

The current state of the management of loan surgical instruments(LSI) in Japan -the perceptions as a contractor

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Background

In mid- to large-sized hospitals in Japan, 35.3% of facilities outsourced in-hospital CSSD operations in 2018 with an increasing trend compared to 20.7% in 2009. In such a situation the contracted outsourcing companies are forced to efficiently manage the increased number of loan surgical instruments (LSI). As most of the outsourcing worker are part-time employees, stricter control of outsourcing procedures is required to ensure accurate instruments tracking and appropriate cleaning quality in a timely manner.

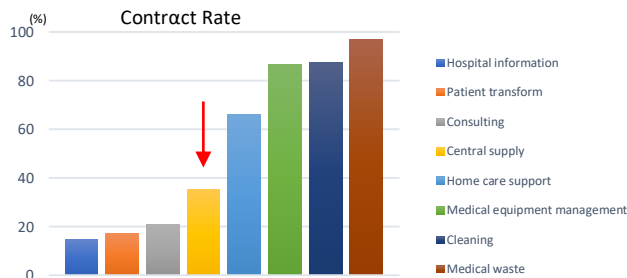


Fig. Survey of Outsourcing (Japan Health Enterprise Foundation in 2018)

Aim and Methods

The change in cleaning rates and handling methods of LSI in Osaka University Hospital over 10 years was investigated to clarify the improvement result of contractors.

Example of surgical instruments on loan(LSI) trouble



Fig. Foreign Matter(Blood clot , hair etc.)

Fig. Dirty container

Fig. Dirty package

Results and Consideration

Change in cleaning rate

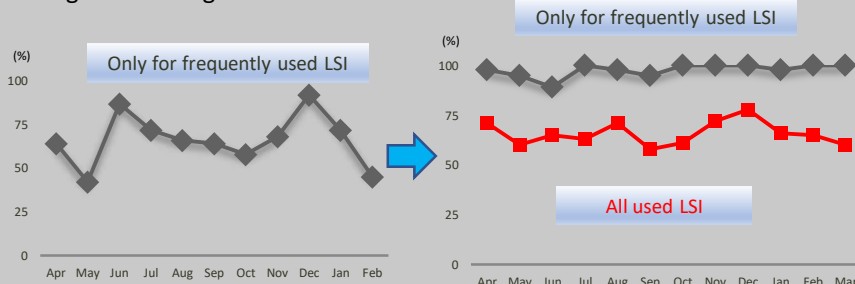


Fig. Cleaning rate in 2010

Fig. Cleaning rate in 2018

1. Cleaning rates

At the commencement of the study period in 2010, cleaning was carried out only for frequently used LSI. Monthly cleaning rates were varied widely from 42% to 92%. A policy was then implemented with the goal of cleaning all LSI. This resulted in a significant improvement with the cleaning rates, Improved to 89% to 100% in 2019. However, overall cleaning rates before use ranged from 58% to 78% because we could not clean instruments if they were delivered outside of business hours.

Improvement of LSI management procedures

PAST

Manual Checking

Check List(Black and White)

Fig. LSI management (past)

PRESENT

Tablet Checking and Full color

Data management

- patient(name,ID)
- ope date
- surgical procedure
- clinical department
- container counts
- name(staff/dealer)
- comments
-

Fig. LSI management (present)

2. Improvement of LSI management procedures With respect to confirming of the number of LSI, we moved from a paper-based method of confirmation to a tablet computer (iPad) in order to enhance visibility and identification of instruments. Key issues in the efficient management of LSI include ensuring confirmation of the number of LSI delivered and reduced number of non-standard surgical instruments ordered by physicians. However, we could not reduce the number of non-standard instruments with iPad system.

Conclusion

The management of LSI is a global issue. In Japan, outsourcing of CSSD operations has increased and outsourcing contractors make an effort to implement efficient procedures. However, to achieve overall success in managing this issue, it is necessary to reduce in the number of non-standard surgical instruments brought into the hospital by physicians.