Did we try THAT yet? Empowering the Medical-Surgical Team to Prioritize Interventions When Considering Rapid Response Activation

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INTRODUCTION

- Rapid responses teams (RRTs) decrease mortality and morbidity in the hospital setting by evaluating and implementing care for deteriorating patients(1). Through education, clinicians are empowered to initiate a rapid response (RR) appropriately when they are concerned about a patient (2,3). Implementing care algorithms and RR education for bedside clinicians and the RRT leads to more effective RRT activations (3,4).

CURRENT STATE

- At this 180-bed pediatric acute care facility, RRs for respiratory patients are frequently initiated before medical-surgical (MS) appropriate interventions are completed.
- Ineffective communication between the RRT and MS staff anecdotally causes hesitation by MS staff to call RRs.

AIM

- The purpose of this quality improvement project was to:
  - Describe the RRT's and MS staffs' perceptions of RRs, including criteria for calling, communication, roles, and barriers.
  - Implement algorithms and education to improve the MS team's response to decompensating respiratory patients.
  - Improve interactions between RRT and MS staff.
- **Outcome measures:**
  - The primary outcome measure was improvement in understanding and communication scores.
  - A secondary outcome measure was the decease in the number of reported barriers.

METHODS

- The project followed a pre-test and post-test design.
- **Pre-survey:** Surveys were sent to nurses (RNs), providers, and respiratory therapists (RTs) from the RRT and MS staff.
  - Demographic information:
    - Roles
    - Years of Experience
    - Number of RRs in the last 3 months
  - Respondents were asked to rate:
    - Understanding of the activation criteria, documentation, and roles during RRs
    - Perception of communication, respect, and attitudes
    - Agreement in outcome among team members at cessation of RR
  - MS staff were asked knowledge-based questions on floor-appropriate respiratory interventions, whereas RRT were ask their perception of MS competency with the same interventions.
- **Educational Intervention**
  - Education on a physician toolbox and care algorithms for decompensating bronchiolitis and asthmatic patients.
  - Skills sessions for MS RNs
  - RR simulations between the RRT and MS staff.
- **Post-Survey:** Two months after the educational interventions, staff were re-surveyed.

Image 1

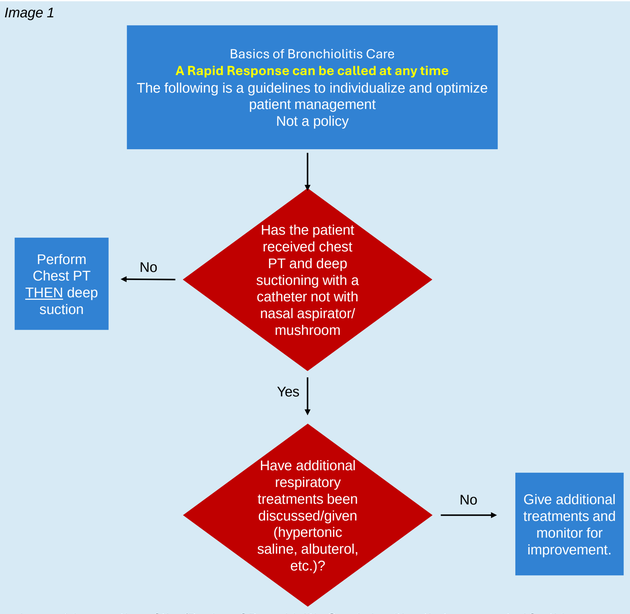
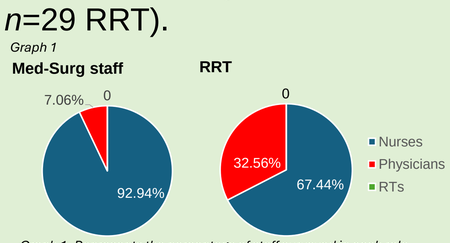


Image 1 is a section of the 'Basics of Bronchiolitis Care' algorithm that was created for this project to promote critical thinking when MS staff responds to decompensating bronchiolitis patients.

RESULTS

- Due to low response rates of providers and RTs, data analysis was conducted on 108 RN subjects (*n*=79 MS, *n*=29 RRT).
- **Barrier Assessment**
  - RR themes were assessed by independent evaluators to ensure interrater reliability. MS RNs' perceived barriers to calling RR included:
    - Ineffective Team Dynamics
    - Disagreement in Necessity of RR
    - Fear of Calling or Judgement

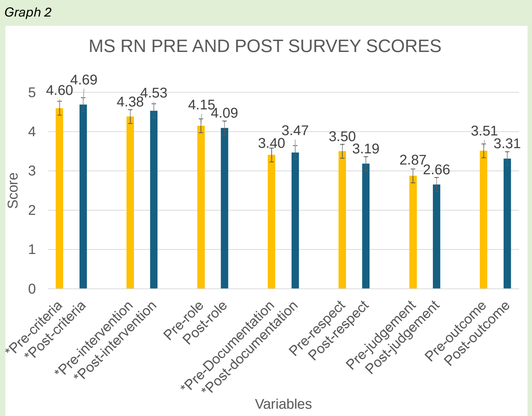
Graph 1



Graph 1. Represents the percentage of staff surveyed in each role (N=128).

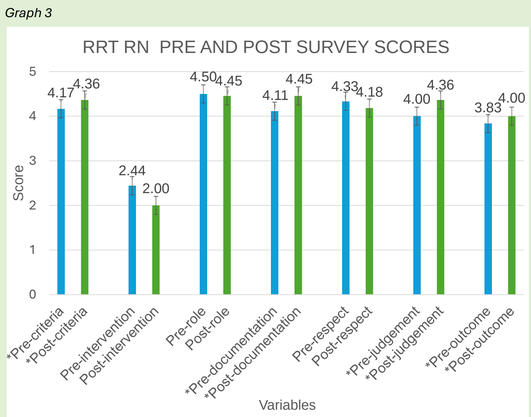
- **Knowledge Assessment**
  - MS nurses correctly identified seven of eight MS appropriate interventions at a higher percentage in the post-intervention survey.
- **Survey Scores**
  - Two-tailed *t*-tests were performed. There was no statistically significant change in survey scores from pre- to post-survey ($p \geq 0.05$).
  - There was an increase in mean scores for criteria to call and documentation for both groups.

Graph 2



Graphs 2. Represents the pre- and post- survey scores for MS nurses.
** indicates an increase in mean score.*

Graph 3



Graphs 3. Represents the pre- and post- survey scores for RRT nurses.
** indicates an increase in mean score.*

CONCLUSIONS

- **Outcome measures**
  - The primary outcome measure was partially met.
    - While mean score for criteria to call and documentation was increased in both groups, the mean score for understanding of role and respect decreased. No statistically significant findings.
  - A secondary outcome measure was met.
    - Respondents indicated fewer barriers in the post-survey.
    - Frequently, RNs indicated that they felt empowered to call a RR even when barriers were present.
- **Limitations**
  - Staff availability for unannounced RR simulations.
  - Limited survey participation by Providers and RTs.
  - Small sample size impacted data analysis.

NEXT STEPS

- **Education**
  - Targeted educational programs to increase knowledge of RR roles.
  - Team-building and communication initiatives to improve perception of respectful interactions.
- **Simulations**
  - Implement interdisciplinary, unannounced RR Simulations quarterly.
  - Expand simulations to include non-respiratory diagnoses.
- **Monitoring of Progress**
  - Real-time RR Feedback forms.

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