# Streamlining the Process of Recording Storage Temperature of Investigational Products (IP)

# Stored in KK Research Centre (KKRC) at Room Temperature

Yvonne YONG, Emmerie WONG, NG Jing Wen, Charis LIM, Michelle REN, Vivien FU and Sonny LIM KK Research Centre, KK Women's and Children's Hospital

**Singapore Healthcare** Management 2018



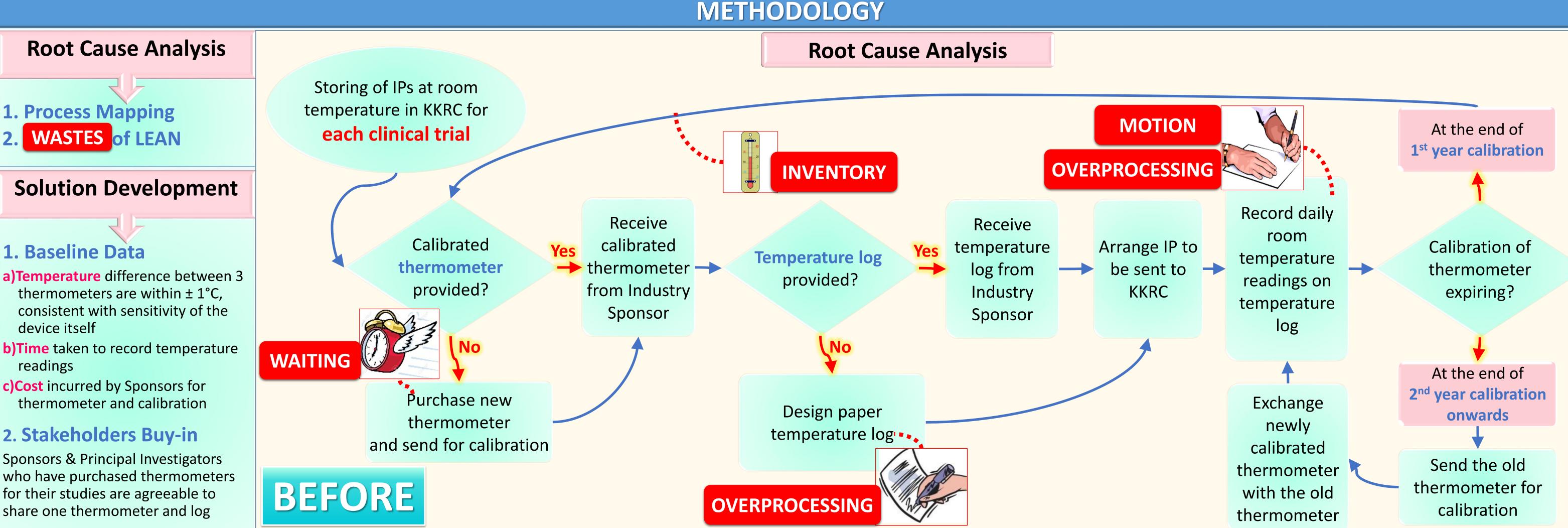
#### INTRODUCTION

An Investigational Product (IP) is defined as a therapeutic product/ medicinal product or a placebo that is to be tested or used as a reference in a clinical trial. Monitoring of IP storage temperature is crucial in IP management, according to International Council for Harmonisation (ICH) GCP E6 R2.

As of August 2017, five different IPs are stored at room temperature in a storage cabinet at KKRC level 3. Daily room temperature readings are recorded by four Clinical Research Coordinators (CRC) from level 3 and 4 using three thermometers placed in the same storage cabinet. The purchase of calibrated thermometers takes about 2 to 16 weeks to process, which results in delaying of IP shipment and study start-up. Each CRCs record temperature readings of respective thermometers using paper temperature logs of various format, that caused inconsistencies, redundancies and wastage of man hours in the workflow.

#### **OBJECTIVES**

To reduce the number of man hours needed to record storage temperature of IPs stored in KKRC at room temperature.



## Solution **Implementation**

c)Cost incurred by Sponsors for

2. Stakeholders Buy-in

for their studies are agreeable to

share one thermometer and log

thermometer and calibration

1. ONE Thermometer

1. Process Mapping

2. WASTES of LEAN

1. Baseline Data

device itself

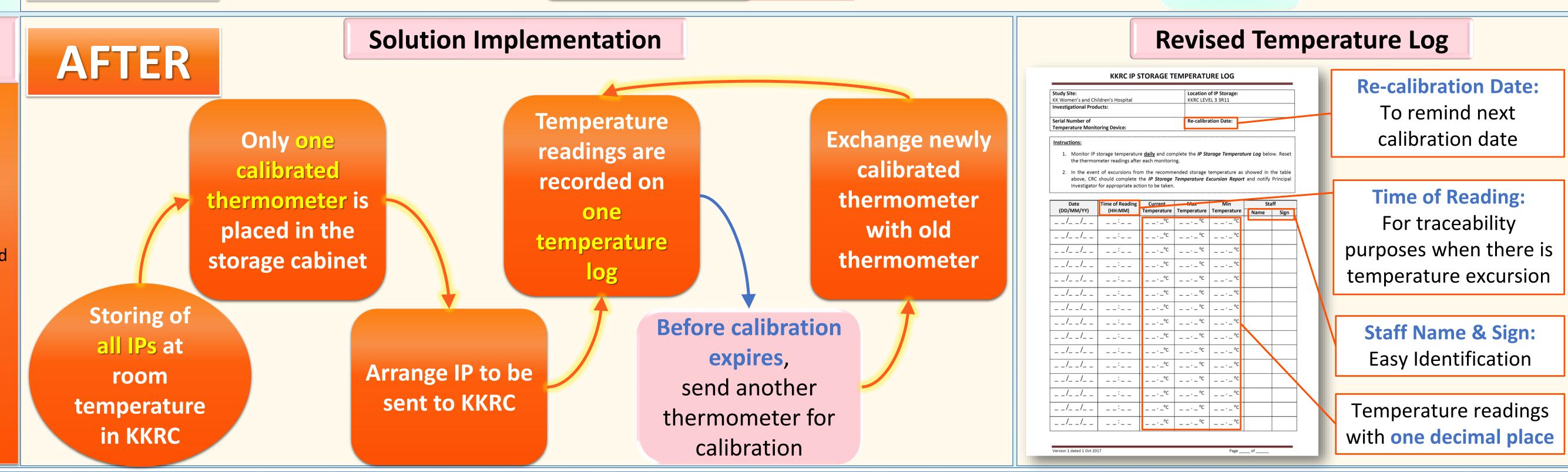
readings

- 2. ONE Revised
- Temperature Log
- 3. Roster

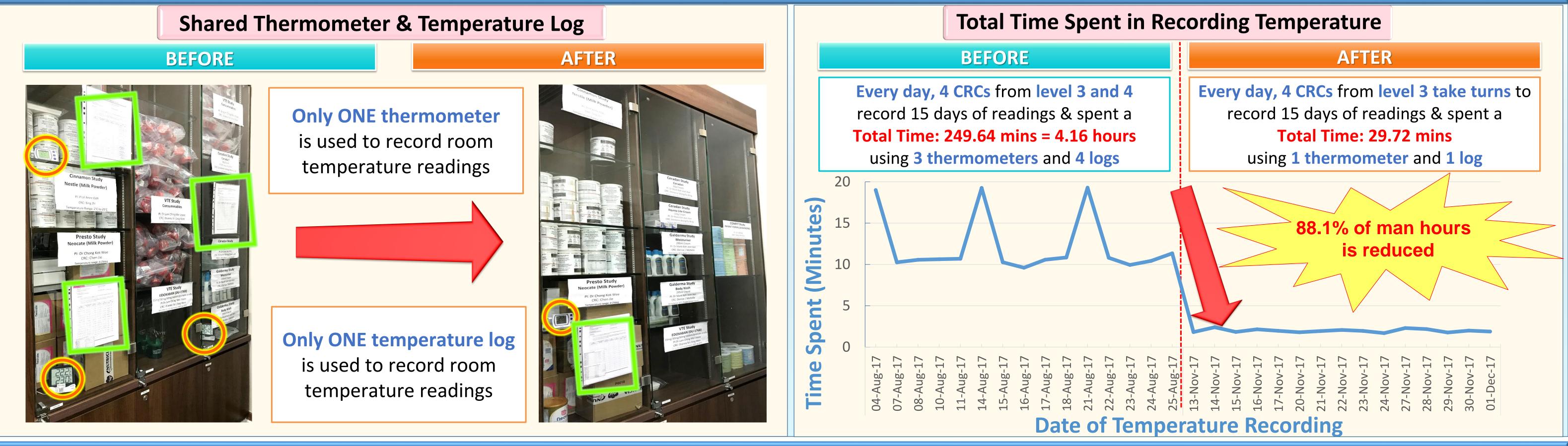
Only level 3 CRCs take turns to record temperature

4. Cost

For new studies starting from Dec 2017, 80% of the cost of a calibrated thermometer is charged to Sponsor yearly in order to compensate the cost of IP storage and management incurred by KKRC.



### **RESULTS & DISCUSSIONS**



### CONCLUSION

One thermometer and one revised temperature log are shared in order to streamline the storage temperature recording for all IPs stored in KKRC at room temperature. With that, the total time spent to record room temperature readings for all IPs is reduced. Moreover, there is no need to purchase new thermometers for other IPs, which eliminates waiting time to arrange for IP shipment and thus preventing delay in starting up a study. This reduces wastes and redundancies in our workflow.

For sustainability, all new studies that require to store IPs at room temperature in KKRC are required to include the cost for IP storage and temperature monitoring in the study budget, which will be incurred by KKRC in providing a calibrated thermometer for all IPs.