



HOME IN A DAY: HIP ARTHROSCOPY

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Lissa Joseph, Poh Seng Yew, Juliana Tan Su Yin, Shirlena Wong, Amy Ong & Noor'ain Bte Hussin

BACKGROUND

Hip arthroscopy is a minimally invasive surgical approach to treat various symptomatic hip disorders such as femoroacetabular impingement, and labral tears. In Singapore General Hospital, patients typically stay 2-3 days after a hip arthroscopy. As the demand has risen, the team would need to explore an effective way to optimise bed occupancy by reducing the length of stay (LOS). Studies have shown the benefit of early discharge in providing greater healthcare efficiency without compromising the quality of care. Thus, we aim for patients to be discharged on the 1st postoperative day. By moving towards early discharge, inpatient beds can be released for other patients, thereby optimising healthcare resources. It also reduces the risk of nosocomial infection which can result in substantial morbidity and mortality.

MISSION STATEMENT

To achieve a reduction in median LOS of patients undergoing hip arthroscopy from **2 days to 1 day** (in at least 50% of patients) within 12 months.

ANALYSIS OF PROBLEM

Cause and effect diagram to identify the root causes.

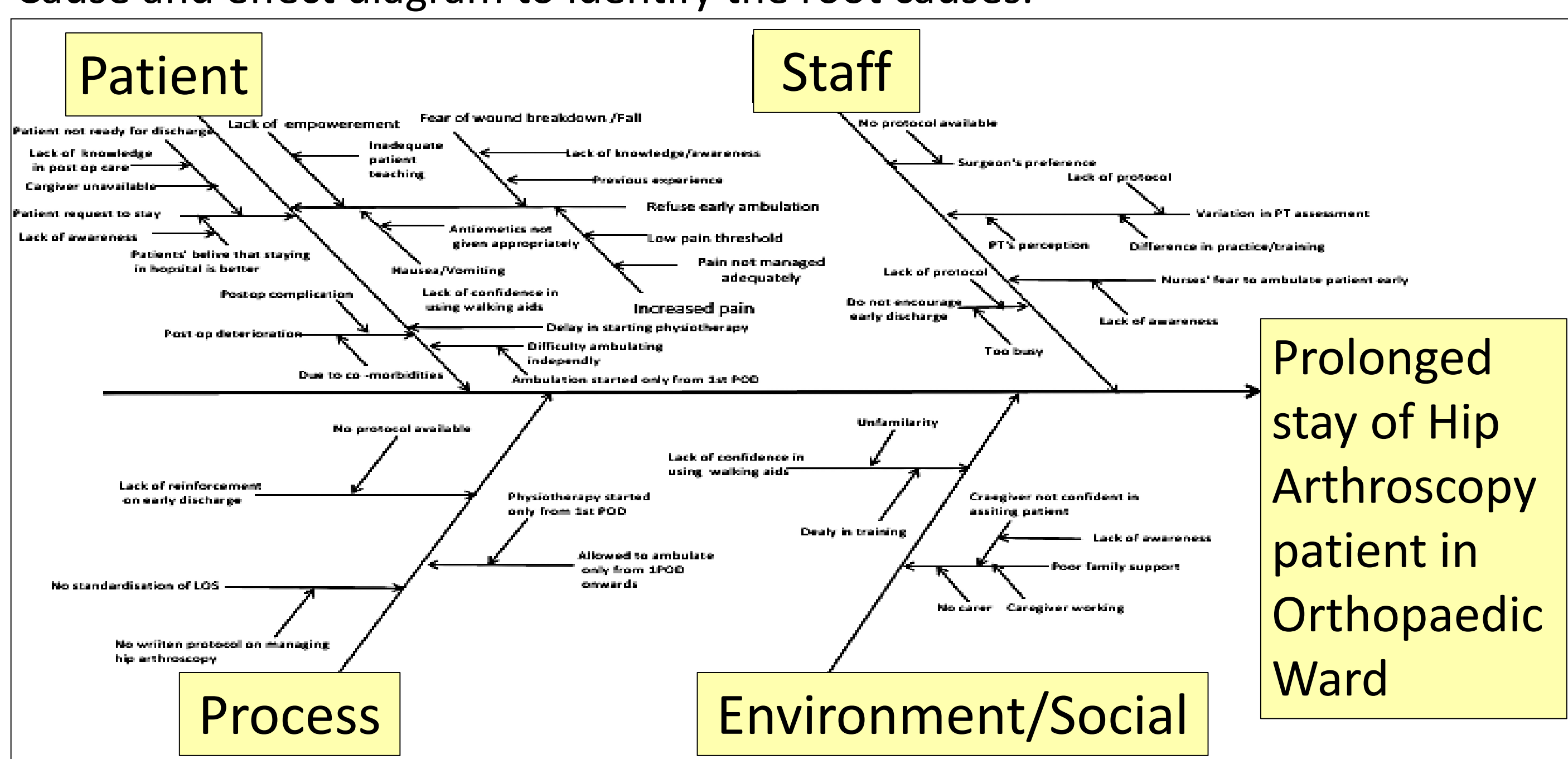


Figure 1: Cause and Effect diagram

Multi-voting performed for causes and plotted onto a Pareto chart to identify the most significant root causes.

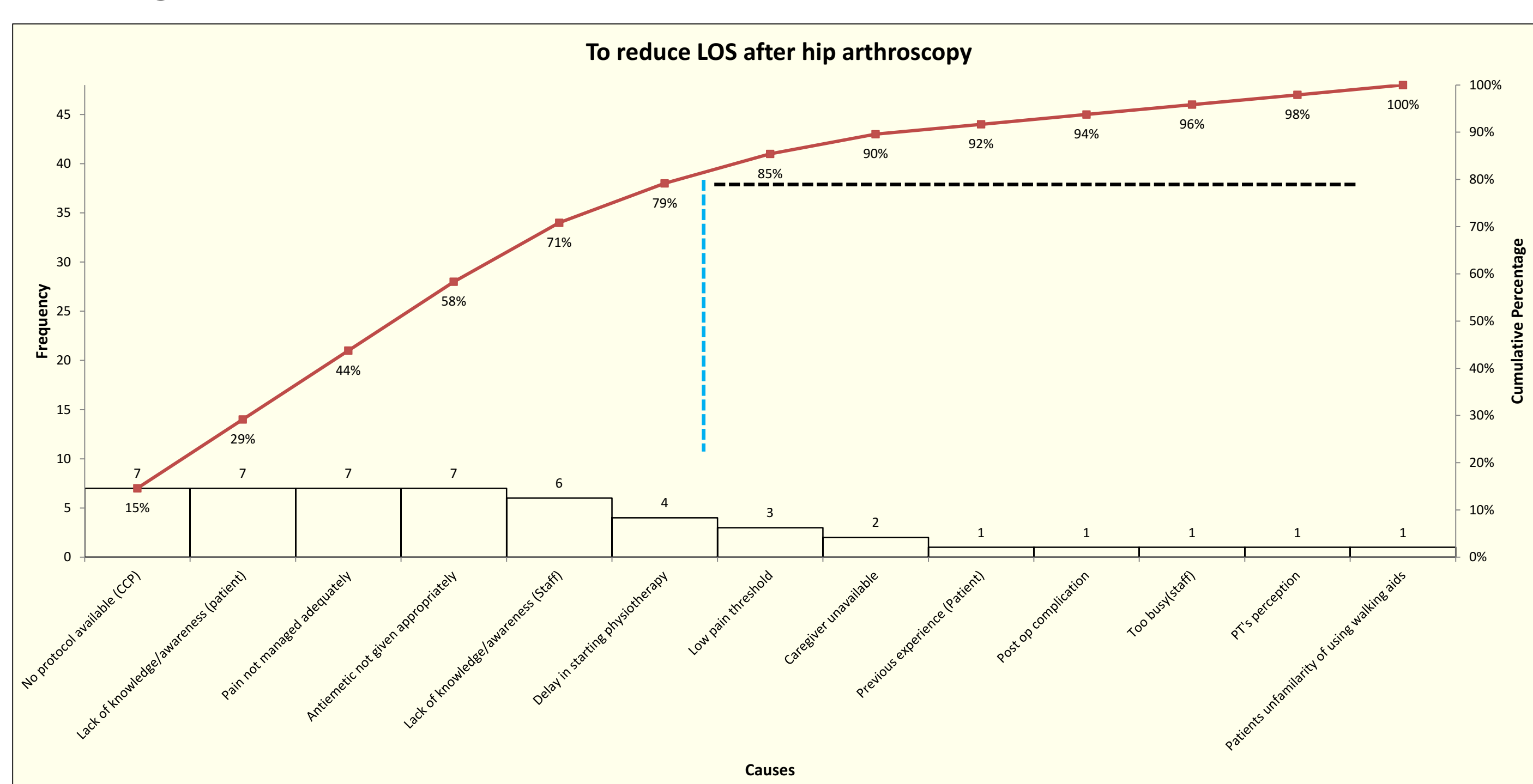
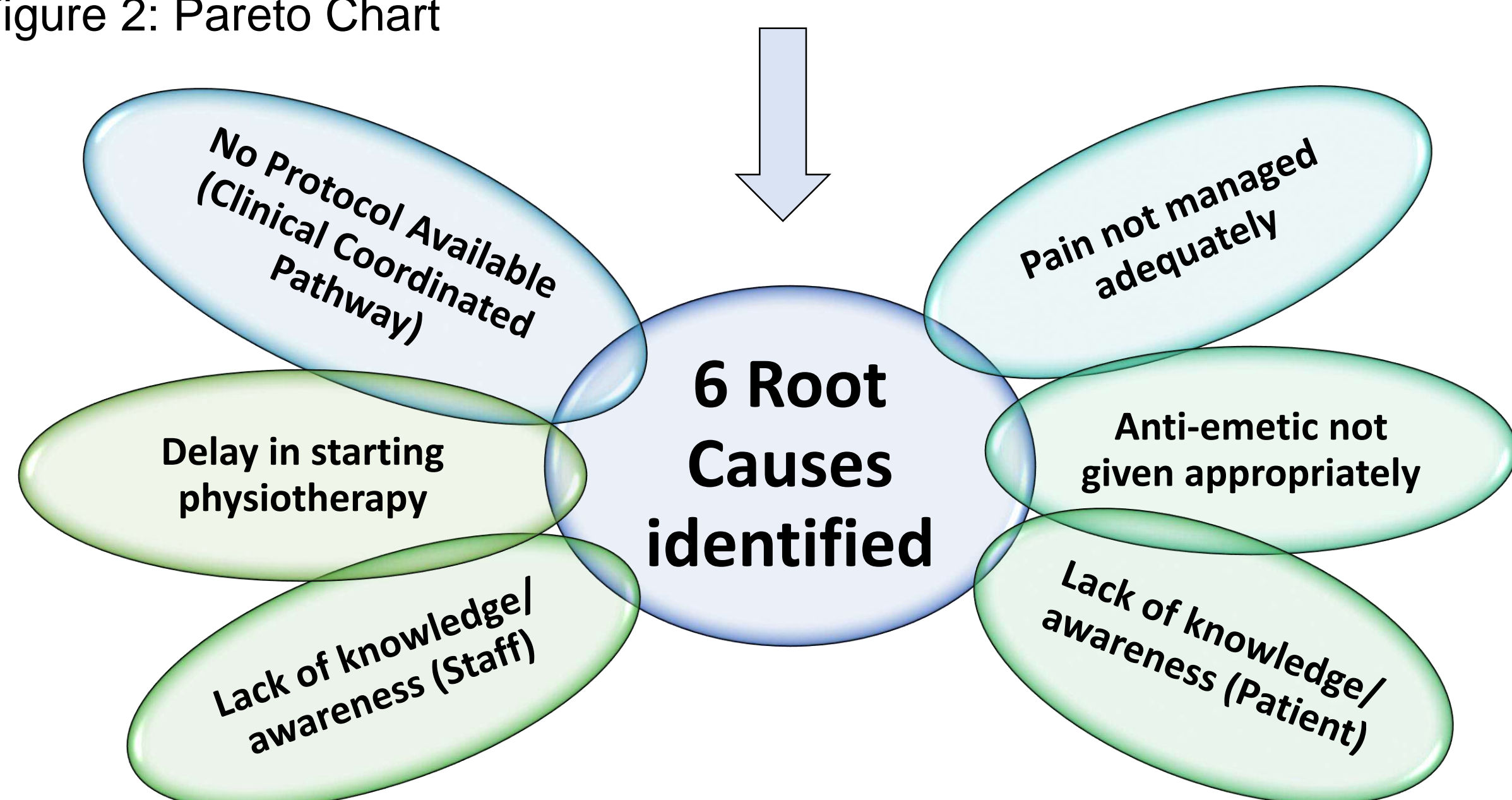


Figure 2: Pareto Chart



SOLUTION

PDSA 1:

1. Mandatory post-op instruction in terms of post-operative management

- Surgeon gave concise instruction regarding analgesics, antiemetic, hip precautions and when to refer to physiotherapy
- Staff were informed with regards to specific post-operative care and it reduced unnecessary delay in providing care

2. Refer to physiotherapist on post-operative day 0

- Physiotherapy referral was initiated on post-operative day 0
- This enabled the physiotherapist to see the patient in a timely manner and facilitated early mobilization

PDSA 2:

Surgeon's explanation

- Surgeon explained to patient regarding expected length of stay during clinic visit
- With improved patient's understanding, it reduced anxiety and allowed them to do the necessary arrangements pre-operatively
- This helped staff in managing patients' expectations

RESULTS

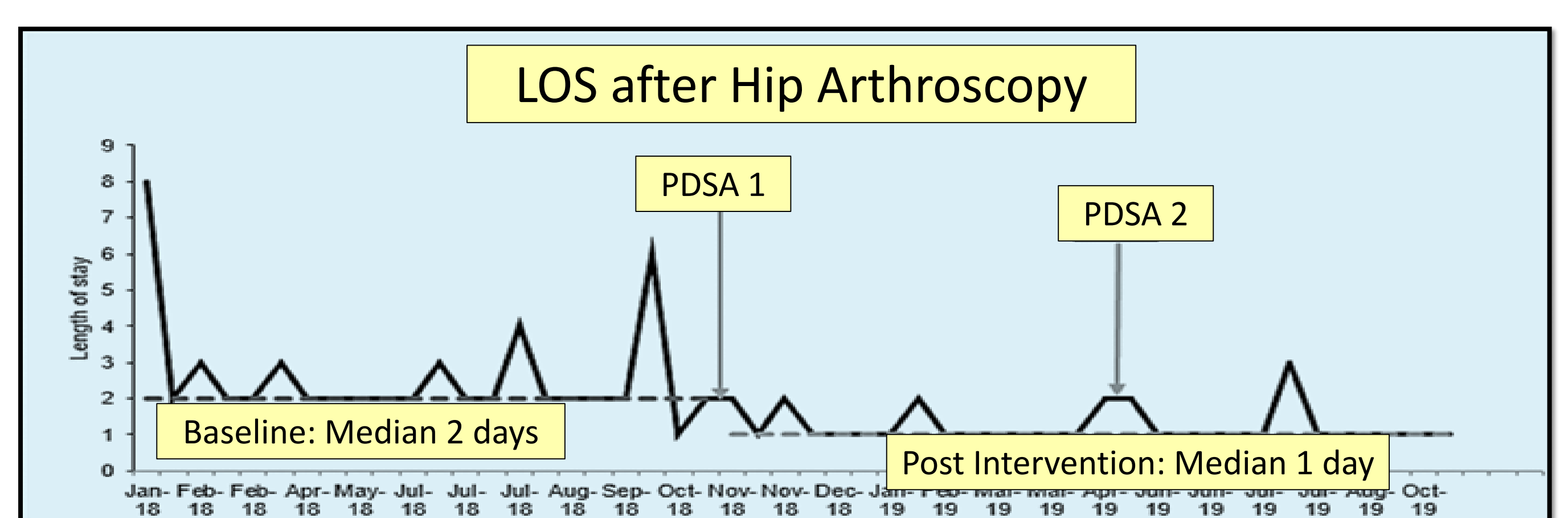


Figure 3: Run chart of length of stay

- The length of stay was 2-8 days prior to implementation
- After the interventions, **80.65%** of patients achieved a median LOS reduction from **2 days to 1 day**. Total cost savings was \$6079.72.

SUSTAINABILITY PLANS

- Orientation is conducted to new medical, nursing and allied health staff regarding LOS and mandatory post-operative instruction.
- Future plans underway to conduct specific pre-op education to enhance patients' knowledge and confidence level.
- Random audits will be conducted to ensure continuity of the initiatives.