Every department, unit and professional within a hospital can agree that infection prevention is a key priority. Infection prevention often starts with central services (CS) but doesn’t end there. Collaboration and teamwork is critical to reducing infections, and nurses, in particular, have the opportunity to play an important role in this effort.

Activities and protocols that take place in the sterile processing department (SPD) or CS department are seldom considered to be linked to potential causes of surgical site infections (SSIs) or other patient infections. This is especially true of sterilization packaging systems (SPS). However, a recent study calls into question the assumption that rigid sterilization containers prevent bacteria from entering post-sterilization, throughout transport and handling, until use in the OR.

The study, conducted by independent laboratory Applied Research Associates and funded by Halyard Health, tested the efficacy of 111 rigid containers and 161 wrapped trays at maintaining sterility of their contents post-sterilization until use in the OR. The study was published in the American Journal of Infection Control and found that rigid sterilization containers, both used and unused, failed to maintain barrier performance under the test conditions: 87 percent (97 out of 111) of the interiors of rigid sterilization containers tested positive for bacteria. Sterilization wraps, on the other hand, provided no detectable ingress of bacteria: 100 percent (161 out of 161) of the wrapped trays using sterilization wrap maintained sterility, preventing the entrance of bacteria.

Leading infection prevention professionals emphasize importance of collaboration to reduce SSI risk

Given these findings, a group of experts across nursing, infection prevention and sterile processing departments came together and developed a consensus statement with recommendations for healthcare professionals working with SPS. One of the key recommendations underscored the need for collaboration among all divisions within the hospital, particularly among nurses, infection preventionists, surgeons and the SPD and CS departments. The experts agreed that teamwork is critical to improving patient safety and reducing the risk for SSIs. Previous studies have shown that effective communication and collaboration across departments can not only decrease infection rates but also improve facility outcomes, reduce costs, lessen redundancies in processes and improve patient satisfaction.

OR nurses are on the frontlines of collaboration across hospital departments

Nurses are in a unique position to foster this collaboration, especially nurse managers, who have contact with nearly every department in the hospital and can help bridge gaps between divisions that have traditionally been siloed. This deep understanding of the roles other care providers play is something that is instilled in nurses at the very onset of their professional training and contributes to their unparalleled ability to be effective players in a collaborative environment.
Rose Seavey\(^{†}\), MBA, BS, RN, CNOR, CRCST, CSPDT, a leader in nursing and sterile processing education who participated in the development of the consensus statement, underscored the critical role of nurses in this discussion. "It is vital that nurses take charge and jumpstart collaboration around reducing SSIs, particularly through strategies that involve closely evaluating SPS and weighing the recent data," Seavey said.

STRATEGIES FOR NURSE LEADERS TO FOSTER COLLABORATION AND GENERATE AWARENESS BETWEEN DEPARTMENTS

To this end, Seavey and her colleagues recommended several key ways you can help nurture collaboration among all colleagues across departments, including:

• Scheduling frequent and regular meetings with infection preventionists, surgeons and SPD and CS professionals to learn what others are doing to prevent SSIs and share these insights with their own department.
• Spending time in other divisions to help share and help uncover new, potential causes of SSIs.
• Sharing the study findings with surgeons, whose patients are most at risk for contracting SSIs.
• Regularly evaluating SPS in risk assessments.
• Ensuring hospital guidelines and competencies are evidence-based and updated regularly.
• Sharing the study findings directly with other infection preventionists at your hospital.

The primary duty of nurses and all hospital staff is to keep patients safe. Patients' trust is rooted in the knowledge that they will consistently receive the highest quality care, and preventing infection is essential to this process. A hospital environment focused on fostering collaboration, where colleagues communicate and learn from one another across departments, and therefore reduce infection risk, can ultimately improve patient care.

1. Shaffer H, Harnish D, McDonald M, Vernon R, and Heimbuch B, Sterility maintenance study: Dynamic evaluation of sterilized rigid containers and wrapped instrument trays to prevent bacterial ingress. Am J Infect Control. 2015 Dec; 43(12) 1336–1341. (Harry L. Shaffer MS, Delbert A. Harnish MS, and Brian K. Heimbuch MS contributed to/authored the above article at the time they had a financial consulting relationship with Halyard Health, Inc.; however, they were not compensated by Halyard Health, Inc. for their respective contributions/authorship of the article.)
2. Ibid.
3. Ibid.
4. Ibid.
† Rose Seavey contributed to the above article. At the time she had a financial consulting relationship with Halyard Health, Inc. \(†\)