

## **Project Title**

Improving and Standardising the Work Process of Performing POCT Glucose in Ward B5

## **Project Lead and Members**

Project lead: Goh Siow Fong

Project members: Fauziah Jabil, Ye Huizhen, Seah See Wei Iris, Jerelyn Tan Jia Wei, Ong May Woon, Paano Samarina Pomareno, Noorshidah

## **Organisation(s) Involved**

Ng Teng Fong General Hospital

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

Nursing

## **Applicable Specialty or Discipline**

Inpatient Ward B5 (Subsidised)

## **Aims**

To standardise the clinical process of staff performing POCT glucose in one month's time.

## **Background**

See poster appended/ below

## **Methods**

See poster appended/ below

## **Results**

See poster appended/ below

### **Lessons Learnt**

There is a standardized clinical practice among ward staff upon obtaining POCT glucose for patient and this process can be easily implemented without incurring a high cost.

### **Conclusion**

See poster appended/ below

### **Project Category**

Care & Process Redesign

Safe Care, Adherence Rate

Quality Improvement, Job Effectiveness

### **Keywords**

POCT Glucose, Standardized Clinical Practice

### **Name and Email of Project Contact Person(s)**

Name: Ye Huizhen

Email: ye\_huizhen@nuhs.edu.sg

# IMPROVING AND STANDARDISING THE WORK PROCESS OF PERFORMING POCT GLUCOSE IN WARD B5

**MEMBERS:** FAUZIAH JABIL, YE HUIZHEN, GOH SIOW FONG, SEAH SEE WEI IRIS, JERELYN TAN JIA WEI, ONG MAY WOON, PAANO SAMARINA POMARENO, NOORSHIDAH

- ✓ SAFETY
- ✓ QUALITY
- ☐ PATIENT EXPERIENCE
- ✓ PRODUCTIVITY
- ☐ COST

## Define Problem, Set Aim

### Problem/Opportunity for Improvement

#### Background

There is no standard clinical practice In Ward B5 Subsidised when staff are tasked to perform Point of Care Testing (POCT) glucose for patient. Observation has shown that orders for POCT glucose are carried out based on staffs' memory or written lists recorded upon handover based on patients' bed number, instead of verification using NGEMR worklist upon performing POCT glucose. This can result in staff performing unnecessary POCT glucose checks; especially after doctors' review on the frequency of POCT glucose, whereby new or discontinued orders may result in patients having additional or omission of test.

Survey done in Jan to Feb 2022 had shown that 70% of the staff practiced writing down the list of patients for POCT glucose at various timing before performing POCT glucose. There have been 2 incidences where unnecessary checks of POCT glucose had occurred.

#### Aim

To standardize the clinical process of staff performing POCT glucose in one month's time

## Establish Measures

### Outcome Measures

- Number of IRIS incidences based on unnecessary checks of POCT glucose
- Feedback from doctor for unnecessary checks of POCT glucose

### Process Measures

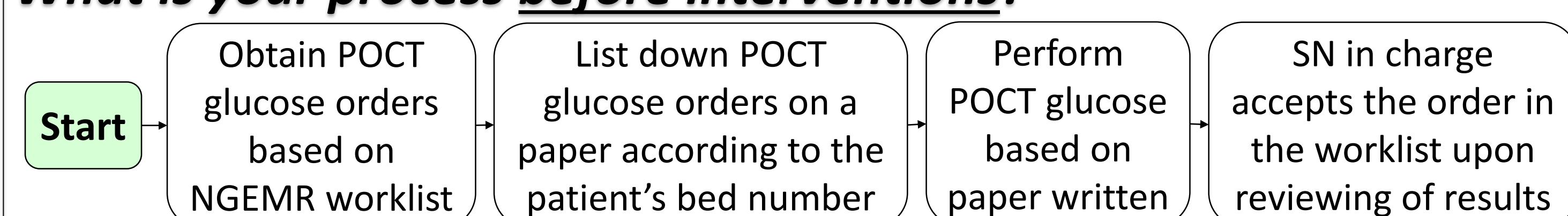
Staff behaviour when performing POCT glucose checks

### Balancing Measures

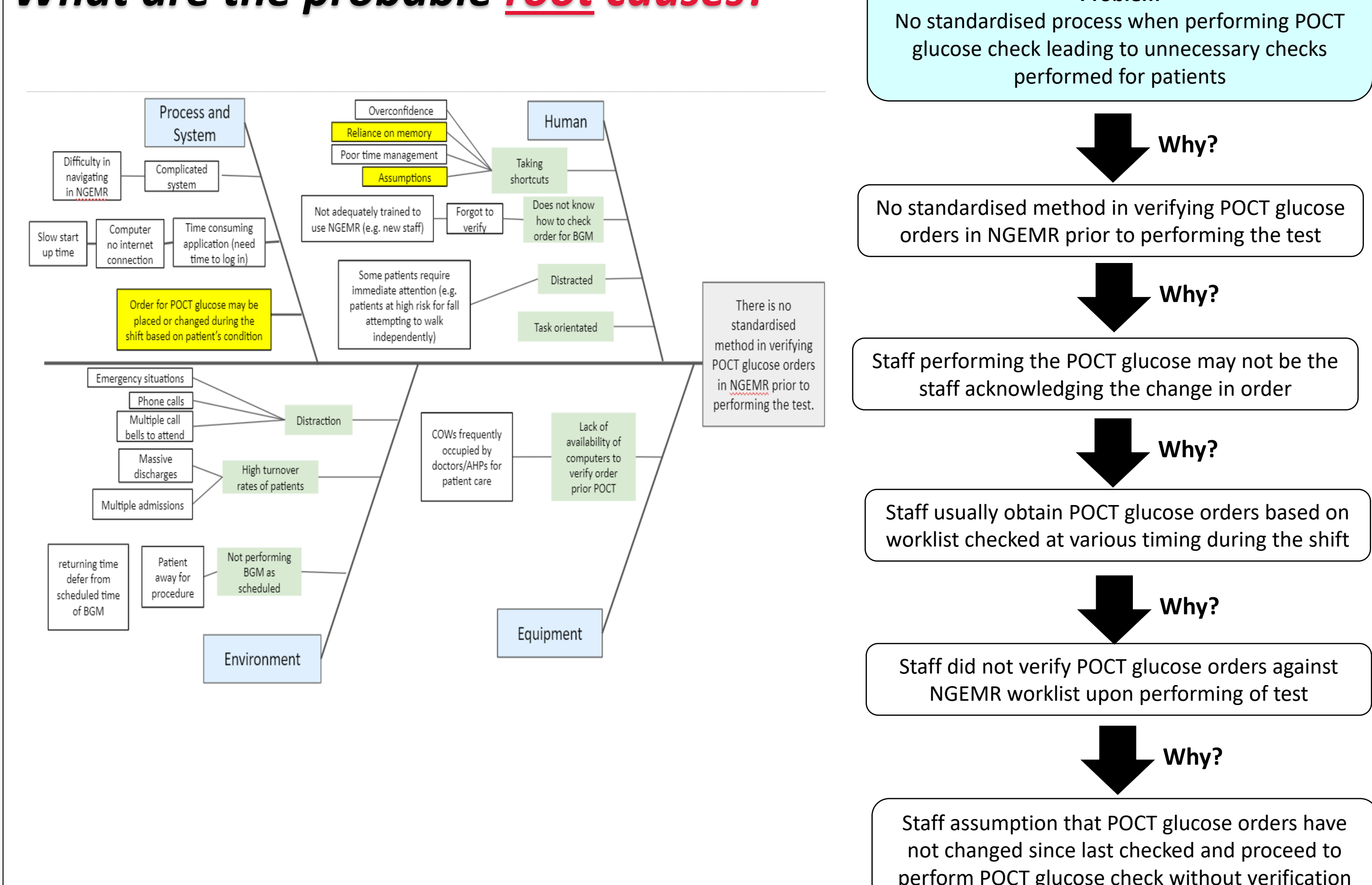
Time taken for staff to perform POCT glucose (15 minutes to complete for 6 patients)

## Analyze Problem

### What is your process before interventions?



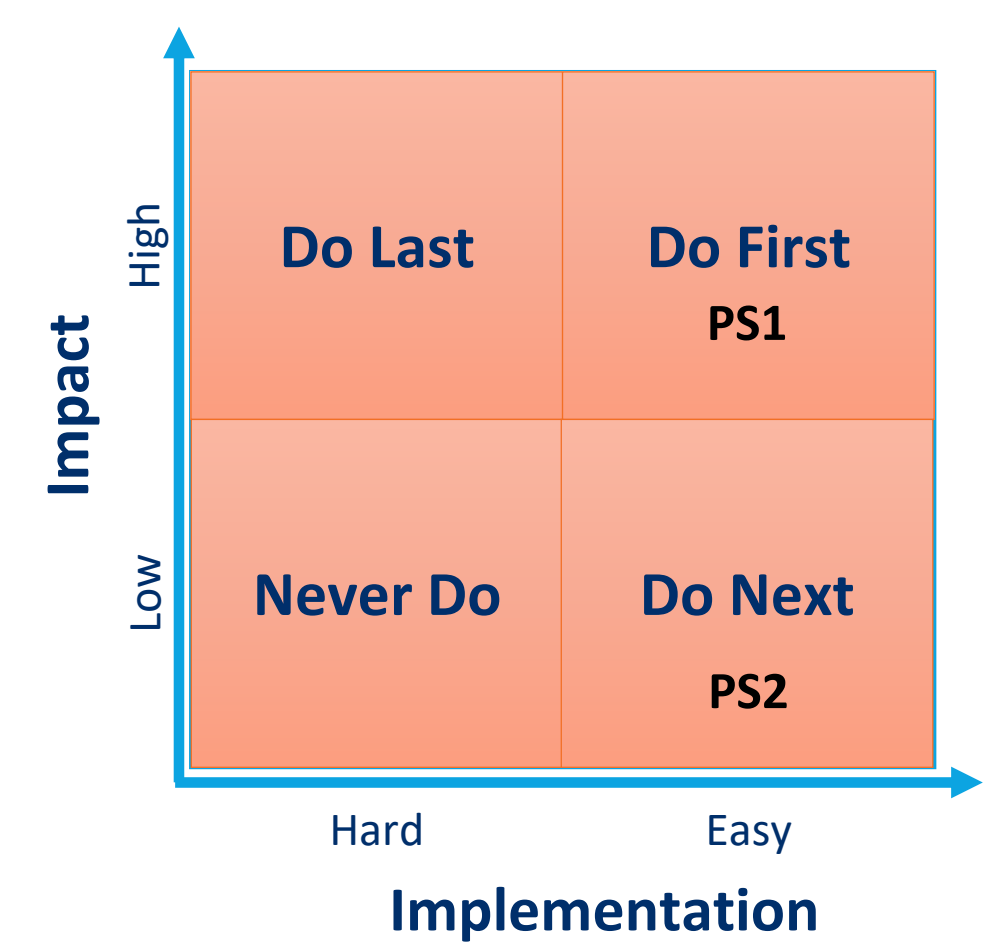
### What are the probable root causes?



## Select Changes

What are all the probable solutions? Which ones are selected for testing?

| Root Cause  | Potential Solutions  |
|---|--|
| No standardised process when performing POCT glucose check leading to unnecessary checks performed for patients | 1 Usage of COW with NGEMR access to verify and carry out POCT glucose immediately prior to testing |
|   | 2 Using phlebotomy trolley to carry out POCT glucose immediately prior to testing                  |



## Test & Implement Changes

How do we pilot the changes? What are the initial results?

| CYCLE | PLAN   | DO  | STUDY  | ACT  |
|-------|--|---|--|--|
| 1     | <ul style="list-style-type: none"> <li>Aim of cycle: Trained staff to verify POCT glucose orders upon performing POCT glucose using NGEMR worklist.</li> </ul> | <ul style="list-style-type: none"> <li>Introduction of the proposed intervention was communicated to staff during daily roll call.</li> <li>Yellow tray (containing POCT glucose requisites) and sharp box was placed on COW to facilitate POCT glucose.</li> <li>Audits were carried out to ensure staff compliance</li> <li>Staff feedback were collated for review.</li> </ul>       | <ul style="list-style-type: none"> <li>60% of the trained staff are not compliant to use COWs</li> <li>Feedback gathered from staff highlighted the lack of space on COW to place all requisites and sharp box, lack of availability of COWs to perform POCT glucose as doctors are using it as well.</li> <li>Non compliant staff reverted back to use previous method of using paper and pen and yellow tray with trolley without NGEMR access to perform POCT glucose.</li> </ul> | <p>Conclusion: Poor compliance of current intervention which prompted a review of new intervention</p> <ul style="list-style-type: none"> <li>Use of other trolley to carry out this project.</li> </ul> |
| 2     | <ul style="list-style-type: none"> <li>Aim of cycle: Enhance the compliance rate of accessing NGEMR worklist upon performing POCT glucose.</li> </ul>          | <ul style="list-style-type: none"> <li>Yellow trays were removed</li> <li>New cycle and intervention was introduced during roll call</li> <li>Revamp of phlebotomy trolley to include requisites for POCT glucose.</li> <li>Staff were observed to be compliant in using phlebotomy trolley upon carrying POCT Glucose.</li> <li>Audits were done to ensure staff compliance</li> </ul> | <ul style="list-style-type: none"> <li>100% of the trained staff used phlebotomy trolley to perform POCT glucose checks</li> <li>Positive feedback from staff received: able to place items properly with adequate space</li> <li>Nil IRIS or doctors' feedback were received after implementation.</li> </ul>   | <p>Adopt the change and put into practice</p>  |

## Spread Changes, Learning Points

What are/were the strategies to spread change after implementation? Phase 1

To share in nursing quality forum and roll out to other wards

What are the key learnings from this project?

There is a standardized clinical practice among ward staff upon obtaining POCT glucose for patient and this process can be easily implemented without incurring a high cost.

