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If one tool in the sterile processing arsenal could be described as a "weapon of mass microbial destruction," it would be the surgical instrument cleaning brush.

Although chemicals, time, and temperature all play a part in getting surgical trays from contaminated to clean, the epicenter of cleaning activity starts with the right brush, in the right hands, being used the right way.

However, as important and fundamental as surgical instrument cleaning brushes may be, sterile processing departments (SPDs) still face a number of challenges in achieving 100% compliance for this critical aspect of their instrument-reprocessing duties.

Absence of Inventory Information The foundational challenge in developing an all-inclusive brush compliance program in your SPD starts with overcoming a lack of information regarding manufacturers' specific requirements for the size and type of brushes required to clean their devices.

However, this does not mean that brush information is completely unavailable: Manufacturers are required to include instructions for use (IFUs) when devices are shipped, and vendors often make IFUs accessible online or through a third-party hosting database service. The breakdown in information transfer happens when the IFU documentation is not matched up with the existing instrument inventory, the documen- tation itself is incomplete, or the correct brush selection is not available to technicians at the decontamination stage.

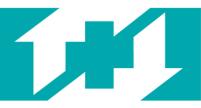
Incomplete Instrument Data

A lack of complete instrument data partly stems from a lack of quality and complete- ness of surgical instrument count sheets (also known as "recipes") being used by many SPDs. Although the advent of instru- ment-tracking software has improved this data-related challenge, few facilities across the country have true data integrity related to which manufacturer and instrument product numbers should be included in trays.

On a practical level, without complete, manufacturer-specific information on count sheets, confirming that compliant brush variations are available to technicians during the decontamination stage is impossible.

Simply listing an instrument name or generic product number placeholder may be enough to get the correct instruments in the correct tray, but it is not sufficient for linking specific brushing IFUs for each and every instrument in the inventory.

A Foundation for Brush Compliance After instrument count sheets have been updated with complete product information for the entire instrument inventory and access to IFUs has been confirmed, the foundation for brush compliance has been established. The next step is to distill the product-centric IFUs into one "master list" of brush variations needed to clean every instrument owned or used in a facility. This includes ensuring that the IFUs for all loaner instruments that make their way into the SPD are reviewed for particular brush requirements. Specific complex items may require a call to the vendor technical support line to request supplemental cleaning instructions, which would include lumen specifications necessary to identify the proper size and length of cleaning brush.



Every good foundation, however, requires a solid structure built on top of it. In this case, that structure consists of two main pillars: 1) brush availability at the point of need and 2) tray-specific brush instructions.

Brush Availability at the Point of Need

After the "master list" of the brush variations has been complied, these brushes should be made available and accessible for decontami- nation technicians. Because of the wide variety of brushes that may be required for larger facilities with complex inventories, reorganizing the current brush setup may be necessary. Stainless steel hook organizers and/or bin systems that allow for clear labeling of brush specifications are critical, as some brushes can be hung and others (e.g., flexible scope brushes) must be placed in a bin or drawer system due to their length and packaging. The key point is that the correct brush size must be able to be easily located and retrieved by technicians in full personal protective equipment when they carrying out the cleaning process.

Tray-Specific Brush Instructions The linchpin for this vision of 100% brush compliance ultimately involves connecting

and collating all information into a format to provide tray-specific brush instructions at the point of cleaning. With the IFU information gathered on the front end, and every brush variation on the "master list" made available in the decontamination area, technicians will need to know which brushes are needed for unique trays and the specific products within those trays.

For example, if a technician begins pro- cessing a trauma arteriovenous shunt tray that includes a 9.5-inch Andrews suction tube and a 7.5-inch Pacifico suction tube, he/ she will need to know that this tray requires two different sizes of brushes and which brush goes with which device. This informa- tion can be presented in a number of different ways depending on a particular facility's context, but a simple solution would be to create a unique number for each brush (e.g., B-710 = 7 mm × 10 mm brush), then associate that unique number with the product numbers of the devices that require them. This information then could be labeled on the sterilization basket via a permanent label or stainless steel tag to serve as the last piece of the information-needed-for-compli- ance puzzle.

Conclusion

The best cleaning IFUs in the world will not be effective unless a number of supporting factors also are in place, including the availability and accessibility of correct brushes at the point of cleaning. All of the elements needed to carry out effective instrument reprocessing exist, but a vision is needed to ensure that these critical elements are used in a consistent and compliant way. And when used in the proper manner, the surgical instrument cleaning brush can truly be a weapon of mass microbial destruction.

References

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