

Improving Turnover Time in Cardiac Catheterization Lab, a multi-disciplinary approach



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BACKGROUND

Turnover Time (ToT), defined as 'time from end of a procedure to the start of next', can have a significant impact on patient care delivery. Our Cardiac Catheterization Lab's (Cath Lab) mean ToT was 62 mins. By June 2019, Cath lab team aimed at decreasing turnover time by 25 %.

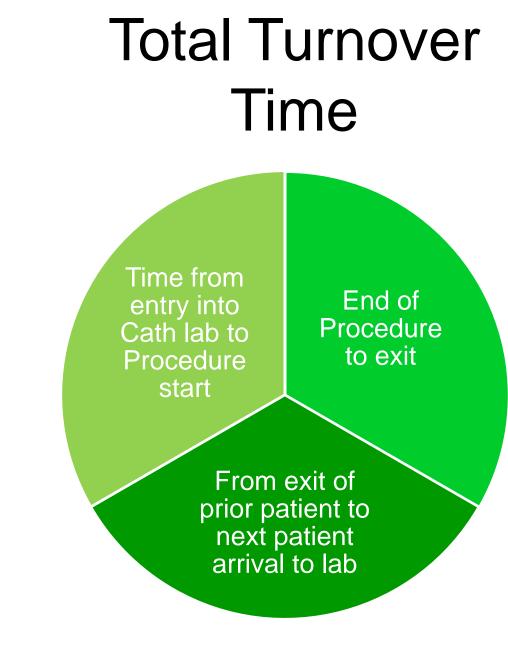
METHODS

A multi-disciplinary team with Physicians, RNs and Cardiovascular techs was formed. 'Plan-Do-Study-Act' model was chosen. A baseline Process Map was created, Fishbone Plot helped discern roles of staff.



DATA COLLECTED

1) Time from entry into Cath Lab to procedure start (A); from procedure end to patient's exit from Lab (B); from exit to next patient arrival to lab / time spent in Pre-post Room (PPR) (C); 2) Consents, IV access and lab work

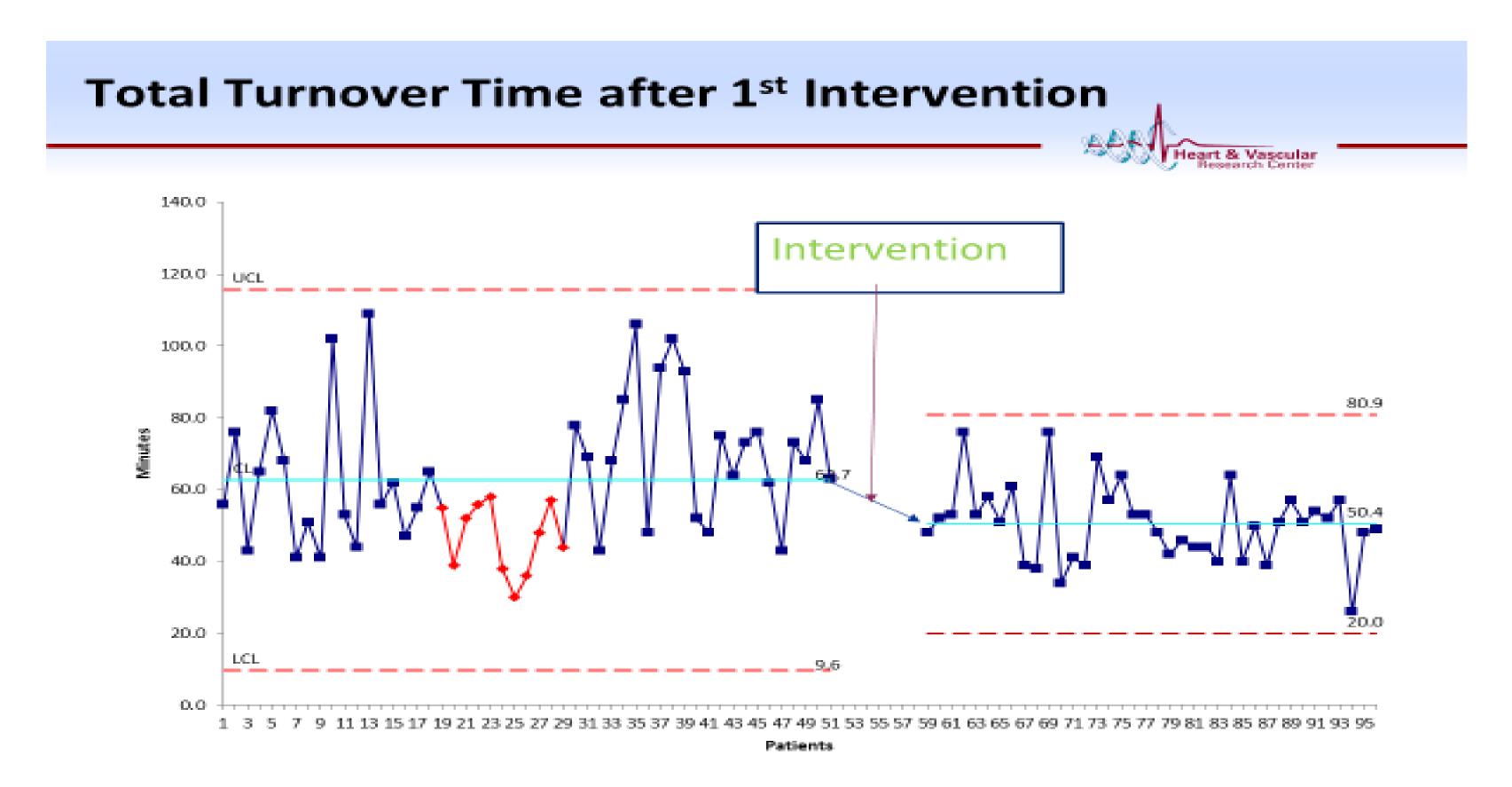


1st INTERVENTION

a) In PPR, responsibility of a specific patient was assigned to one particular RN; b) next patient was brought to PPR as soon as prior patient rolled into lab; c) Consent obtained prior to patient coming to PPR

RESULTS

Total Turnover Time improved by **20%, from 62 to 50** mins. Time B improved from 16 to 11 mins; C from 24 to 17mins



2nd INTERVENTION

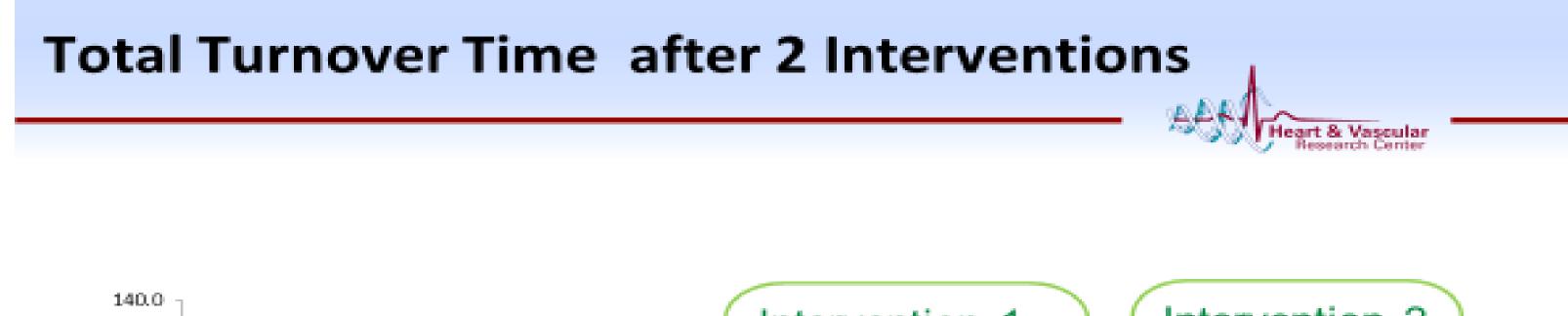
Clear delineation of staff roles:

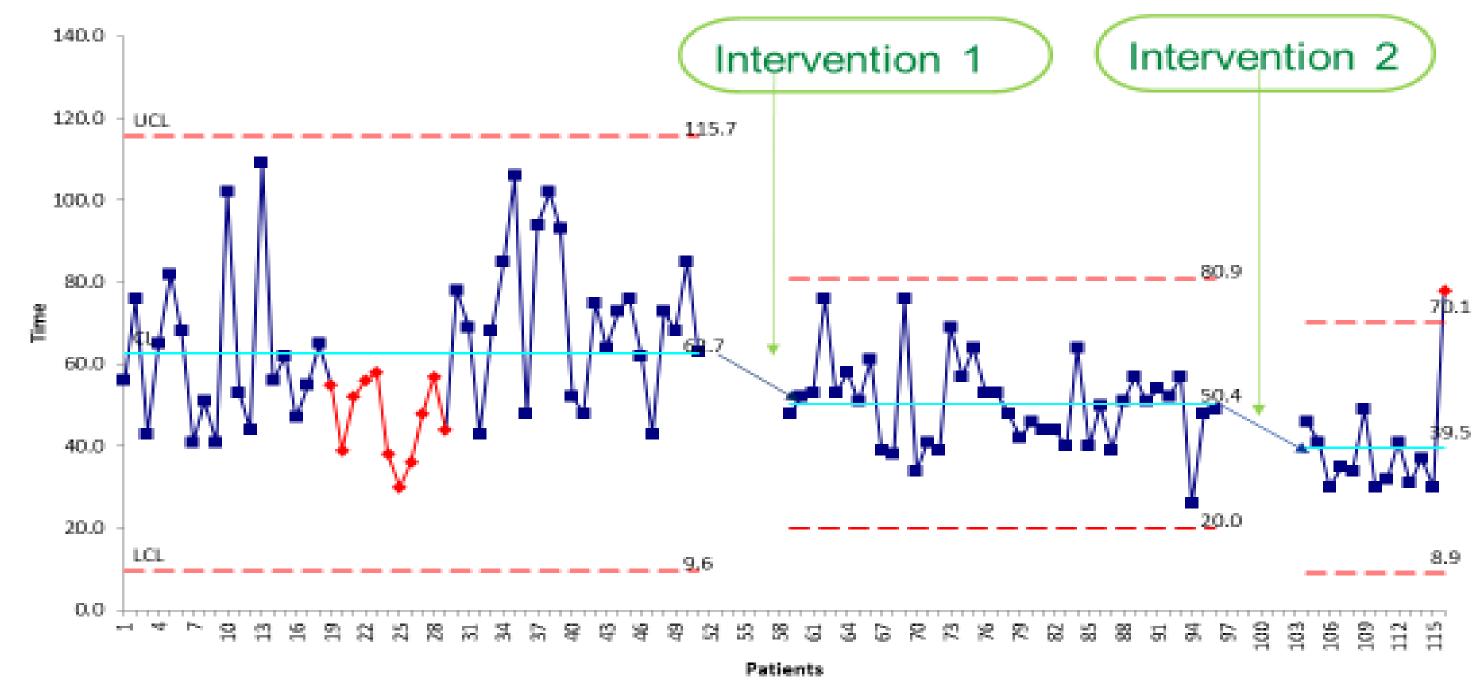
After procedure ends, one team member stays back in control room and enters next patient's info in MacLab and Xray. Another stays in Lab cleaning, setting up table, opening new cath pack and the third member takes patient to PPR and brings back the next patient into the lab.

FINAL RESULTS

Total Turnover time per procedure improved by 36 %, from 62 mins to 39.5 mins.

Time A improved from 23 to 14.5 mins; B showed additional improvement, from 11 mins to 8.5 mins;





Potential Impact: 36 % reduction in Total Turnover Time per procedure translates to additional **2 hours** of available lab time per day, which can be utilized for 2 additional diagnostic Caths per day.

CONCLUSION

Multi-disciplinary team approach is crucial in improving efficiency of patient care delivery, which can be achieved without resource intense interventions.