



Implementation of an Infection Control Program

for the Ophthalmic Investigative Unit

at SNEC



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Introduction

- The aim of this project is to improve the design of sociotechnical systems so as to enable our Allied Health team to perform their tasks safely. This is a key goal of both occupational health and patient safety.
- Among different staff groups in SNEC, compliance rate of allied health staff was the lowest which fluctuated from 24% to 35%. Ophthalmic investigative technician (OIT) team, which is part of the allied health, was opted as the pilot site of the initiative to improve hand hygiene compliance rate.
- To support patient safety improvement, enhancing the infection control knowledge and increase the compliance rate on hand hygiene for Ophthalmic Investigative unit, have been and will continue to be our utmost priority.

Methodology

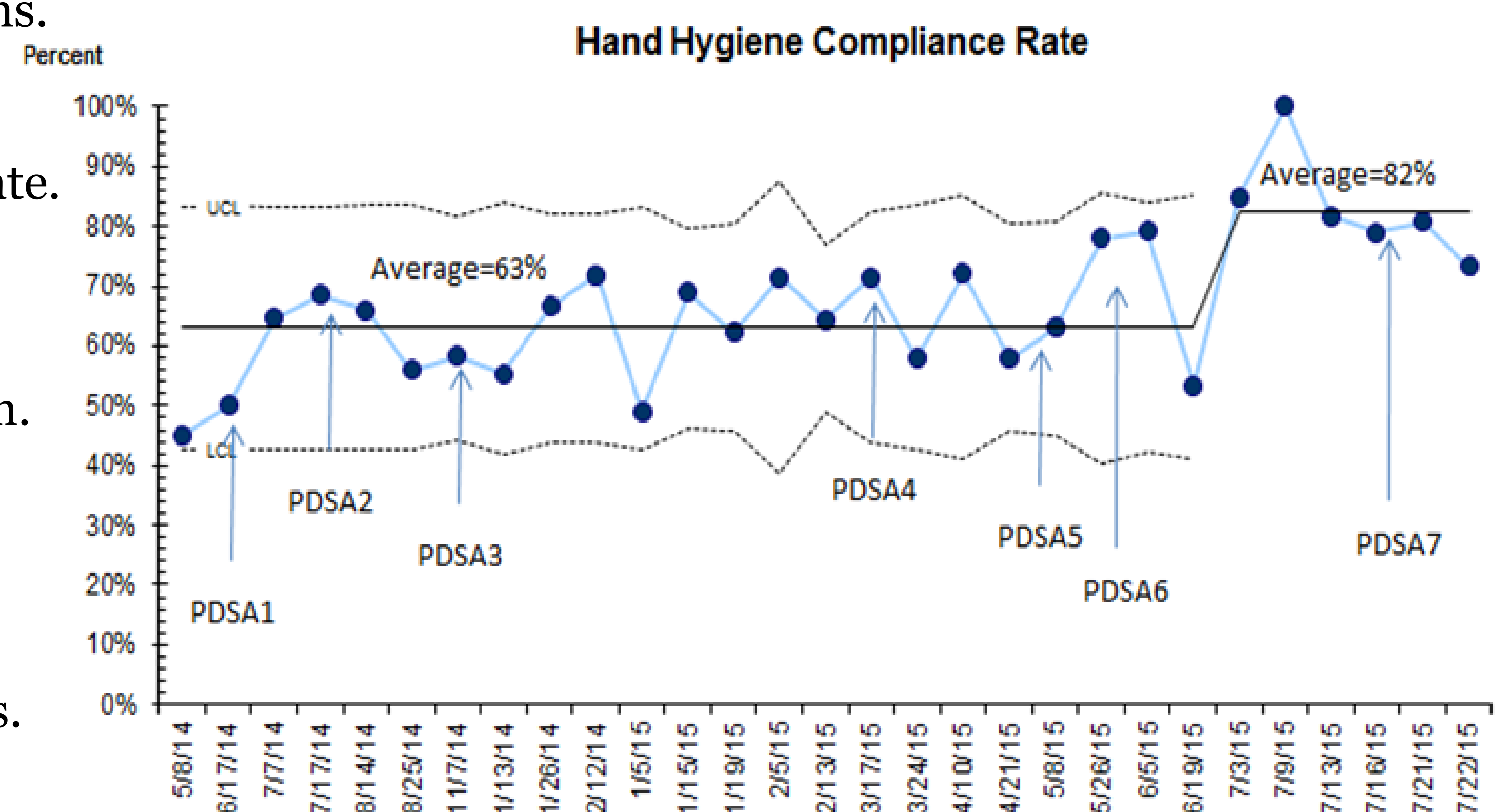
A survey conducted in 2014 revealed that the knowledge on hand hygiene among the Ophthalmic Investigative Specialists (OIS) is lacking. The reasons for non-compliances were :

- Lack of awareness of the importance of hand hygiene practices.
- Lack of process knowledge.
- Skin irritation resulted from hand hygiene product.
- Tendency to forget to hand rub.

The monthly infection control audit also reported the hand hygiene compliance rate of OIS team was only 45%, but the target for the institution is set at 80%. Such data advocates that there is a need to build the science of patient safety for Allied Health Team. They are working as frontline staff and should be aware of the risks of patient harms.

The infection control team carried out 7 PDSAs from 2014 to 2015 to enhance the infection control knowledge and hand hygiene compliance rate. These PDSAs cycles were:

- Training session specifically for OIS by SNEC Infection Control team.
- New hand hygiene product was introduced and tested by the OIS team.
- Hand hygiene training was carried out by the vendor.
- Process training video was developed.
- Workflow was redesigned for the OIS.
- Poster were used as reminders for OIS staff at respective clinical areas.
- Patient-trigger reminder badges to empower patients.



What did we learn from "Ask 5, Take 5" ?
- Knowledge does not necessarily translate into practice
Training was then given to the cohort (n=15) from the OIT Group

PDSA 3
Intervention – Education and Training Revised (PDSA Cycle 3)

PDSA 4
Assumption: It was assumed that the non-compliance was more related to the process during the service provided for the patient.

PDSA 5
Assumption: It was assumed that the non-compliance might be a result of too many steps for hand hygiene during the process.

PDSA 6
Assumption: As expected the increase in compliance was not sustained. It was assumed that the group involved needed to be constantly reminded that they were being observed for hand hygiene compliance.

PDSA 6A
Assumption: The credibility of the poster statement requires data support. The hand hygiene data was sorted according to staff and the results of compliance was arranged in descending order. This gives credibility to the poster statement.

PDSA 7
Assumption: Knowledge that their own individual hand hygiene compliance rates may not help to change behavior.

Results

- The PDSA cycles from 1-5 reported no significant increase in the compliance of hand hygiene practices.
- After PDSA 6, the compliance rate of hand hygiene increase from 63% - 83% and was sustainable for a 3 month period.

Conclusion

Enhancing knowledge in hand hygiene practice for the Allied Health team is imperative as they may not be aware that hand hygiene is associated with healthcare-associated infections. It also involves respect for the patients and a commitment to patient-centred care. The patients will benefit from improvements in the delivery of care. Our infection control team has also changed from reactive to proactive as avoiding harm is a major public health concern.

To ensure that other Allied health team understand the same notion of patient-centered care, the same safety education will be implemented for the Ophthalmic Imaging Department in 2015.

Moving forward, the team is exploring a technical solution (a sensor driven reminder device) to add automated reminders into the care giving process. Meanwhile, by implementing the device, the manual data collection process which is manpower consuming will be replaced by automated data collection method.

Congratulations to Ms Jazlyn Peh, Ms Nazimah Binte Saini and Ms Eileen Lim for having achieved 95 to 100% hand hygiene compliance consecutively in three months.