A Study to Analyse the Determinants Influencing Critical Value Alert Time and Intervention Strategies to Amend it at Max Super Speciality Hospital, Mohali

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Presentation Outline

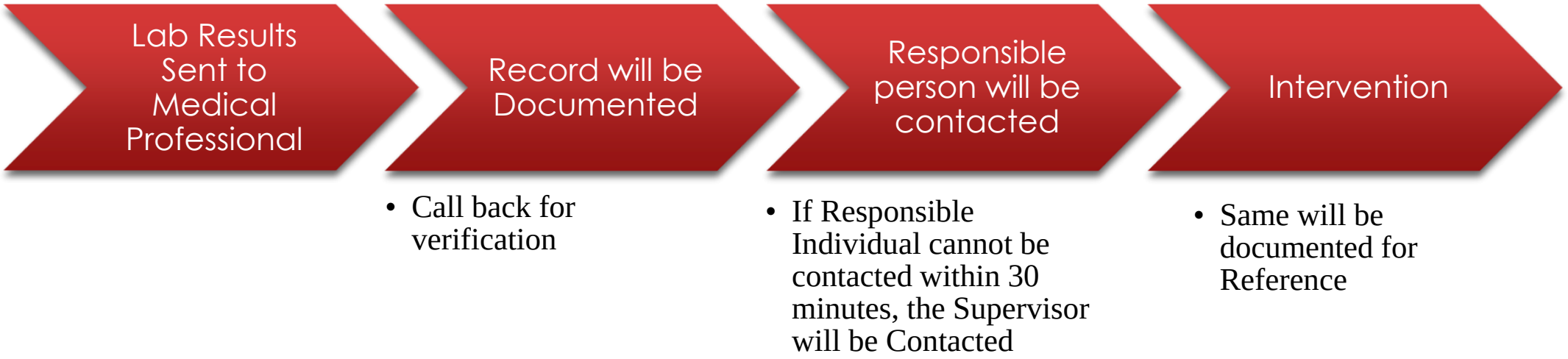
- INTRODUCTION
- OBJECTIVE
- METHODOLOGY
- FINDINGS
- RECOMMENDATIONS
- CONCLUSION

Introduction:

Critical Values:

Critical/Panic values are defined as values that are outside the traditional range to a degree which will constitute an instantaneous health risk to the individual or require immediate action on the part of the ordering physician. It is the policy in which clinical laboratory to call the critical values listed to a licensed provider as soon as completed and verified in compliance with hospital policies and approved by the Stanford Children's Health and Stanford Health Care hospital boards of directors.

Process Cycle:



Rationale

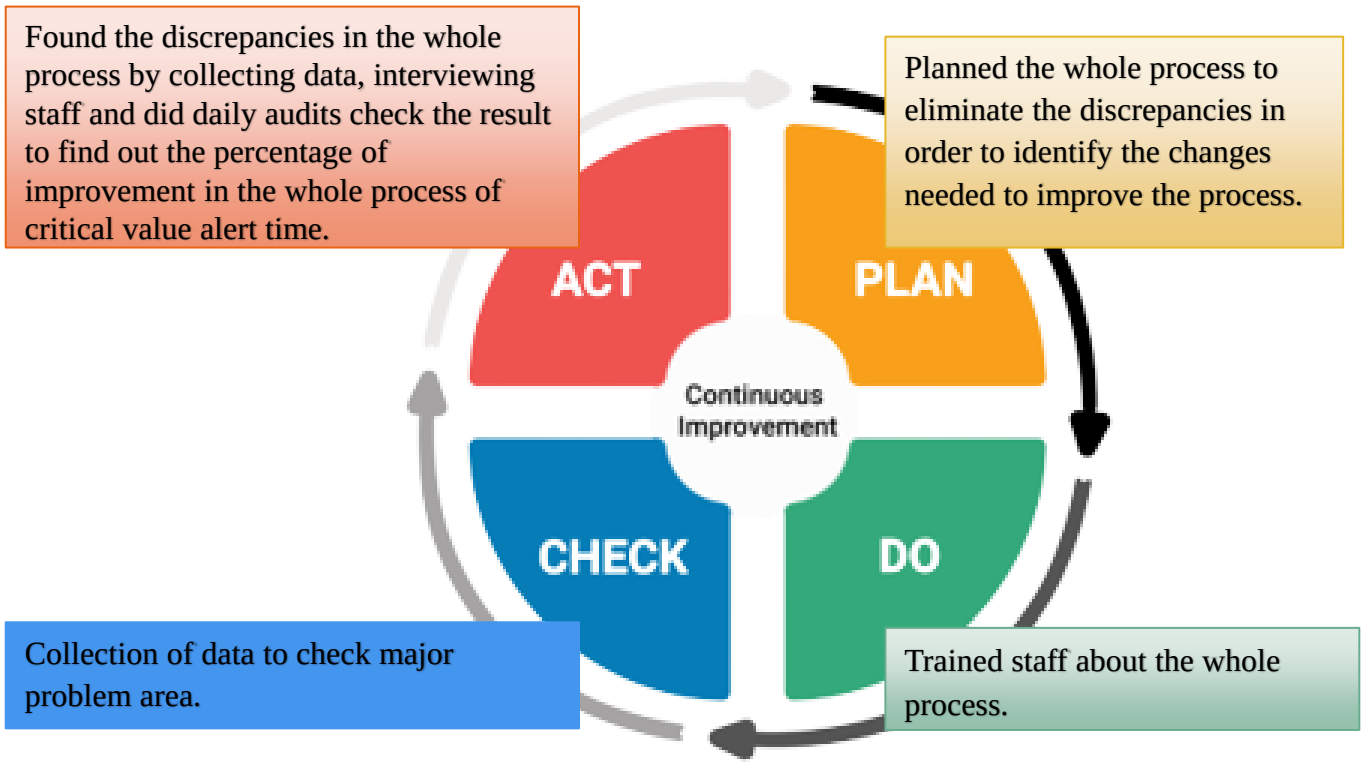
After reviewing the literature, the causes of delay in critical value alert time were different in different hospitals. Since Max super speciality hospital, Mohali has also been facing issues with critical value alert time, a study was conducted to find out the significant causes.

Objective

To Analyse the determinants influencing critical value alert time and intervention strategies to amend it in Max Super Speciality Hospital, Mohali

Methodology

PDCA (plan–do–check–act or Plan–do–check—adjust). The Deming cycle/cycle/wheel, the Shewhart cycle, control circles/cycles or plan-to-study–act are also known (PDSA).



Area of Study and Data Collection: The study was conducted on entry of the patients admitted in the month of March and April 2021 with critical values in the MSP1, MPSP2 of 2nd floor 3rd floor, Eco ward 3rd floor and in different ICU'S. Laboratories data, CTVS system of Max hospital, record registers of wards and ICUs

Study Design: Exploratory study

Duration of Study: 25th May to 21st June

Sample Size: 100 Patients.

Sample Technique: Convenience Sampling

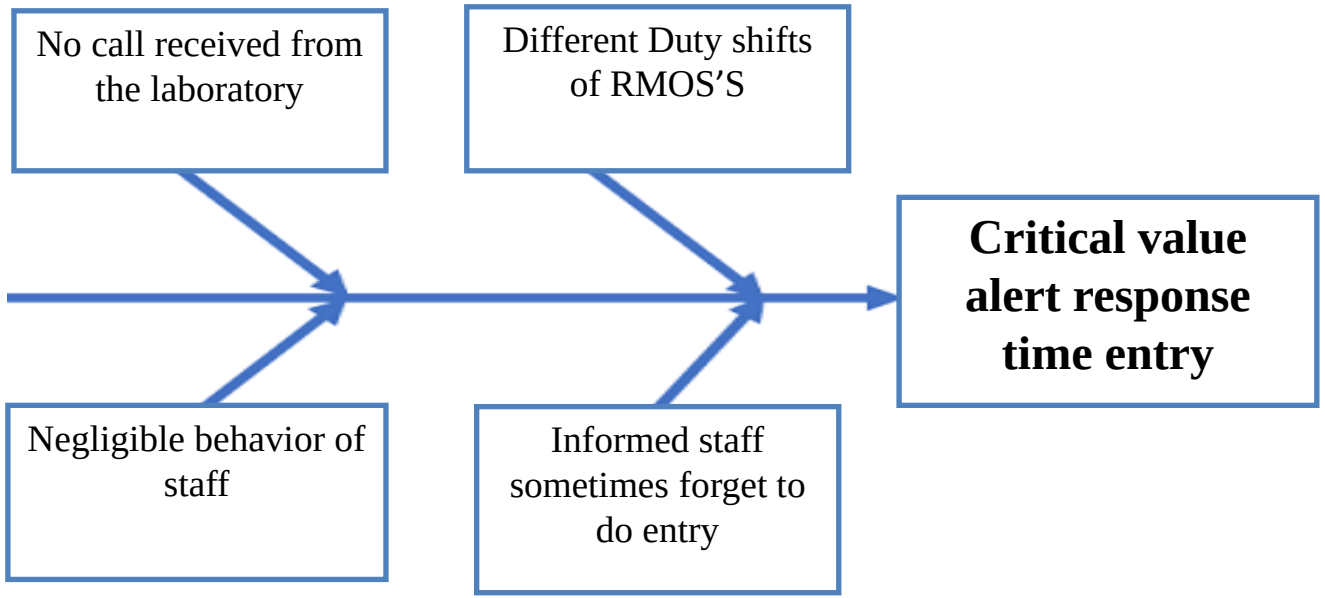
Analysis Tool: MS-Excel

Findings

CAUSES EXPLAINED THROUGH LOCWIN FISH BONE DIAGRAM:

Issues:

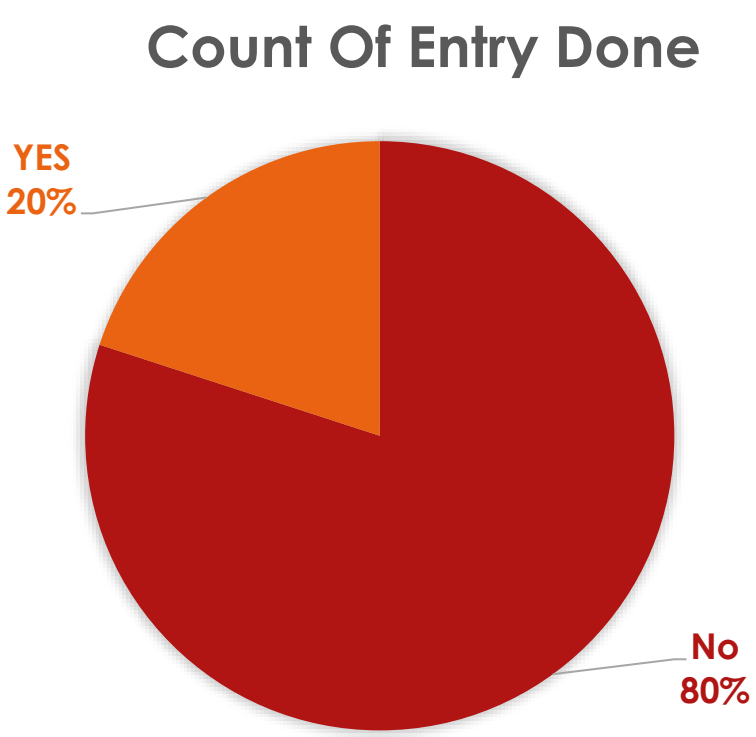
- Communication gap between inter-departments.
- Absence of systematic entry on day to day basis.



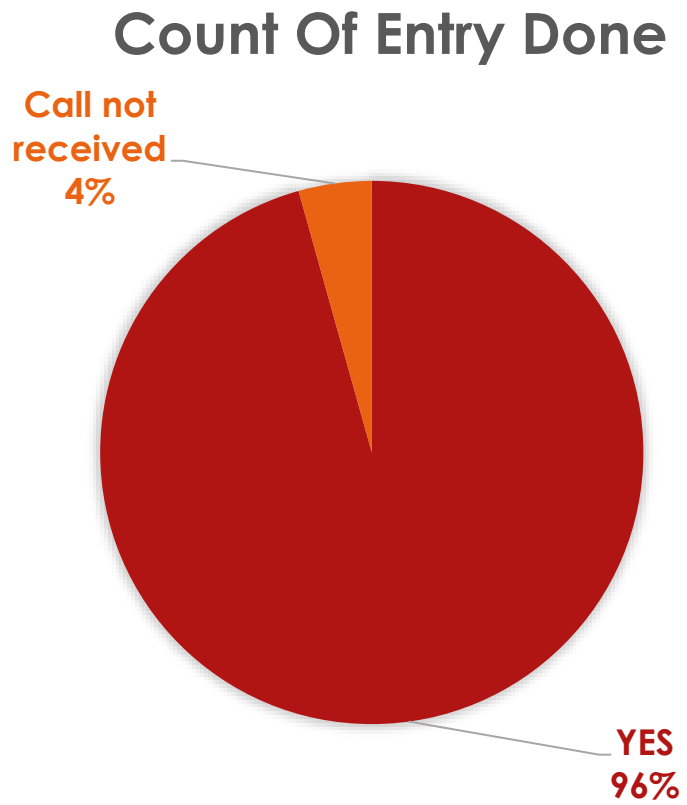
Interventions:

- Systematic entry action plan was developed in the various departments for day to day entry so that neither human error nor systematic error will occur.
- Responsible staff was trained to the updated standards to work to eliminate the discrepancies.
- Necessary actions were taken to improve the work process regarding this problem.

PRE and Post intervention audit comparison

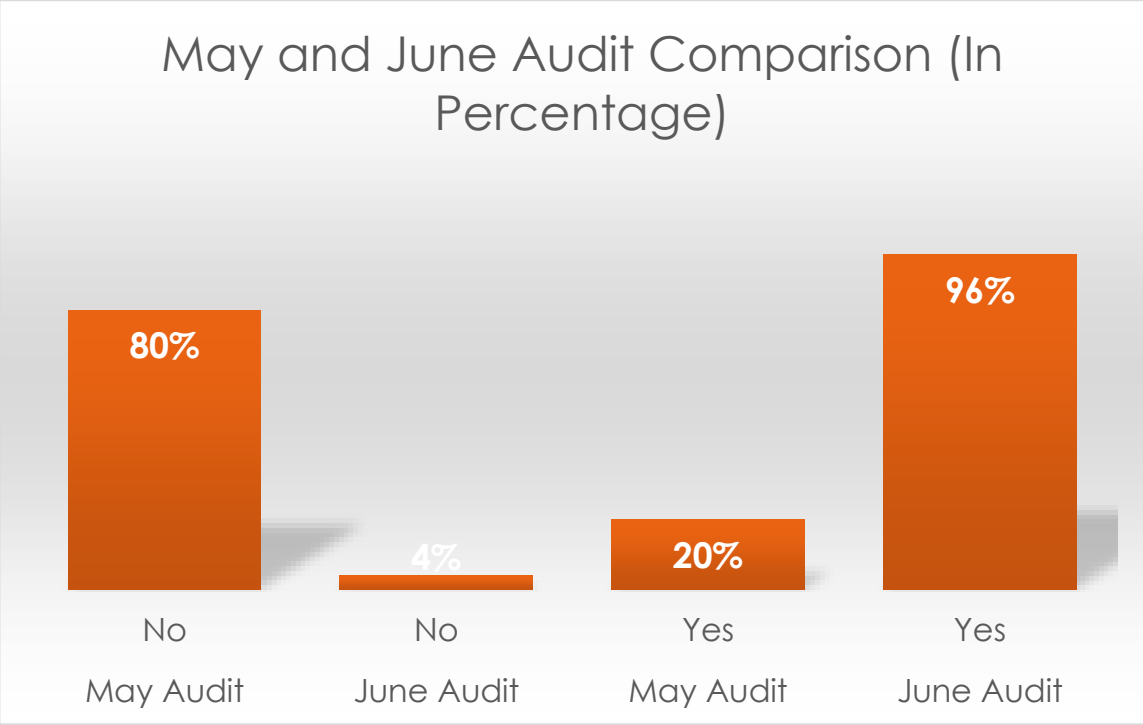


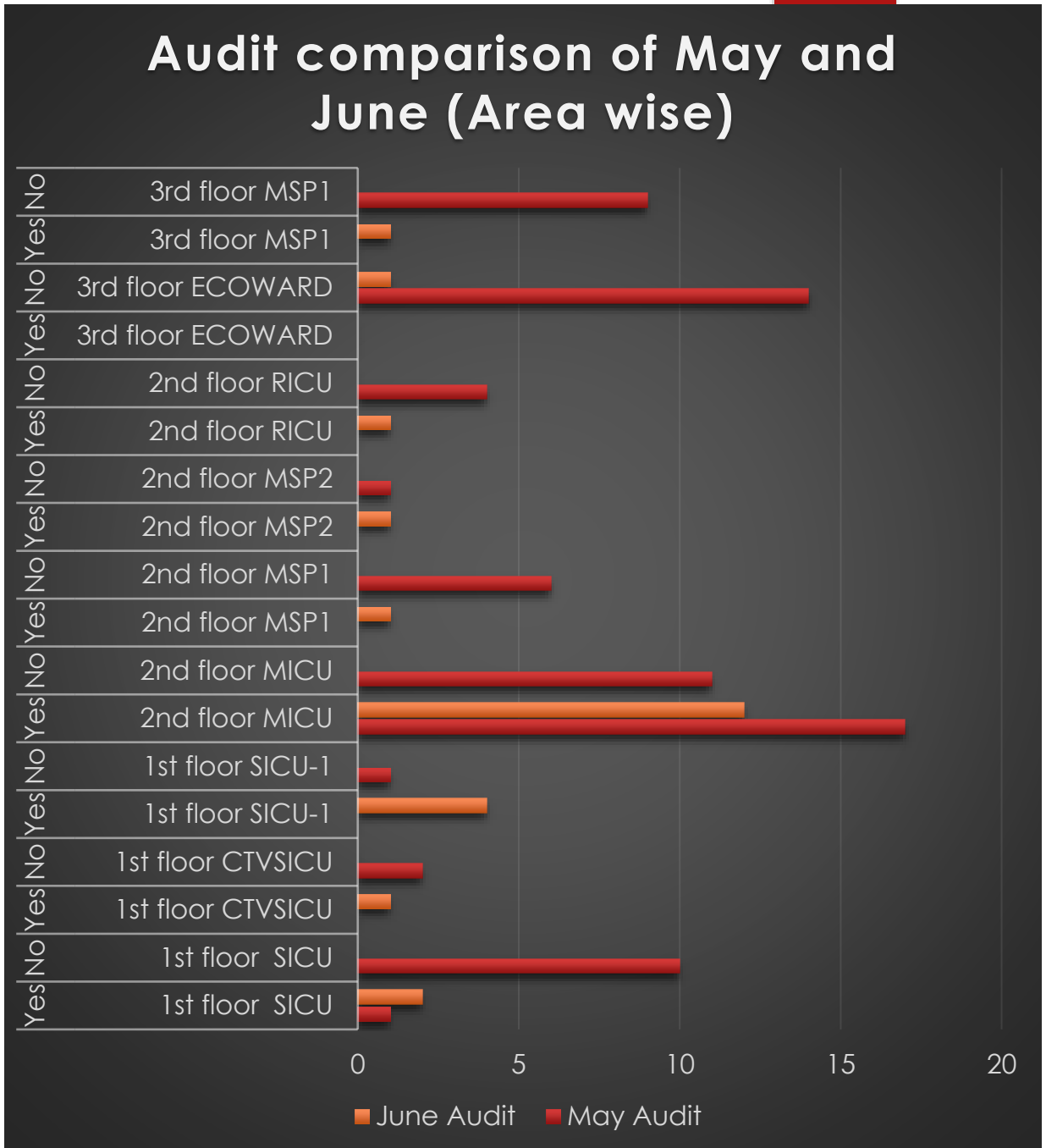
Pre-intervention (May Audit)



Post-intervention (June Audit)

Percentage and Area wise Comparison





Recommendations

- Even though NABH inspections and audits are conducted to maintain the hospital's high standards, critical values should be documented so that they do not cause embarrassment for the organisation. Clinical auditing should be performed on a regular basis.
- The medium for documenting these critical values from the laboratory is telephonic mode, which introduces the possibility of human error. To avoid this, a standard call back procedure should be implemented strictly.
- Once the critical value is reported to the relevant staff member, action should be taken promptly, and follow-up documentation should be completed within 24 hours.
- In the preceding points, emphasis was placed on the documentation portion following any necessary intervention. The reason is simple, as a healthcare provider, one's goal should be to provide the best treatment at affordable cost. Scholars and management students can analyze data and contributing to their best knowledge in respective fields such as management and research.

Conclusion

The audit duration was of May June 2021, the time where the covid second wave was at its peak. Where every hospital was working on its full capacity to provide services and struggling to manage resources most efficiently. The effect of this was inevitable on respective departments of hospitals and their staff. Considering all this audit results came out to be very satisfactory and there were positives outcomes. the only factor that affected ECOWARD was absence of communication with laboratory department which could be the burden of covid, rest is nice and well maintained. We have already highlighted improvements, except ECOWARD all the departments showed significant improvements. Lastly concluding, interventions and findings in the post audit proves that interventions were constructive in nature and positive results (from 20 to 96 percent) were observed. Possibility of adopting this will be helpful in future.

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THANK YOU