

# CHI Learning & Development System (CHILD)

### **Project Title**

Improve Compliance Rate for Outsourced Staff's Daily Temperature Reading Submission

### **Project Lead and Members**

- Grace Tay
- Adrian Low
- Tenny Chow

# Organisation(s) Involved

Changi General Hospital

# **Healthcare Family Group Involved in this Project**

Healthcare Administration

# **Specialty or Discipline**

General Services, Environment Services

### **Project Period**

Completed date: Jul 2020

### Aims

- To review the process of temperature submission
- Implement a common system / platform for outsourced partner staff to key in temperature

### **Background**

See poster appended / below

### Methods

See poster appended / below



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### **Results**

See poster appended / below

### **Lessons Learnt**

See poster appended / below

### Conclusion

See poster appended / below

### **Additional Information**

Singapore Healthcare Management (SHM) Conference 2021 – Shortlisted Project (Operations Category)

# **Project Category**

Technology, Digital Health, Chat Bots, Care & Process Redesign, Quality
Improvement, Workflow Redesign, Value Based Care, Productivity, Time Saving

### **Keywords**

COVID-19, Staff Health Surveillance System, Plan Do Study Act

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# IMPROVE COMPLIANCE RATE FOR OUTSOURCED STAFF'S DAILY TEMPERATURE READING SUBMISSION

# BACKGROUND

In 2020 to early 2021, due to COVID-19, all staff working in CGH are required to take and record their temperature twice a day in the SingHealth Staff Health Surveillance System (S3) or Form.sg. However these 2 systems are only available for CGH staff. Under Support Operations, there are around 930 outsourced and tenant staff from 12 different companies. Without a proper common platform and system to record and monitor the temperature, the temperature record compliance rate was only 80%.

# OBJECTIVE

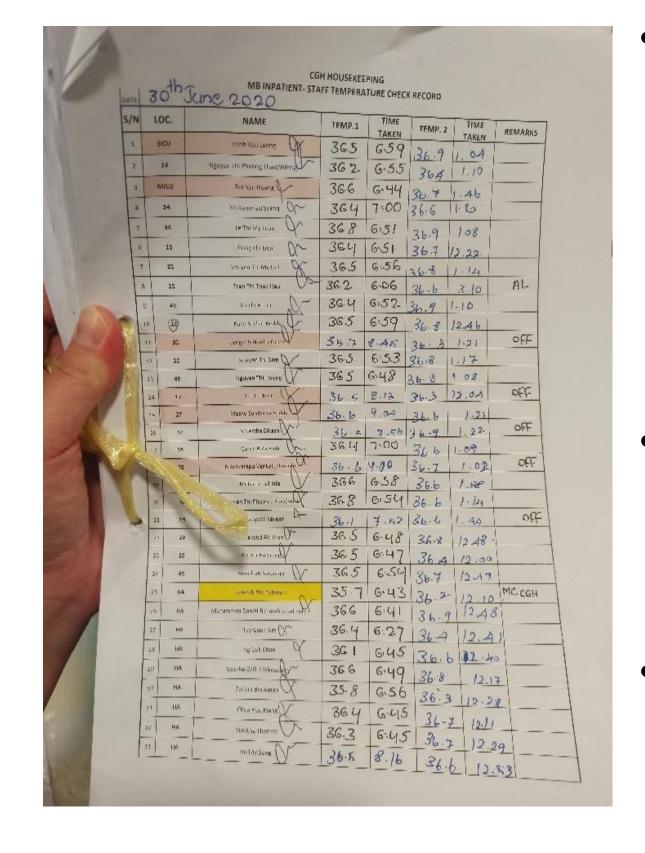
With the problem statement mentioned above, the project team took this opportunity to review the following

- To review the process of temperature submission
- Implement a common system/platform for outsourced partner staff to key in temperature

# METHODOLOGY

The team then proceed to apply the Plan-Do-Study-Act (PDSA) methodology to solve the issue.

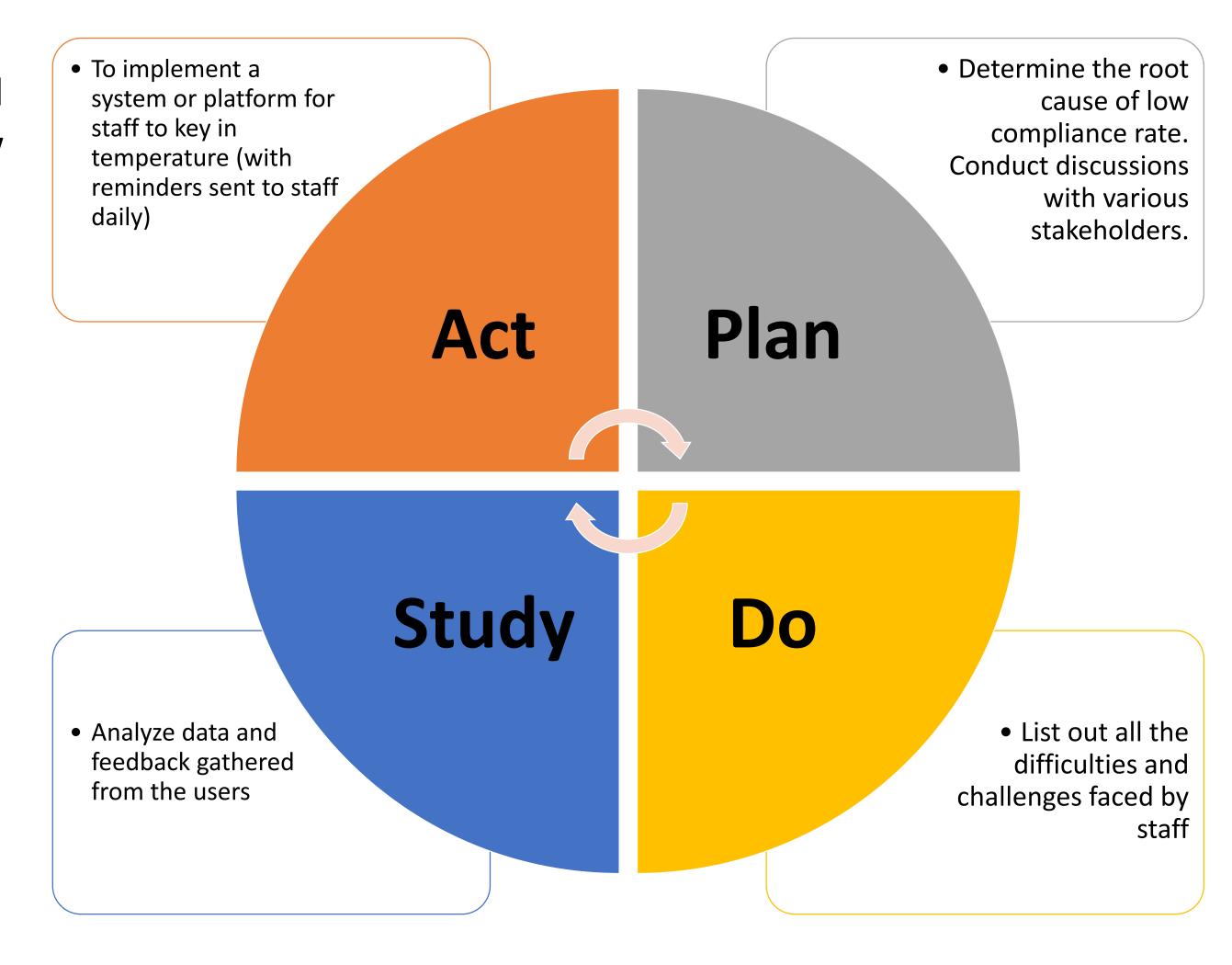
Discussions with key stakeholders (eg. Outsourced Partner Managers and CGH department reps) were carried out. Below are some of the root causes for the low compliance rate.



- Time consuming Without a proper process and platform to key in daily temperature, some outsource partners record the temperature manually on paper. It was found out that Supervisors spent an average of 750 minutes per day checking, calling and manually recording the staff temperatures records.
- Difficulties in contacting staff Supervisors faced difficulties contacting staff to check on their temperature especially when the staff were busy with work and not picking up the calls.
- Lack of reminders Some staff feedback that they often overlook and forgot to submit their temperatures on time during their shift.

The project team then searched for suitable systems and shortlisted both "Google Form" and "Telegram". "Telegram" is similar to Whatsapp messaging platform and it comes with a built-in function called "Temperature Bot" created by Army Digitalization Office (ADO) under SAF. The team subsequently contacted the developer, ADO, and they have agreed to allow CGH to use this to facilitate the staff temperature recordings.

Table on the right summarizes the evaluation for the 2 systems :



Description	Telegram - Temperature Bot	Google form
Is service free if charge?	✓	✓
Auto reminder?	✓	X
Generate data to monitor compliance rate?	<b>√</b>	X

# RESULTS

The "Temperature Bot" was first tested out with a small group of staff from Housekeeping Department. Both the Supervisors and staff had feedback that it is easy to use and staff appreciates that they are reminded to submit their temperature readings on time. Subsequently on 1 July 2020, this "Temperature Bot" was rolled out across the rest of the outsourced service providers and tenants. Compliance rate has improved from average 80% to 99%. Staff satisfaction has also increased from Fair to Excellent.

# CONCLUSION

The "Temperature Bot" proves to be an effective tool for the Supervisors as they no longer require to update their individual staff temperatures manually. The staff appreciates that they can be notified to take and submit their temperatures. In summary, all the staff are happy to adopt this new technology and the compliance and staff satisfaction rates has improve significantly.