

≡ Enduser's view on sterilization packaging choice ≡

Keywords: Safety of use, economy – pros and cons

The feasibility analysis focuses on medical packages which follow EN 868-2 and EN 868-8 standards. The packaging materials and methods for sterilising vary from country to country due to the different methods and criteria used. I am comparing single-use wraps and reusable containers, their pros and cons, and costs of acquisition and use from the viewpoint of a sterile supplies manager.

When reviewing these two package concepts, I addressed questions which remain to be satisfactorily answered in Finland. When I was in charge of the CSS department in a central hospital with 600+ beds, I faced this question more than once because personnel in operating rooms were in favour for the use of containers.

A container system is a capital investment which involves considerable running costs during the period of use.

There are time and material related costs involved in making a device ready for next use (so called turn-around time). The effective service time for device maintenance is an important factor from the viewpoint of the operating room staff.

When the turn-around time increases, it means instruments are not in their intended location in time for proper use. This means that more instruments need to be acquired for sterile supply availability.

An optimal choice of a correct packaging systems require that sub-processes related to their use and practicality are analyzed at the investment planning stage of the healthcare facility:

- transportation equipment and its suitability
- capacity of washing machines and suitability of their drying system
- applicability of automatic conveyor belts
- adequacy of packaging tables
- autoclave capacities (turn-around times)
- applicability of unloading devices
- adequacy and suitability of storage space

There are additional cost factors to be taken in account, such as:

- unloading used devices out of containers and cleaning them (double sorting and cleaning costs for one set of devices), washing the containers, emptying the washing machines and drying, checking and maintenance of containers, replacing single-use filters and checking mechanical filters (double costs for checking and maintenance).

Container use also involves running costs from cold and warm water used, disinfecting agents, energy, labels, filters and inner packaging materials.

Cost feasibility at the detailed level shall consider also purchase prices for materials and wages and social security costs of personnel and utility costs.

Conclusions

A healthcare facility planning introduction of a container system must take this choice into consideration at the stage of structural planning for a sterile supply center. Container packages are usable, but changing over to this method is not possible without major modifications and investments.

In Finland, single-use packages are preferred. Only a few hospitals use containers. In the light of my long career in this field, I am in favour of single-use packaging materials because of their overall ease of use and processing, economy and safety.

Author:

Mrs. Katariina Orha (Lahti, Finland)

Surgical instruments, Hospital Supplies, CSSD and Infection Control Expert

Specialised Nurse in Surgery (RN) (CSSD and operating theatre), Surgical Nursing (SRN),

Operating theatre nursing (ORN)