

Project Title

Outpatient Group Programme to Facilitate Early Discharge from Physiotherapy In Patients With Knee Pain

Project Lead and Members

Project Lead: Tiang Poh Gek

Project Members: Ng Xian Fei, Lee Chiew Lan

Organisation(s) Involved

Ng Teng Fong General Hospital

Healthcare Family Group(s) Involved in this Project

Allied Health

Applicable Specialty or Discipline

Physiotherapy

Aims

To shorten the RT by at least 30% for patients with knee pain and get discharged from outpatient physiotherapy clinic in 4 months.

Background

See poster appended/ below

Methods

See poster appended/ below

Results

See poster appended/ below

Lessons Learnt

Knee class was able to cut down on average rehabilitation time for patients with knee pain despite clinical outcomes being similar. Use of patient education materials can be helpful for patients to achieve self-management.

Conclusion

See poster appended/ below

Project Category

Care & Process Redesign

Productivity, Time Saving

Keywords

Outpatient, Early Discharge, Physiotherapy, Knee Pain

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OUTPATIENT GROUP PROGRAMME TO FACILITATE EARLY DISCHARGE FROM PHYSIOTHERAPY IN PATIENTS WITH KNEE PAIN

- SAFETY
- QUALITY
- PATIENT EXPERIENCE
- PRODUCTIVITY
- COST

TIANG POH GEK, NG XIAN FEI, LEE CHIEW LAN

Problem & Aim

Problem/Opportunity for Improvement

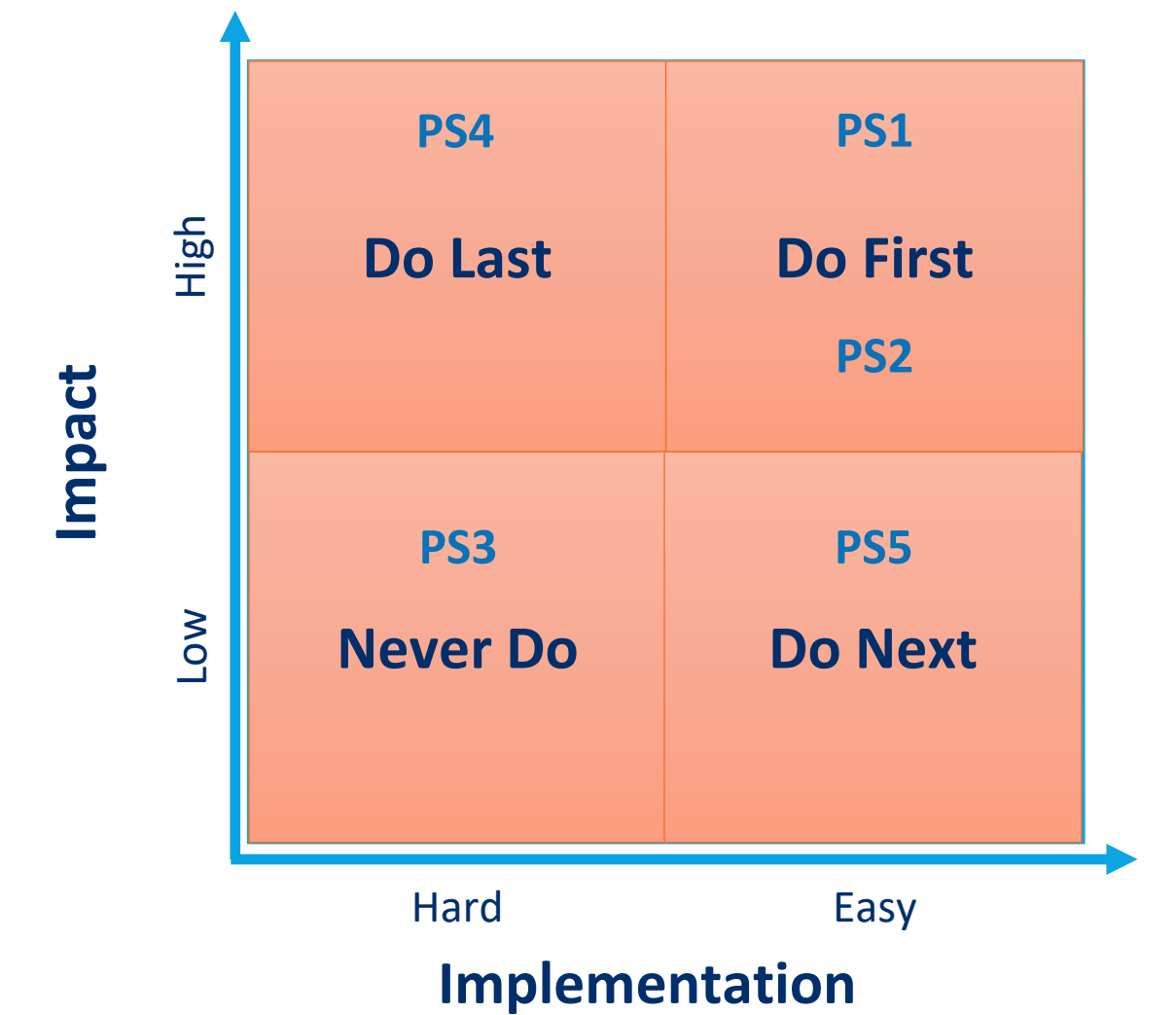
In the outpatient physiotherapy clinic, the physiotherapist sees about 25% of patients with knee pain in their daily load. It has been noted that the average rehabilitation time (RT) for patients with knee pain to be discharge from physiotherapy takes about 184 days from their initial visit to physiotherapy until discharge from service. As there is a high percentage of knee pain patients seen in the clinic, if these patients can be discharge earlier, it can result in lesser cost for patients. This maybe also help to increase availability of review slots as patients gets discharged earlier.

Aim

To shorten the RT by at least 30% for patients with knee pain and get discharged from outpatient physiotherapy clinic in 4 months.

Select Changes

Root Cause	Potential Solutions (PS)
No availability of class format for more patients to be seen at a given time	1 Use of Knee Class
	2 Use of patient education materials during knee class
	3 To see patients quickly
	4 To see patients more regularly
	5 Peer support group



Establish Measures

Before intervention	
Patient's Age (year)	67.1
Average RT (days)	184
Time up and Go (TUG) result (sec)	Pre: 9.2 sec; Post: 8.4 sec
TUG difference (sec)	0.8 sec

Time up and go

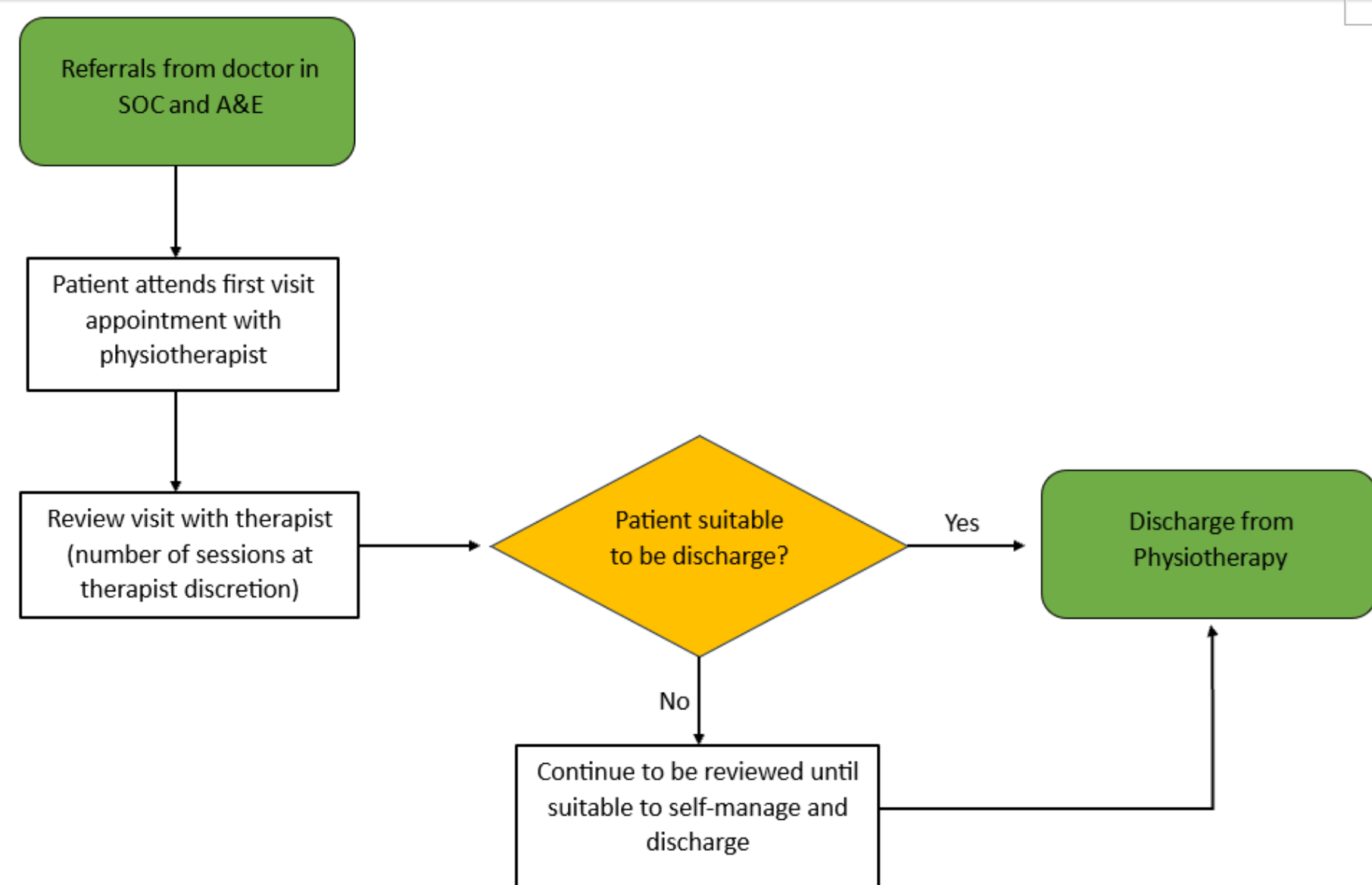
Normative Data for 60-69 years: **8.1 seconds**

Test & Implement Changes

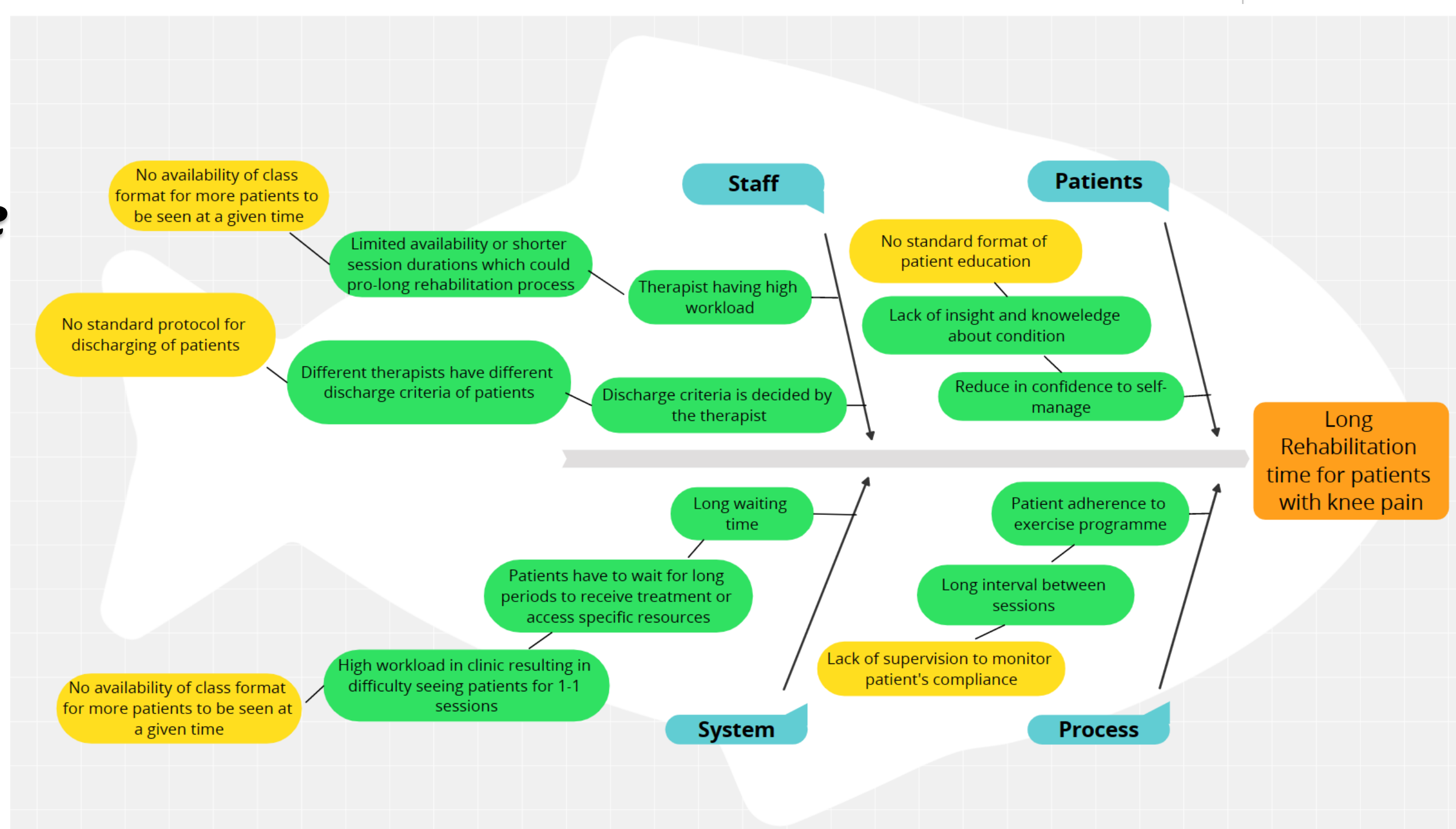
CYCLE	PLAN	DO	STUDY	ACT
1 (PS1 & PS2)	Develop knee class & patient education materials to supplement understanding of patients in the next 2 months	Outpatient physiotherapists (PT) 1) researched up to date evidences on knee pain management. 2) surveyed current individualized knee pain patient. Feedback from patients: • Long interval between each session • Likes idea of education material to know mechanism of knee pain	Materials developed are run through with a small group of patients. Overall received good feedback for roll out.	ADOPT Introduce knee class
2	Introduce Knee Class (1.0)	Patients are reviewed once a fortnight. Feedback from patients: • Regular sessions are helpful, in addition to the use of patient education materials during the class.	At 2 month, results were promising. Minor changes to programme was required: • Changes to exercises taught in class • Updated education materials to include some frequently asked questions.	ADAPT Minor adjustment to knee class content & patient education materials
3	Roll out Knee Class (1.1)	Implemented the new changes and to have music during session Feedback from patients: • Easier to follow • Sessions enjoyable	Results: Patients in knee class achieved similar outcomes in TUG at a much earlier date.	ADAPT Explore the start of peer support group
4 (PS5)	Explore the start of peer support group	Gather ideas from outpatient physiotherapists and patients (Ongoing)	In planning phase (Ongoing)	In planning phase (Ongoing)

Analyse Problem

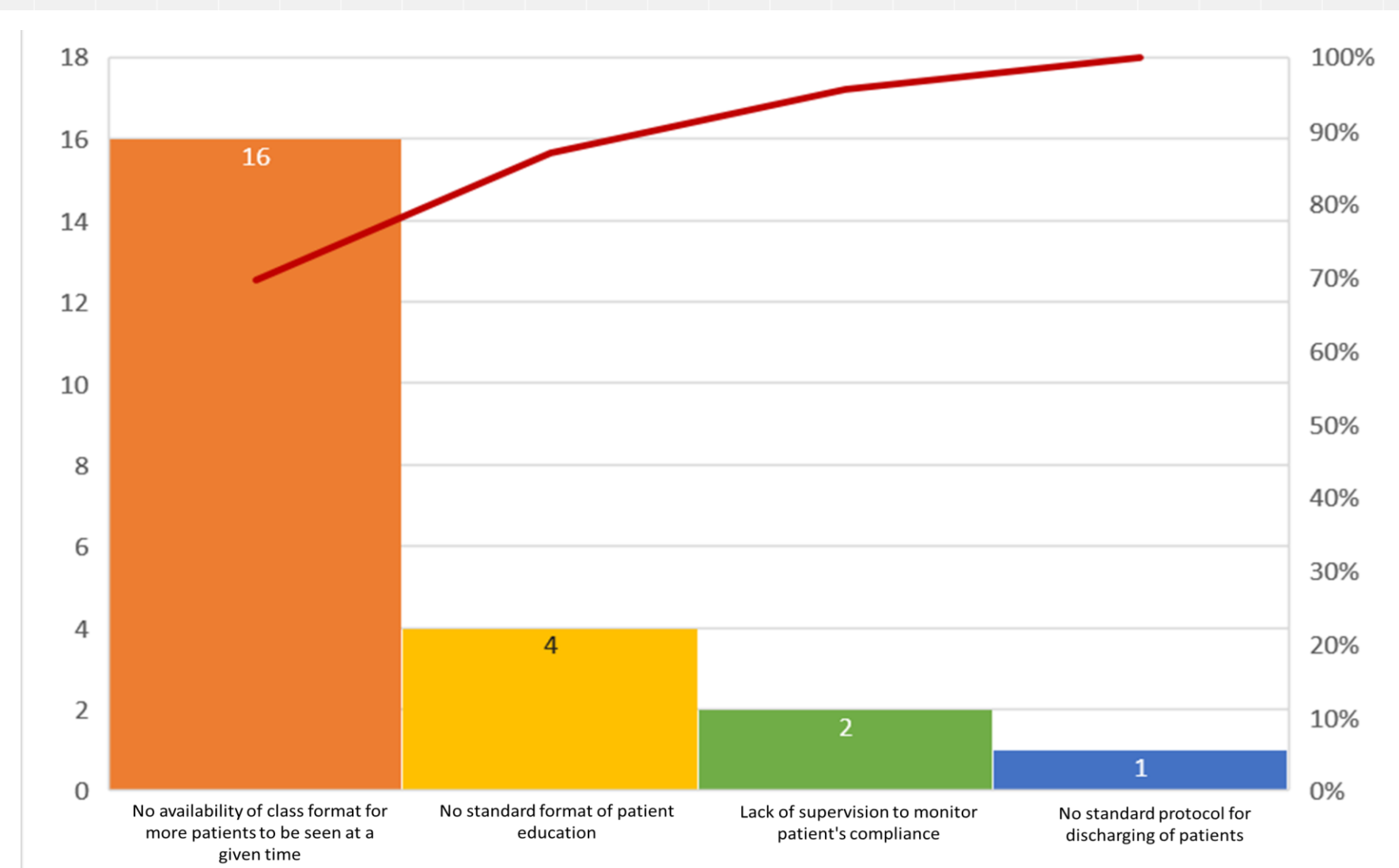
Process before interventions



Probable root causes

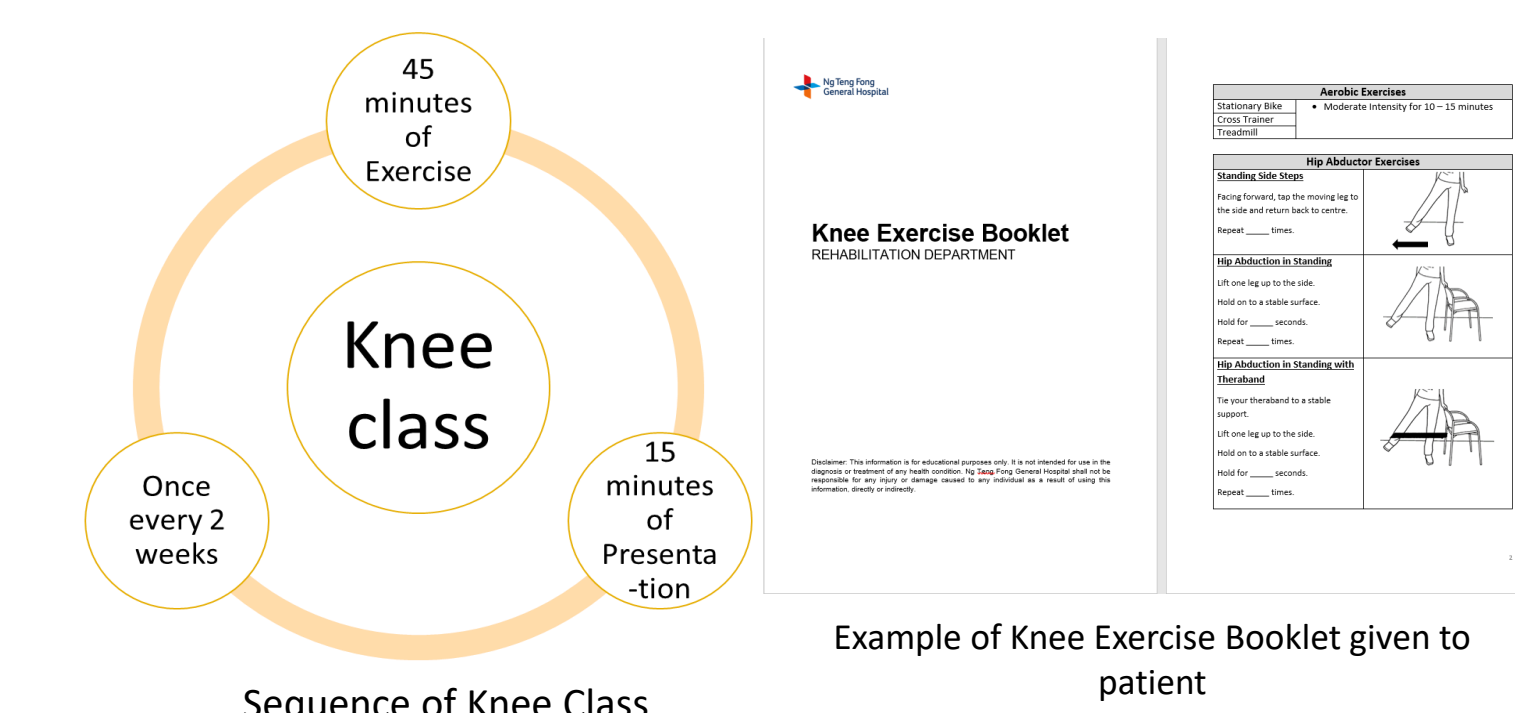


Pareto chart



After Intervention

Patient's Age (year)	65.9
Average RT (days)	125 (↓32.1%)
TUG result (sec)	Pre: 8.5; Post: 7.8
TUG difference (sec)	0.7



Spread Changes, Learning Points

What are/were the strategies to spread change after implementation?

Physiotherapists in the outpatient clinic were encouraged to refer patients to knee class. Regular announcement as well as WhatsApp messages to remind physiotherapist to refer patients to knee class was done during morning roll call.

What are the key learnings from this project?

Knee class was able to cut down on average rehabilitation time for patients with knee pain despite clinical outcomes being similar.

Use of patient education materials can be helpful for patients to achieve self management.