

## **Project Title**

Reduce Incidences Of Wrongly Scanned ID Tag When Taking Blood Glucose

## **Project Lead and Members**

Project lead: Laura Quak

Project members: Julia Law, Chua Si Ning, Teo Yun Ru, Kris Aiza Catindig

## **Organisation(s) Involved**

Ng Teng Fong General Hospital

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

Nursing

## **Applicable Specialty or Discipline**

Endocrinology

## **Project Period**

Start date: Jan-2017

Completed date: July-2018

## **Aims**

To maintain a minimum of 100 days between incidence of error to zero ID scan error by July 2018 for Ward B14.

## **Background**

See poster appended / below

## **Methods**

See poster appended / below

## **Results**

See poster appended / below

## **Lessons Learnt**

This initiative helped to raise ward 14 nurses' awareness towards preventing errors when performing BGM. To make changes, nurses need to communicate effectively with one another on the patients who require BGM.

## **Conclusion**

See poster appended / below

## **Project Category**

Care & Process Redesign, Quality Improvement, Job Effectiveness, Value Based Care, Patient Satisfaction

## **Keywords**

Wrong ID Scan, Blood Glucose Monitoring, Inpatient Ward

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

Name: Laura Quak

Email: kwee\_huwang\_quak@nuhs.edu.sg



# REDUCE INCIDENCES OF WRONGLY SCANNED ID TAG WHEN TAKING BLOOD GLUCOSE

LAURA QUAK, JULIA LAW, CHUA SI NING, TEO YUN RU, KRIS AIZA CATINDIG

- SAFETY
- PRODUCTIVITY
- PATIENT EXPERIENCE
- QUALITY
- VALUE

## Define Problem, Set Aim

### Problem

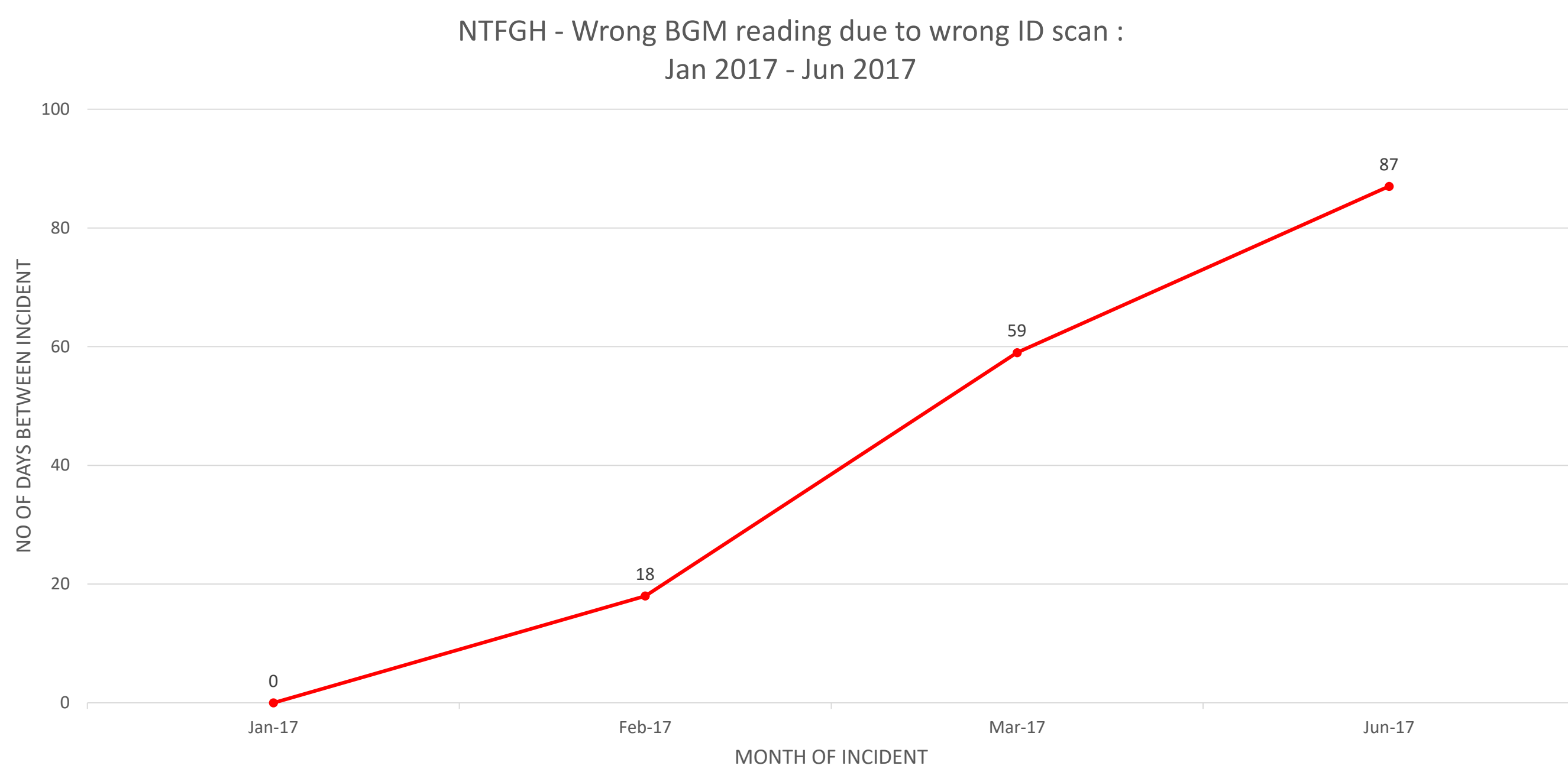
Between January to June 2017 in Ward B14, there were 4 incidences whereby staff wrongly scanned their ID tag when taking blood glucose for patients. Such errors resulted in nurses having to repeat blood glucose monitoring tests for patients which caused patients' dissatisfaction.

### AIM

The team aimed to maintain a minimum of 100 days between incidence of error to zero ID scan error by July 2018 for Ward B14.

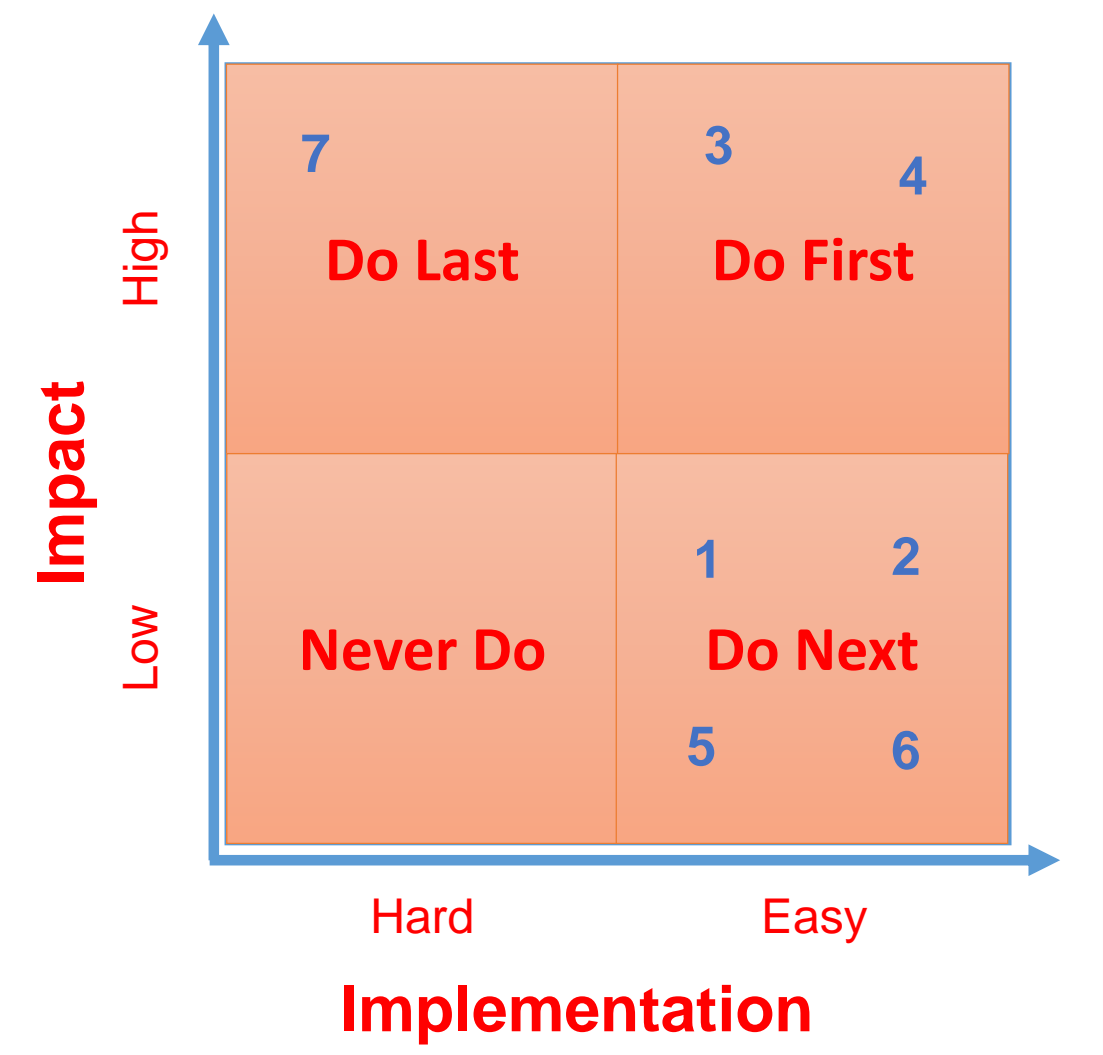
## Establish Measures

NTFGH Ward 14 – Wrong BGM reading due to wrong ID scanning



## Select Changes

Root Cause	Potential Solutions
Root Cause A Unnecessary frequency of BGM	1 Encourage doctors to review BGM frequency.
	2 Use of visual cues to 'remind' doctors to review BGM frequency
Root Cause B Nurses rushing to complete all tasks at the same time	3 Delegate one nurse per machine (2 machines) to take BGM for all the patients who need BGM.
	4 Start BGM checking slightly earlier than usual timing (5- 10 minutes earlier)
Root Cause C Non compliance to protocol	5 Education and annual competencies
	6 Reinforce policies
	7 Change machine set-up/log-in identifier



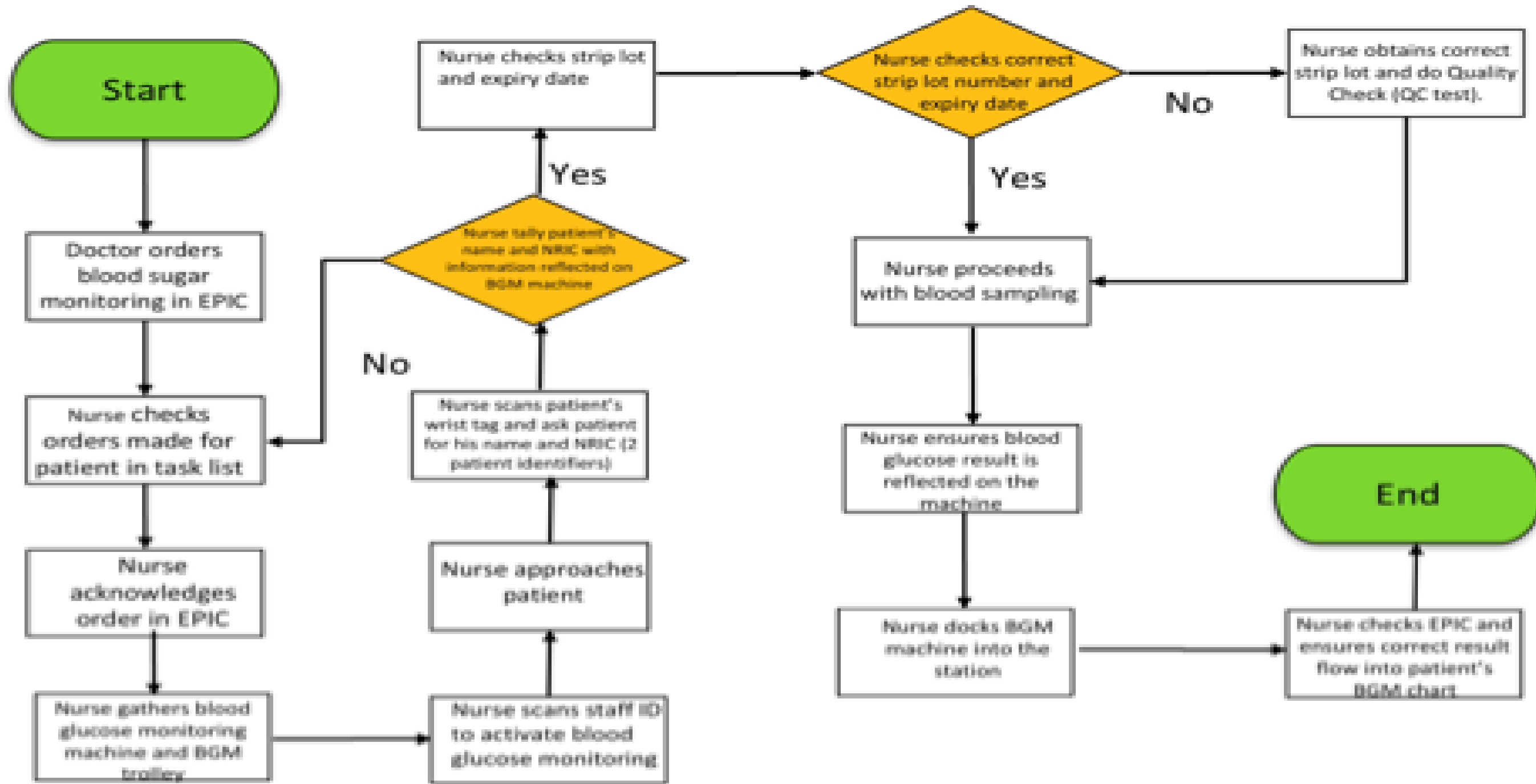
The solution selected was to designate two nurses to perform BGM monitoring for the whole ward.

## Test & Implement Changes

CYCLE	PLAN	DO	STUDY	ACT
1	To test whether reducing number of nurses using the BGM machine will reduce number of errors related to ID scanning in Ward 14	<ul style="list-style-type: none"> <li>- Most were agreeable</li> <li>- Resistance from some nurses</li> <li>- Felt less distracted during BGM rounds</li> </ul>	Nil error since implementation. The test change is effective. (Refer to run chart below)	To adopt this change and implement fully to the ward

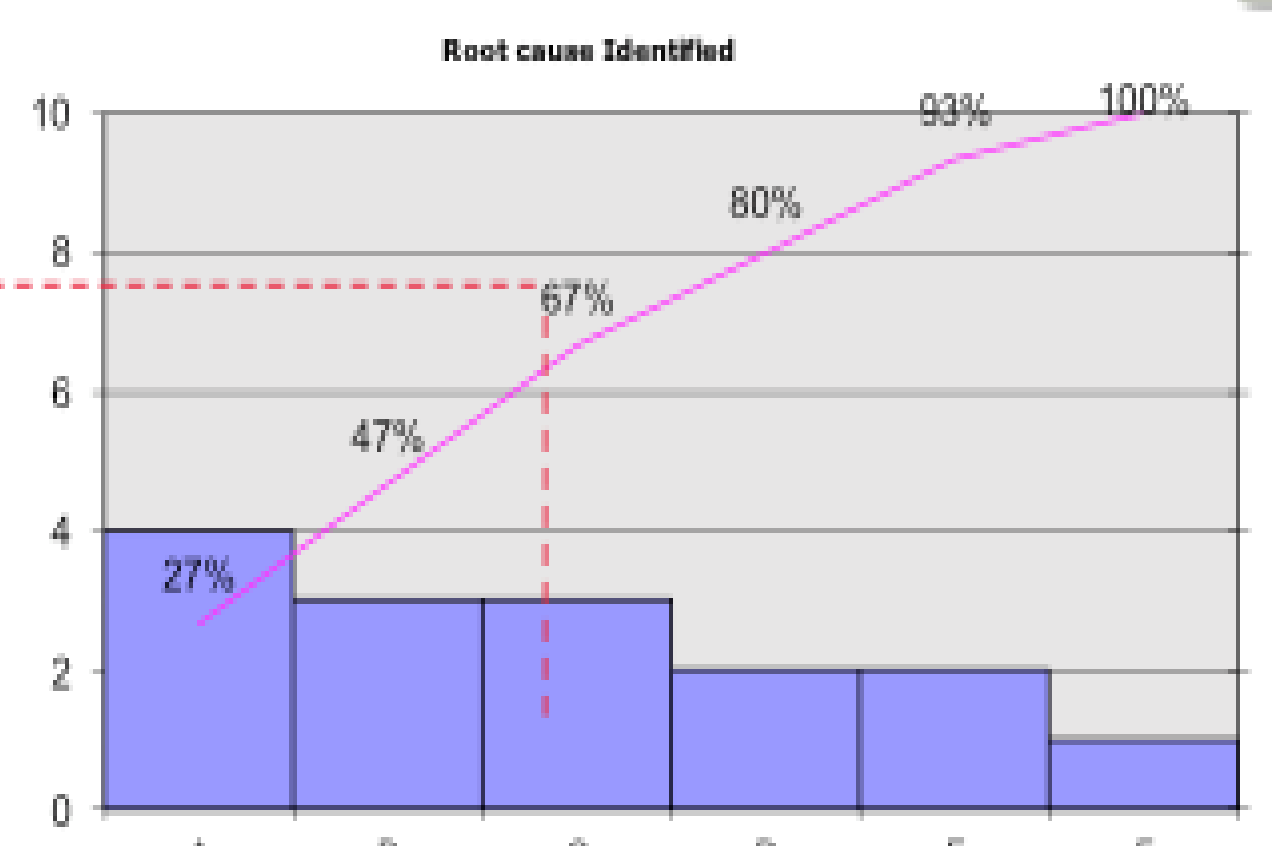
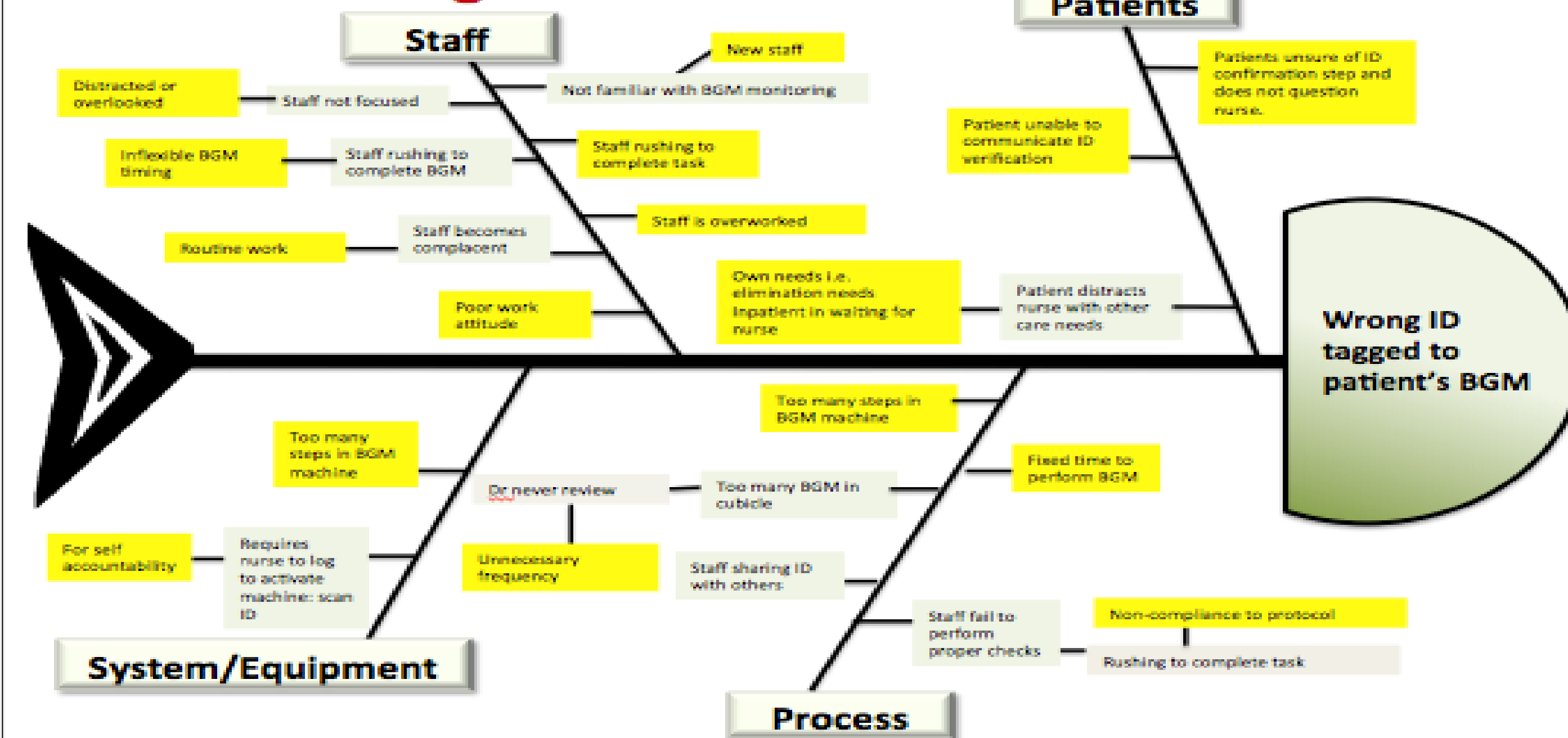
## Analyse Problem

### Process Before Improvement

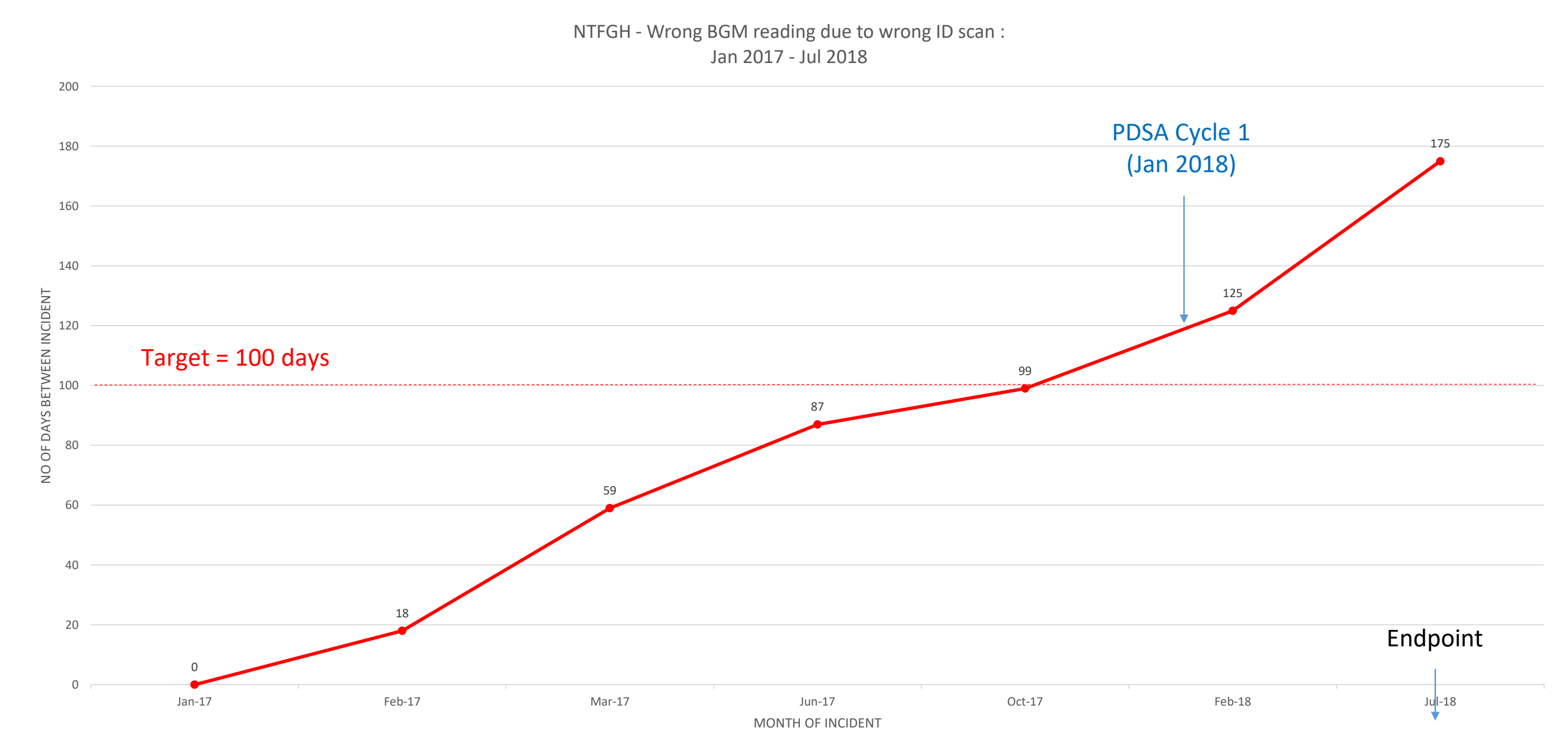


### Root Cause Analysis

#### Fishbone Diagram



- A. Unnecessary frequency of BGM
- B. Nurses rushing to complete tasks all at the same time
- C. Non-compliance to protocol
- D. Patients' elimination needs are not met prior to BGM round
- E. Poor work attitude
- F. Lack of manpower during BGM



## Spread Changes, Learning Points

### Spread Changes:

Ward 14 is an endocrine ward, where BGM is commonly done. The same problem may not occur in other wards, which perform less BGM. Thus, there is no plan for spread change across the wards.

### Learning Points:

Aside from the benefits such as reduced distraction and also less repeated scanning of staff ID. This initiative also helped to raise awareness of nurses in ward 14 toward preventing error when performing BGM.

However, this change also requires nurses to be able to communicate effectively to one another about which patients require BGM.