REDUCING INTERVENTIONS RELATED TO POST-CONSULT MEDICATION REQUESTS AT PHARMACY

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Define Problem & Set Aim

Problem Statement

From January to December 2017, outpatient pharmacists performed an average of 491 interventions per month, of which 78 were due to patient requests (15.9%).

Requested medications may be omitted due to human, system or process shortcomings, such as omission of the request or inaccurate medication ordering, miscommunication and others.

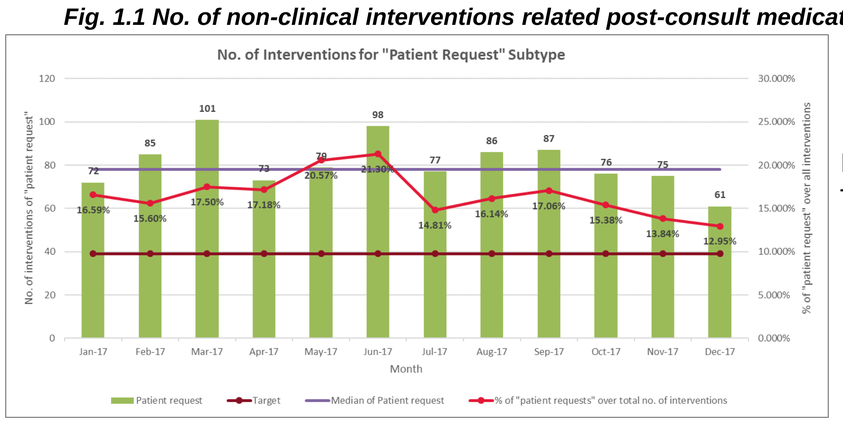
Interventions due to patient-requested medications resulted in pharmacists having to repeat the ordering, reviewing and packing processes of the prescription which were completed earlier. An additional 234 hours per month was spent on rework, leading to longer waiting time for collection of medications. Patient and staff satisfaction were affected as a consequence.

Aim

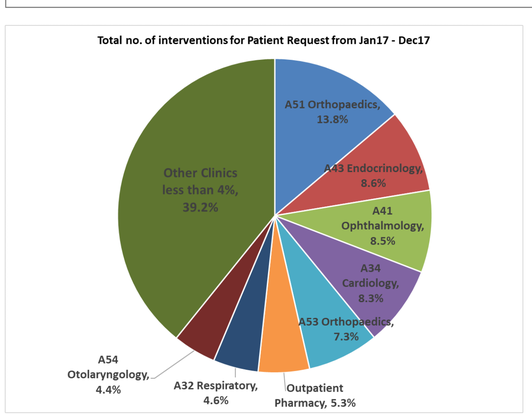
To reduce the median number of interventions for patient-requested medications by 50% for Orthopaedic Clinic within 6 months starting from August 2018.

Establish Measures

Fig. 1.1 No. of non-clinical interventions related post-consult medication requests at the pharmacy



Median: 78 interventions
Target: 39 interventions



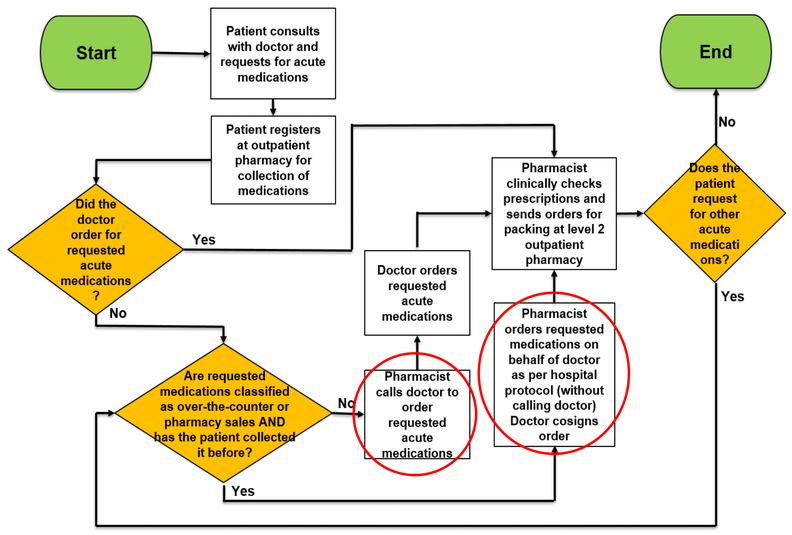
Initial focus on A51 Orthopaedic Clinic, the clinic with the highest number of interventions for patient-requested medications.

Clinic	Patient Request	% of Patient Request
A51 ORTHOPAEDICS	134	13.8%
A43 ENDOCRINOLOGY	83	8.6%
A41 OPHTHALMOLOGY	82	8.5%

Fig. 1.2 Distribution of interventions due to post-consult medication requests at the pharmacy

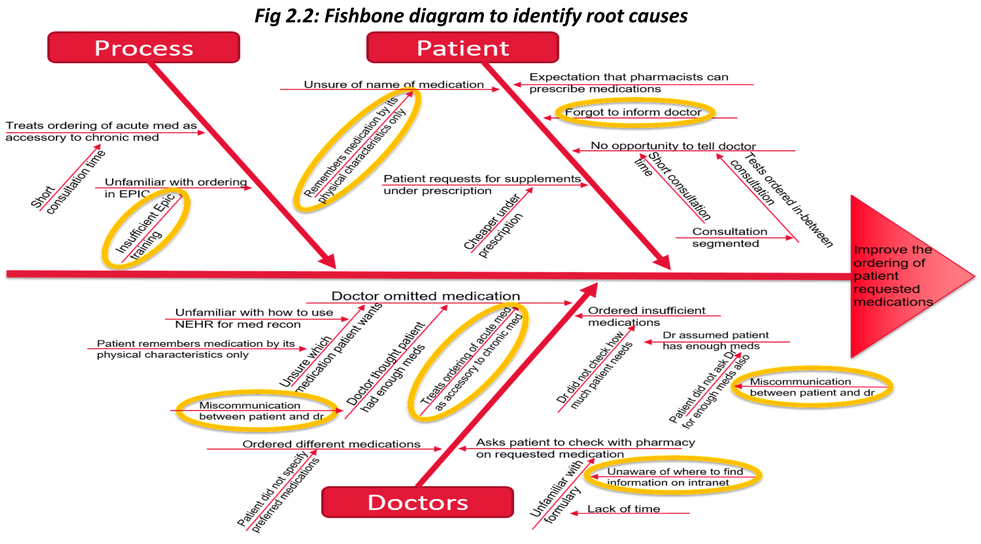
Analyse Problem

Fig 2.1: Collection of medications at outpatient pharmacy



1) Time is wasted due to pharmacists contacting the doctor to prescribe omitted patient-requested medications or documenting in notes if ordering for top-up on behalf of doctor.
2) Further time is spent amending the prescription and repeating the processes.

Fig 2.2: Fishbone diagram to identify root causes



Select Changes

Root Causes		Potential Solutions
Patient forget to inform doctor on request for acute medication	1	Poster on consult room door to remind patient to discuss their medications with their doctor before leaving room
Miscommunication between patient and doctor		
Patients remember medications by physical characteristics only (e.g. colour and shape)	2	Visual chart of commonly prescribed medications in A51 and A53 orthopedics
Doctor unaware of where to find drug information on intranet	3	Adding shortcut on doctors' desktops that links to hospital drug listing

Potential solutions were evaluated by:
1) Ease of implementation,
2) Impact rate

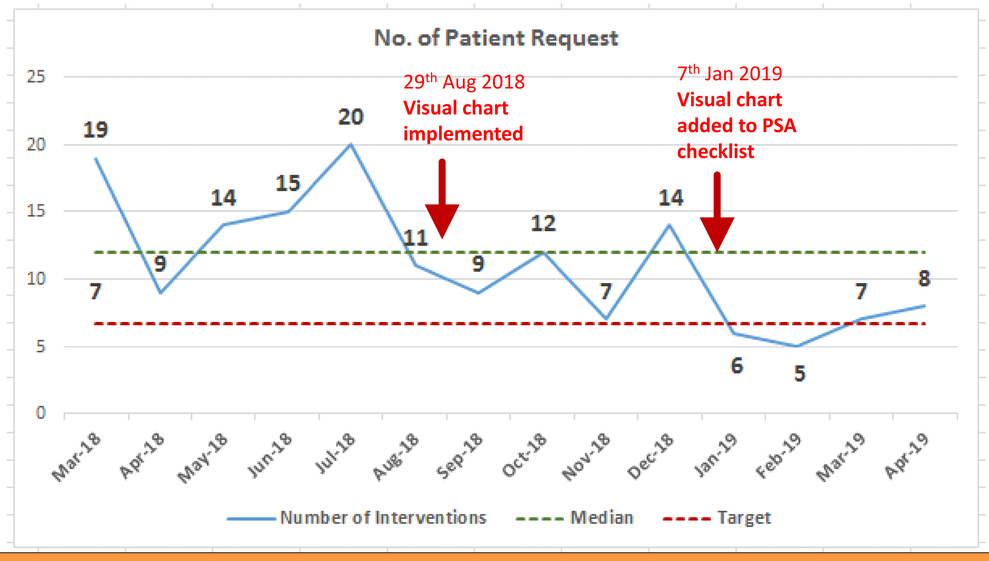
The visual chart was rated highest out of the 3 solutions and was thus chosen for our 1st PDSA Cycle.

Fig 3.1: Visual Chart used in orthopaedic clinic

Test & Implement Changes

CYCLE	PLAN	DO	STUDY	ACT
1 (Initiated 29th Aug 2018)	Reduce the median number of interventions for patient-requested medications for Orthopedics clinic from 13.5 to 6.75 (50%)	Visual Chart of commonly prescribed medications by Orthopaedics team	22.22% decrease in median of interventions related to "Patient Request" (from 13.5 to 10.5) (-) Clinics misplaced charts	Adapt and work with clinic executives
1.1 (From 7th Jan 2019)	Increase accessibility of visual chart	Include display of visual chart into PSA daily opening checklist	48.15% decrease in median of interventions related to "Patient Request" (from 13.5 to 7) (+) Visual chart was perceived as useful by patients for purpose of communication (-) Doctors unaware of chart or did not see a need to use	Meeting with Orthopaedics doctors to brief on the visual charts and get their buy-in.

Fig 4.1: Target for Patient Request in Orthopaedic Clinic



Spread Changes & Learning Points

What are the strategies to spread change after implementation?

- Design different visual charts, tailoring to the needs of other clinics
- Collaborate with all relevant parties to increase awareness and buy-in

What are the key learning points?

- Identify all involved parties and inform them of the changes made
- Feedback is important in identifying problems with the "change" to facilitate improvements

Conclusions and Future Direction

- Visual chart acts as a visual cue to prompt patient to ask about such medications and facilitates communication between patient and physician.
- Educating patients on differences between chronic and acute medications and supplements can be a future intervention to consider. This reduces the misconception that all medications are to be used long term
- Expanding use of visual charts to Endocrine and Ophthalmology clinics after extracting list of common medications requested at pharmacy post-consult, will further reduce future requests.

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