

Improving Protocol Turnaround Time in Nuclear Medicine Division at a Tertiary Referral Medical Center

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Presentation#: W5B-QI-2







Background and Problem Statement

- Delay in outpatient protocol of Nuclear Medicine studies causes delays in patient care and lowers satisfaction of the providers and patients.
- The cause of outpatient protocol delay at an academic tertiary referral center is multifactorial.
- We aimed to understand this complex process and improve the protocol turnaround time.







Target State: SMART Goal

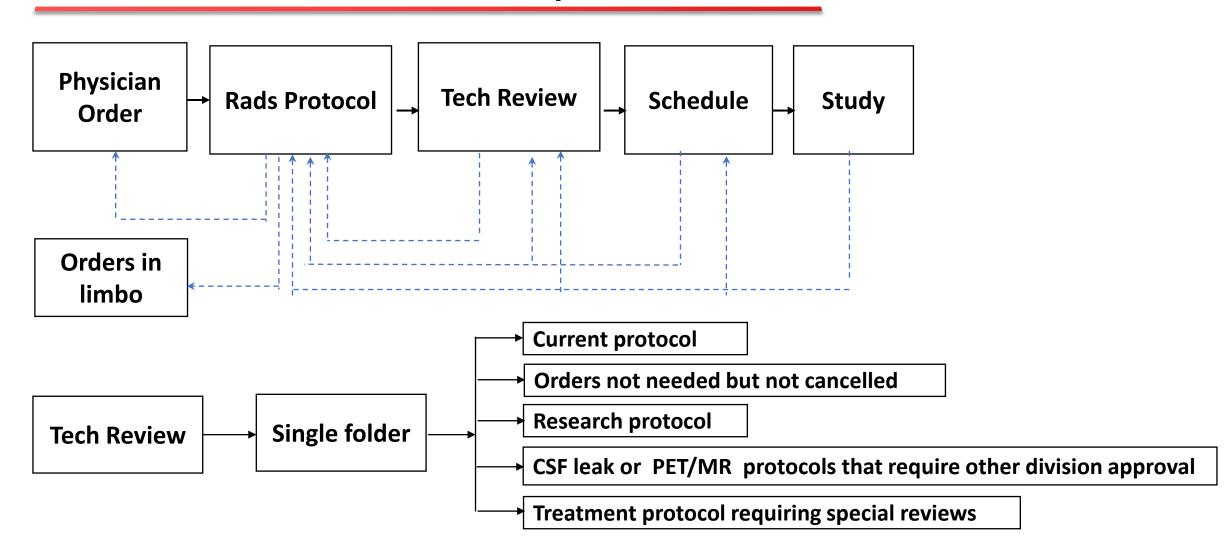
- The goal of our team was to decrease outpatient nuclear medicine protocol turnaround time by 10% from 8/1/2021 to 12/15/2021.
- This goal was determined by group consensus that this was the best objective measurement.
- Protocol turnaround time: time from order placement to protocol finalization.





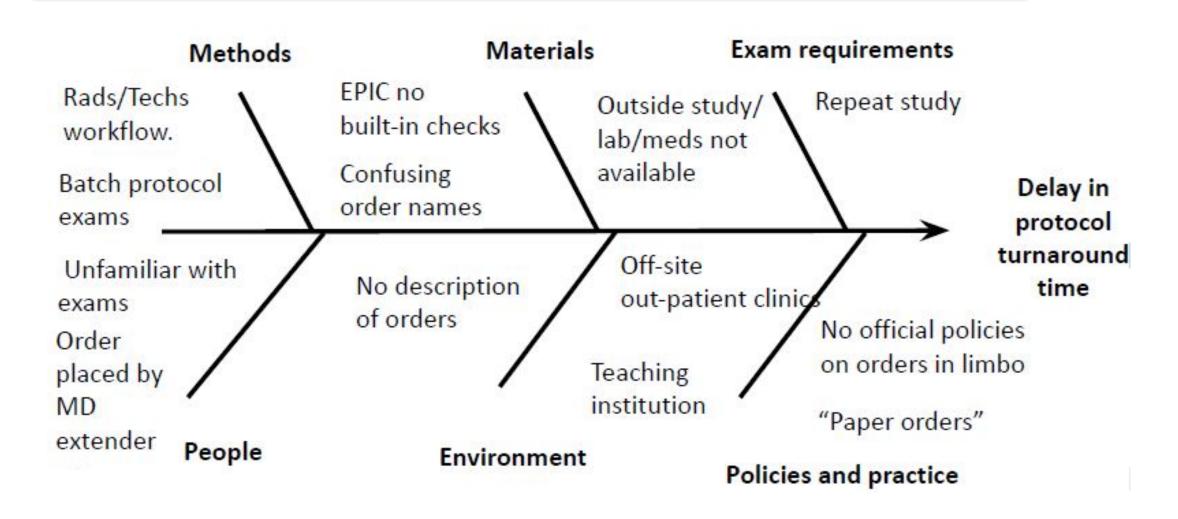


Methods and Results: Process Map – Current State



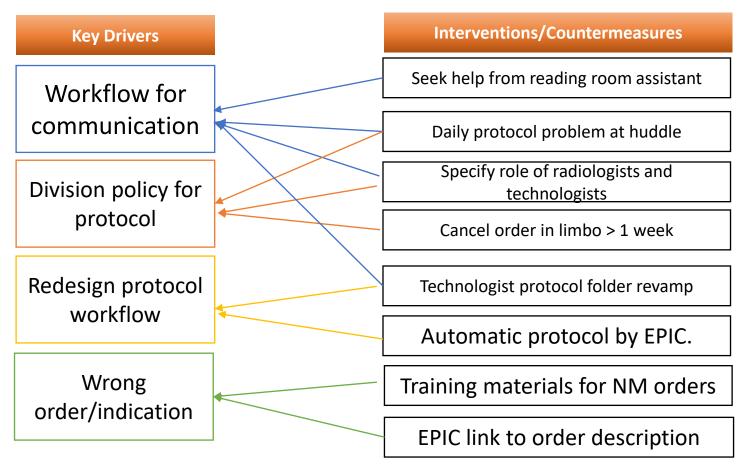


Methods and Results: Root Cause Analysis - Fishbone Diagram





Methods and Results: Key Drivers, Interventions and Countermeasures

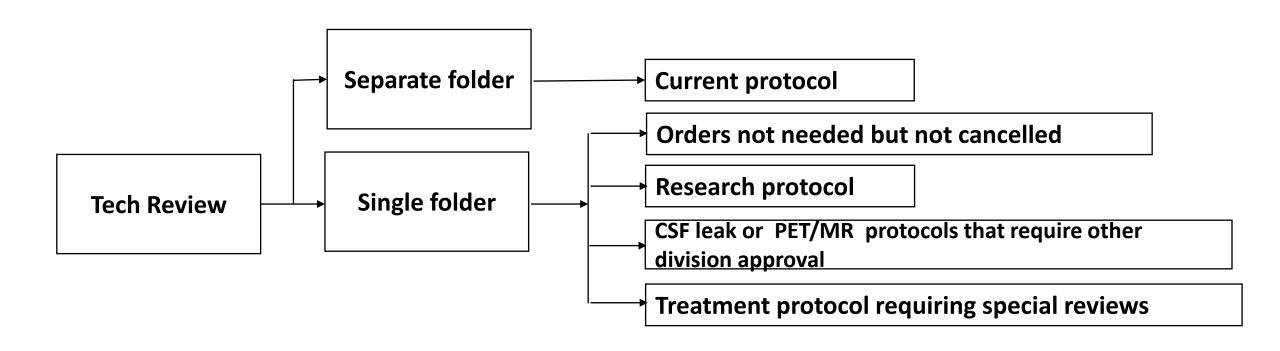




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Methods and Results: Process Map – Future State

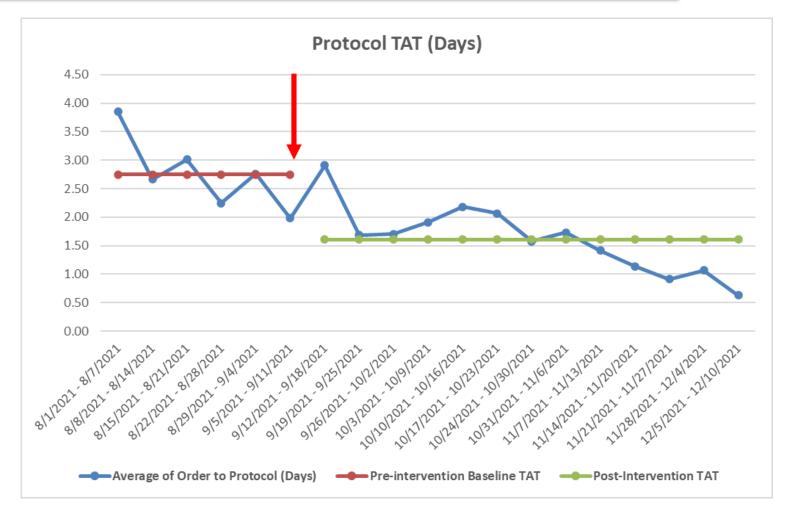








Results: Improvement in protocol turnaround time (TAT)









Future directions: Sustain Plan

Interventions to sustain	Owner	Sustain method and frequency	Report to
Revised Nuclear Medicine division policy regarding outpatient protocoling	Nuc Med Residents	Nuc Med residents taking ownership of protocoling, Daily	Attending on service
Monitoring protocol turnaround time	Nuc Med Technologist	Analytics update, Monthly	Manager







Conclusions

 We employed a LEAN A3 problem solving approach to identify root causes and key drivers that caused delays in outpatient protocol turnaround time in Nuclear Medicine division.

- Our initial intervention in technologist workflow and revision of division policy significantly improved protocol turnaround time in our division.
- Additional intervention to improve communication to community referral provides are necessary to further improve protocol efficiency.



