



# To reduce process time of exchanging Loose Soiled Central Sterile (CSSD) Instruments in Ward 52B

Wong, M. W ., Norazlina, S. I ., Jaynithi, K ., Masayu, J.M., & Linda, M. N.  
NURSING DIVISION, SINGAPORE GENERAL HOSPITAL, SINGAPORE

## PROBLEM DEFINITION

Staff members conversed that they faced difficulties as **time was wasted** during the exchange of loose soiled CSSD instruments at ward level. The exchange of CSSD loose instruments takes place daily in the morning at ward level whereby human traffic and ward activities are at the peak. Very often, nurses felt frustrated as they have to search for the key to the locked drawer in order to retrieve soiled instruments for exchange.

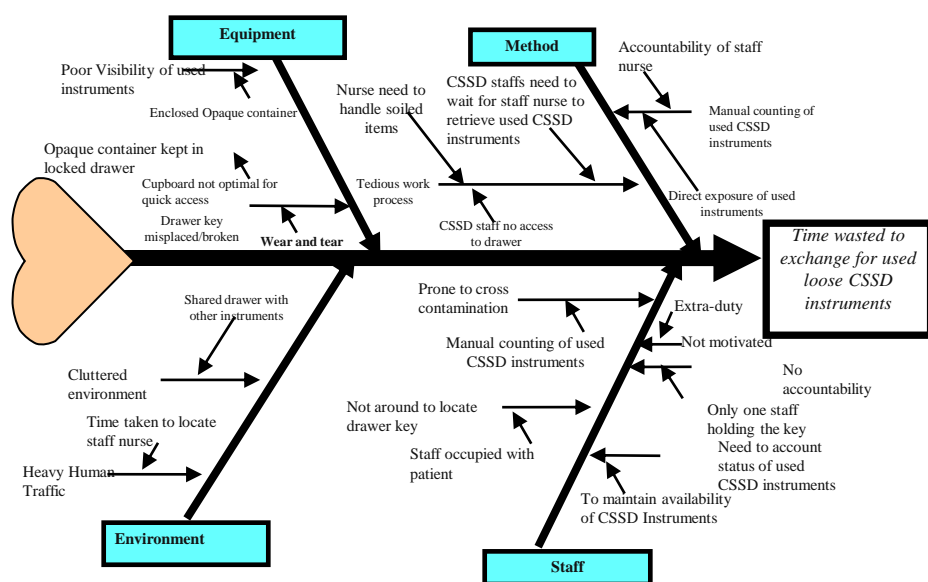
## AIMS

The objectives of the project are:

- A) To decrease the time taken to exchange for used loose instruments by 50% from 8.227mins to 4mins.
- B) CSSD staff will be able to retrieve loose instruments on their own without looking for the nurses.

## METHODOLOGY

**Analyze:** *Fish (cause and effect) diagram* was used to analyze the root causes of the problems. Using **critierion scoring**, top four top root causes are identified, which are enclosed opaque container, shared drawer with other equipments, nurse presence during exchange of soiled instruments and cluttered environment.



**Develop:** Based on the identified root causes, team members **brainstormed** for possible solutions. Propositions were then evaluated using **Tree diagram** on 4 factors- **Effectiveness** (How well it address the problem), **Resource Feasibility**, **Operational Feasibility** and **Ease of Implementation**.

The final solution comprised of **4 main components**:

**Transparent container.** A transparent acrylic box is chosen to store the opaque container. This will enable the nurses to visualize the number of soiled items to be replaced.

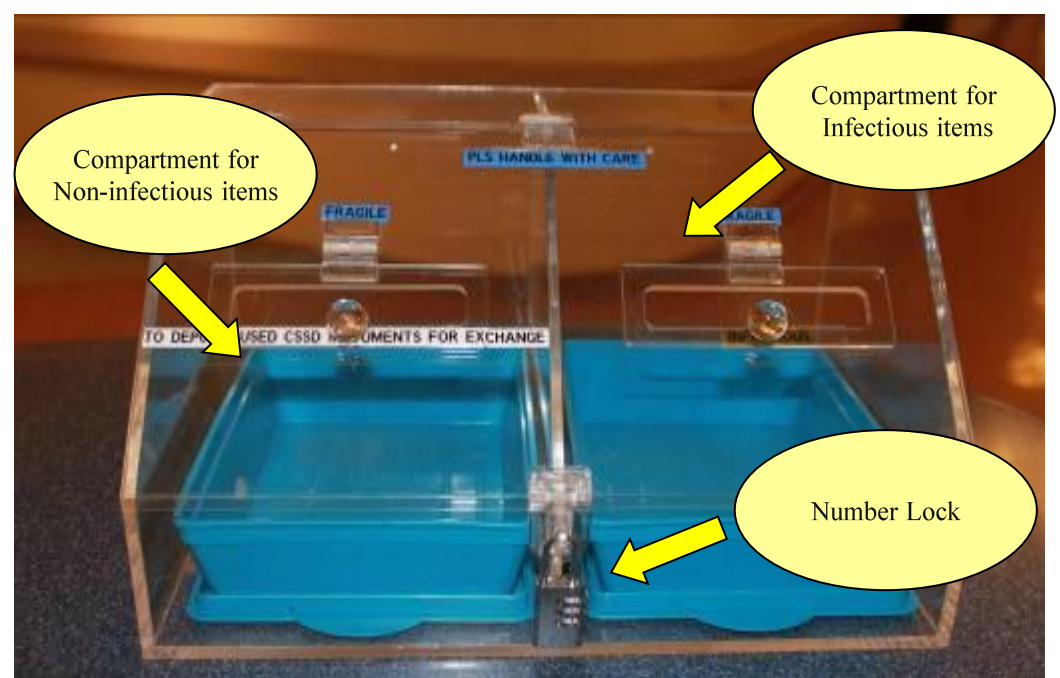
**Uses of number lock system.** The uses of number lock facilitate easy access to the soiled instrument. The soiled instrument no longer needed to be kept in locked drawer. Thus, promoting a “keyless” access for the staff.

## METHODOLOGY (CON'T)

**Relocation of exchange point for soiled items.** This is to promote “hassle free” exchange of soiled instruments. The area has limited storage space. In addition, many fixtures and other equipments are kept in the area.

**Accessible for other staff members to retrieve soiled instruments.**

Ward clerk can be involved in the exchanged process as she is stationed at the nurses’ counter



Our project initiate the blue print of a newly design acrylic sealed container. With incorporation of the number locked system, we have brought about effective work flow of exchanging soiled CSSD items at ward level. Thus minimizing the time wasted in locating staff that holds the key to locked drawer.

## RESULT

Ave. time taken to exchange for soiled instruments:

Pre implementation = 8.227 mins

Post implementation = 1.69 mins

Time Saved = 6.5 mins

Target reached, time decrease by 79.45%.

Most importantly, it helped to save time from pacing through and forth the ward locating staff holding the key to the locked drawer. In addition, time saved was better directed to other nursing activities such as bedside teaching and discharge planning.

## CONCLUSION

This project conveyed enhancement in work process, minimizing the inconvenience of exchanging loose soiled instruments. With the time saved from the improved workflow, healthcare providers can better direct their attention to patient care, both in terms of clinical quality and service delivery.

## Future Plan:

The team are exploring the idea to other surgical units within Singapore General Hospital as nursing care services provided in surgical wards are similar in nature.