



# Singapore Healthcare Management 2018



Sengkang Health  
SingHealth

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## CHECKING ALL THE RIGHT BOXES:

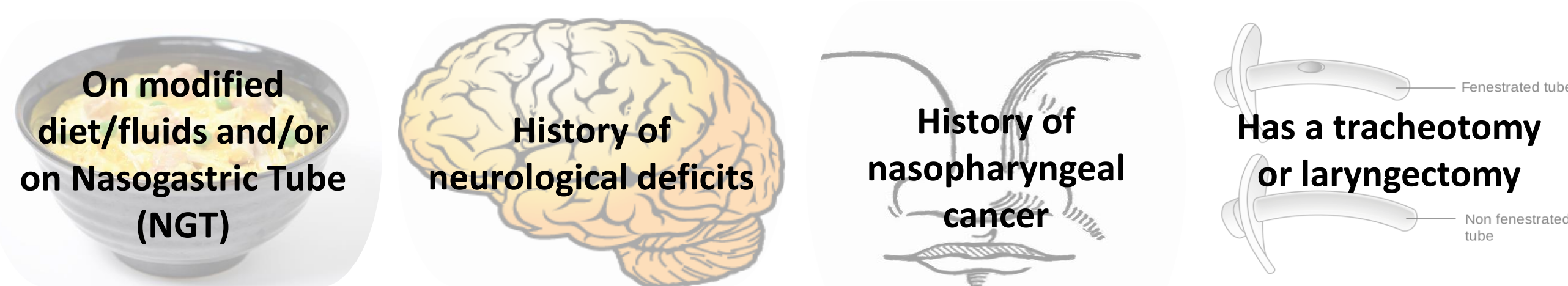
Increasing the number of appropriate Speech Therapy referrals

### INTRODUCTION

Patients with medical diagnoses (e.g. stroke, dementia) that can cause dysphagia are at a higher risk for aspiration pneumonia which can lead to mortality. Without timely referrals to Speech Therapists, appropriate assessment and interventions cannot be carried out, which will compromise quality care to patients. Baseline data showed that only 19% of patients at Sengkang Hospital who required ST intervention were referred. Therefore we wanted to find a solution to make sure that patients who require ST services are indeed referred to us.

### MISSION STATEMENT

In 6 months, 100% of General Medicine patients who require ST will be referred accordingly. Patients who require ST include:



### METHODOLOGY

The team analysed the problem using several tools as follows:

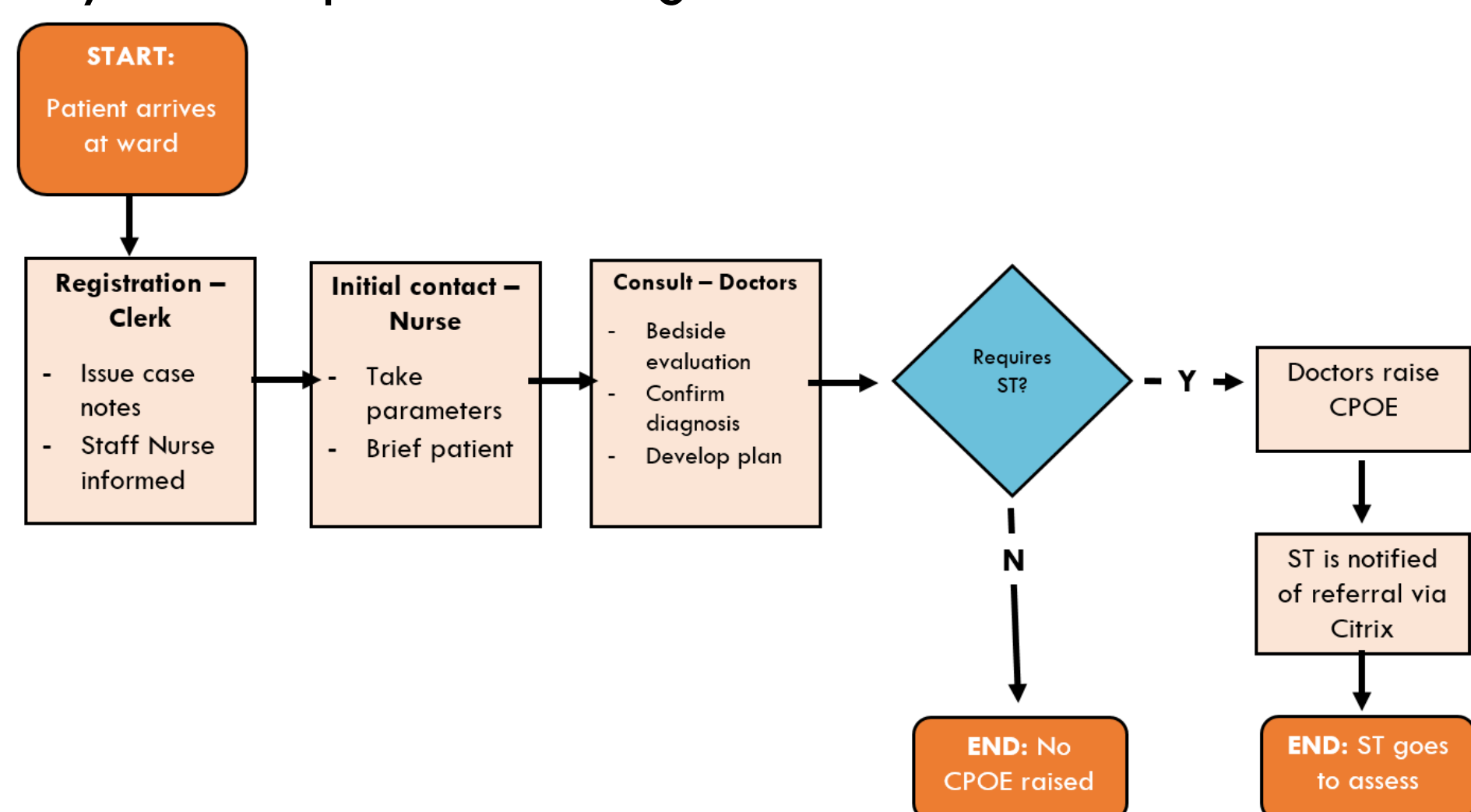


Figure 1: Flowchart of the referral process to help understand a) how patients are referred to ST upon admission, b) how Speech Therapists are informed of the referral.

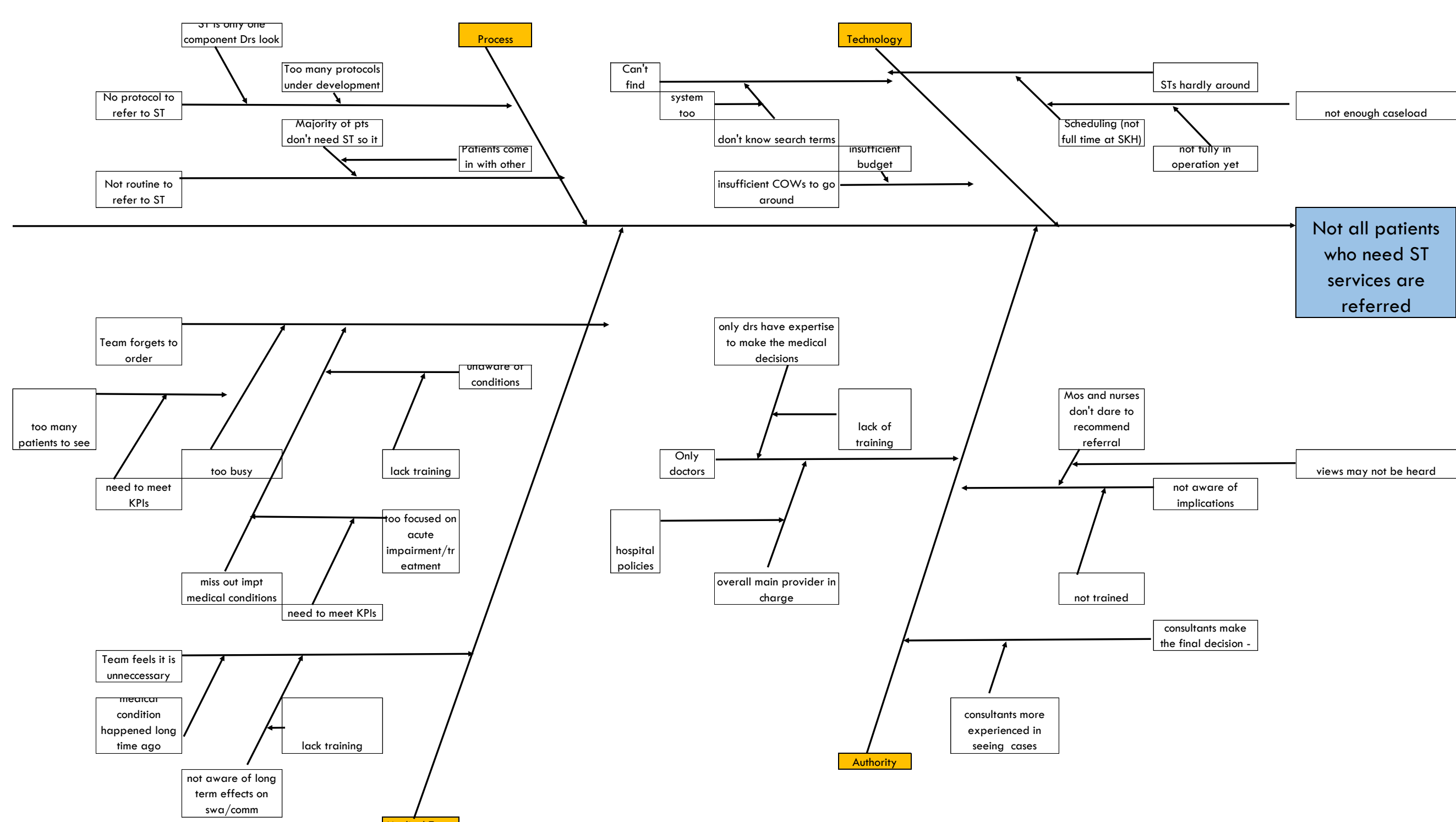


Figure 2: Cause and effect diagram showing the different causes for low ST referral rates.

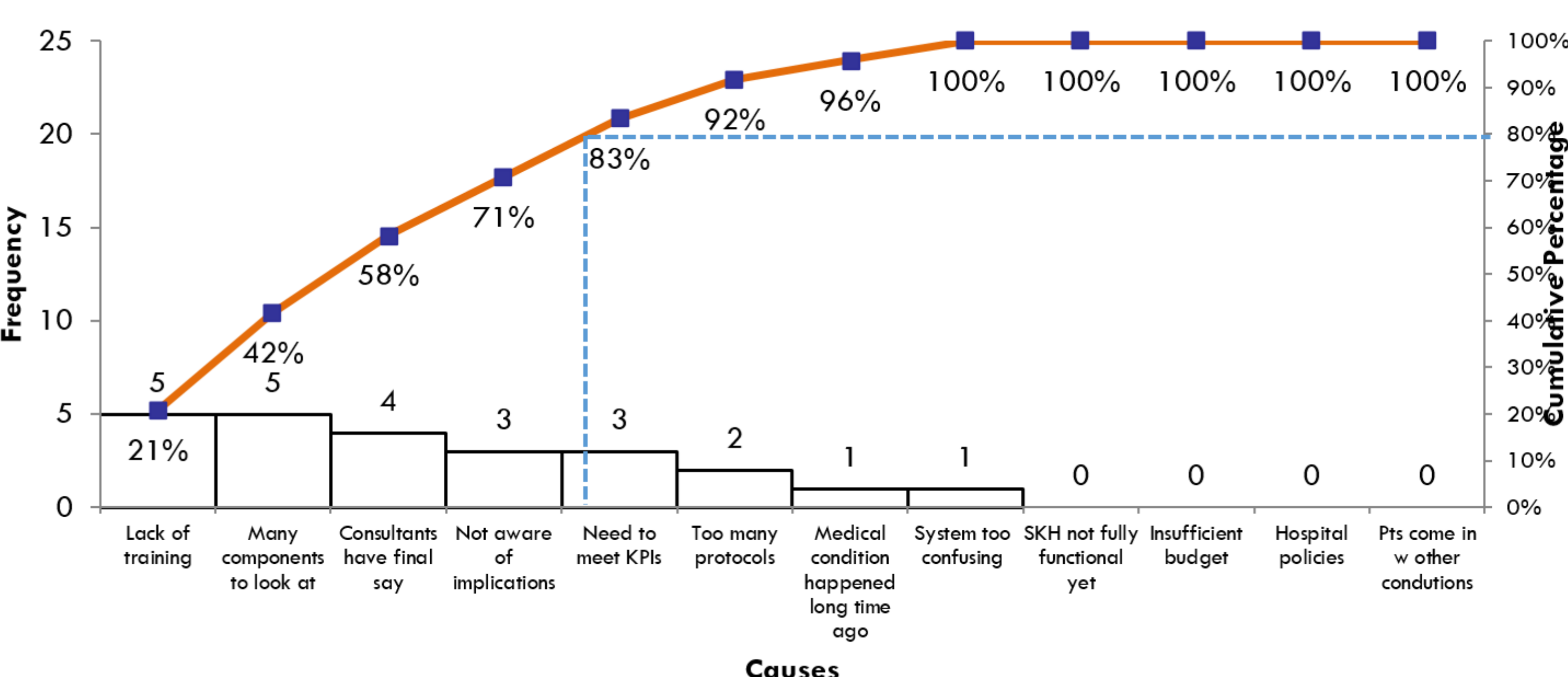


Figure 3: Pareto Chart showing the top causes for low ST referral rates.

### INTERVENTION

#### PDSA 1: Lack of training:

A training program was designed to train the nurses which diagnoses puts a patient at risk of dysphagia and hence aspiration pneumonia.

Case studies were given during the training and pre and post-scores of the trainings were collected.

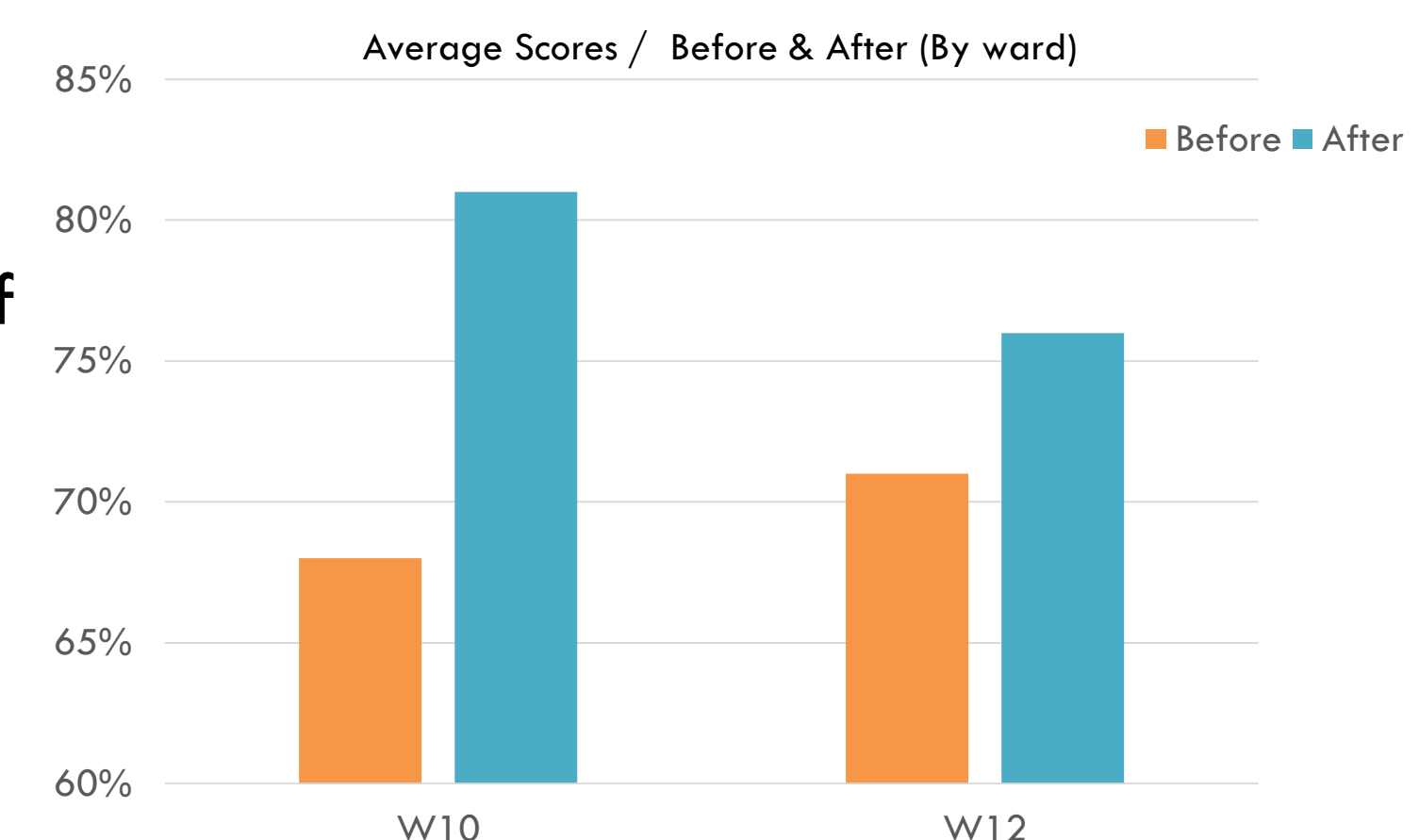


Figure 4: Average nurses' scores pre and post-training

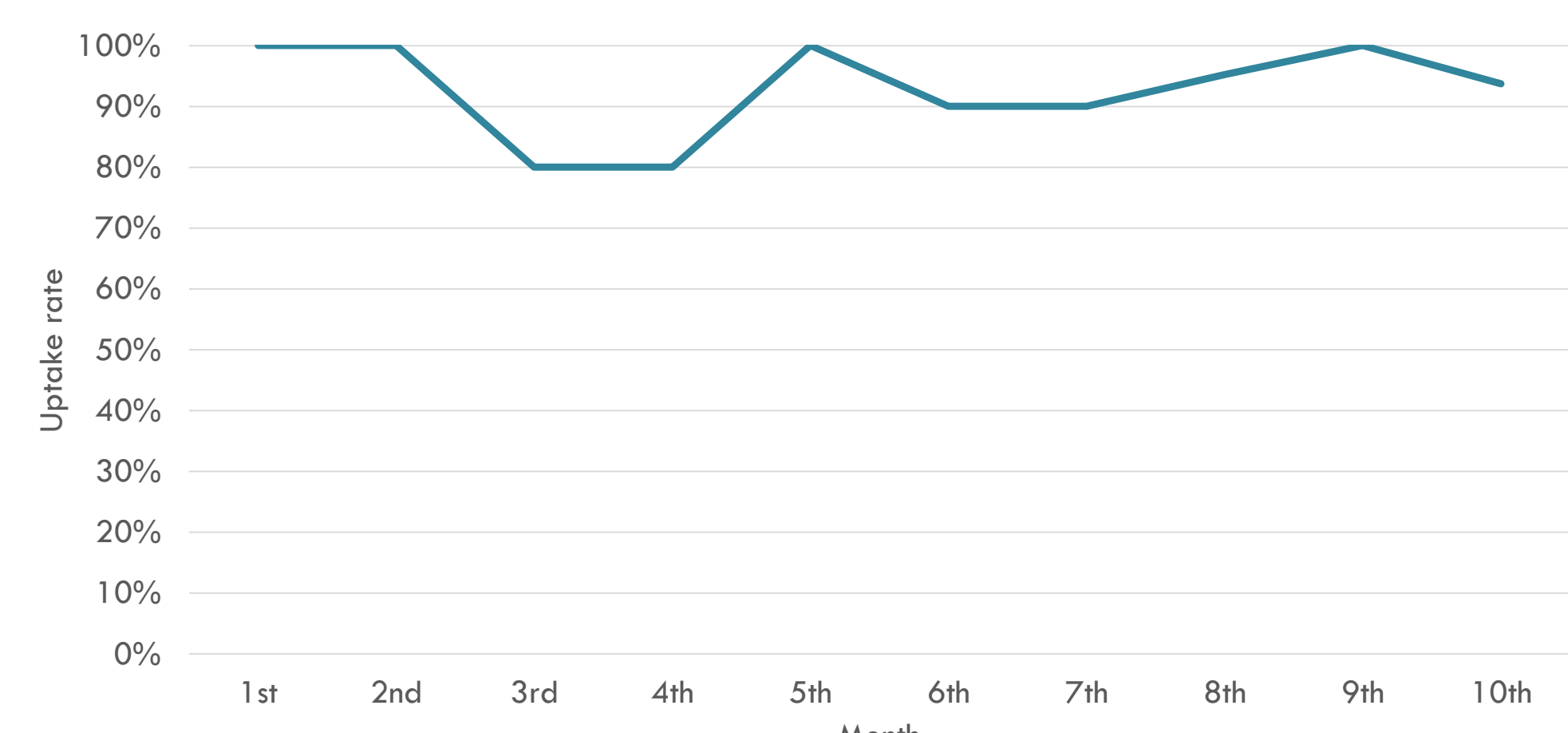
#### PDSA 2: Too many components to look at:

As the medical team often has many components of a patient to look at, a screener was designed to list the key areas that a doctor/nurse has to look at in order to determine if the patient needs ST referral. Several drafts were done in discussion with nurses and doctors to find out what they found easy to use. Figure 5 is the final version which only had "Yes/No" questions, and examples for the team to refer to.

On NGT OR modified diet/fluids for the past 3 months (e.g. blended diet; uses thickener)	Yes/No
Coughing/choking regularly when eating or drinking OR difficulty managing own secretions (e.g. choking/drooling of saliva; difficulty coughing out phlegm) for the past 3 months	Yes/No
History of: <ul style="list-style-type: none"> <li>Strokes or neurological deficits (e.g. Brain tumours, PD, MS, Dementia)</li> <li>Head and neck cancer (e.g. tongue/thyroid/laryngeal Ca, NPC)</li> <li>Tracheostomy or laryngectomy</li> </ul>	Yes/No

Figure 5: Final version of the dysphagia screener

The uptake rate for the screener was also closely monitored to ensure that the team was using it adequately.



### RESULTS

Data was collected over a period of 10 months (Mid Aug 2016 to Mid June 2017). The referral rate was measured as such: Referral rate (%) = Number of patients referred/Number of patients who require ST intervention x 100%.

This two-pronged intervention is effective as seen in the run chart (Figure 7), a shift is seen above the median line after implementing the checklist and is sustained till current.

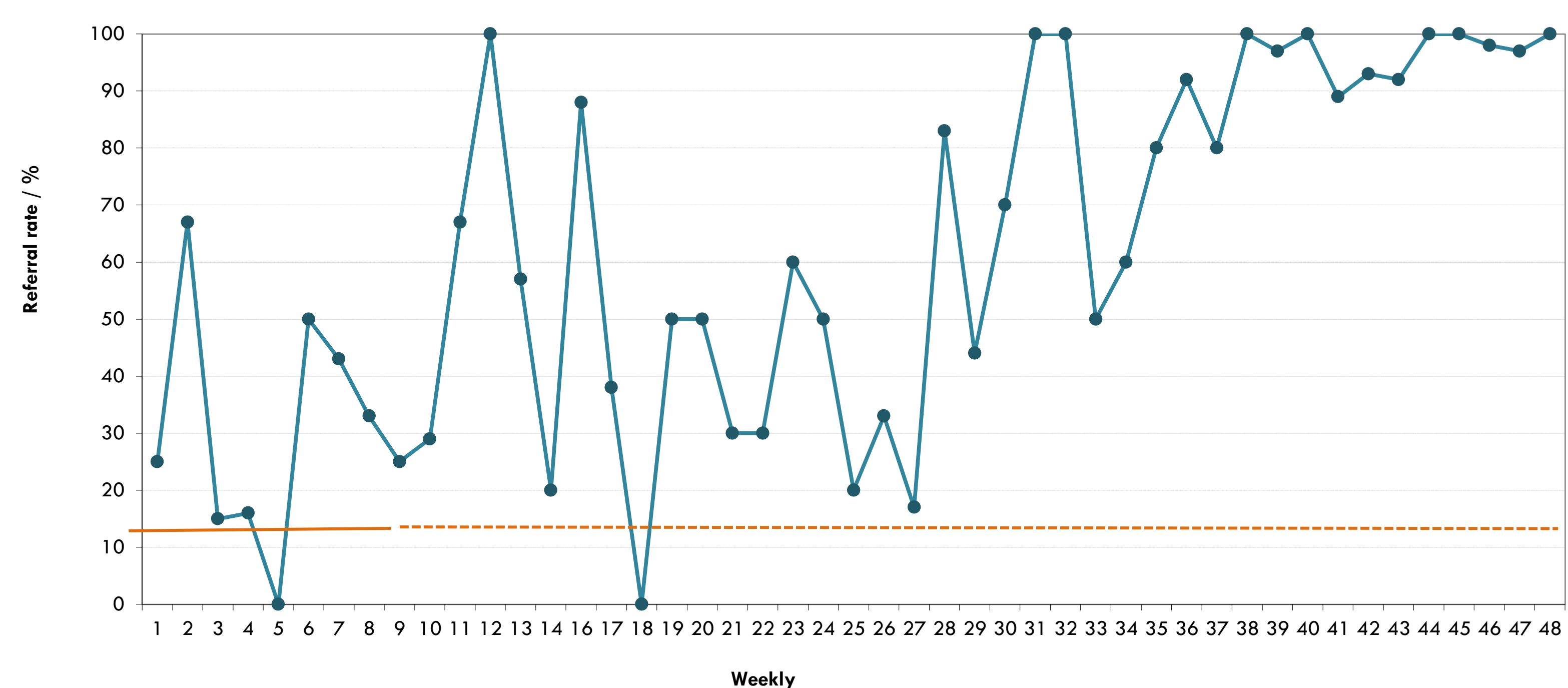


Figure 7: Run chart showing referral rate measured over time

### SUSTAINABILITY PLANS

Electronic version of screener has been rolled out to all Joint Admitting Wards (JAW) as of October 2017

Training of screener will be integrated into regular nurses education sessions, in-services etc.

Continual monitoring of uptake of the screener