



Singapore Healthcare Management 2018



Singapore General Hospital
SingHealth

Reducing Length of Stay for Patients Admitted with Acute Gout

The 48 Hour Gout Fix

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Background

- What is gout?**
 - Arthritis caused by deposition of monosodium urate crystals within joints
 - Causes joint destruction, leading to physical impairment and reduced work productivity.
- Current situation**
 - Total of ~554 patients per year admitted to the Department of Internal Medicine, Singapore General Hospital for management of an acute gout flare
- Length of stay**
 - Mean length of stay = 6 days based on data collected from 1/6/2014 to 31/5/2015
- Reduction of Length of Stay**
 - Reduction of the mean length of stay for patients admitted with an acute gout flare would lead to significant cost savings
- Aim**
 - We aim to explore factors leading to prolonged hospital admissions for patients with acute gout

Mission Statement

To reduce the length of stay for patients with an acute gout flare admitted under the Department of Internal Medicine from a mean of 6 days to a mean of 2 days within 6 months

To reduce the average cost of stay for patients admitted for acute gout flare.

Analysis of Problem

From our Cause & Effect Diagram, we identified the main factors contributing to the prolonged stays of patients with acute gout flare. On the Pareto Chart (Figure 1), we highlighted the most important factors.

We then prioritized the interventions on our Tree Diagram (Figure 2).

Figure 1: Pareto Chart

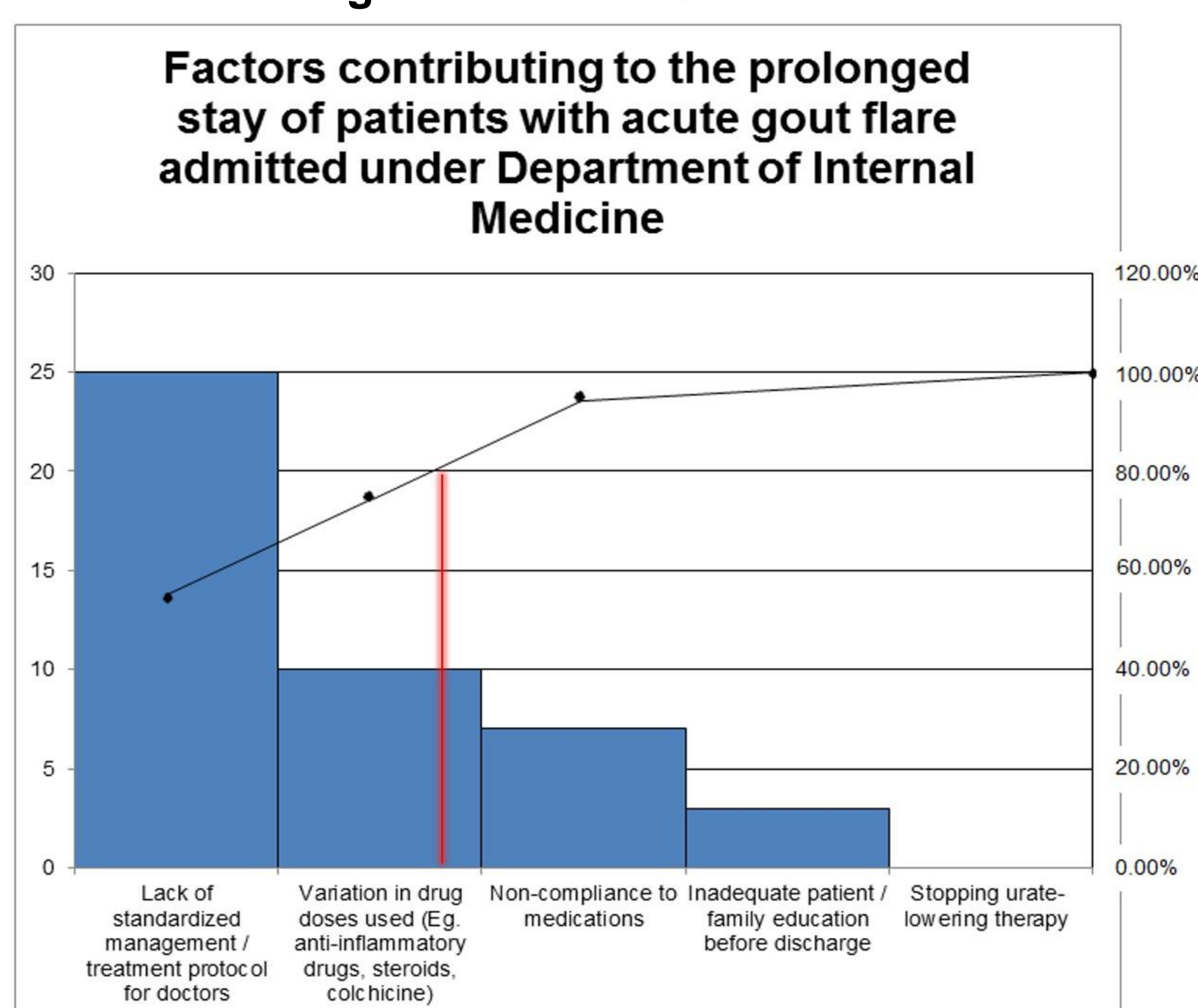
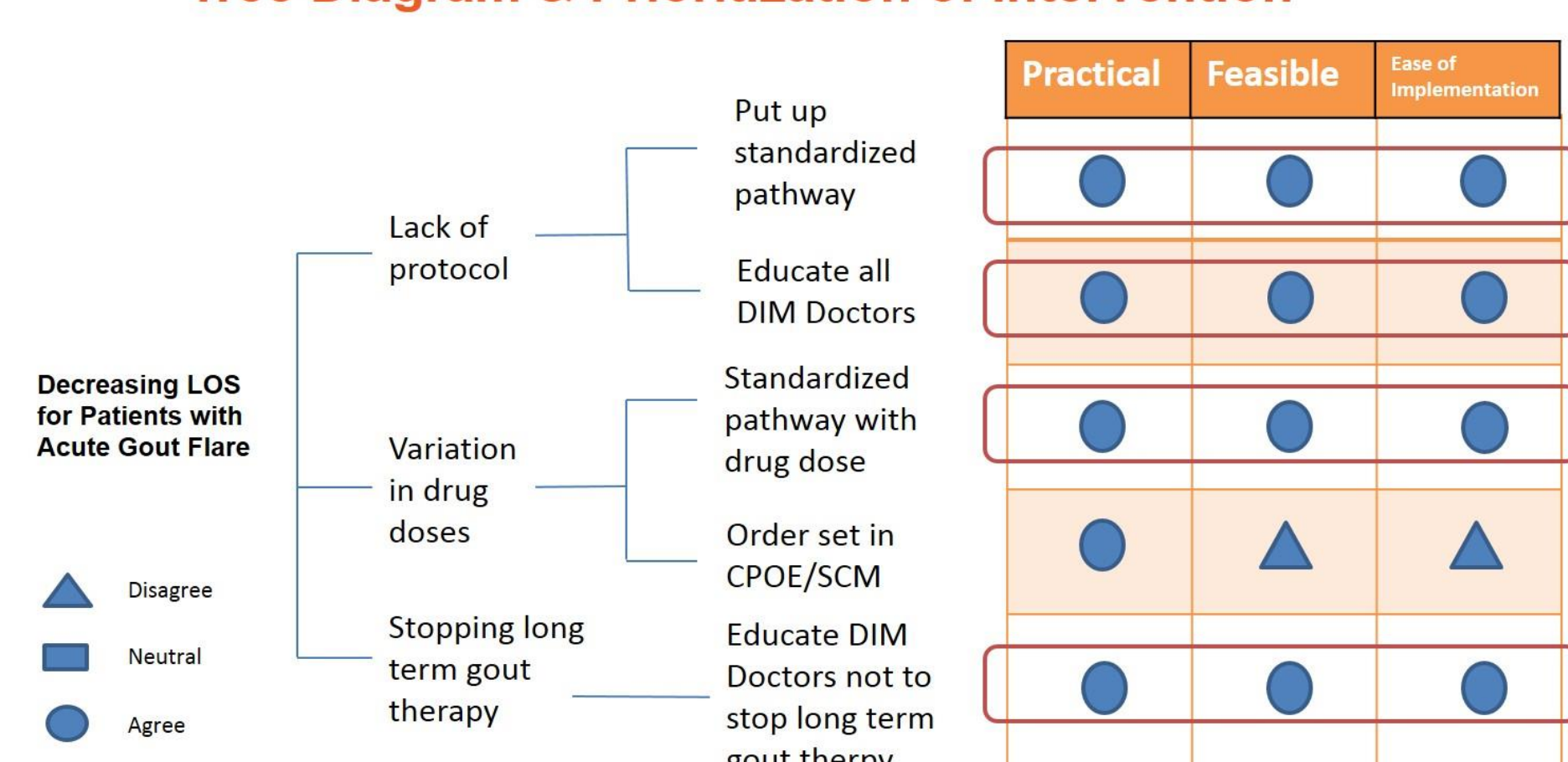


Figure 2: Tree Diagram

Tree Diagram & Prioritization of Intervention



Interventions / Initiatives

We generated a proposed Acute Gout Clinical Care Pathway (CCP) (Figure 3) through multidisciplinary discussion (consisting of doctors, nurses, administrators) and also developed teaching materials for doctors.

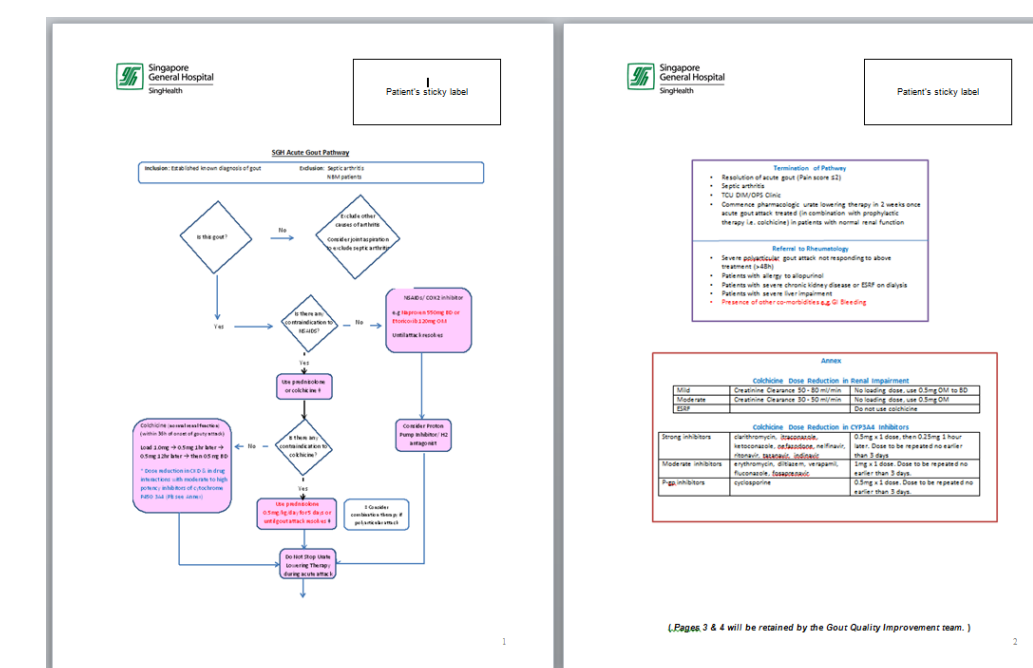
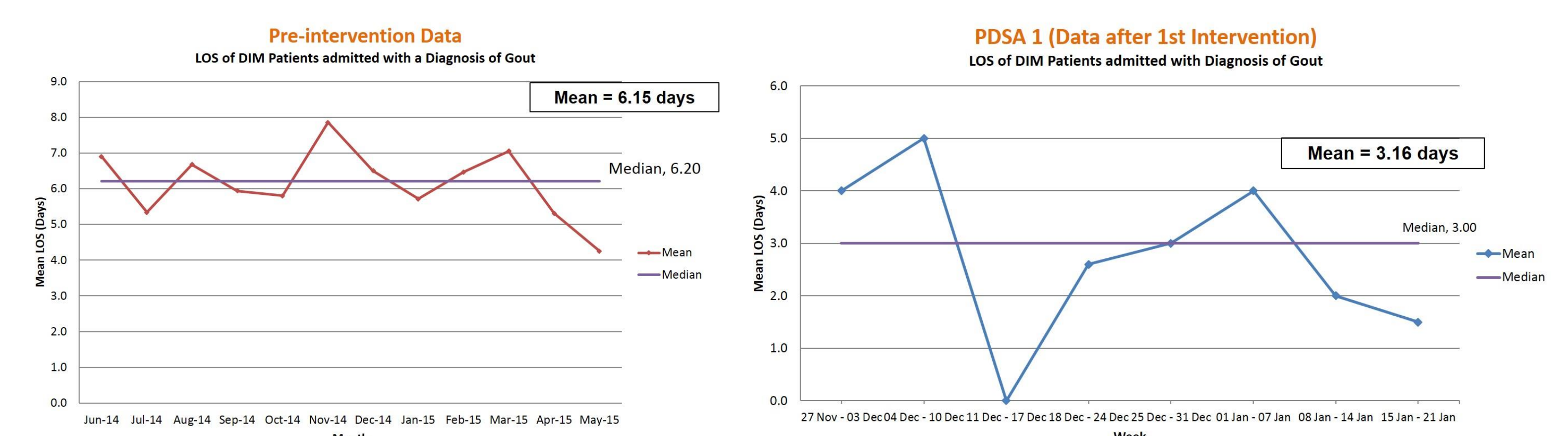


Figure 3: Acute Gout Clinical Care Pathway

Results

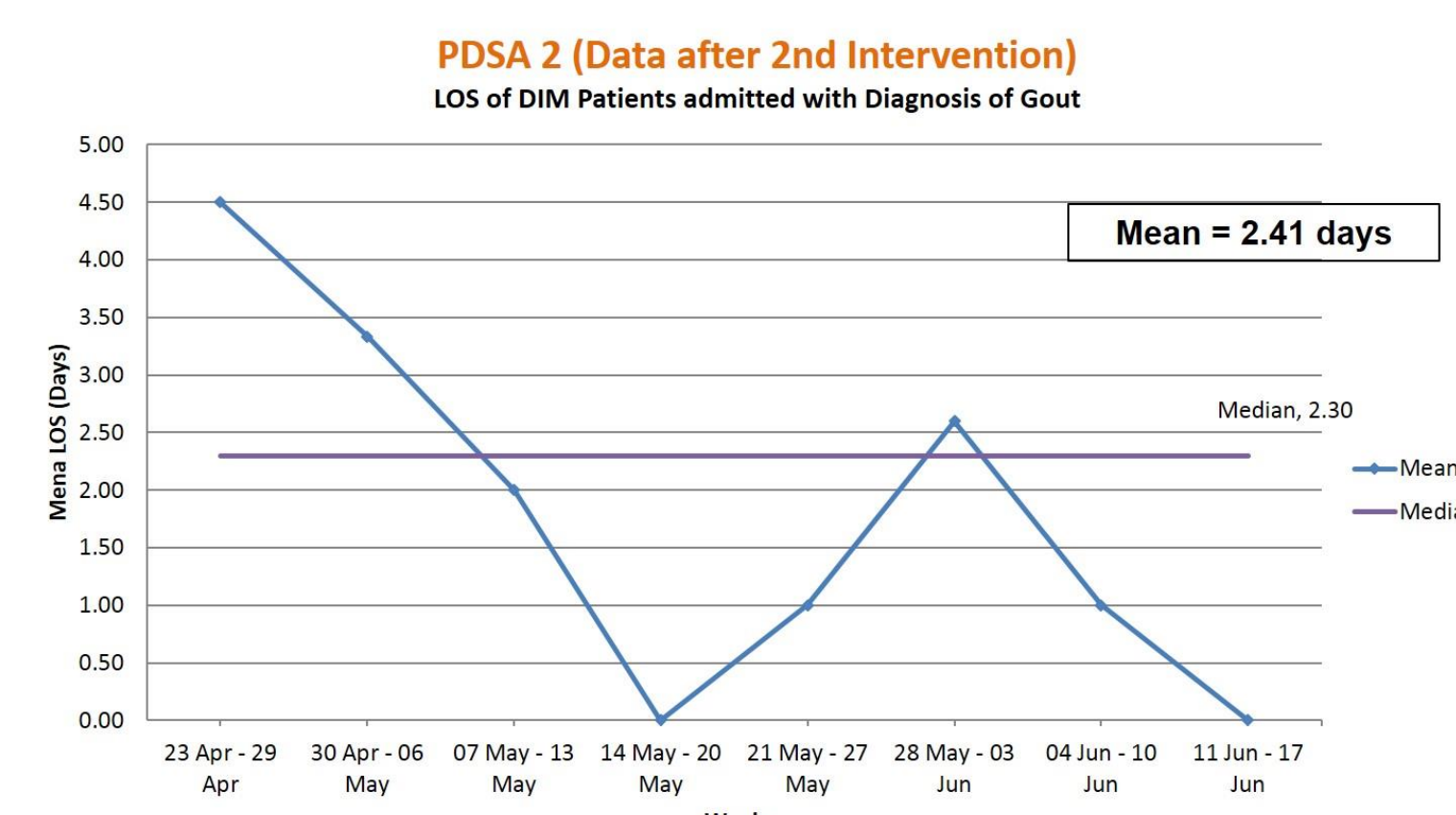
PDSA Cycle 1: Clinical Care Pathway

We implemented our clinical care pathway (CCP) in ward 73 Singapore General Hospital, collected feedback and aimed to enhance the use of the CCP and improve management of acute gout and shorten length of stay.



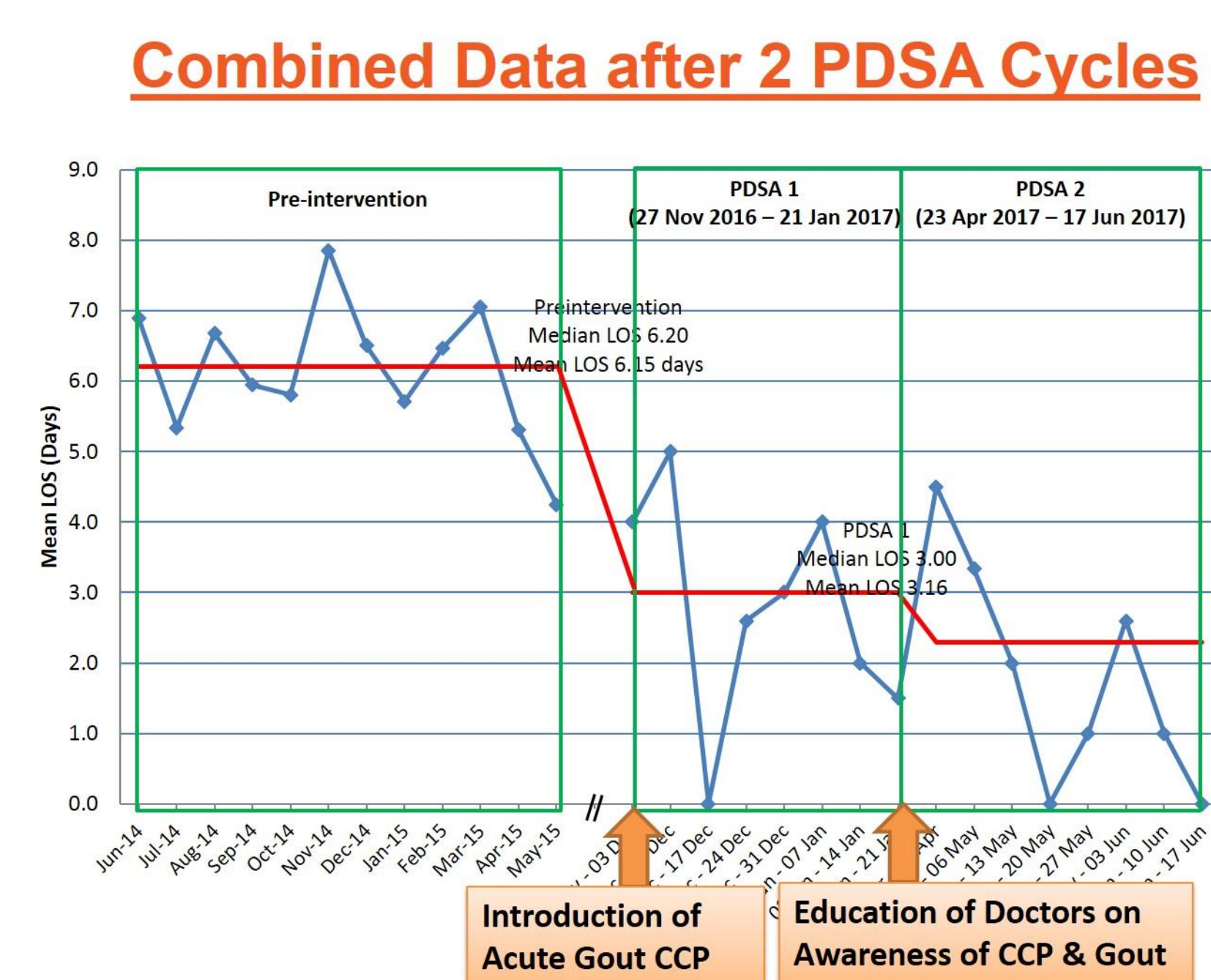
PDSA Cycle 2: Teaching Doctors

We then gathered feedback from users of the CCP that their preference was education of doctors on management of acute gout through a standardized teaching forum. The CCP was implemented in ward 73 again after doctors received education on gout.



Overall results: Reduction of Length of Stay

Mean Length of Stay reduced from 6.15 days to 2.41 days



Sustainability Plans

- Education**
 - Create awareness for more healthcare professionals to use Acute Gout CCP.
- Implementation**
 - Implement Acute Gout CCP in more medical wards in Singapore General Hospital.
- Quality Improvement**
 - Continuous process to review and improve the Acute Gout CCP.
 - Enhance discharge planning and step down care options.
 - Prevent readmissions.