



# Singapore Healthcare Management 2017

## IS INCREASING NEAR-MISS INCIDENTS GOOD OR BAD?

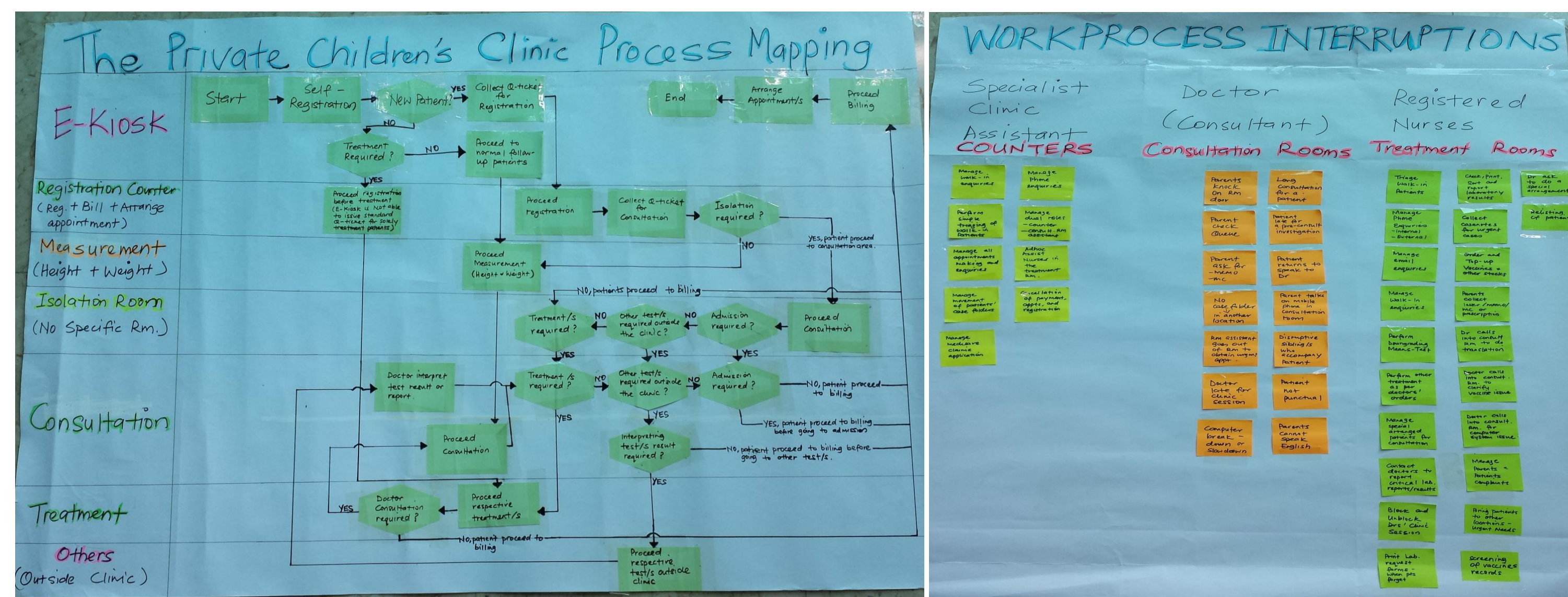
Tng Lay See Daisy



### Introduction:

Private Children's Clinic (PCC) comprises of general paediatric service, six paediatric sub-specialties and provides screening and administration of childhood/travel vaccines. Inevitably, the interaction among the workflow processes becomes complex. Increased interruptions from patients/parents may lead to vaccine verification and administration errors. Furthermore, interrupted tasks are truncated to 'catch up' for lost time, which have significant implications for patient safety.

Lack organized process workflow and facilities to manage vaccination work may lead to increase of interruptions. Increase interruptions can impede communication and coordination problems such as unnecessary rework, delays which may contribute to increase workload and led to errors.



### Aims:

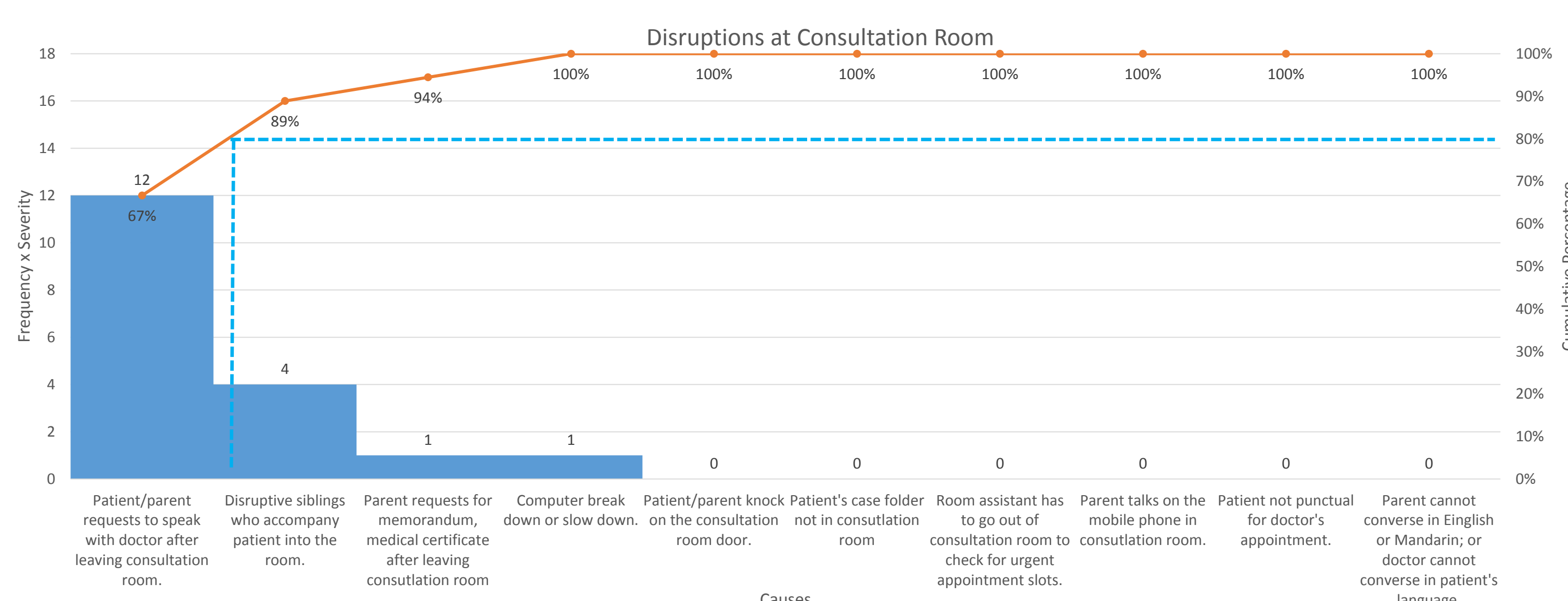
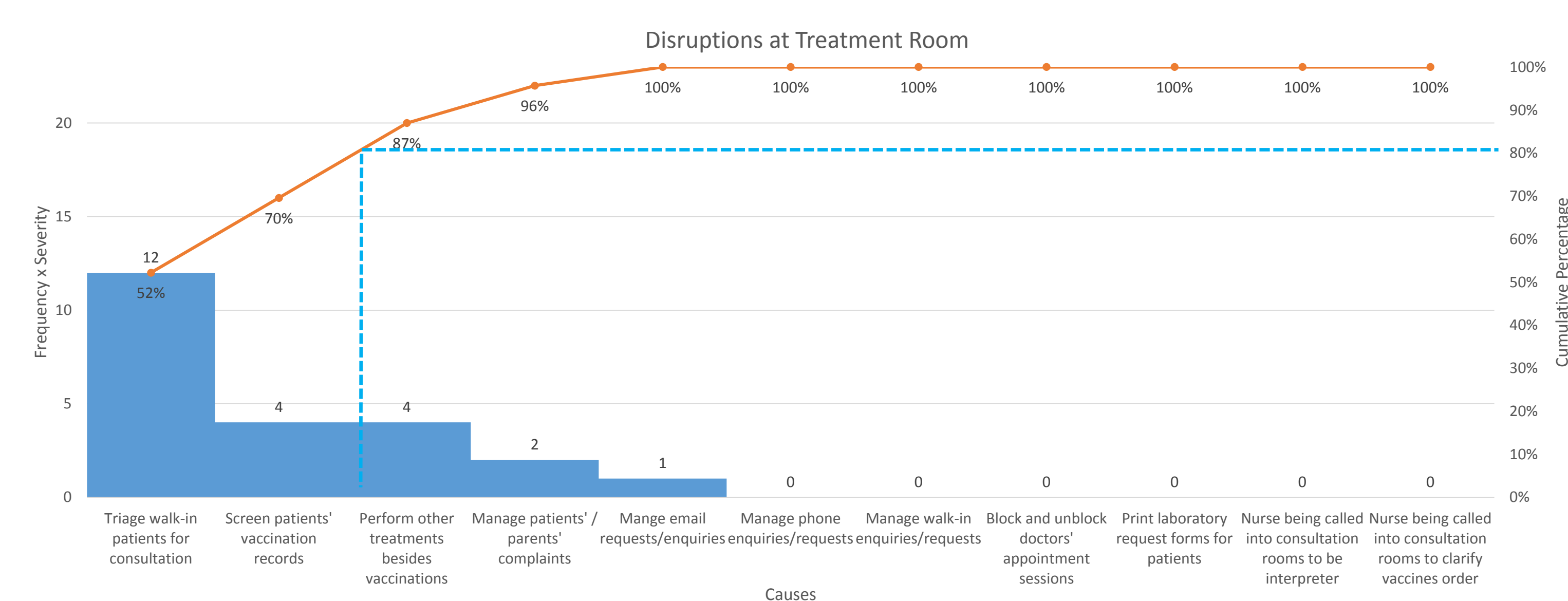
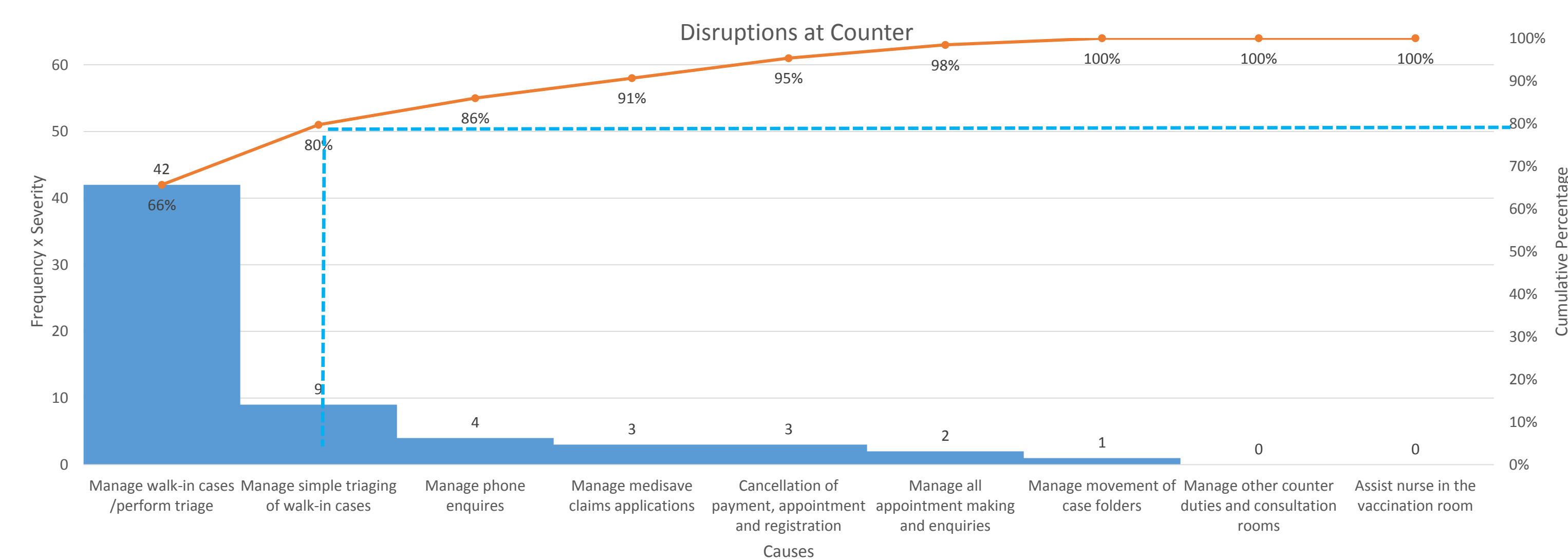
In 2013, there was an increased number of near-misses and one actual vaccine error were reported. KKH definition of near-miss is defined as "any medication related process that has potential to result in a medication error or any near-miss incident intervened by healthcare staff before medication is dispensed, supplied or administered to patient".

Thus, this project aims to identify the gaps within our work processes and eliminate workflow disruptions that may cause increased of near-miss and vaccine verification/administration errors.

### Analysis:

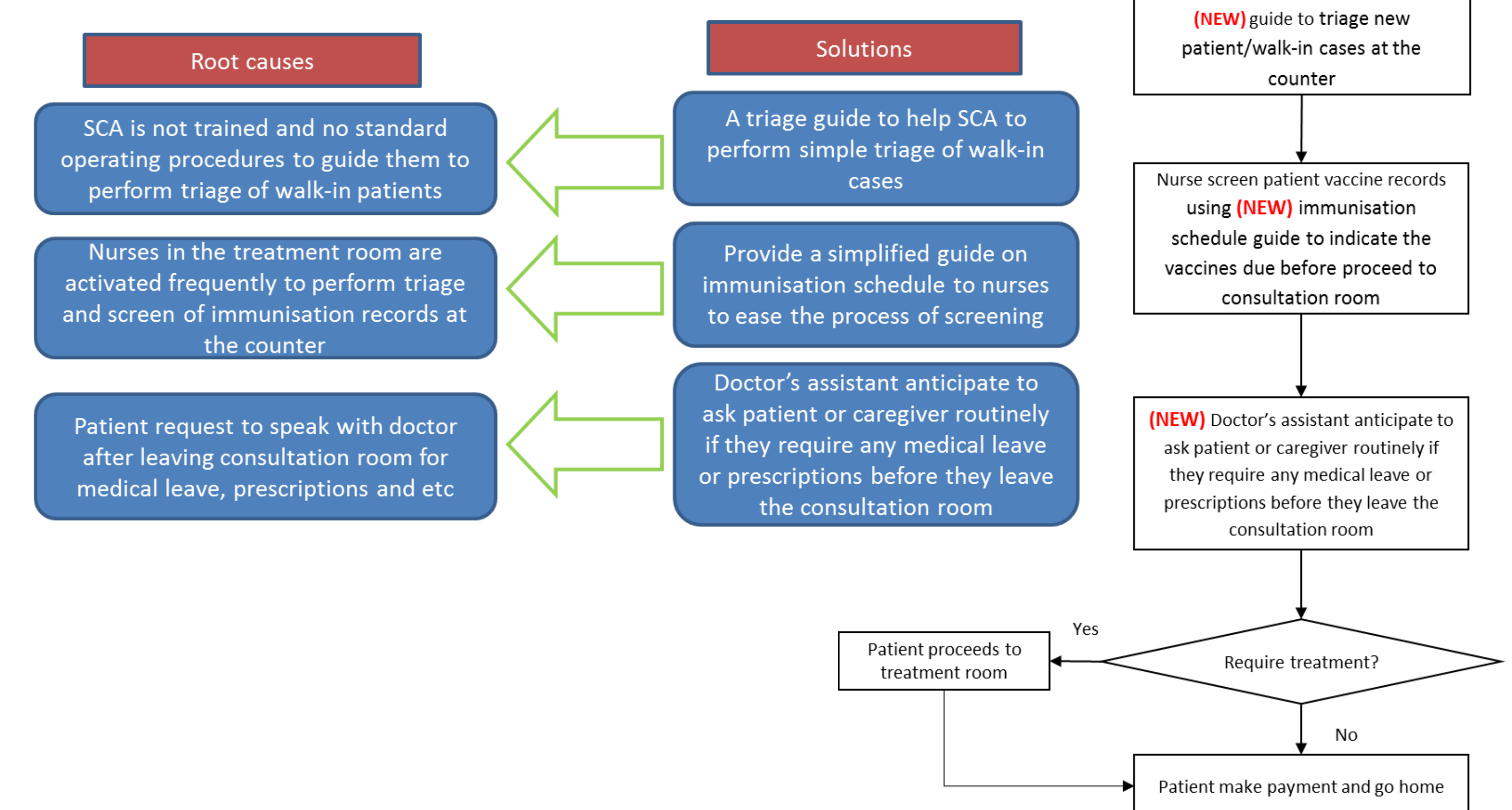
Designed survey questions were formulated based on the work processes with description of each activity to understand the factors that can cause disruptions when tasks are performed. In the context of this project, the various interruptions are associated with work processes in the clinic. The reliability and valid measures of the data are important and necessary to predict and justify the need for any change in our work processes.

Pareto Analysis was also used to analyse the frequency and severity of the disruptive episodes to help us focus on the vital few causes in the decision to make changes.



### Methodologies:

- The highest impact at counter is the need to manage and perform triage of walk-in patients as counter staff need to interrupt Nurses from treatment room to assist them in performing triage of new walk-in patients
- The highest impact at treatment area is Nurses frequently being activated to perform triage of walk-in patients and screening of patients' immunisation records while they are busy in the treatment room
- The highest impact at the consultation rooms are patient or caregivers request to speak with doctor after leaving the consultation room



### A Triage Guide

To prevent frequent interruption to nurses, a triage guide was introduced to help the Specialist Clinic Assistants in performing simple triage of walk-in cases.

### Simplified Immunisation Schedule Guide

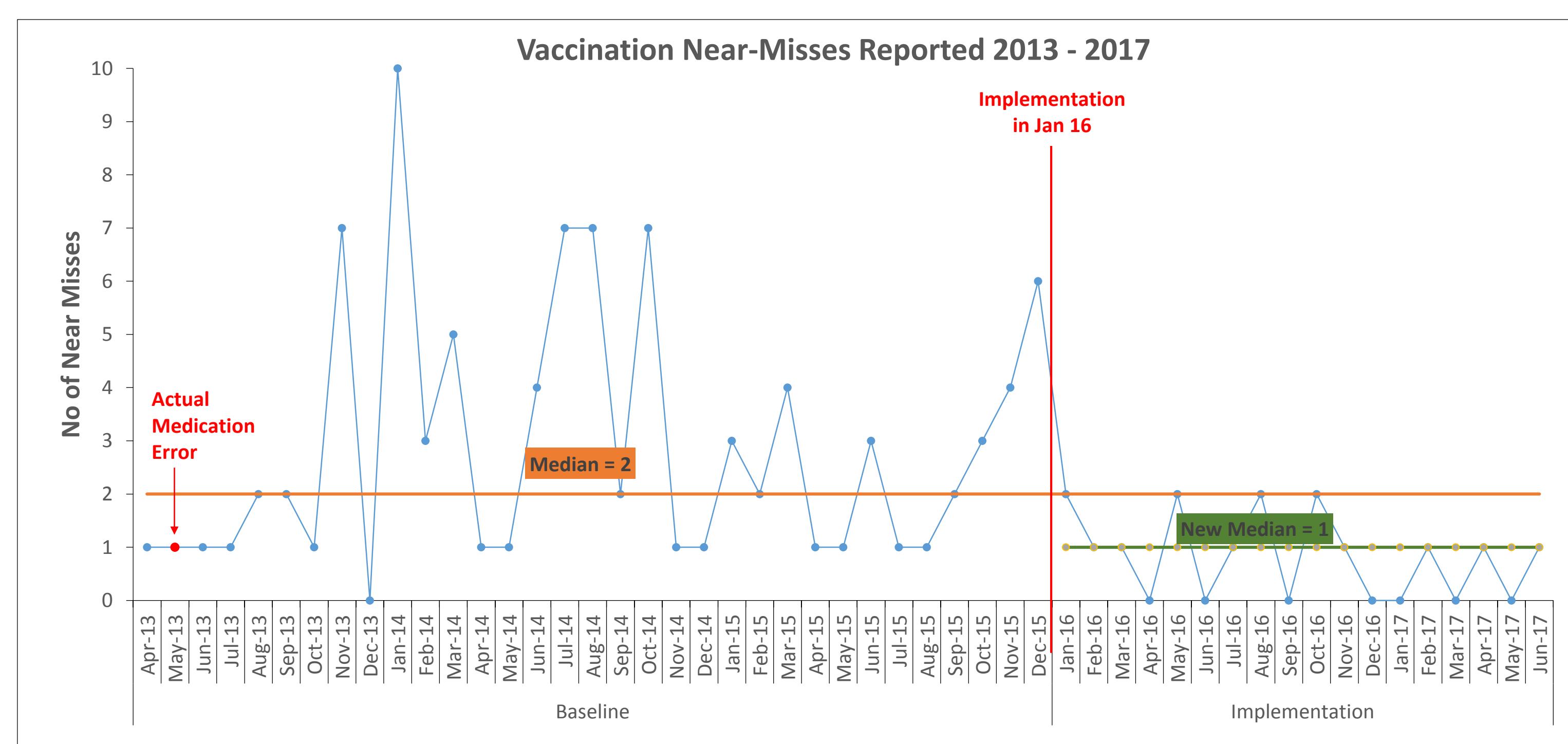
To provide a simplified guide for the nurses to ease the screening process of immunisation records by tallying health booklet and National Immunisation Registry (NIR), hence to indicate the vaccines due before patients proceed to consultation room. This helps to prevent rework in the treatment room if wrong vaccine is ordered, and nurse would have to return to doctor to change the order. This change has also helped to reduce doctor's screening time of the record and interruption to doctor.

### Anticipate Patient's Concern

To reduce the chance of parents or caregivers returning to doctor's consultation to make requests after leaving the room, SCA are trained to anticipate by asking patient or caregiver routinely if they require any medical leave and prescriptions before they leave the consultation room.

Similarly, this has also eliminated the interruptions to the nurse at the treatment area as patients often approach them for the same requests.

### Results:



From January 2016, work processes and the associated activities in Private Children's Clinic were re-examined, unnecessary steps in the workflow were eliminated and improved, and disruptions were significantly reduced.

These were evidence by the reduction of more than 50% of near-miss errors and no actual vaccine error since 2016 to present.

### Conclusion:

Near-miss event is a risk for potential error which can lead to the occurrence of an actual error if not mitigated. The task to report and mitigate the underlying cause of near-miss events are equally important in preventing occurrence of actual errors.

To encourage and engage all level of staff to report near-miss event has been a constant uphill task, but we must persist in the execution of this change management to eliminate the chance of an error. Therefore, if more near-miss events are reported, it is crucial to allocate time to migrate the causes of those incidents.

While the reduction or elimination of irrelevant interruptions is important to achieve decrease in vaccine errors, however, not all interruptions are bad as some interruptions may deliver useful and relevant clinical information to which may help prevent any medical related error.