



# Sterile Processing and Its Impact on Patient Safety and Satisfaction



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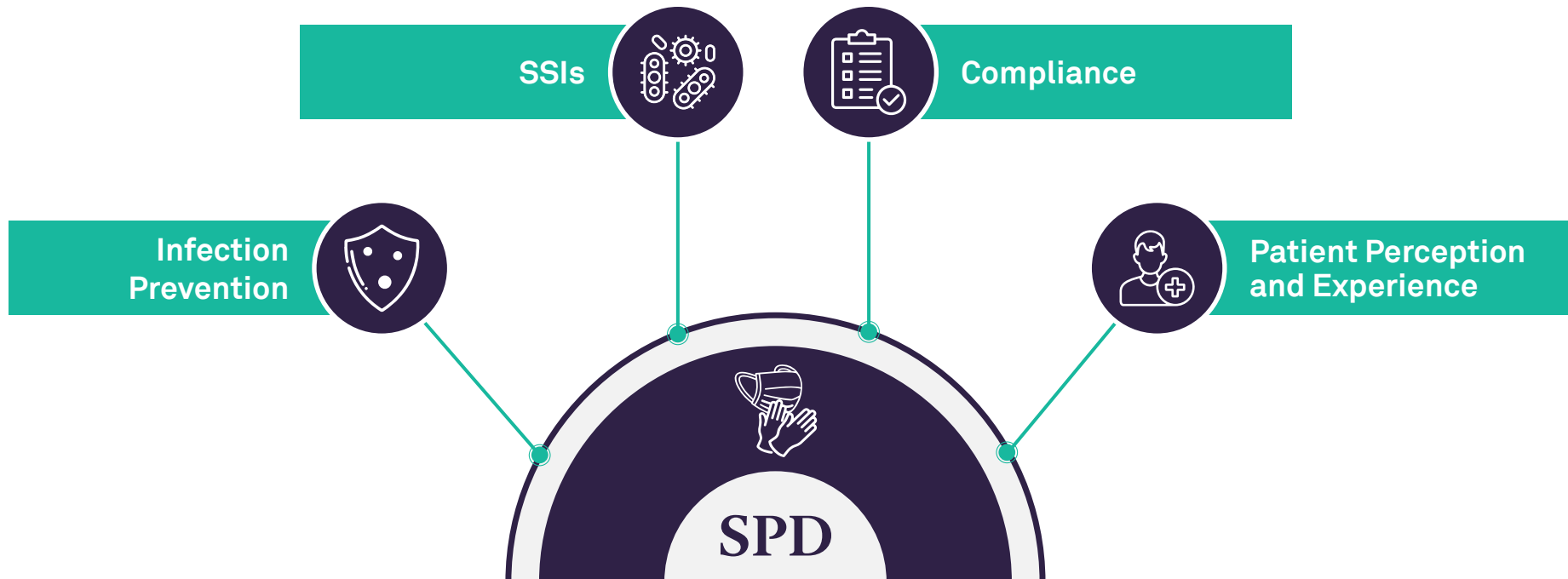
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# Introduction

Perception is a person's reality. As healthcare consumers become savvier, a patient's perception of a hospital's safety and quality of care can influence their trust in the facility.<sup>[7]</sup> Nearly all areas of the hospital play a role in patient safety, and the Sterile Processing Department (SPD) is one of the most crucial. While the spotlight tends to shine on surgeons, the operating room (OR) suite, and the OR nurses and techs, none of their successful outcomes would be possible without a high-performing SPD. Infection Prevention, surgical site infections (SSIs), compliance, and patient perception and satisfaction contribute to a hospital's reputation, and the SPD is integral to each.



Infection Prevention

SSIs

Compliance

Patient Perception and Experience

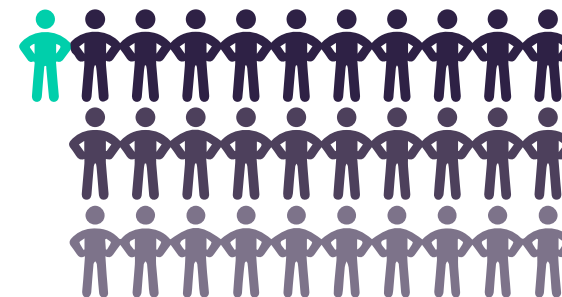
### Infection Prevention:

With an infection rate of 1 out of every 31 patients, infection prevention is top of mind in the SPD.<sup>[3]</sup> A well-trained SPD staff understands the importance of adhering to policies and procedures to prevent infections and increase patient safety. Failure to do so can lead to an increase in hospital acquired infections (HAIs), erode patient and clinician trust, and detrimentally affect the facility's reputation.

### SSIs:

The SPD bears responsibility for ensuring all instruments are properly sterilized or high-level disinfected, inspected for damage, and stored. Ultimately, the SPD is ground zero for controlling costs associated with SSIs. Without properly sterilized instruments, the risk of hospital acquired and surgical site infections increases.<sup>[6]</sup> SSIs occur in approximately 2% of cases and account for approximately 20% of all HAIs.<sup>[5]</sup> Beyond eroding patient and provider trust, SSIs severely affect a healthcare facility's bottom line. When a patient contracts an SSI, they require more treatment and an extended hospital stay, increasing the budgeted Average Length of Stay (ALOS) for the original procedure. A study of more than 723,000 surgical hospitalizations showed the ALOS for an SSI was 9.7 days. When combined with SSI readmissions, total SSIs resulted in an extra 521,933 days of inpatient care at a cost of almost \$700 million.<sup>[5]</sup>

Infection Rate of 1 Out of 31 Patients <sup>[3]</sup>



9.7 days

Average Length of Stay (ALOS) for an SSI <sup>[5]</sup>



SSIs potential cost of inpatient care: ~\$700M <sup>[5]</sup>



## Compliance:

Hospitals must comply with stringent regulatory guidelines and standards, and the SPD adheres to those set forth by multiple bodies, including The Joint Commission (TJC), the Centers for Disease Control and Prevention (CDC), and the Association for the Advancement of Medical Instrumentation (AAMI). Additionally, SPDs comply with guidance created by the Association of Perioperative Registered Nurses (AORN) and the Society of Gastroenterology Nurses and Associates (SGNA). Patients and providers know that TJC accreditation is one way to judge a healthcare facility's reputation in the community. **The SPD plays a pivotal role by ensuring the department staff is well-trained; understands and adheres to regulatory compliance standards, rules, and regulations at all times; and contributes to promoting a culture of excellence.**<sup>[1]</sup>

## Patient Perception and Experience:

A patient's experience goes beyond the care they receive. They also demand safety and will access various healthcare associations' websites for information. For surgical patients, safety starts in the SPD, where every day, skilled technicians ensure that sterile instruments reach the operating room staff. A well-resourced, well-trained SPD has a downstream positive effect on patient satisfaction, and that ultimately impacts the reputation and financial health of a facility.

Next, we'll take a deeper dive to look at five pillars that contribute to a facility's reputation and also form the backbone of how a well-functioning SPD directly impacts patient safety, satisfaction, and the financial bottom line.








# 5 Pillars that Lie at the Heart of the SPD

The daily role of the SPD overlaps with the factors that contribute to a healthcare facility's safety and level of patient satisfaction. The five pillars that put the SPD at the forefront of a facility's reputation include: *Patient Safety, Infection Prevention (IP), Compliance with Regulations and Accreditation, Cost Efficiency, and Operational Efficiency.*

## Patient Safety

A high-performing SPD is comprised of highly trained experts who prevent HAIs through the proper sterilization of instruments and promote a culture of safety to protect patients. Ensuring that surgical instruments and devices are safe for patients is a multi-step process that involves cleaning, decontamination, sterilization, and the maintenance of the equipment and instruments.<sup>[9]</sup> SPD supervisors are responsible for monitoring their staff and ensuring that all instruments are processed correctly, inspected for damage, and documented. This includes knowing which instruments and devices are considered critical or semi-critical and whether they are indicated for sterilization, high-level disinfection, or low-level disinfection.<sup>[2]</sup>

## Sterile Processing Department - Five Pillars Essential to a Healthcare Facility's Reputation

 <b>Patient Safety</b>	 <b>Infection Prevention</b>	 <b>Compliance</b>	 <b>Cost Efficiency</b>	 <b>Operational Efficiency</b>
<ul style="list-style-type: none"> <li>• Prevent HAIs through proper sterilization of instruments</li> <li>• Promote a culture of safety to protect patients</li> </ul>	<ul style="list-style-type: none"> <li>• Implement and adhere to strict protocols and guidelines to help reduce risk of contamination from instruments and spread of infectious disease</li> <li>• Maintain a clean and safe environment to prevent infection and outbreaks</li> </ul>	<ul style="list-style-type: none"> <li>• Adhere to all regulations and accreditation standards</li> <li>• Help to enable hospital to maintain accreditation and reputation</li> </ul>	<ul style="list-style-type: none"> <li>• Maximize lifespan of equipment through proper cleaning, decontamination, and sterilization</li> <li>• Saves costs for facility</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure timely availability of instruments to help OR stay on schedule</li> <li>• Contribute to facility's workflow optimization and resource management</li> </ul>



## Infection Prevention

The SPD plays a pivotal role in infection prevention by following strict protocols and guidelines to minimize the risk of cross-contamination and ensure reusable instruments and equipment are properly reprocessed or sterilized. Additionally, SPD staff are trained in the proper selection and use of personal protective equipment (PPE), maintain records of sterilization for all instruments and equipment, and monitor and report any problems with sterilization equipment to prevent infection.

## Compliance

It is incumbent upon the SPD to stay up-to-date and compliant with standards as they are essential for maintaining accreditation and avoiding penalties – both of which impact a hospital’s reputation. This includes a facility’s unique policies and procedures in addition to federal, state, and local requirements.

## Cost Efficiency

It’s no secret that U.S. healthcare costs continue to increase. Surgeries are projected to be one quarter of the U.S. economy by 2025.<sup>[8]</sup> For example, a 2014 study showed the mean cost of operating room time in California acute care hospitals was \$36-\$37 per minute, with \$2.50-\$3.50 attributable to surgical supplies.<sup>[4]</sup> The SPD helps hospitals rein in costs by adhering to proper disinfection and sterilization protocols to maximize the lifespan of surgical instruments and equipment. Think of what improper sterilization and handling of scopes can cost in repairs or replacement, or even lost OR time!

The SPD is responsible for reducing the risk of damage, deterioration, and the need to replace expensive items sooner than expected by using proper sterilization and disinfection techniques, saving the facility thousands of dollars.



## Why You Should Invest In Your SPD Staff

Well-trained, experienced SPD technicians make fewer errors. Healthcare facilities invest in their nursing staff to achieve Magnet status<sup>[13]</sup>. Why not do the same for the SPD technicians? SPD technicians typically receive low pay and receive little-to-no training. In addition to errors, this can lead to the high staff turnover SPD departments experience. Turnover costs a facility lost productivity because time is needed to recruit and hire, onboard, and train replacement staff. During this time, a short-staffed department places added stress and strain on the manager and remaining technicians – which can lead to even more turnover.

Certifications like those offered by the Certification Board for Sterile Processing and Distribution (CBSPD) and Healthcare Sterile Processing Association (HSPA) require individuals to demonstrate via testing that they meet competency-based standards.<sup>[11]</sup> By offering certifications that expire, these certifying organizations ensure that SPD technicians engage in continuous learning and practice in order to re-certify.

Incentivizing SPD staff to obtain industry certifications that require them to demonstrate competency, recognizing them for that competency, and paying those employees a better salary for their increased knowledge creates a higher level of skill in the department and increases employee loyalty, ultimately benefitting patient safety and employee retention.





## Operational Efficiency

Clean, sterile, and properly functioning instruments and trays readily available to the OR and surgeons fall on the shoulders of the SPD. A well-run SPD contributes to operational efficiency by optimizing its workflow and resources, including staff. This helps the OR function more effectively by minimizing delays, cancellations, and rescheduling due to an instrument being unavailable or damaged and in need of repair or replacement.

No single department can operate in a silo to positively impact patient safety and a hospital's reputation. We've seen how the SPD affects what happens in the OR. Now, it's time to take a closer look at how the SPD is crucial to a hospital's reputation by examining the collaboration with Infection Prevention to maintain a safe and sterile healthcare environment.



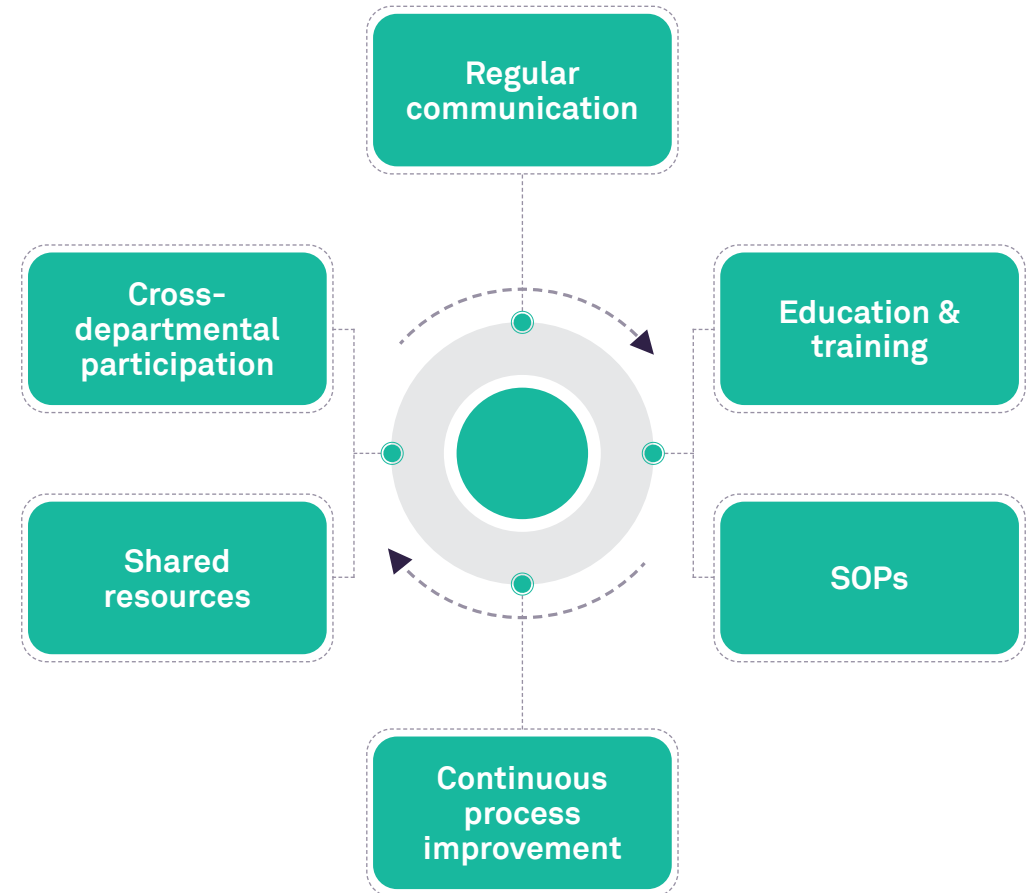
# The SPD-Infection Prevention Connection

The interdepartmental relationship between the SPD and IP forms the backbone of creating and maintaining a safe and sterile environment for surgical patients. While the IP department is responsible for developing policies and procedures, collecting infection data, and providing education<sup>[14]</sup>, the SPD diligently incorporates those policies and procedures into their daily duties to prevent costly SSIs and errors.

**Here is what it takes to turn silos into collaborative teams that cooperate to implement best practices that keep patients and staff safe.**

## Regular Communication

Open and frequent communication between IP and the SPD helps ensure both departments align their goals and procedures. Communication takes many forms, including regular meetings, electronic updates, and collaborative document sharing to build trust among the two teams.



Regular Communication

Education and Training

Standard Policies and Procedures

Continuous Process Improvement

Shared Resources

Cross-Departmental Participation

## Education and Training

Facilitating thorough cross-departmental education and training helps ensure the IP and SPD teams understand the important synergies needed for patient safety. It is essential for staff from both departments to learn and follow infection prevention policies and principles in addition to proper sterilization techniques. This allows both teams to understand the importance of their roles, how they relate to each other, and enables leadership to foster teamwork and collaboration versus conflict.



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## Standard Policies and Procedures

The IP and SPD should work together to develop clear and understandable policies and procedures. These policies and procedures should account for guidelines from organizations including the CDC and AAMI. Ideally, representatives from the IP and SPD should become active members of associations for their areas of expertise like the HSPA and the Association for Professionals in Infection Prevention and Epidemiology (APIC) and participate on committees, such as those that develop AAMI standards.

## Continuous Process Improvement

Blame the process, not the people. When IP and SPD commit to a culture of continuous process improvement and avoid pointing fingers at each other if an infection or mistake occurs, the facility and patients can reap the benefits. Processes can entail joint agreement for regular audits, projects that improve quality, mechanisms to provide actionable feedback, participation on committees, and pilot programs.

More healthcare facilities are adopting a combination of Lean and Six Sigma methodologies for continuous process improvement. Six Sigma engages all level of staff, minimizes waste, and uses data to reduce medical errors, creating more efficient operations and improving the patient experience.<sup>[12]</sup>





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## Shared Resources

When the IP department and SPD share resources, a healthcare facility can realize potential cost savings. Cross-training staff to manage staffing shortages, coordinating schedules, standardizing processes and procedures, and collaborating on quality improvement initiatives are areas where the SPD and IP can share resources. This can lead to significant cost savings for the facility when the result is a reduction in HAIs and SSIs, reduced ALOS and re-admissions, and increased patient safety.

It's important for both departments to establish a system for sharing information, resources, and data to effectively collaborate and cooperate. Ultimately, a facility should conduct its own cost-benefit analysis to determine the level of resource sharing based on goals, staffing, and budget.

## Cross-Departmental Participation

The famous saying “walk a mile in my shoes” holds true for IP-SPD cooperation. According to TJC, staff resistance is a barrier when implementing new policies and procedures.<sup>[10]</sup> Cross-departmental collaboration and participation helps increase understanding of how IP and SPD work together to keep the OR running smoothly and patients safe. Joint committee participation can create a culture of trust between the departments by allowing representatives from each an opportunity to contribute their expertise, voice their opinions about how the new policies and procedures would affect workflow, and be a part of the decision-making process.

Cross-departmental participation doesn't stop at IP. Administration should reach out to SPD leaders and technicians to learn more about their daily activities, successes, and challenges and not wait for the department to reach out to them. In fact, the entire facility should have a

basic understanding of what the SPD does and the critical role they play in helping to reduce HAIs and SSIs to keep patients safe. This can easily be accomplished via a facility's intranet and internal newsletter to highlight excellence in the SPD and recognize staff who go above and beyond.



## Conclusion

The SPD plays a vital role in patient safety and satisfaction and a hospital's reputation. There's more to a high-functioning SPD than the proper cleaning, disinfection, and sterilization of instruments and equipment. Healthcare facilities that prioritize adequate SPD staffing, training, and interdepartmental collaboration, especially with IP, demonstrate that they are committed to:

- A culture of quality and safety
- Reducing the risk of SSIs and HAIs, extended hospital stays, and re-admissions
- Providing excellent patient care and outcomes
- Maintaining a good reputation in the community

When there is a lapse in policies and procedures the SPD must follow, it can lead to negative consequences, including an increase in SSIs and HAIs, patient and provider dissatisfaction, regulatory non-compliance, fines, and/or malpractice lawsuits. **The SPD works hard every day of the year. It's important for facility leadership to show support for the department outside of Sterile Processing Week to demonstrate the team is valued and integral to the functioning of the OR and the facility's reputation.**

By investing in the SPD, healthcare facilities can enjoy a positive reputation, be perceived as a trusted and safe place for patients to receive care, and have a sound revenue stream.



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