

Introduction

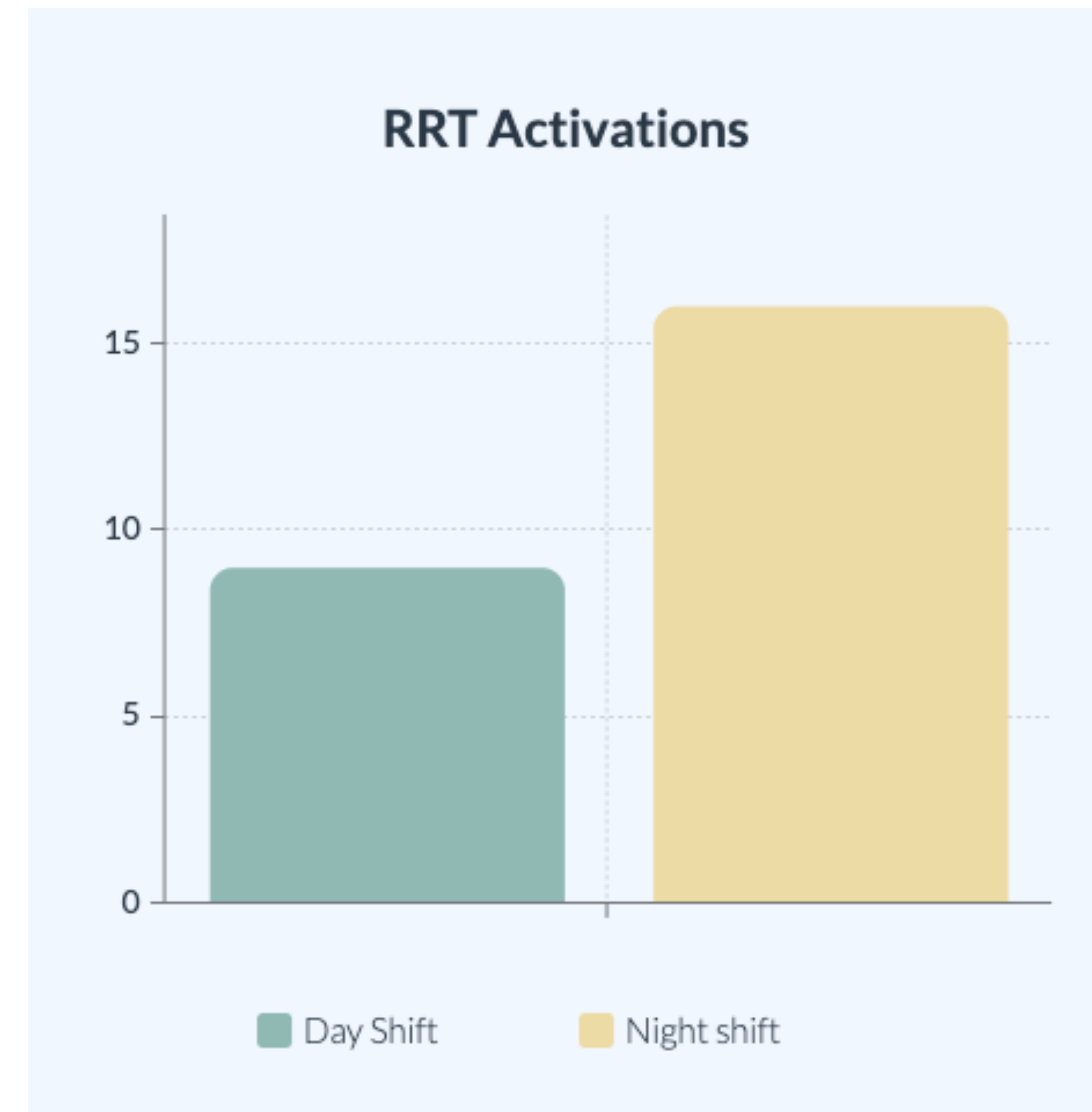
- The Rapid Response Teams (RRTs) is an emergency team response to hospitalized in-patients who are deteriorating and require additional resources to stabilize.

Background and Significance

- RRTs prevent inpatient adverse outcomes, cardiac arrest, and death among hospitalized in-patients.
- Their goal is to react promptly to clinical signs like hypotension, tachycardia, altered mental status, sepsis, respiratory failure, and cardiac failure.
- Delays in call recognition and escalation were reported in 62% of in-patients who experienced cardiac arrest and presented with signs of physiologic instability for 6 or more hours before the arrest (Lyons et al., 2018).
- Due to the variability in operation methods within RRTs and without standardized guidelines, there is limited evidence on how to evaluate RRTs based on activating nurses' perceptions of RRT performance and call recognition among acutely deteriorating inpatients (Walker et al., 2020).

Project Aims

- Examine activating nurses' perceptions about the performance of the rapid response team (RRT),
- identify factors leading to call recognition at a local community hospital.



Methodology

- An evaluation approach was adopted for this QI project.
- The two outcomes of interest were:
 - Perceptions of the activating nurses about the performance of the RRT
 - Identifying factors leading to delays in early identification from the activating nurses' perspective.

Data Analysis

- Quantitative data were summarized using Excel, whereas qualitative comments were reviewed and categorized using thematic analysis.

Sample/Setting

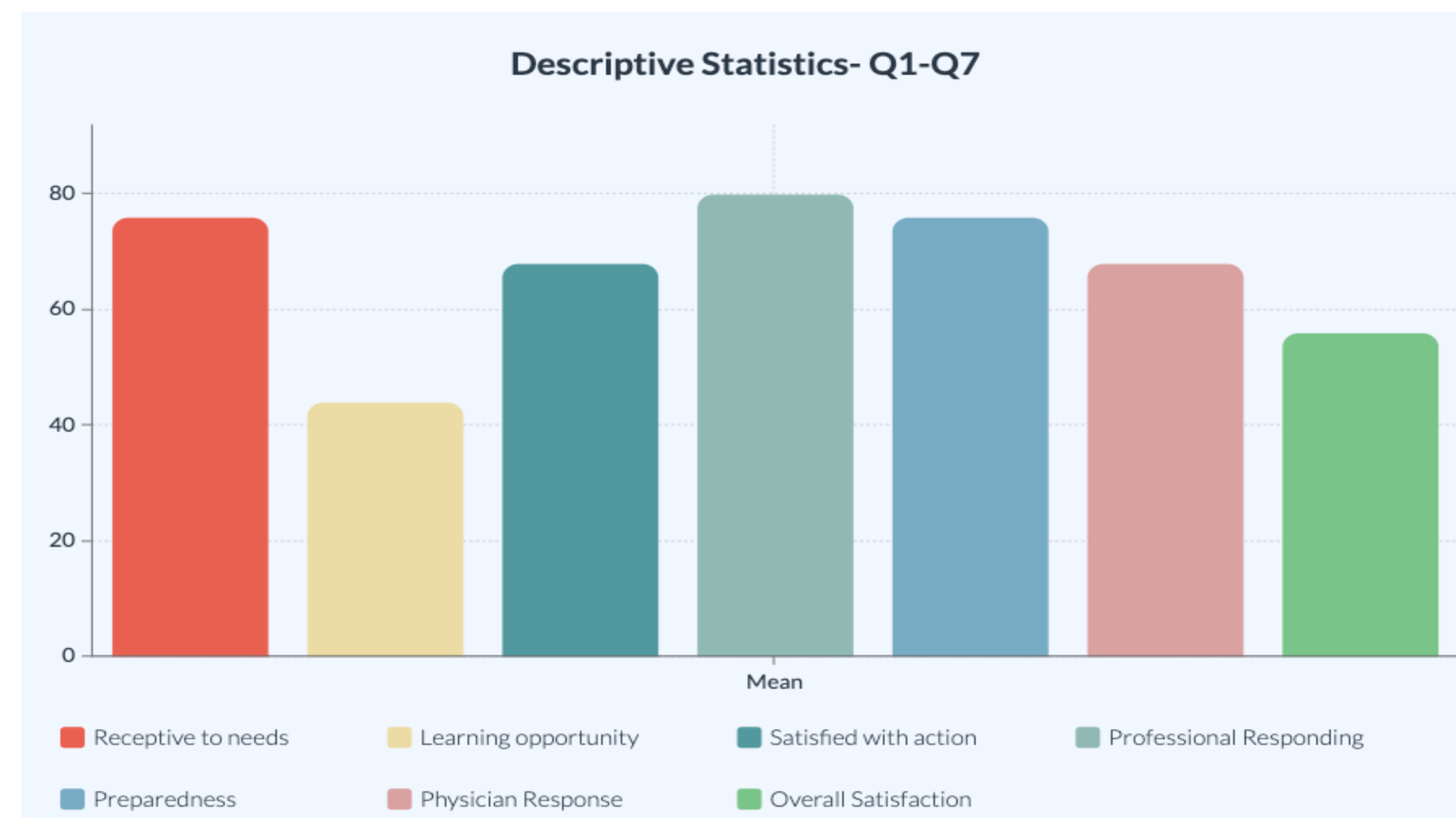
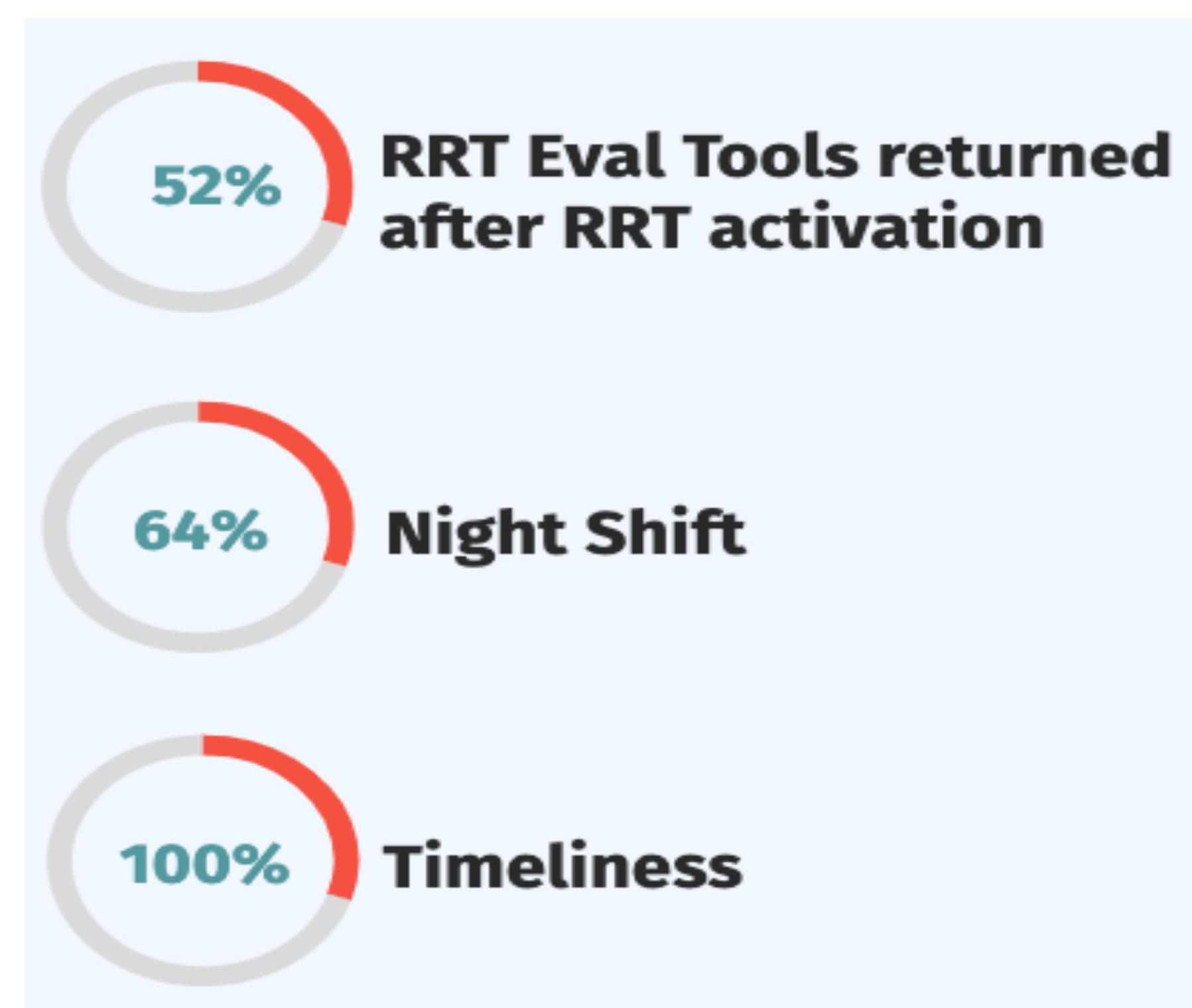
- This project was conducted at a 260-bed non-profit community medical center located in northern New Jersey, with a RRT already established.
- Activating telemetry nurses on a non-critical care unit with the highest code blue events and RRT activations in 2020 were the primary population invited to participate in this project.
- Data were collected from RRT activations over six weeks during Fall of 2021.
- The inpatients typically receiving RRT activations were admitted adult patients requiring telemetry monitoring.

Intervention

- A RRT evaluation tool, recommended by the IHI, was used to explore activating nurses' perceptions on RRT performance and factors related to call recognition among activating nurses.
- The tool consists of 15 items and is a QI resource that assesses aspects of RRT performance and call recognition.
- A Likert type 1-5 scale for nine items were used to measure activating nurses' perception about the RRT's performance.
- Other items are open-ended questions that allow nurses to add comments about what went wrong, what went well and a brief description of the call.
- Themes emerged, leading to the development of recommendations.

Results

- 22 participant nurses completed 25 RRT evaluation tools out of 48 RRT activations over 6 weeks.
- No statistical significance was found between shift and reason for calling.
- Descriptive data analysis showed that night shift ($n = 16$; 64%) had a more RRT activations when compared to day shift ($n = 9$, 36%).
- RRT activations related to the patient's cardiac status ($n = 14$, 56%) complaints were the highest reason for calling, whereas "other" ($n = 1$, 4%) complaints had the least.
- Activating nurses indicated that they were notified ($n=14$, 56%) of the deteriorating inpatient outcomes majority of the RRT activations.
- Timelines of the RRT were always less than 5 minutes ($n=25$, 100%) of the activation being made.
- Activating nurses were most satisfied with the professional response of RRT to the activation ($n=20$, 80%).
- Most did not find the RRT activation a learning opportunity for them ($n = 11$, 44%).
- Qualitative thematic analysis uncovered four themes based on activating nurses' perception on call recognition and RRT performance on a non-critical care unit:
 - policy
 - RRT interventions
 - communication
 - delays in treatment



Discussion and Recommendations

- Evaluation is beneficial to understanding inconsistencies in patient outcomes and guide future initiatives to improve patient outcomes.
- Participant nurses reported that RRTs increased their workload. It is recommended that a teamwork approach should be used, and shared patient responsibilities could alleviate the nurses' workload.
- Response rate was low and could possibly be related to increased workload.
- Activating nurses did not find the RRT process a learning opportunity and overall, they are not satisfied with the current process. This was a missed opportunity and could be addressed by introducing new policy.
- Communication between activating nurses and RRTs needs improvement. Care plans should be clear and RRT members should be respectful of all members. Activating nurses should feel empowered when adverse events are averted by early recognition and activation of the RRT. Teamwork approach could be implemented.
- RRTs with other competing responsibilities have limited time to engage with activating nurses. Dedicated RRT could be beneficial.

