

Turning a Crisis Into an Opportunity: Promoting Professional Development Among Perioperative Personnel During a Pandemic

Lori Robertson, MBA, BSN, CNOR, NE-BC, FACHE; Susan Finlayson, DNP, RN, NE-BC; M. Tracey Peñaloza, MSN, RN, CNOR; Stacey Brull, DNP, RN, NE-BC

ABSTRACT

The perioperative setting is a complex, high-risk working environment. Ensuring adequate staffing with highly competent nurses remains a top priority to sustain safe patient care. However, there are barriers to individual professional advancement in hospitals, including costs and lack of support or time, which can lead to decreased nurse satisfaction. After the mandated cancellation of elective surgery in March 2020 resulting from the coronavirus disease 2019 pandemic, leaders at a medical center decided to turn this difficult situation into an opportunity to re-engage their perioperative personnel in professional development. More than 70 staff members participated in activities related to certification, continuing education, clinical advancement, and cross-training. Elective surgery has since resumed, and as a result of the pursuit of professional development opportunities, staff member turnover did not increase throughout the transition at the medical center. Interest in professional growth has been reignited and staff members are excited about future development opportunities.

Key words: *professional development, clinical ladder, specialty certification, cross-training, continuing education.*

Patient safety, teamwork, and clinical competence are critical to ensuring positive patient outcomes.¹ Researchers have identified that knowledge in evidence-based practice and clinical best practices have been associated with a decrease in adverse patient outcomes, such as surgical site infections, morbidity and mortality, and hospital-acquired skin injuries.¹⁻³ An increased national focus on providing the highest quality care in an effective and efficient manner has reinforced the need to ensure certain structures and processes are in place to promote clinical nurse advancement.⁴

Perioperative nurses work in an extremely stressful, complex, and technology-driven environment that is constantly changing.^{5,6} This work environment requires nurses to consistently demonstrate flexibility and adaptability and emphasizes the need for continuing education.

However, the attributes of the perioperative work environment also can lead to nurse burnout. According to a 2020 Nursing Solutions report, the national vacancy rate for perioperative nurses was 15.3% in 2019.⁷ Further, from 2012 to 2020, the OR has continued to be the most difficult area in which to recruit experienced nurses.⁷ Making education and professional development opportunities available and, more importantly, accessible to nurses is a way for health care organizations to retain nurses and decrease vacancies.⁸

The American Nurses Credentialing Center Magnet Recognition Program, among other national programs, emphasizes professional growth and development as key components of practicing nursing in a healthy work environment.⁹ In the literature, clinical ladders specifically have been discussed as one way that organizations

can engage in the promotion of nurses.^{10,11} Other development strategies include providing opportunities for academic advancement,⁹ specialty certification,¹² and education and training in other roles and specialty-specific topics.^{13,14} By recognizing nurses' professional achievements and accomplishments, nursing leaders can influence nurses to continue working on the front lines of patient care.^{10,15}

A review of the nursing literature revealed several barriers that make it difficult to incorporate these types of professional development opportunities into daily operations in a hospital. These barriers can be organized into three major categories:

- the financial costs associated with review courses, study materials, and certification exams;
- individual nurse-driven barriers, such as fear of failing or not testing well; and
- leadership-driven barriers, such as lack of support and provision of review time, resources, and mentoring.^{16,17}

Our medical center was facing many of these barriers. In this article, we share how the perioperative leadership team at our medical center used the government mandate to halt elective surgery during the coronavirus disease 2019 (COVID-19) pandemic strategically to engage the staff members in professional development opportunities and achieve positive outcomes in the following domains: turnover rates, staff retention rates, staff member satisfaction and engagement, and certification.

BACKGROUND

Mercy Medical Center (MMC) is a faith-based, Magnet-recognized, academically affiliated nonprofit community medical center in Baltimore, Maryland. At MMC, there are more than 300 perioperative staff members caring for more than 15,000 patients annually. The perioperative department houses 30 ORs in four different locations: the main operating suite, Crane surgical suite, the foot and ankle ORs, and McAuley surgical center.

Because of a busy surgical schedule and the intensity of the nursing role, perioperative nurses often were not able to take time to grow professionally, which can lead to dissatisfaction.¹⁸ The 2020 Press Ganey nursing satisfaction results related to professional development in the

perioperative units at MMC scored an average of 3.55 on a 5-point scale, which fell below the national benchmark of 3.98 (Press Ganey Associates, unpublished data, 2020). During multiple meetings between the perioperative nursing staff members and perioperative leaders, the meeting participants identified that nurses' concerns were centered around their inability to find time during the day to invest in advancing their careers. Nurses stated during shared governance and staff meetings that they would attempt to prioritize their work on a project or study for their certification during their breaks or between procedures. Additionally, other nurses stated they would do the work at home on their days off, which increased their stress, anxiety, and frustration.

After additional investigation, we found through an internally conducted survey that the OR nurses in particular felt the clinical ladder did not highlight the role of the nurse in the OR but rather was geared more toward the inpatient and postoperative areas of the medical center. This disconnect contributed to decreased interest in the clinical advancement ladder because nurses would have to spend additional time translating their procedural care model and outcomes to fit the inpatient care model. Nursing leadership allocated time for and assisted the OR nurses with developing an OR-specific clinical ladder, which alleviated the content challenges but did not address the time that nurses needed to complete the endeavor.

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CALL TO ACTION

On March 16, 2020, amid the public safety concerns surrounding the global spread of COVID-19, Governor Hogan directed all Maryland hospitals to halt elective procedures.¹⁹ This mandate decreased surgical volume by 90%, thus decreasing the need for a full complement

of perioperative team members. As the realization of the pandemic set in, hospital executives across the state began making tough operational decisions that included furloughs, layoffs, and reductions in paid time off. Although these direct financial risk-mitigation strategies could stem losses during the pandemic-induced downtime, the perioperative leadership team at MMC decided to focus on future recovery and use this time as an opportunity. Senior institution and perioperative leaders knew that after elective procedures resumed, every nurse and surgical technologist would be critical to providing surgical services to patients.

Identifying this cessation in elective surgeries as an opportunity to focus on initiatives and activities led to the development of a comprehensive, strategic, professional growth and development plan with the goal of retaining perioperative staff members during the pandemic. There were opportunities for staff members to engage in professional activities in four focused areas: certification, continuing education, clinical ladder advancement, and cross-training.

Focus 1: Certification

At meetings that took place before the pandemic, many perioperative nurses voiced interest in becoming certified in their specialties. To create this opportunity, the vice president of Perioperative Services reached out to multiple companies that provided certification review courses and inquired about the possibility of hosting a virtual certification review course for the perioperative nurses. Not knowing how long the mandate would last, the perioperative leadership team requested that the course be offered as soon as possible and in a forum that allowed for the restrictions of social distancing. The vice president of Perioperative Services contacted various vendors to assess their ability to provide safe, socially distanced education starting within seven to 10 days.

Two perioperative certification review companies agreed to host a perioperative certification review course at MMC and committed to dates, a minimum number of seats, a venue, and a per-person course rate that was covered by MMC. Within a few days, the MMC information technology (IT) department had set up an online audiovisual platform for the course that included a real-time chat box for questions and answers between both parties (ie, host and attendees). The IT department also provided support

throughout the course by ensuring that all audiovisual components were functioning properly. To boost morale and instill a sense of normalcy, MMC nursing leadership arranged for catering (ie, lunch, snacks) in two adjoining conference rooms so staff members could connect while maintaining social distancing. Using this format, we were able to host multiple certification courses: CNOR preparation for the OR nurses and CAPA (certified ambulatory postanesthesia nurse) or CPAN (certified postanesthesia nurse) preparation for the postanesthesia care unit (PACU) nurses. The perioperative leadership team was committed to providing the nurses the time they needed to attend these courses. These offerings allowed 48 interested nurses to participate either online or onsite and to be paid for their time while taking the courses.

After the nursing certification classes had been established, surgical technologists at MMC also expressed interest in a certification review course. One of the nurses who had attended the nursing certification course volunteered to lead the effort. With the support of perioperative leaders, the designated clinical nurse contacted the National Center for Competency Testing (NCCT) to set up a certification review for the surgical technologists. The designated clinical nurse worked with the surgical technologists to create an online surgical technologist certification review consisting of nine modules and more than 600 practice questions to be completed over two days. Twenty surgical technologists signed up and completed the certification review course. Additionally, nurse leaders at MMC requested that the facility become a designated testing site for the NCCT certification exam because so many of the existing testing locations were shut down during the pandemic.

The designated clinical nurse worked with the surgical technologists to create an online surgical technologist certification review consisting of nine modules and more than 600 practice questions to be completed over two days.

To initiate MMC becoming a designated testing site, the same nurse who had contacted NCCT reached out to an independent certification representative and obtained the

testing site eligibility application—a three-page document inquiring about specific organizational demographics and a general overview of the exam. The application also lists all the environmental, safety, and accessibility requirements that the facility must fulfill to serve as a testing site. The exam can be administered via paper and pencil or computer. The surgical technologists chose to have the exam administered via computer. To be a designated test site, there must be a program coordinator and a proctor from the organization to support the testing. A clinical nurse who works in the OR volunteered to be the program coordinator. In accordance with the testing site requirements, the vice president of Perioperative Services selected an employee outside the perioperative department to serve as the proctor. The IT department secured a testing room with computers and internet access. A minimum of four candidates per test are required to avoid facility fees from NCCT. Mercy Medical Center and NCCT mutually agreed upon a specific date for the exam; candidates had to register with their required documents and exam fee a minimum of two weeks in advance of the exam date. Mercy Medical Center reimbursed participants for the exam fee under the continuing education benefit available to all employees. The total time for the exam, including set up, was approximately four hours. Since becoming established as a testing site, MMC has hosted three test dates for internal employees as well as surgical technologists in the surrounding community.

Focus 2: Continuing Education

Perioperative nurses who were interested in improving their clinical skills asked if they could take advantage of this pause in elective surgery to refresh their knowledge of current evidence-based practices geared specifically to the OR. Perioperative nurse leaders held a shared-governance meeting with perioperative team members that produced a variety of additional suggested topics for review (eg, service line refreshers, specific skill development, advanced technologies). Using these suggestions, perioperative nursing leaders reviewed and subsequently purchased a group package of programs from AORN that included Periop 101: A Core Curriculum and Periop 202 for Spine Procedures, Total Knee Arthroplasty, and Total Hip Arthroplasty. By partnering with its librarian, MMC was able to upgrade from the electronic version of the AORN *Guidelines for Perioperative Practice* to the online AORN eGuidelines+, which provides staff members access to additional resources, such as AORN *Journal* articles, the Periop Nursing Video Library, case studies, frequently asked questions, and the

latest COVID-19 resources. The eGuidelines+ link is available on MMC's intranet for nurses to access free of charge.

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Perioperative nurses with one year of OR experience or less were given the opportunity to complete the Periop 101: A Core Curriculum course, which they said was extremely helpful in reinforcing their practice. Other more experienced and specialized nurses were given the opportunity to take the Periop 202 courses for orthopedic and spine procedures. One perioperative nurse who took the spine procedures course verbalized appreciation to confirm existing practices and enhance knowledge on safe positioning for bariatric patients undergoing spine procedures. Others commented on the immense value that it brought to validating their practice.

In addition to the formal online courses, the perioperative leadership team developed various institution-specific back-to-basics courses to refresh OR staff members on core tasks, such as surgical skin antisepsis, safe patient positioning, intraoperative medication administration, and code blue drills in the OR. When the curriculum was didactic, nurse leaders placed 10 nurses in three to four different ORs and had key team members work with the technology. Information was presented via an online video platform. Team leads selected the refresher course topics, including patient positioning for orthopedic surgery and neurosurgery, performing gynecologic surgical preps, and handling gynecologic specialty equipment. Nursing leaders arranged education for central sterile (CS) department staff members on applying safe practice updates, reprocessing orthopedic instrumentation, maintaining powered equipment, and COVID-19 training.

Focus 3: Clinical Ladder Advancement

The perioperative nurse leadership team asked perioperative nurses for clarification as to why they were not interested in advancing on the clinical ladder. The nurses

stated that the current ladder was difficult to attain given the uniqueness of OR nursing. The nurses felt they wanted a ladder geared toward the specific skills and attributes of an OR nurse. Nursing leaders took their feedback and met one-on-one with a few of the nurses to develop a new OR-specific clinical ladder. This clinical ladder focused on clinical mastery, teamwork, and engagement in daily unit operations. Nurses also could be specifically recognized for their technical mastery related to recent advancements in robotics, vascular, spine, and reconstructive plastic surgery. After piloting the ladder, and based on verbal feedback from the nurses, the perioperative leadership team decided to implement the new OR-specific clinical ladder in all the ORs throughout MMC. However, the OR nurses were still tasked with the challenge of finding time during their regularly scheduled hours to work on the requirements for the clinical ladder. As part of the focused plan, the perioperative leadership team provided nurses who had been working on their applications for the clinical ladder additional time to complete their clinical initiatives.

Focus 4: Cross-Training

The perioperative leadership team and OR staff members met to assess the interest level among perioperative personnel in either being temporarily deployed to or cross-trained to work in other areas of the hospital. For example, the critical care unit, medical-surgical units, maternal-child health, and the multiple physician site hub locations surrounding the beltway of Baltimore needed experienced nurses to support the growing staffing needs. More than 75% of the nurses in the OR and PACU asked to either reorient to an area in which they felt comfortable or to train to screen or swab incoming visitors and patients for COVID-19. Cross-training included both didactic and hands-on training sessions for those staff members deploying to the inpatient clinical areas followed by one-on-one shadowing of experienced nurses. Surgical technologists from the OR as well as the CS department also received cross-training to support the growing needs of environmental services and security personnel during the elective surgery cessation (eg, screening at service entrances, cleaning and disinfecting).

FINANCIAL CONSIDERATIONS

One component of MMC’s professional practice model is focused on professional growth and development for employees. Because of this strategic focus, MMC allocates

a percentage of the Patient Care Services budget for new hire orientation, mandatory training, continuing education, and meetings. Depending on the initiatives for the year, different departments may need more or less of the allocated budget. Therefore, funding for this perioperative continuing education initiative was taken out of the overall Patient Care Services budget through those allocated dollars. Studies show RN turnover costs can range from \$10,000

Table 1. Overview of Mercy Medical Center’s Resources for Perioperative Personnel Professional Development

Module	Estimated Time to Complete	Cost Per Module
AORN Periop 101: A Core Curriculum	40 h	\$2,985
AORN Periop 202 Total Hip Arthroplasty Total Knee Arthroplasty Spine Procedures	3 h per module	\$690
MMC back-to-basics courses MMC: Surgical Counts MMC: General Surgical Positioning MMC: Surgical Preps MMC: Medication Administration in the OR MMC: How to Run a Code Blue in the OR MMC: Safe Positioning of the Spine/Neuro Patient MMC: Safe Patient Positioning on a Mechanical Orthopedic Surgical Table	30 min per module	None
NCCT TS-C review course	20 h	\$875
Online CNOR prep course	54 CEUs over 4 mo	\$875
CNOR certification prep course	16 h	\$500
CAPA/CPAN certification prep	16 h	\$3,430
AORN eGuidelines+	Expanded access	\$550

MMC = Mercy Medical Center; NCCT TS-C = National Center for Competency Testing Tech in Surgery-Certified; CEU = continuing education unit; CAPA = certified ambulatory postanesthesia nurse; CPAN = certified postanesthesia nurse.

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to \$88,000²⁰ and average between \$33,000 and \$56,000 per nurse.⁷ The financial outlay for the educational interventions was approximately \$47,000 (Table 1). This figure includes the costs of the courses, time for staff members to attend the review courses and work on projects, and the costs associated with catering. Therefore, the perioperative leadership team considered the costs associated with this four-focus approach to staff development minimal compared with the cost of one nurse leaving the organization.

By using this approach during the COVID-19 pandemic and associated halt in elective surgeries, nursing leadership at MMC was able to redeploy the OR staff members back into the ORs when elective procedures resumed and surgical volume increased in May of 2020. Therefore, the facility only realized a loss of 6.5% of the total OR volume compared with the average peer hospital's loss of 12.4%,^{21,22} which equates to more than \$16 million in revenue that would have been lost. Full-time equivalents remained stable during the shutdown of elective surgeries without any furloughs or displacement of staff members (Figure 1). This strategy supported the organization's ability to immediately respond to volume increases when surgeries recommenced.

RESULTS

The perioperative leadership team's decision to use the time created by the restriction on elective surgery for

professional development has produced many positive outcomes at MMC. From the OR, preoperative unit, and PACU, a total of 29 nurses seized the opportunity to prepare for certification exams. As of October 2020, six nurses have become certified, and many others are awaiting their exam dates as testing sites reopen. Nurses' verbal feedback to the leadership team included that the education provided at the review sessions validated their practices and gave them direction to continue to provide excellent care for their patients.

On September 19, 2020, the first NCCT Tech in Surgery-Certified (TS-C) onsite exam was held at MMC. A total of 10 surgical technologists have passed the exam. On September 19, 2020, after the first test date, one of the newly certified technologists announced with pride, "I am officially a certified TS-C after 20 years! I passed!"

Mercy Medical Center also has begun using the certification testing as a strategy to recruit other experienced surgical technologists in Baltimore who want to work for an organization that supports their professional advancement. By becoming a designated certification testing site, MMC has begun a partnership with a local college that offers a surgical technologist training program that needed an affiliated testing site. This academic-practice partnership provides the potential for a future pipeline of surgical technologists and recruitment opportunities.

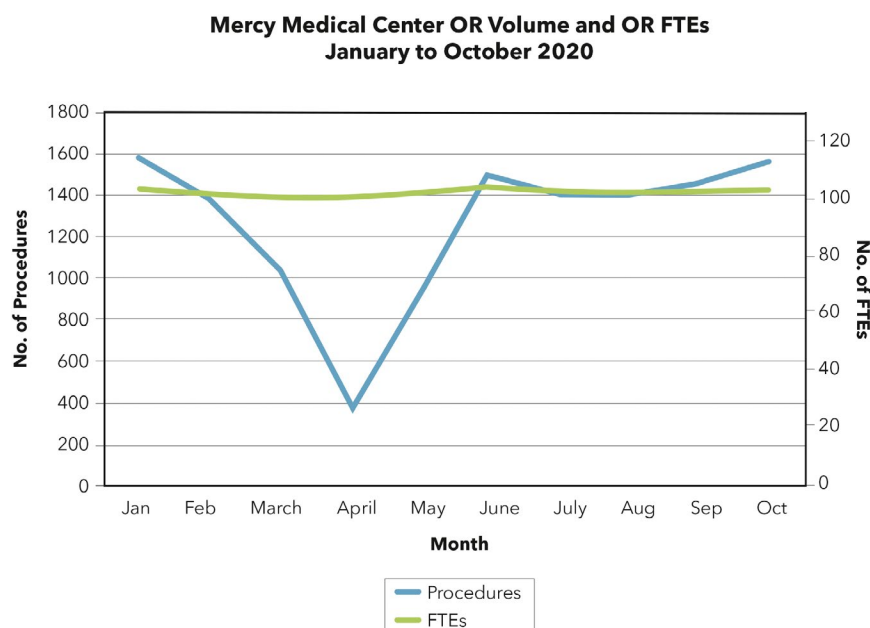


Figure 1. Line graphs showing the fluctuation in OR procedure volume (*blue line*) compared to the consistency of OR full-time equivalents (*green line*) in 2020. FTE = full-time equivalent.

Key Takeaways

- ◆ Because of busy surgical schedules and the intensity of the perioperative setting, perioperative nurses often are unable to take the time to further their professional development, which can lead to job dissatisfaction.
- ◆ In March 2020, amid the public safety concerns surrounding the global spread of coronavirus disease 2019, government mandates forced hospitals to stop performing all elective surgeries, which resulted in a lack of work for many perioperative nurses and surgical technologists.
- ◆ To retain staff members and increase their satisfaction, the perioperative leadership team at Mercy Medical Center (MMC) in Baltimore, Maryland, created a four-focus professional development program for perioperative nurses and surgical technologists. The four focused areas included certification, continuing education, clinical ladder advancement, and cross-training.
- ◆ More than 70 staff members took advantage of the professional development opportunities. When the elective surgery mandate was lifted, MMC had retained all of its perioperative staff members, and was able to resume elective procedures quickly. This retention resulted in a lower loss of revenue for MMC compared with peer hospitals.

Nursing leadership organized recognition and celebration events after these certification milestones. Though these celebrations looked different in a socially distanced environment, these celebrations allowed the perioperative leadership team to reward and recognize the staff members' achievements. To enhance morale on a wider scale, the newly certified personnel also were publicly recognized via social media communications, video clips, and institution-wide e-mail announcements.

Overall, more than 70 staff members took advantage of one or more of the continuing education opportunities. Nurses completing the AORN modules shared the information with their peers, generating additional interest in continuing education. One nurse stated how much she appreciated just having some quiet time to go through the various modules without worrying about hurrying back into the OR. Another nurse noted that after completing Periop 101, she was able to update her service's current orientation materials. Staff members from the CS department voiced their appreciation specifically for the evidence-based decontamination training to enhance their current practices related to COVID-19 instrument processing procedures. The CS staff members expressed feeling less stressed after learning the best practices to perform their roles safely given the current environment.

Eleven nurses used this opportunity to further their clinical ladder progression. Four of the nurses completed their portfolios and seven nurses identified individual

initiatives to improve patient care at MMC. One of these projects focused on using evidence-based practice to design a charge nurse orientation program, and another project focused on pressure injury prevention for patients undergoing spine surgery in the prone position. Another nurse was able to complete a comprehensive portfolio outlining the coordination and collaboration required when she led the implementation of a new bariatrics surgical service line. One innovative intervention highlighted in this portfolio was the use of an open-house style simulation of a bariatric procedure in which staff members were encouraged to have hands-on interaction with all the associated equipment and supplies used in bariatric surgery. Another nurse was able to use the time to develop and implement a robotic procedure simulation training program. An OR nurse was able to complete her project using intrinsic and extrinsic motivation techniques to improve infection control practices. Three nurses were officially promoted to the clinical nurse III position and were formally recognized at a socially distanced pinning ceremony.

Lastly, 14 nurses were deployed to clinical units at MMC (intensive care unit, emergency department) or our long-term care facility. Forty nurses were stationed as facility entry screeners for patients, personnel, and visitors entering the hospital or performed COVID-19 specimen collection for testing throughout the campus and at multiple hub locations around Baltimore. The perioperative staff members deployed to the clinical units offered

positive feedback, including that they enjoyed helping their colleagues and getting to know other nurses in the organization.

During the shutdown, the MMC leadership team hosted weekly web-based town halls during which the nurses openly shared their appreciation for the opportunity to focus on their professional growth. Those that had become certified or advanced up the clinical ladder were extremely proud of their accomplishments, which in turn has inspired others to take the next step on their journey. Perioperative staff members have approached many members of the leadership team to extend their personal thanks for helping them achieve professional milestones that they never thought they would accomplish. Other OR staff members were grateful to know their positions were secure during this tumultuous time, which gave them a sense of safety and comfort. In fact, as one nurse commented, "I wish more organizations would take the approach that our hospital did."

CONCLUSION

Developing unique advancement opportunities with a focus on perioperative personnel can improve retention and engagement of these staff members. Mercy Medical Center used the opportunity presented by the mandated freeze in elective surgery in Maryland to pursue improving staff member engagement, maintaining employee retention, and increasing staff member satisfaction. The perioperative leadership team developed and implemented a strategic and organized approach to facility-sponsored events for staff member certification, continuing education, clinical ladder advancement, and cross-training. Other specialized nursing departments may benefit from this example by creating similar ladders and platforms. The leadership team's forward thinking and the staff members' flexibility and resilience placed this community hospital in an excellent position to resume elective surgery immediately after the mandate was lifted. Equally important, we found that by investing in the professional development of the staff members instead of furloughing them or reducing their hours, MMC retained every single valuable member of the team. If there is a silver lining to this pandemic, it is the MMC perioperative leaders' foresight to invest in their perioperative staff members, who in return took this unique opportunity to commit to their professional development during a difficult time.

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Lori Robertson, MBA, BSN, CNOR, NE-BC, fellow of the American College of Healthcare Executives (FACHE), is the vice president of Perioperative Services at Mercy Medical Center, Baltimore, MD. *Ms Robertson has no declared affiliation that could be perceived as posing a potential conflict of interest in the publication of this article.*

Susan Finlayson, DNP, RN, NE-BC, is the senior vice president of Operations at Mercy Medical Center, Baltimore, MD. *Dr Finlayson has no declared affiliation that could be perceived as posing a potential conflict of interest in the publication of this article.*

M. Tracey Peñaloza, MSN, RN, CNOR, is the director of Perioperative Services at Mercy Medical Center, Baltimore, MD. *Ms Peñaloza has no declared affiliation that could be perceived as posing a potential conflict of interest in the publication of this article.*

Stacey Brull, DNP, RN, NE-BC, is the senior director of Research, Education, and Informatics at Mercy Medical Center, Baltimore, MD. *Dr Brull has no declared affiliation that could be perceived as posing a potential conflict of interest in the publication of this article.*
