



مستشفى الملك فيصل التخصصي ومركز الأبحاث
King Faisal Specialist Hospital & Research Centre
Gen. Org. مؤسسة عامة



Improving In-patients Access to MRI Through Enhanced Communication and Optimized Scheduling Process - A Tertiary Hospital Experience

Abstract: 3413

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Introduction

Strategic Objective (In-patient)

Improving the efficiency by reducing the Turn-Around-Time (TAT) for in-patient MRI, to achieve 80% of in-patient MRI within 24 hours by December 2020

Project Scope

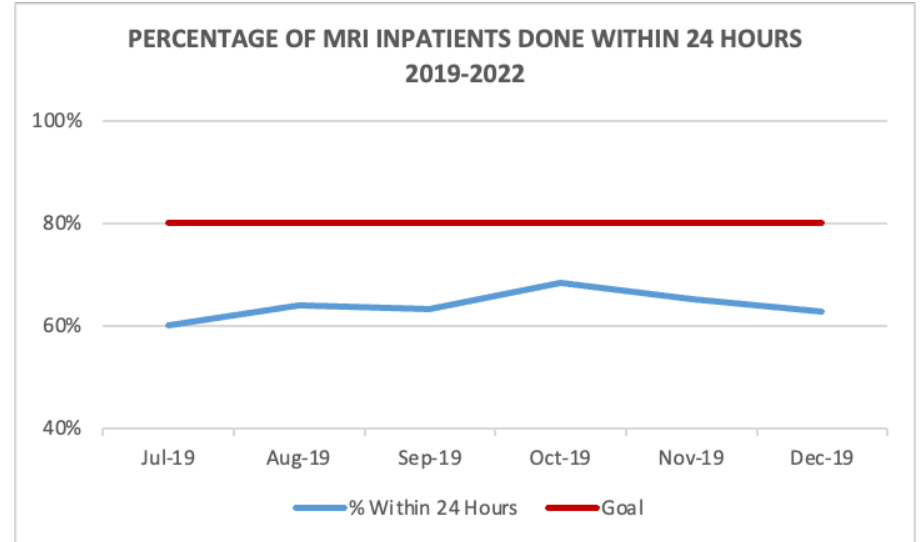
All MRI in-patients

Goals

- ✓ Improve workflow
- ✓ Decrease patient length of stay thus decrease cost of service
- ✓ Increases patients' satisfaction
- ✓ Better patients' hospital experience
- ✓ Improve patient care
- ✓ Reduce stress in the workplace

Methods

- Data was collected over 6 months by the MRI technologists
- Data was analyzed to find root causes and provide feedback and suggestions to improve compliance



Methods cont.

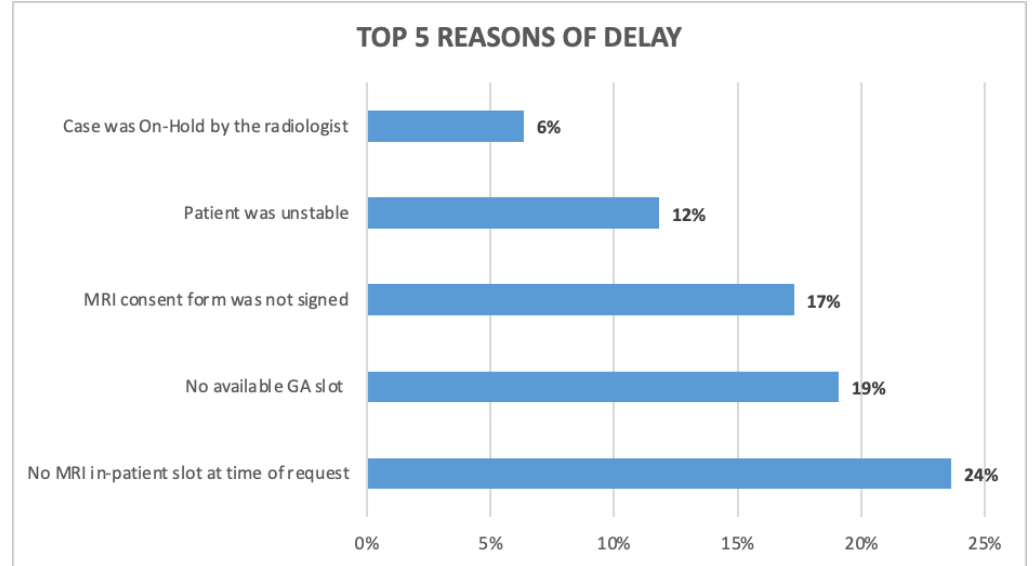
Root Cause Analysis (RCA) identified multiple causes of delays.

The 3 main causes included:

1. No inpatient MRI slots at the time of request
2. No enough General Anesthesia slots
3. Incomplete MRI consent forms



Average access time
to MRI 3 – 5 days



Action Plan



Communication

- Facilitate the coordination/open communication between MRI and other hospital departments.
- A timely appointment was given to inpatients within 24 hours
- A unified checklist was introduced to MRI Technologists
- Electronic MRI preparation and consent forms were launched



Head Nurses

- Education sessions to enhance the preparation process (access MRI materials from E-Radiology recourses)



MRI Technologists/QA

- Technologists' workflow and shifts were adjusted to maintain outpatient productivity
- The inpatient schedules were reviewed daily during Covid-19 and an appointment was assigned based on priority
- Radiology quality assurance (QA) analyzes received TAT data
- Action/Follow up on Weekly basis

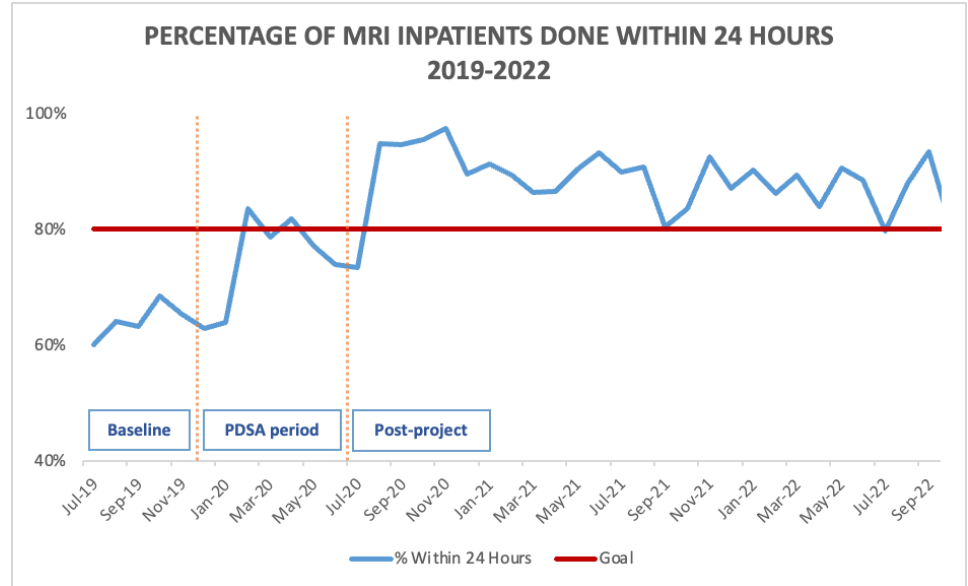


Appointments/Slots

- Proper scheduling (Appointments) for in-patients is introduced
- Increase inpatient MRI slots
- Improvement in-patient waiting times via documentation of TAT
- Achieved a fair distribution of time slots to the In-patient groups

Results

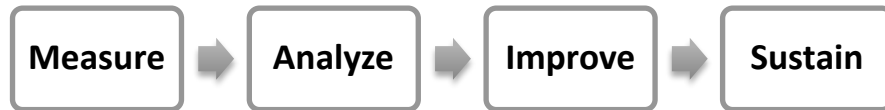
- Baseline review of MRI access TAT data showed that only 65% of the patients received MRI scans within 24 hrs. over a period of 6 months. Median access time was 30 hours (Range from 3 to 169 hrs)
- After 7 months of multiple PDSA cycles, a sustained monthly target of achieving 80% inpatient TAT within 24hrs was achieved. The median access time for MRI was 10 hrs. (Range from 1 - 90 hrs.)
- Sustainment of improvements was ensured



Conclusion

A robust process improvement initiative focused on capacity planning and enhanced communication helped reduce median access time to MRI by 66%. Approximately up to 90% of the inpatients had access to MRI within 24hrs.

Maintaining quality improvements is crucial; our data analysis shows the sustainment of the improvement 27 months after completing PDSA cycles.





THANK YOU

