

Reducing “Failure to Rescue” Events with a Synergy Driven Nursing Bundle

Sara Kleinsteuber, BSN-RN, CCRN
Taylor Jones Swing, DNP, RN, CPNP-BC
Lynn Marie Elizabeth Bullock, DNP, RN, NEA-BC

Purpose

In a four-month chart review of 273 inpatients seen by the Rapid Response Team (RRT) in 2021, up to 20% of patients were admitted for less than 48 hours before emergent transfer to an ICU.

- Patients were not identified by the hospital's early warning software and were considered “failure to rescue.”
- Current processes to identify patients at risk for decompensation do not acknowledge increased nursing workload.

Does the use of a patient acuity tool that incorporates nursing workload decrease the number of failure to rescue events seen by RRT on a 21-bed medical/surgical/observation floor?

Objectives

- 10% reduction of RRT activations with ICU transfer for patients admitted < 48 hours.
- Full compliance from nursing staff in implementing the ADT-SMAT tool
- Increased communication between the hospital RRT and floor staff with a patient acuity tool incorporating nursing workload and assessment
- Implementation of a nursing tool that incorporates bedside workload into a patient's acuity score within the hospital's early warning system.

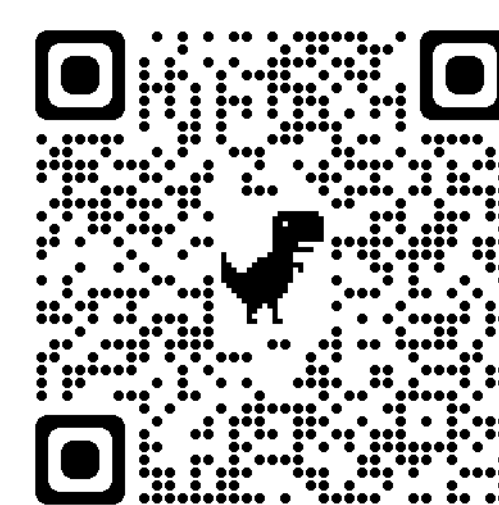
Development

A ten-year literature review identified **no current standard of care with proactive rounding and Rapid Response.**

A 2020 study using the AACN Synergy Model matched patient characteristics into an acuity tool for patient placement (Figure 1).

The Admission Discharge Transfer Synergy Model Acuity Tool (ADT-SMAT) showed high reliability when implemented among four different hospitals with consistent scoring (Byrum et al., 2020)

ADT-SMAT tool



Methods

Participants:

Inpatients admitted to a 21-bed med-surg/observation floor between 9/19/22 to 12/19/22 assessed by the floor's charge staff (N=340)

Intervention:

- Charge nurse assessment of patients admitted for every 12 hours up to a 48 hours LOS using the ADT-SMAT tool.
- Communication to RRT of patients scoring > 11 points with ADT-SMAT over secure messaging
- Remote monitoring by the RRT using the hospital's current early warning system software.

Implementation Strategies:

Remote and in-person education, multimedia communication, use of unit champions, incentives.

Data Collection:

ADT-SMAT scores were entered by charge staff over online Research Electronic Data Capture (REDCap) software. Interventions documented by RRT were recorded in the electronic health record.

Figures

Figure 1 Longitudinal Count of ADT-SMAT Scores

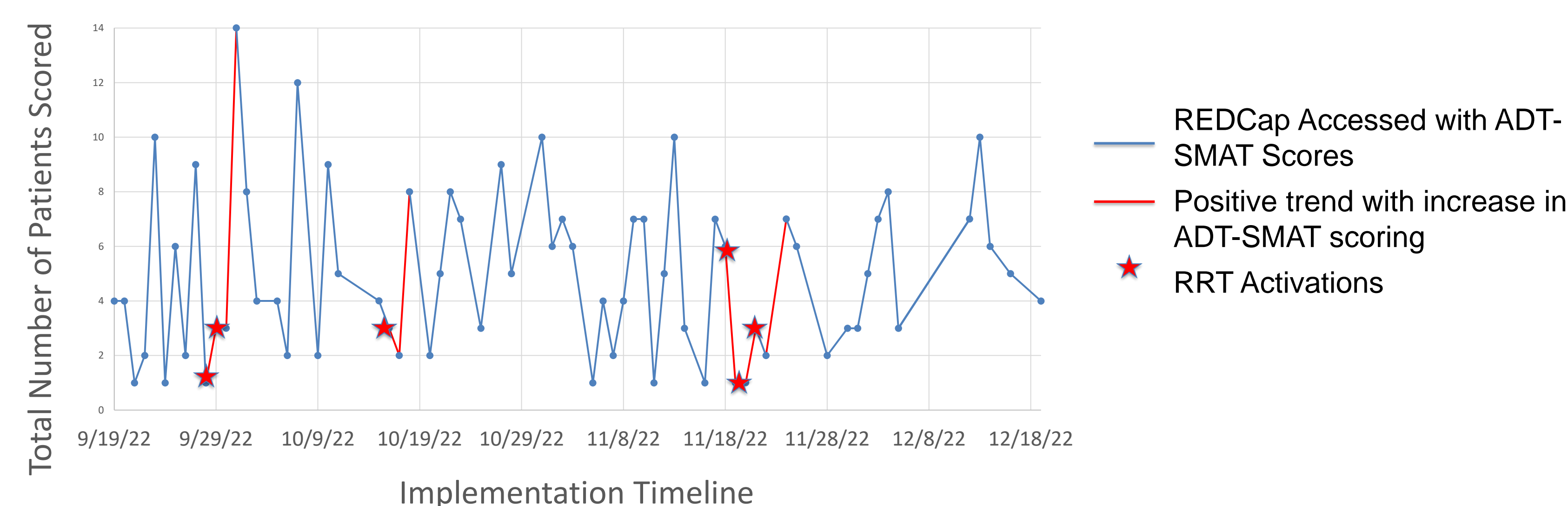
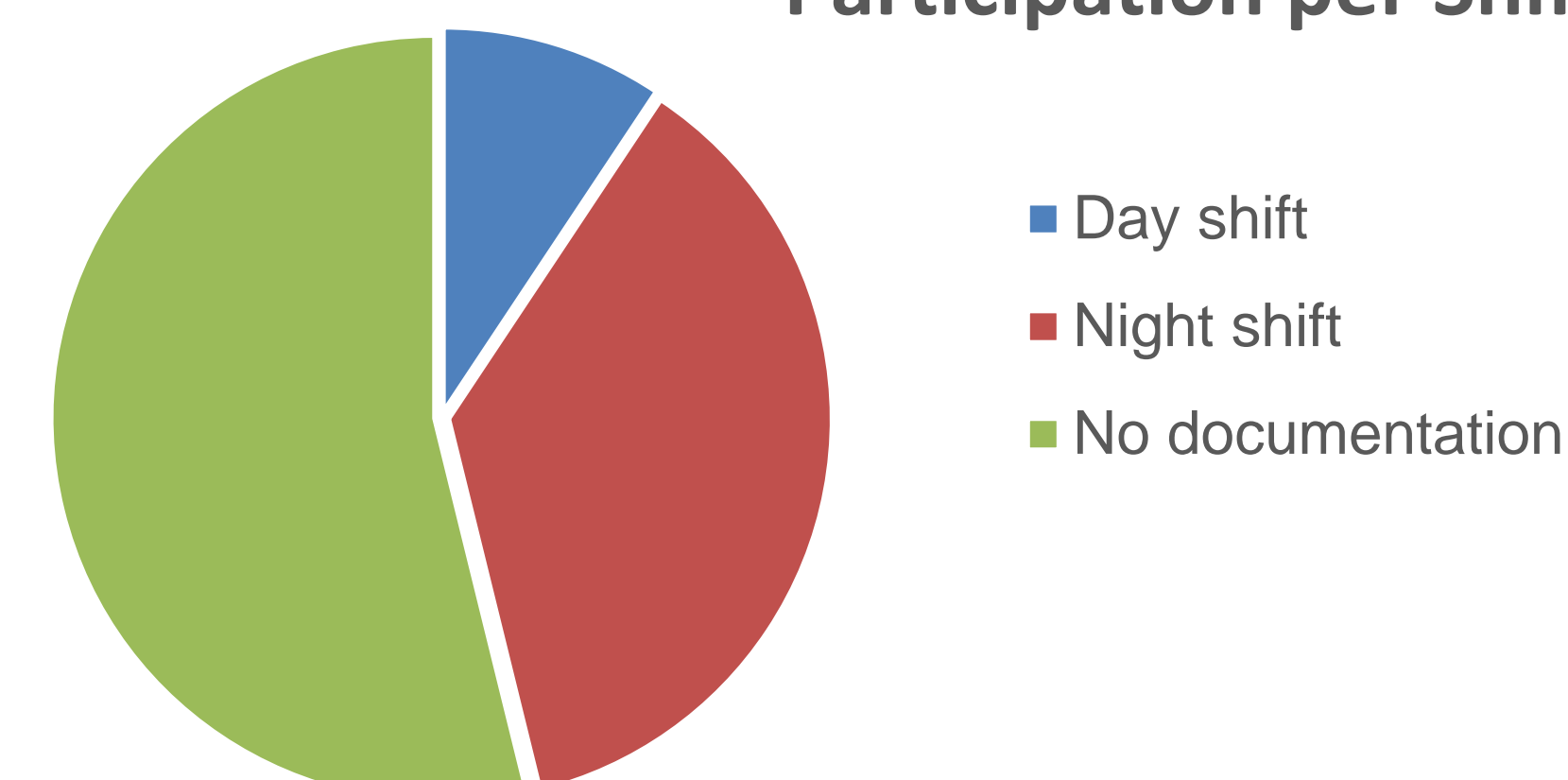


Figure 2

Data Inclusion: REDCap Participation per Shift



Results

Six RRT activations occurred to between September-December of 2022. Four were identified as high-risk (score >11 points) with recommended upgrade. This represents a 33% decrease of failure to rescue events.

- ADT-SMAT was accessed approximately 50% of the 182 shifts assessed (Figure 2)
- Patient assessment with the tool improved after RRT activation in four separate events marked by red trend lines (Figure 1)
- Reliability among charge nurse staff using the ADT-SMAT tool reflected the 2020 Byrum study with a Cronbach's alpha of 0.990 (p< 0.0001).

Barriers

Difficulty accessing REDCap online for data entry, charge nurses with patients, short staffing, changes in management.

Facilitators

Face to face communication, weekly reports, unit champions, use of secure messaging software.

Limitations

Pilot study without documentation in the hospital's EHR, short staffing.

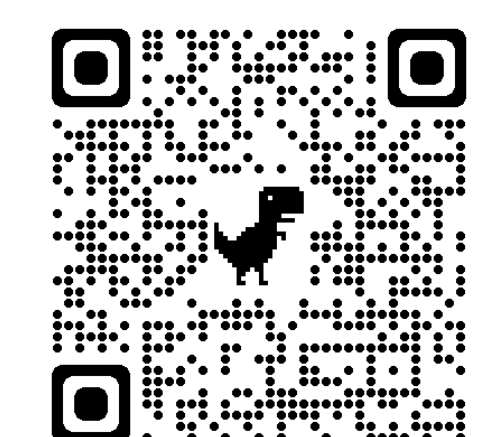
Conclusions

Current early warning systems in the hospital do not reflect nursing interventions that impact patient complexity.

The Synergy Model ADT-SMAT is effective at predicting decompensation on a medical surgical observation floor within the medical center. This tool improved communication between RRT and floor staff and a reduction in “failure to rescue,” events.

References

Scan here for a full reference list



Acknowledgements

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