



FOCUSing on Safety

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AORN has a tradition of partnering with other organizations in efforts to promote patient safety. For example, AORN's Correct Site Surgery Tool Kit reflects a collaboration among AORN, the American College of Surgeons, and the Joint Commission.¹ In 2009, AORN established a partnership with the Society of Cardiovascular Anesthesiologists (SCA) to participate in the FOCUS (Flawless Operative Cardiovascular Unified Systems) project, a patient safety initiative.² Conceived by Bruce Speiss, MD, FAHA, in the late 1990s, the initial FOCUS project goals were to investigate and design initiatives to improve the safety of patients undergoing anesthesia during cardiac surgery. The SCA endorsed the FOCUS project and funded the initiative through the SCA Foundation. The Johns Hopkins University Quality and Safety Research Group (QSRG), directed by Peter Pronovost, MD, PhD, was contracted by the SCA in 2006 to research and develop methods to achieve "harm-free cardiac surgery."^{2,3(p308)}

Over the past year, the FOCUS leaders realized that, because safety is a team effort, the initiative would be more effective as a collaborative effort, and they invited representatives of the perioperative team, including surgeons, nurses, perfusionists, and anesthesiologists, to participate. It has been my honor to serve as the AORN liaison to the FOCUS project, which has great potential to

improve patient safety not only for cardiac patients but for all patients who undergo operative and other invasive procedures. In addition to AORN, other organizations currently involved in the FOCUS project are the Society of Thoracic Surgeons and the American Society of Extracorporeal Technology.

INITIAL INVESTIGATIONS

In the first year of the FOCUS project, Dr Pronovost and the QSRG team conducted a review of the cardiac patient safety literature. In addition, they reviewed the United Kingdom National Health Service error-reporting database, focusing on errors in cardiac surgery³ (there is no national error-reporting system available in the United States). As a result of this preliminary work, the QSRG developed an in-depth, two-day observational process to research factors in the OR that contribute to human errors.

This observational process was conducted in cardiac ORs at five separate hospitals in early 2009. At each site, surgeons, anesthesiologists, nurses, perfusionists, surgical technologists, and hospital executive management personnel completed extensive surveys on motivation and patient safety culture. Survey and observational results are being coded into a database and will be used to create a taxonomy of errors and to develop interventions. Identifying specific hazards

and interventions to reduce risk will be part of the ongoing FOCUS project.³

An early review of the collected data was both informative and distressing. For example, errors were observed frequently in skin preparation procedures and in the programming of “smart” IV pumps. These errors were made despite the perioperative team members’ apparent motivation to provide flawless care. These findings reflect the complex nature of the surgical environment.

The FOCUS project takes an innovative conceptual and practical approach to addressing the problem of surgical errors. Martinez and colleagues from the QSRG emphasized that, in comparison with work being done in the FOCUS project, “prior efforts to improve patient safety have been independent rather than interdependent, competitive rather than cooperative, and focused on efforts rather than results.”^{3(p308)} Moreover, the absence of scientific rigor in evaluating the effectiveness of safety interventions often produces insufficient or superficial understanding of what works. Metric-based evaluations (eg, the degree of wound infection reduction) will provide more robust results, and this will be part of the FOCUS project.

A COMPREHENSIVE VIEW OF SAFETY

In addition to enhancing scientific rigor, the FOCUS researchers are seeking to develop a broader and more comprehensive view of patient safety by integrating the often varying viewpoints of practitioners in different disciplines, such as organizational sociology, human factors engineering, industrial psychology, and clinical medicine. Practitioners in each discipline can have a different perspective, or lens, when looking at risks and interventions.³ Applying the comprehensive LENS (Locating Errors Through Networked Surveillance) model,³ the FOCUS Steering Committee has identified six major areas for investigation:

- safety culture,
- infection control,
- transitions of care,

- teamwork skills,
- OR design, and
- OR equipment.

These are areas familiar to perioperative nurses who work in both cardiac and noncardiac surgical specialties. Some of the interventions planned to improve patient safety in surgical suites include developing a learning collaborative within the cardiac surgical teams, creating a peer-to-peer assessment program in which teams of OR personnel can provide feedback to other teams in regard to safety improvements, and addressing the issue of machine and OR design by improving the interface between humans and surgery-related machines and devices.

Interventions that produce improved outcomes for one group of patients may be applicable to other groups. One example of transferrable study results can be seen in another research study by Dr Pronovost in which he introduced a checklist in 103 intensive care units in an attempt to decrease the incidence of catheter-related bloodstream infections. The results of that study showed a dramatic reduction in the number of catheter-related infections.⁴ Techniques used in this study can be applied to the insertion of central lines in the OR.

JOIN THE EFFORT

The FOCUS project represents a frontline effort with the individuals who are actually providing patient care also designing improvements. With this in mind, the FOCUS group is encouraging perioperative nurses to be part of this significant initiative by supporting the project and participating in the study sites. Interested perioperative nurses can contact me at tseifert@aorn.org. The results of these efforts will be felt in the broader context of surgical care and have the potential for improving the science of patient safety. **AORN**

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