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# Impact of QUALITY IMPROVEMENT PROJECTS in improving positive patient outcomes.

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## INTRODUCTION

Quality improvement projects widen the door for health care workers to identify the risks and interventions to mitigate them. As a quaternary care setting emphasizing quality care and patient safety, we focus on a range of improvement methods to sustain quality care practices through clinical audits to identify and bridge the gaps. Four major clinical deficiencies were identified through structured process and procedure audits. Quality improvement interventions were implemented by conducting appropriate root cause analysis. This study focuses on the impact of quality improvement projects carried out on the basis of two process and procedure audits to improve patient outcomes.

## AIM / OBJECTIVE

1. To identify the impact of **Process Improvement Interventions** through QIP in improving positive patient outcomes
2. To identify the impact of **Practice Improvement Interventions** through QIP in improving positive patient outcomes

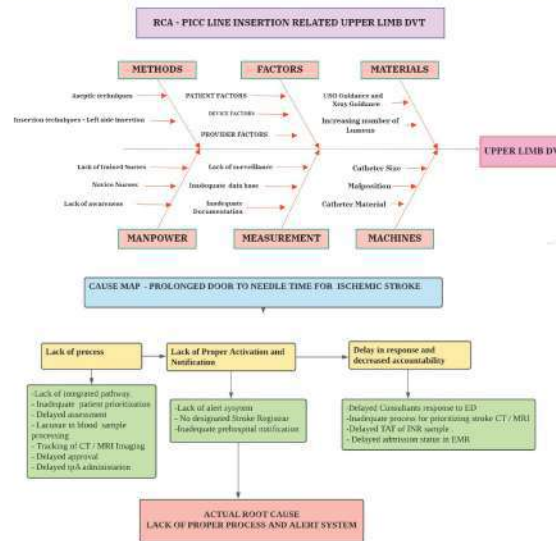
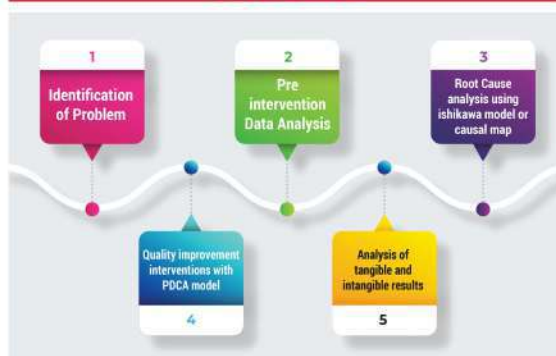
## STUDY DESIGN

Quantitative design - Descriptive Time Motion Study  
Sampling : Two process & two Procedure Audits based data

## PROJECTS

- QIP I Impact of QIP in reducing patient identification errors in ER
- QIP II impact of stroke code implementation in reducing the door to needle time for stroke patients
- QIP III Prevention of PICC insertion associated upper limb Deep Vein Thrombosis
- QIP IV Impact of tracheostomy nurse in reducing tracheostomy related complications

## PROCESS



## RESULTS

**Strategy : Implementation of stroke code.**

**QIP I**  
Impact of QIP in reducing patient identification errors in ER  
11 in 2020 to 3 in 2021

**QIP II**  
Impact of stroke code implementation in reducing the door to needle time for stroke patients.  
Adherence to stroke code - 100%  
INR TAT - 43 Minutes -> 28 Minutes  
CT / MRI TAT - 47 Minutes -> 21 Minutes  
Door to Needle time - 64 min -> 53 Minutes

**Strategy : Implementation of PICC line team and data repository**

**QIP III**  
Prevention of PICC insertion associated upper limb Deep Vein Thrombosis  
Patient Factors - 2% -> 0  
Device Factors - 2% -> 0  
Provider Factor - 1% -> 0

**QIP IV**  
Impact of tracheostomy nurse in reducing tracheostomy related complications  
2018 - 18.1%  
2019 - 8.4%  
2020 - 3.1%

## DISCUSSION

The above study revealed the impact of quality improvement projects, have an increased influence in process and practice streamlining and thereby improving the patient outcomes. Clinical Audits conducted to identify the gaps in the process and analyzed through proper root cause analysis by using advanced quality tools. The identified interventions with primary and secondary drivers were plotted and implemented through PDCA model systematically and the change in process/ practice was analyzed.

The key opportunity for moving healthcare delivery science forward is to embark on conducting quality improvement studies in a standardized manner. If conducted well and reported through a peer-reviewed journal, such studies will

be reproducible and offer insight into how others might make similar changes in their own practice. Over time, our patients and wider healthcare system will benefit through concerted approaches aimed at increasing efficiency, reducing unnecessary morbidity and resource use, and improving professional satisfaction.

The tangible and intangible results identified can be locked for improvement by maintaining the consistency in practice through proper surveillance, keeping data repository and data analysis. Cloning of improvement can be done by sharing the study finding and process improvement intervention to similar setting or through publications, national and international presentations and journals.

## CONCLUSION

The current study shows the successful implementation of quality improvement strategies in improving positive patient outcomes. Quality improvement is an essential process to increase efficiency, effectiveness in all areas. It is absolutely essential to focus on continuous quality improvement by defining; measuring, analyzing, improving controlling

and replicating the study findings. Recent advancement in technology provide ample opportunities, tools and application to promote greater safety for patients. Careful consideration and planning can produce a significant process or plan that is implemented to ensure successful patient safety, quality and patient satisfaction.