do and how to do it, you can imagine how well that goes over,” she says.

Intraoperatively, Schatz says she prides herself on being 1 step ahead of Dr. Khandhar. “I know the moves he is going to make, and I try to move before he needs me to. If he needs me to hold something, I am already there to take it from him.”

To give NPs the necessary experience to assist at surgery, Schatz says, a periopera-
tive NP specialty akin to the family practice and acute care NPs is needed that includes an OR didactic and clinical piece.

The hospital hired Schatz specifically to assist Dr Khandhar in surgery as well as take care of patients on the unit postoperatively and do preoperative consults and H&Ps.

Dr Khandhar wanted an NP rather than a physician’s assistant because of his high regard for nurses’ backgrounds and their role in patient care, says Schatz. “He truly values nursing and the holistic approach and personal service nurses bring to the care of patients.”

**Bringing the humanity back**

What sets his partnership with Schatz apart from others, says Dr Khandhar, is they fundamentally believe they need to bring back the notion of human care.

There has been a phase shift in medicine over the past 25 years from humanistic to technical, he says. “We have fancy interventions, shorter lengths of stay, and less time for bedside care. Even the robot has now physically removed the surgeon from the patient on the OR table.”

It is so important to bring the humanity back, he says. “Everything we do, from the first time we see patients in the office to the preoperative care, intraoperative care, postoperative care, and follow-up, is focused on the patients and their entire well-being.”

When Dr Khandhar gets a consult call, he and Schatz try to see the patient within a half hour to an hour. All of Dr Khandhar’s new patient appointments are scheduled for 1 hour. “I need this much time to educate them about lung cancer and the expectations for surgery and long-term outcomes,” he says. “I want to combat all of their fear and trepidation with knowledge, and it takes time to do that.”

He also gives all of his patients his personal cell phone number, and he calls each patient the night before surgery, just to make sure there are no last-minute questions or concerns.

“I can’t tell you how many patients after surgery tell me, ‘I can’t believe he called me,’” says Schatz. “It’s those little touches that make such a big difference for our patients, and we try to carry it out all the way from preop until they are home and everything is set.”

Dr Khandhar and Schatz always insist that families accompany the patients on their office visits, so they can educate all of them together. Fairfax Hospital is located in an area with a very educated population, and its patients seek and thrive on education, says Dr Khandhar.

“They don’t want to hear, ‘I am the doctor, and I want you to do this.’ They want to know why, they want to know how many times, they want to know what the percentages are, and they want to know your results,” he says. “They are very challenging in that sense, but we enjoy that.”

Dr Khandhar says he and Schatz have found that if they take their technical exper-
tise and combine that with excellent perioperative care, “it’s a formula that can’t lose. It saves time and money, it makes patients feel good, and it gets patients back to their lives as quickly as possible.”

**Team is focused and subspecialized**

“One unique aspect of our practice is, we are very focused and subspecialized,” says Dr Khandhar. “What makes it so successful and special is not just the technology, but the people with whom we work. Their dedicated focus to our specific service line allows us to do our procedures in a very fluid and very efficient way.”

Dr Khandhar performs his procedures in a subset of 6 ORs for cardiac, vascular, and thoracic procedures. A dedicated team of scrub technologists, circulating nurses, and anesthesiologists also works in these rooms.

About 80% of his cases are lung cancer, and about 20% are for other lung diseases. He also does a small number of mediastinal tumor, esophageal cancer, and chest wall, diaphragm, and rib procedures.

Though most lung cancer resections are done by general surgeons, at Fairfax Hospital only cardiothoracic surgeons perform these procedures.

There are about 5,500 cardiothoracic surgeons in the US, Dr Khandhar explains. Of those, the vast majority operate predominantly on the heart. The rest operate predominantly on the lungs, and about half of those perform cases minimally invasively.

Dr Khandhar is among a small group of about 50 who have completed additional training in minimally invasive surgery.

Dr Khandhar performs almost all procedures, including lobectomies, wedge resections, and decortications, through 2 incisions—an inch and a half in the front and a half an inch in the back. He did only 3 open thoracotomies last year.

About 75% of his patients go home on postoperative day 1 after a lobectomy, and about 95% go home after spending 2 nights in the hospital. Only 5% stay longer than that.

**Collaboration, communication, coordination are key**

The unique environment Dr Khandhar and Schatz work in requires collaboration, communication, and coordination.

Schatz is hired by the hospital, and Dr Khandhar is in private practice with 16 other surgeons. The medical oncology, radiation oncology, and pulmonary groups that refer patients to him also are in private practice, except for the transplant group.

“Because very few physicians work for the hospital, collaboration is key,” says Dr Khandhar. “This collaboration extends from the referring physicians to the surgeons to the nurses to the patients, and things get done efficiently and with as perfect communication as we can make happen,” he says.

The hospital’s recognition of this exemplary service is further manifested by employing an NP for Dr Khandhar’s office to do preoperative H&Ps for elective cases and to schedule patients for preoperative testing and surgery.

Schatz sees the patients and their families immediately before surgery in the preoperative holding area. She talks to them about what the patient can expect in the postanesthesia care unit (PACU), the pain management strategy, and lung expansion exercises. Immediately after surgery in the PACU, Schatz writes the postoperative orders.

Most of the time, Schatz and Dr Khandhar make morning rounds together to see the patients they operated on the day before. Even though Dr Khandhar operates on 10 to 12 patients a week, the typical census on the floor is only 2 or 3 patients because most go home the day after surgery.
Patients are discharged with Dr Khandhar’s personal cell phone number, Schatz’s number, and the office NP’s number.

Another unique aspect of Dr Khandhar’s practice is that a significant number of patients are discharged postoperatively from the PACU, such as patients who have wedge resections for cancer or diagnostic purposes. These patients never go to the patient care unit, so all of the discharge coordination has to happen within about 3 hours in the PACU, says Schatz. The PACU nurses, Schatz, and Dr Khandhar take part in this.

The national average length of stay for any intervention in the chest, including minimally invasive, is 4 to 7 days, says Schatz, and “our patients are routinely going home in 1 or 2 days.”

Many talk about a half-day shortened length of stay as a huge driver in a business model, says Schatz, “and we are talking about a 2- to 4-day shortened length of stay in our program. There aren’t a lot of bells and whistles to it. You just need the right people in the right places.”

**Study on early ambulation**

A study by Dr Khandhar, Schatz, and colleagues on early postoperative ambulation of lung cancer patients found it was feasible and safe to have them up and walking within an hour of extubation. Patients were set a target of 250 feet, and 77% (579 of 750 patients) managed to walk that distance, 60% of them within the hour.

Early ambulation shortens the hospital stay, reduces pain and the need for narcotic analgesics, and lowers the incidence of deep vein thrombosis.

“Our focus on early ambulation has really brought together the essential members of our perioperative team around a very specific and defined goal,” says Dr Khandhar. “The end result is a win-win proposition—patients feel better, and the hospital has more time and resources to treat more patients.”

This concept has been recognized in multiple settings, and Dr Khandhar says their team is dedicated to spreading the word. He and Schatz are helping to design novel training paradigms that include surgeons, NPs, anesthesiologists, and administrative personnel that will begin at Inova later this year.

“We are excited to be able to share our work and philosophy with healthcare professionals regionally, nationally, and across the globe,” he says. ✤

—Judith M. Mathias, MA, RN

**Institute of Medicine’s recommendations for the future of nursing**

Four recommendations are presented in the report:

- Nurses should practice to the full extent of their education and training.
- Nurses should achieve higher levels of education and training through an improved education system that promotes seamless academic progression.
- Nurses should be full partners, with physicians and other health care professionals, in redesigning health care in the United States.
- Effective workforce planning and policy making require better data collection and an improved information infrastructure.


**References**

