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**AIM Statement:** The overall goal of this project is to reduce wait times for pediatric patients attending fracture clinics by 25% from a baseline 4-hour-average, where progress is measured after 6 months.

## PROBLEM DEFINITION

The paediatric orthopedic clinic is currently facing a significant problem with long wait times, leading to high levels of frustration among patients, their parents, and referring physicians.

Despite the clinic's efforts to manage patient flow and optimize resources, the wait times for appointments, diagnostic tests, and procedures continue to exceed acceptable levels, ranging upwards of 3-6 hours. This can be attributed to a variety of causes that will be discussed and analyzed further in this poster.



Figure 1: Featured are photos taken after our team went to Victoria Hospital in London, Ontario of the Paediatric Orthopedic unit.

## ROOT CAUSE ANALYSIS

Developing a process flow diagram was critical to determine different types of patients and their corresponding throughput time. The diagram also showcases which providers will be required to facilitate patients appointments.

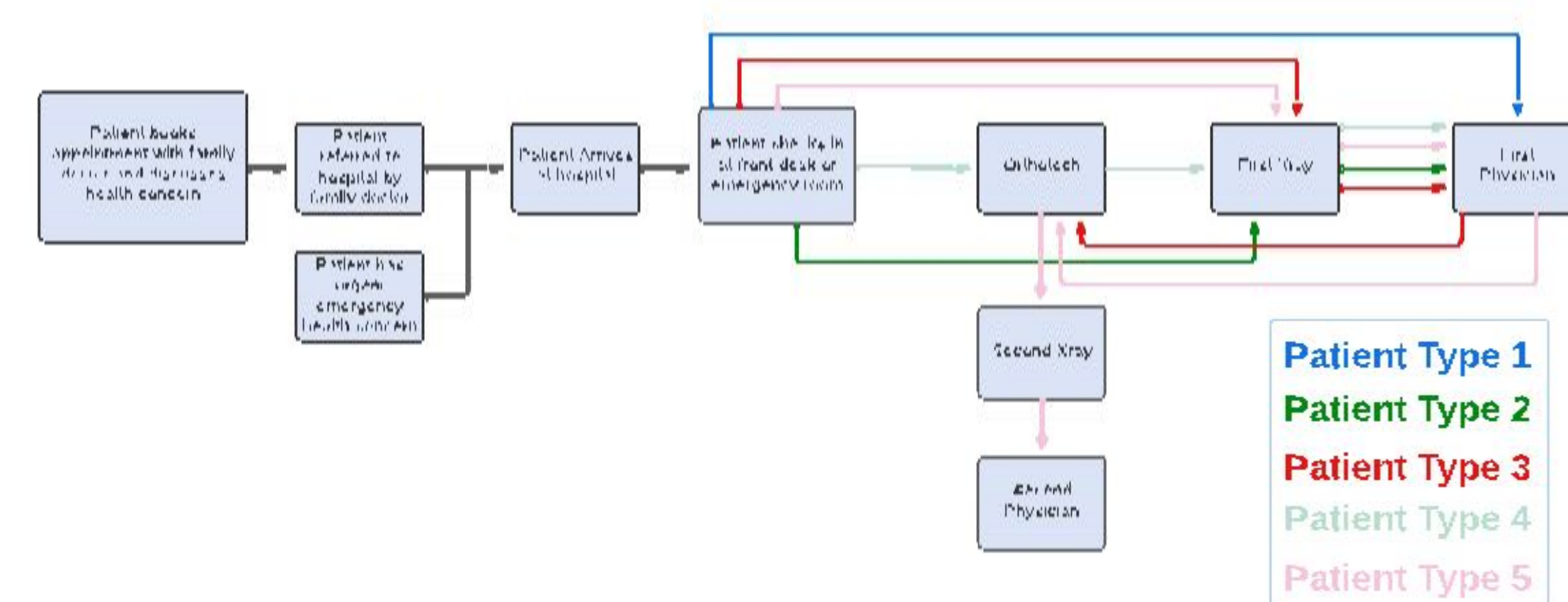


Figure 2: Process Flow Diagram for Five Different Patient Types visiting the clinic (Victoria Hospital)

Feedback Survey implemented at Clinic:

**PATIENT SATISFACTION SURVEY**

This survey is part of a quality improvement project to improve wait times and patient care in our Pediatric Orthopedic Fracture Clinic. Please read and answer the following questions honestly. We're trying to improve everyone's experience in our fracture clinic. Please circle the appropriate face for each question.

How would you rate your overall experience today? (Scale: 1-5 faces)

How do you feel about wait times today? (Scale: 1-5 faces)

Do you have any additional comments? Please elaborate below:

THANK YOU!

Figure 3: Feedback Survey at Victoria Hospital (during Pediatric Clinic Hours)

- Concerns:**
- Difficulty getting responses, lack of incentive
  - QR codes aren't being scanned as often
  - Questions are very open-ended

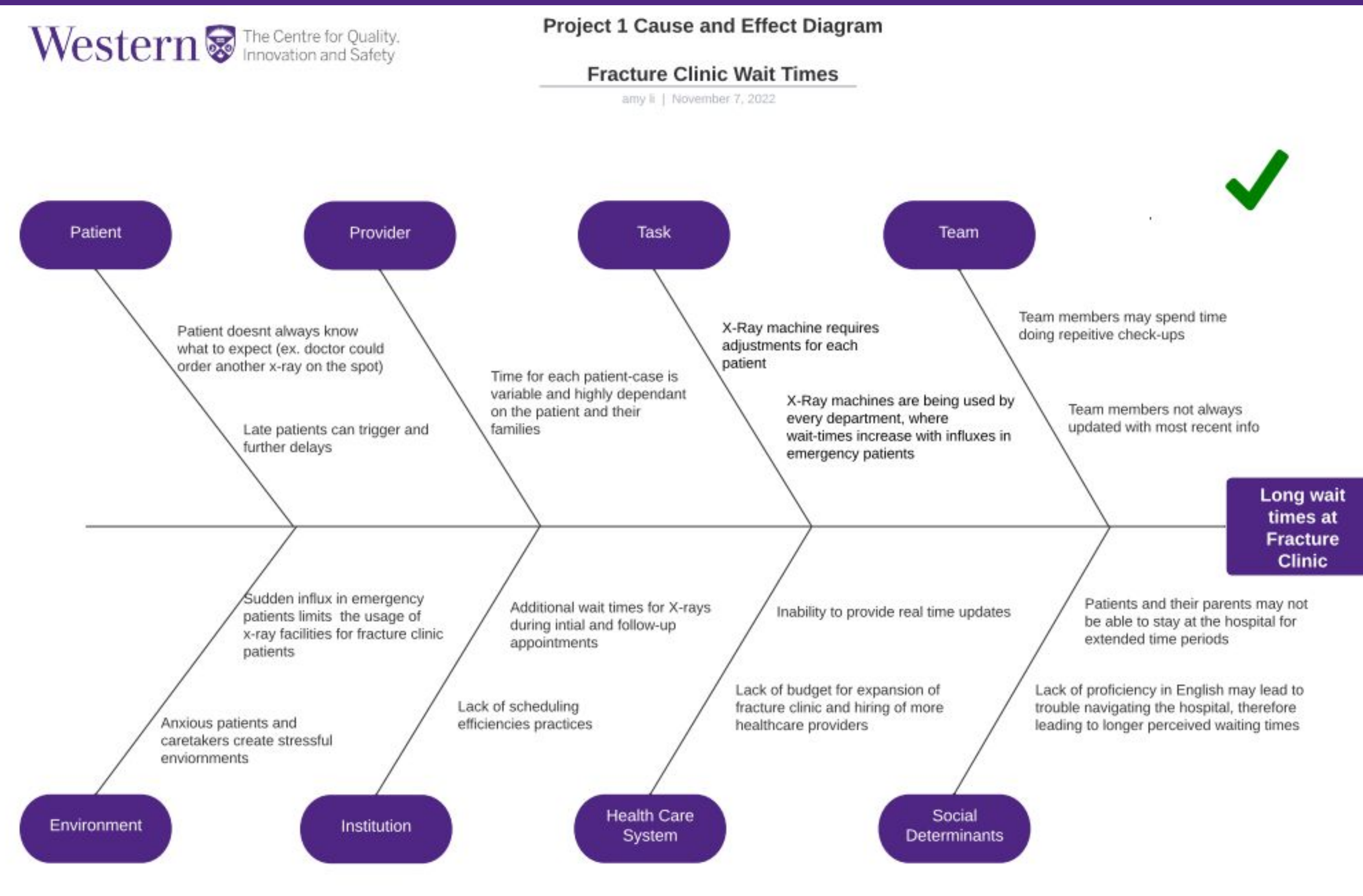


Figure 4: Cause and Effect Diagram, demonstrates how long wait times affect different factors. Chart was used to decide most impactful proposed solutions

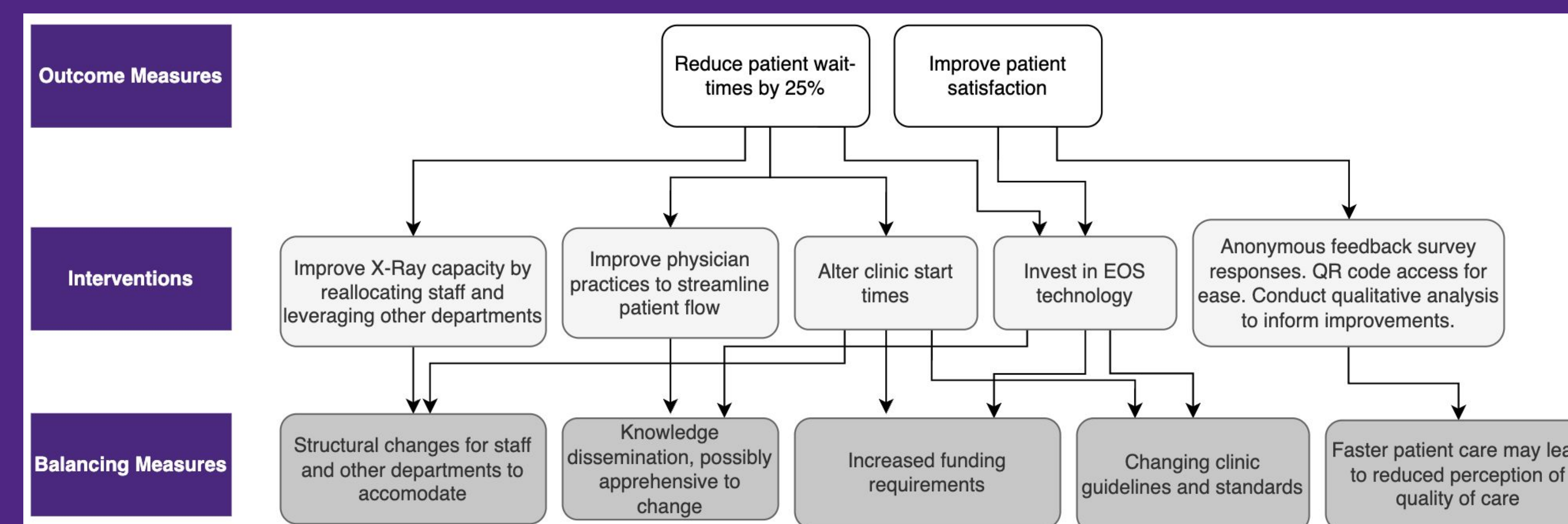


Figure 5: Exploring balancing measures for planned interventions in achieving outcome measures

## IMPLEMENTATION

Several strategies were ideated to help reduce patient wait times within the paediatric orthopedic fracture clinic. Of the strategies, three were implemented within the clinic

1. In the operating room or clinic, physicians started to avoid using Coban for wrapping on casts. This type of material takes an average of 1-3 mins longer to cut through than traditional fiber glass and provides no additional support. By switching materials, physicians were able to save those extra minutes.
2. Extra providers were added to the clinic to help reduce time patients spent at each step of the appointment. An extra X-Ray technologist was hired to cover the break times at 9:30am and 11:30am. An extra ortho technologist was added to help cover patients that needed their care.
3. Patient type 4 & 5 were manually scheduled in to come in earlier at 7:30am. This gives ortho techs more time with the patients to change casts and assess post operation before the clinic opens at 8am.

## MEASUREMENT & RESULTS

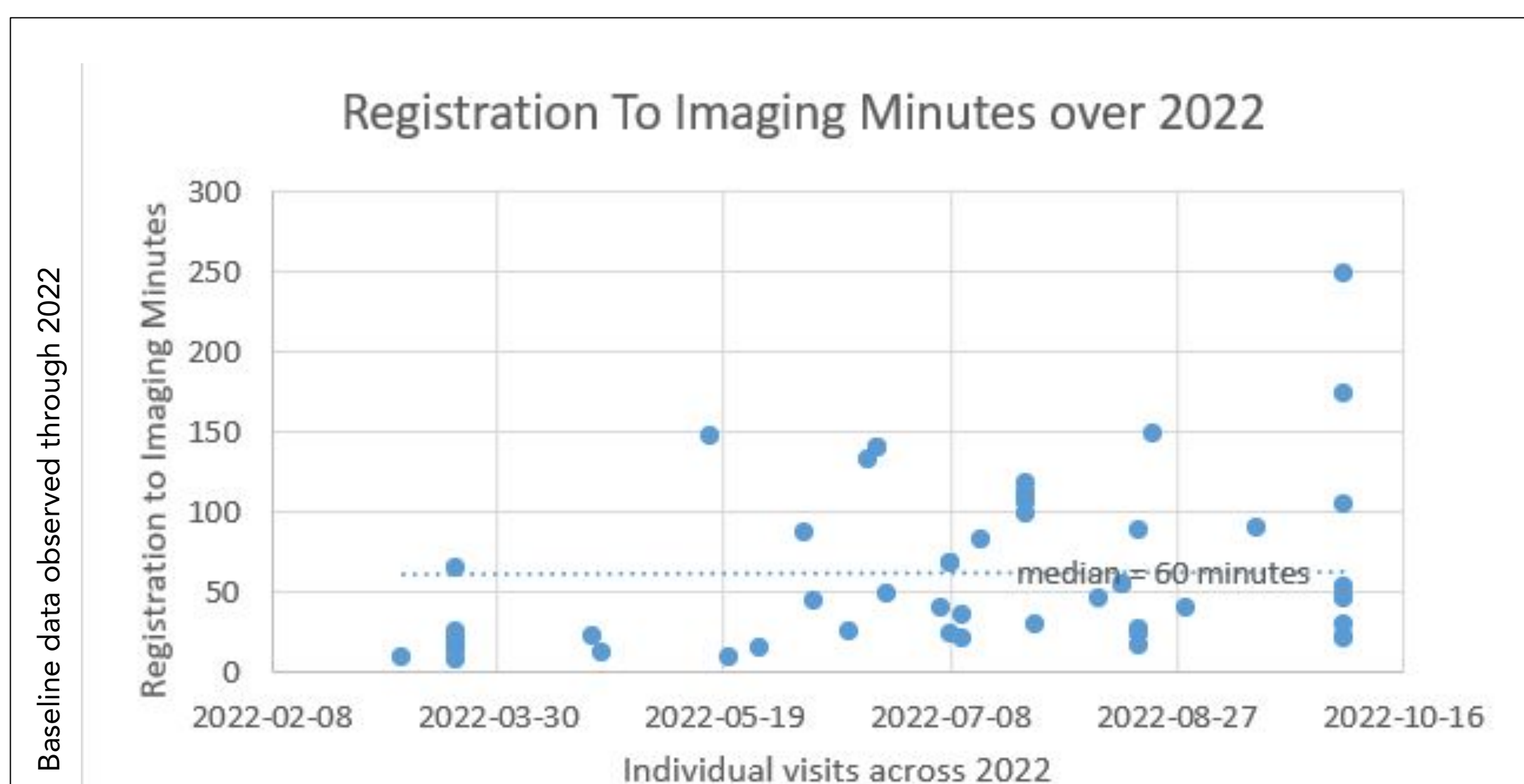


Figure 6: Baseline Data illustrates difficulties in predicting wait times, leading to frustrated Families and staff. Note: Currently, PDSA cycle is being run, awaiting data collection

**REDUCTION OF WAIT TIME BY ~ 1 Hour (approx. 25%)**  
Only implemented for 1 month, still observing results

## SUSTAINABILITY

- Adjust costing structures to account for changes in work hours and staff
  - 1 additional X-ray tech covering breaks during specific times and admin clerk starting early on specific days
- Move towards more systematic and strategic way of categorizing type 1-5 patients, placing 'show stoppers' at the start
- Develop continuous method of receiving feedback from families and patients (through surveys, sample sizing, interviews, etc.)
- Develop quality check processes to ensure progress checks (ex. Counting number of patients/patient charts left to check)