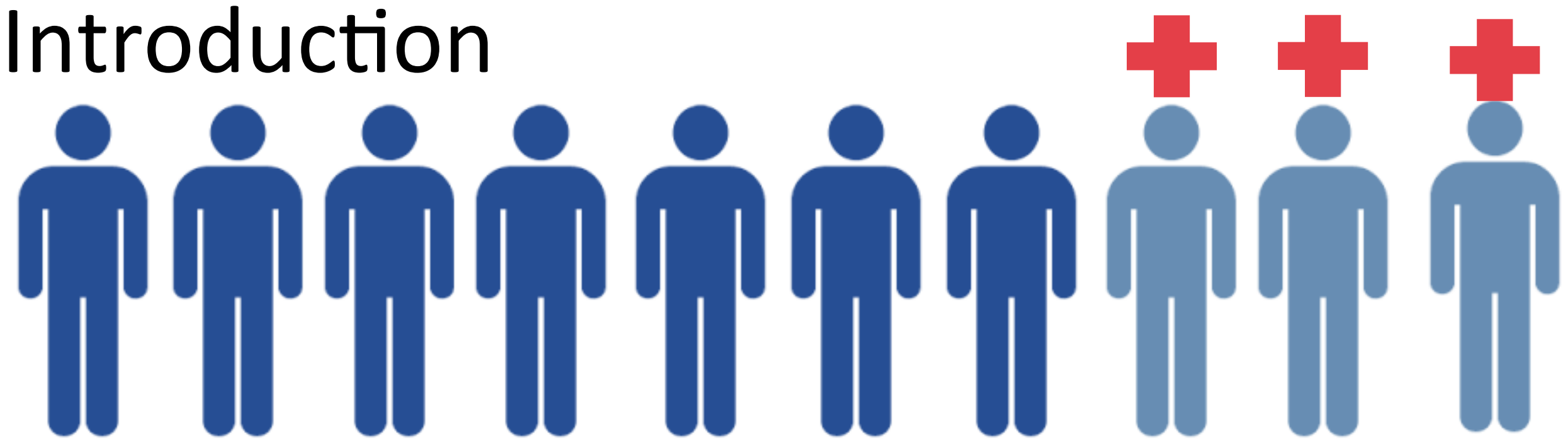




Improving access to care for Neurological patients by Effective Optimization of Clinic Resources

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Introduction



Since 2013, approximately 7 in 10 subsidised (SUB) patients waited for more than 60 days for a first appointment to see a neurologist in Singapore General Hospital Specialist Outpatient Clinics (SGH SOC) (Figure 1). This made neurology department (NEM) one of the Top 5 departments with the longest waiting time for appointment (WTA).

Long waiting has implications on patients’ clinical outcome and standard of care. it is also one of the corporate objectives in SGH strategy map and hospital’s key performance indicator (KPI) tracked by Ministry of Health (MOH), hence the motivations for this project.

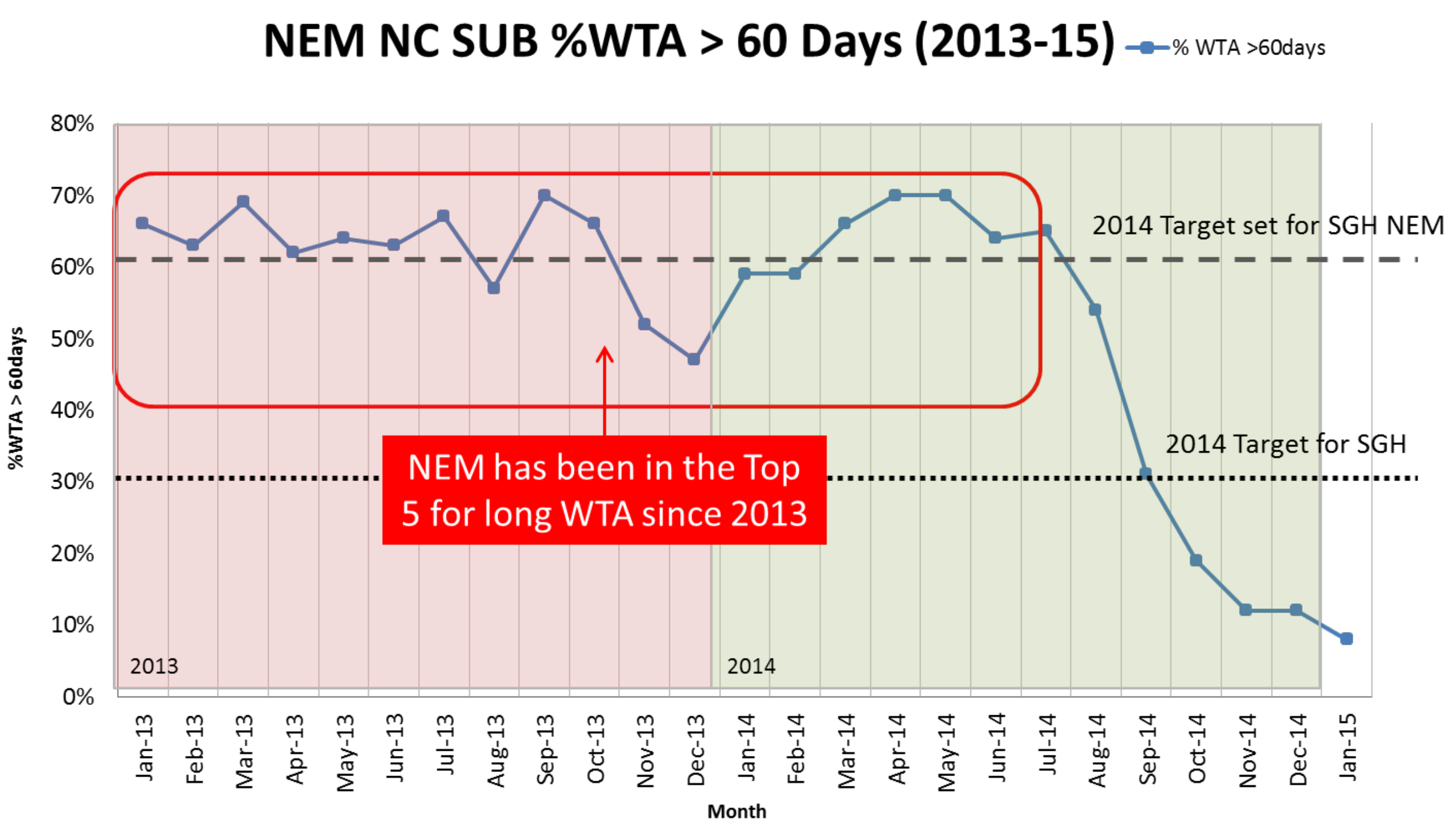


Figure 1: NEM WTA from 2013 - 2015

Mission statement

To reduce WTA for SUB new case (NC) to 30.8% more than 60days in a month, in short %WTA>60days/month = 30.8%, the overall WTA target set by Ministry of Health (MOH) and SGH for 2014. 60 day is chosen as clinically reasonable for specialist treatment.

Methodology

An ishikawa diagram (Figure 2) was used to identify the root causes of the problem. Supply-side strategies were employed to meet the demand of more NC slots. A total of 5 initiatives were implemented in a period of 5 months from August to November 2014, focused on optimization of clinic and SOC, especially in a hospital and country that have very tight supply space.

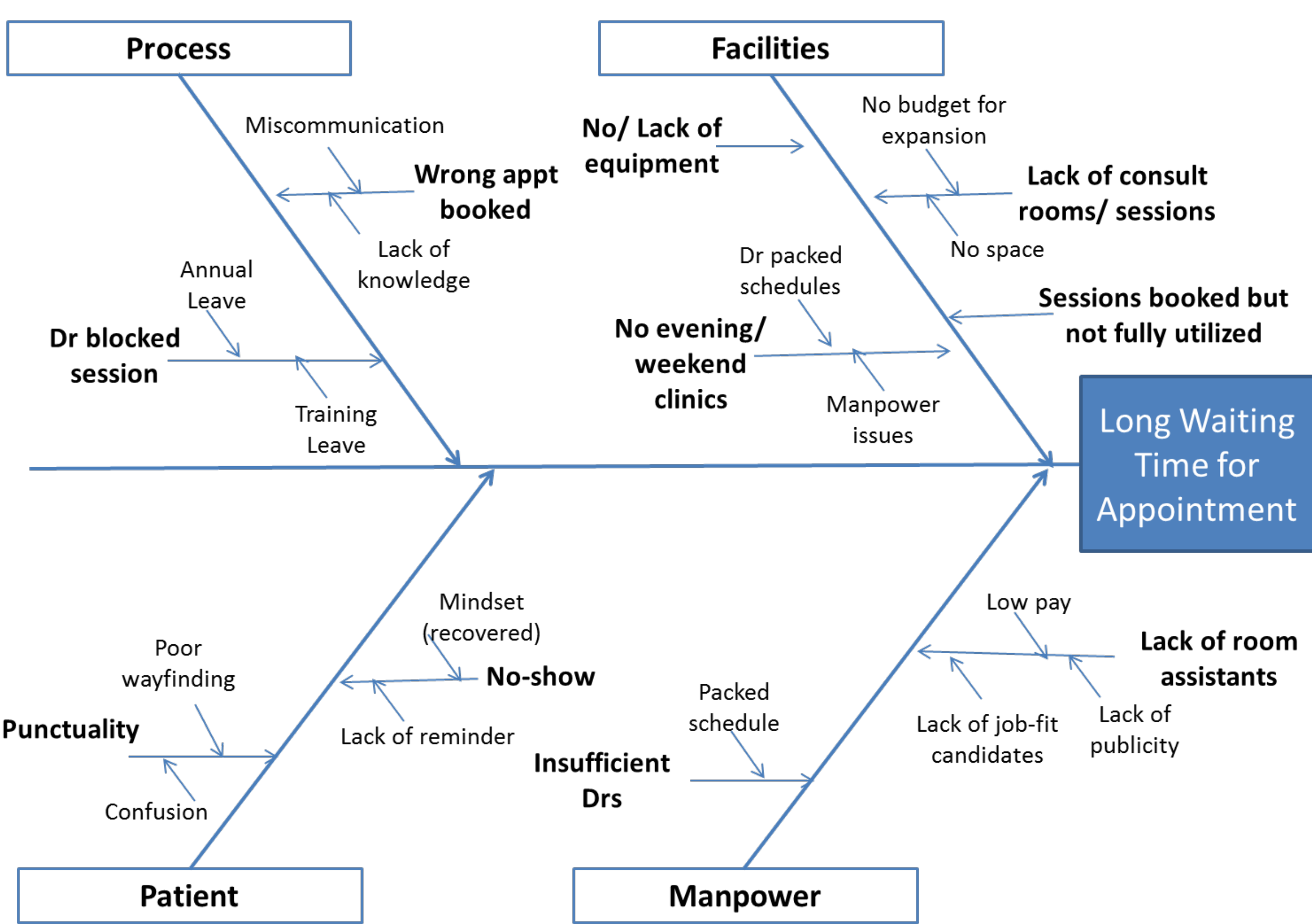


Figure 2: Ishikawa diagram to identify root causes of long NEM WTA

Implementations & Results

Initiative & Implementation Date	Description	Number of additional NC	Impact on %WTA>60 Days
1 “Floater” Clinic Aug 2014	<ul style="list-style-type: none">Tracking of clinic availability based on doctors’ blocked sessionsSet up of permanent clinic session where a doctor runs clinic in any available room on Fri PMConsistent tracking of availability of rooms over a period of 3 months	↑24 NC/month	↓ 65 to 54%
2 Ad Hoc clinic sessions	<ul style="list-style-type: none">Subjected to availability of consult rooms based on data monitoring	Ad Hoc	Ad Hoc
3 Standardization of doctors’ resource setup Sep – Nov 2014	<ul style="list-style-type: none">Based on doctors’ workload, demand of patients, session timing and safety of patientsFixed the optimal number of NC and follow up (FP) a doctor sees	↑164 NC/month	↓54 to 31 to 19%
4 Re-organization of SUB and PTE patients Sep 2014	<ul style="list-style-type: none">Looked at doctors’ resources with PTE and SUB workloadPTE patients moved to private clinic to freed more space for SUB patient load	↑24 NC/month	↓54 to 31%
5 Sourcing for permanent sessions Nov 2014	<ul style="list-style-type: none">SOC looked at the overall clinics setup and worked with other clinics-in-charge to utilize sessions at neighboring clinics	↑52 NC/month	↓19 to 12%

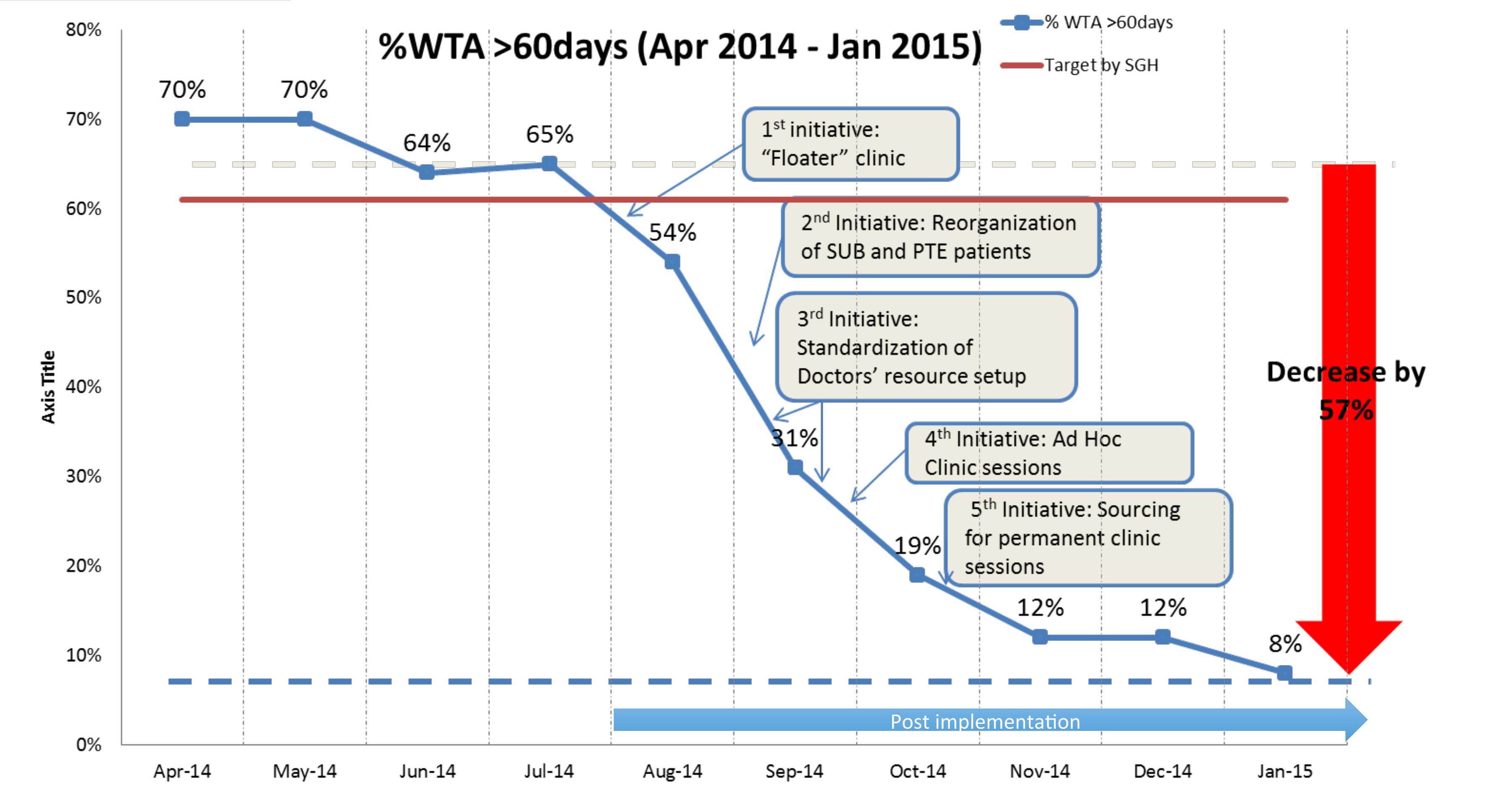
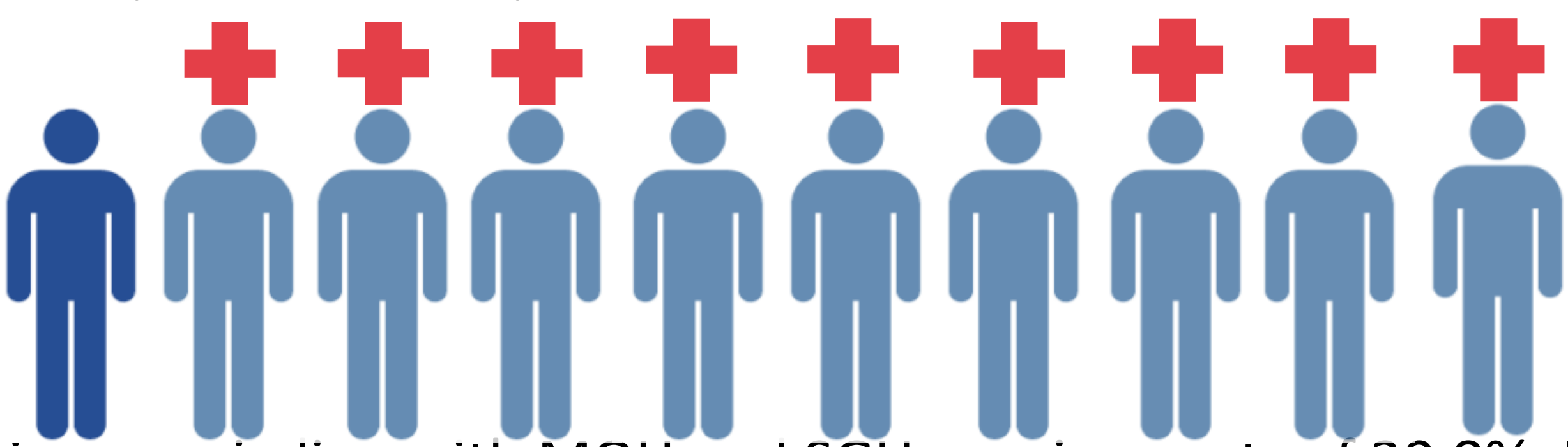


Figure 3: Line chart shows the improvement in %WTA>60days based on the initiatives

Conclusion



In all, the contributions are in line with MOH and SGH requirements of 30.8%. In reality, our result had far exceeded their targets. Overall, at least 4 times more NEM SUB patients receive care within 60 days now (392 patients in Dec-14 compared to 92 in Jul-14). There has since been remarkable improvement to patient’s health outcome, standard and quality of care. The combination of clinical, operational and analytical inputs of team and regular meet ups were contributors of success. Also, with space constraints in SGH and Singapore, optimization is the key to improvement.