6 things to consider when designing your steri-center

Does your steri-center meet SciCan’s SPECs? Here are six important areas to address to ensure you meet these standards.
The steri-center is definitely not as exciting as a shiny new CAD/CAM or 3D radiography unit. This is just one of the many reasons that the instrument processing area, or “steri-center”, is often overlooked and underfunded. Sometimes it is relegated to the far back of the office in a closet that barely fit the vacuum cleaner and mop bucket that used to be kept there.

This is a big mistake because the steri-center is the heart of your practice. All of your instruments need to flow through the steri-center as efficiently as possible to keep your practice operating. Without clean and sterile instruments, your other fancy technology can’t be put to good use, and every area of the practice will end up suffering. Staff will be stressed, patients will be upset that their appointments started late; and further downstream, revenue will suffer.
Steri-centers should be designed to meet the following **SPECs**:

- Improve **Safety**
- Ensure **Predictable results**
- Maximize **Efficiency**
- Maintain **Compliance**

The following is a list of questions, broken out by topic, to help you make smart decisions about designing your steri-center.

1. **The steri-center**

   **Is your steri-center centrally located?**

   The CDC recommends that it should be. This is to minimize the distance that contaminated instruments are transported. A centrally located sterilization area also makes it quicker and
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Easier for staff members to reprocess instruments and keep an eye on the process so that issues don’t go unnoticed. When locating your sterilization area within the practice, think about making it a show piece for your office. When patients see a clean and well-organized sterilization area, it shows them that their safety is a top priority for your office. This helps differentiate you from the office down the street where instrument cleaning and sterilization is hidden away from patient view.

Have you allocated enough space to set your steri-center up properly?
The CDC recommends dividing the instrument processing area into four distinct sections.
1: Receiving, cleaning and decontamination
2: Preparation and packaging
3: Sterilization
4: Sterile storage
These sections should be divided physically, or at a minimum spatially, to prevent cross-contamination from spray and splatter. Adequate counter space should be provided for staff members to perform necessary duties such as sorting, drying, and packaging instruments, as well as space to unload the autoclave without compromising sterility. It is important to store sterile instruments where they will not become contaminated. Drawers under the counter in sections 1-3 of the sterilization area are not a good option because contaminated fluids can drip onto them. Dental grade sterilization centers achieve all of these goals and typically last much longer than contractor grade cabinetry. They also have dental-specific features that prevent cross-contamination, such as doors the can be opened without touching them. Lastly, make sure to factor in any future growth you anticipate. If you plan to bring in specialists a few days a week or plan to add a hygienist or associate, be sure to build in extra space to add cleaning and sterilization capacity when the need arises.
2. Water management

How will you handle distilled water for sterilizers and water for dental unit bottles?

Purchasing distilled water at the store can be a hassle, and using a steam distiller is very slow. SciCan’s Vistapure water filter can produce steam distilled quality water for your sterilizers and provide filtered water for your dental unit bottles, ultrasonic cleaner, and instrument washer. If you will be utilizing a Vistapure, it is important to allocate space for the filter and water storage tank when designing the steri-center.

Do you want to automate filling and draining of your sterilizers?

Adding autofill accessories to a Vistapure water filter allows SciCan’s Bravo and Statim sterilizers to automatically fill themselves. Auto-draining can be achieved using the included hardware with the Bravo vacuum sterilizer. Statim autoclaves will need a VistaCool bottle to auto-drain.
3. Instrument management
Will you be using instrument cassettes?
This decision will affect many of the other items in this list, so take the time to research them. Not all cassettes are created equal. Cassettes that hold instruments firmly in individual slots are preferred. This prevents the instruments from poking out of the cassette and injuring someone, as well as keeps them from banging together during handling and instrument reprocessing. Cassettes eliminate the manual labor of sorting instruments, keeps the instrument tips sharper, and will keep your instruments looking clean and shiny.

4. Instrument cleaning
Will you be using an instrument washer?
SciCan’s Hydrim instrument washers can hold 2-3 times more instruments than the largest ultrasonic cleaners. A Hydrim will wash, rinse, and dry your instruments in as little as 40 minutes. This allows staff members to focus on turning over their operatories and makes it easier for your
office to stay on schedule. It also reduces the chance of staff members being accidentally injured while processing contaminated instruments. Instrument washers are the fastest growing segment of the sterilization market because they make instrument processing much more efficient.

How large, and how many ultrasonic cleaners will you need?
Ultrasonic cleaners are not as safe or efficient as instrument washers, but are still necessary for some items. Burs, dental appliances, and prostheses should be cleaned in an ultrasonic cleaner. If you are not using an instrument washer it is important that you have enough cleaning capacity to keep up with your workflow. Offices that are cleaning cassettes in an ultrasonic cleaner may need more than one ultrasonic cleaning unit.

How will you clean and lubricate your handpieces?
While handpieces can be maintained manually, it is time consuming to properly lubricate and purge them. Oil and cleaner should be sprayed into handpieces after use. Then each handpiece
should be purged for 20-30 seconds on the dental unit or a manual purging station. This ensures that debris and excess lubricant is thoroughly purged out of the handpiece. If this is not done properly, it can cause premature handpiece failure. Lubricant should also be applied to each handpiece chuck to prevent burs from becoming stuck in the chuck. SciCan’s StamMatic handpiece maintenance unit can clean, lubricate, and purge up to three handpieces each cycle. It also has a chuck lubrication port which makes proper chuck maintenance simple and easy. This frees up staff to complete other tasks and will help reduce handpiece repair costs through automated, consistent maintenance.

5. Instrument sterilization
Do you have extra sterilization capacity to prevent downtime when one sterilizer needs maintenance?
Relying on your dental dealer to rush a rental sterilizer to your office when a sterilizer needs
maintenance can be risky. They may not be able to deliver the rental before patients need to be rescheduled, or they may not have any available. Counting on an old backup sterilizer to function properly after being pulled out of storage can also be risky. Having your steri-center equipped with multiple sterilizers, and more capacity than you need on your busiest day, is the best way to prevent unexpected down time. If you are using cassettes, your “extra” sterilizer should be large enough to hold your largest cassettes.

Can at least one of your sterilizers process unwrapped instruments in less than 15 minutes?

If your office gets behind on instrument processing, a Statim can help you get caught back up very quickly. Unwrapped Statim cycles can be as fast as 6 minutes in a Statim 2000 and 9 minutes in a Statim 5000. This allows you to process lots of instruments, very quickly, to meet demand when necessary. Instruments processed unwrapped must be used immediately and transported aseptically. The rest of the time your Statim can be used for normal wrapped instrument sterilization.
Will you be connecting your Statim and Hydrim to the internet?
SciCan’s exclusive G4 networking technology allows Statim sterilizers and Hydrim instrument washers to connect to the internet with WIFI. This allows for electronic logging and verification of cycles, maintenance reminders, and instant communication with SciCan technicians if a cycle fault occurs; all at no charge. Cycle data is automatically stored electronically and can be transferred to a computer for viewing, printing, or backup, by utilizing the included USB flash drive or setting up automated cycle completion emails. This eliminates the need for a printer to be connected to the sterilizer in offices that are required, or choose, to log their sterilization cycles.

6. Expert help
Dental dealers are an excellent resource to utilize when making changes to your office. They have lots of experience designing and installing dental equipment and can help save you from
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costly mistakes. Most of them however are not experts in infection control, workplace safety, and instrument management. Consulting with an expert in these areas can help you get the most out of your steri-center. SciCan’s Regional Infection Control Trainers have been extensively trained in these areas, and are uniquely qualified to work with you and your dental dealer to make sure that your steri-center meets SciCan’s SPECs.

**Conclusion:** A poorly designed and minimally equipped steri-center can negatively affect every area of your practice. If instruments can’t safely and efficiently be processed, it can cost your office dearly in lost productivity, unexpected down time, decreased patient satisfaction, workplace injuries, and unnecessary stress. Working with a sterilization expert and investing the time, space, and money to set up your steri-center properly will protect your practice from these revenue draining problems.

For more information please contact your local SciCan Regional Infection Control Trainer.