

# Missed Opportunities: Reactive vs. Proactive Consultation Rates for Delirium in a Medical Intensive Care Unit – Measuring Potential Impact of a Population-Based Multicomponent Model for Early Intervention to Optimize Brain Health

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## Introduction

- A proactive approach to psychiatric consultation features population-wide screening with validated tools to identify psychiatric issues and provide early intervention.
- When compared to traditional, reactive models of psychiatric consultation, the proactive model improved clinical outcomes for patients in the general medical setting<sup>1</sup> and medical intensive care setting<sup>2</sup> and was cost-effective<sup>3</sup> in previous studies.
- The reactive model has been associated with lower rates of consultation compared to a proactive model, with differences of 18.1% in the medical intensive care unit (ICU)<sup>2</sup> and 21.3% across a medical center.<sup>1</sup>
- Delirium, a common neuropsychiatric condition among critically ill patients, significantly increases morbidity and mortality<sup>4</sup> yet often remains under-recognized.<sup>5</sup>

## Objectives

- This study aimed to investigate differences in consult volume and encounter type between a proactive psychiatric consult service and the traditional, reactive approach in the Medical Respiratory Intensive Care Unit (MRICU) at Virginia Commonwealth University (VCU) Medical Center.

## Methods

- Data for the critical care psychiatry consult service was prospectively obtained over five weeks.
- In the first three weeks, all three MRICU teams could opt in to receive proactive psychiatric consultation.
- In the last two weeks, this model was offered to one team per week, with the other teams receiving only reactive consults.
- The total number of proactive and reactive days of service provision were calculated by multiplying the number of teams receiving a type of consult (proactive vs. reactive) by the total number of days of service provision.
- New consults and reassessments were collectively tabulated as patient encounters.
- Objective screening criteria used to identify patients at risk for delirium included positive Confusion Assessment Method for the ICU (CAM-ICU) score or evidence of altered mental status (AMS) on the prior day's documentation.

On reactive service days, 36% (n=65) of admitted patients would have met criteria for an encounter with the proactive psychiatric consult service, though none of these patients received any psychiatric consultation.

Figure 1. Differences in encounter volume between the proactive days of service provision and the reactive days of service provision for the Critical Care Psychiatry Service in the MRICU

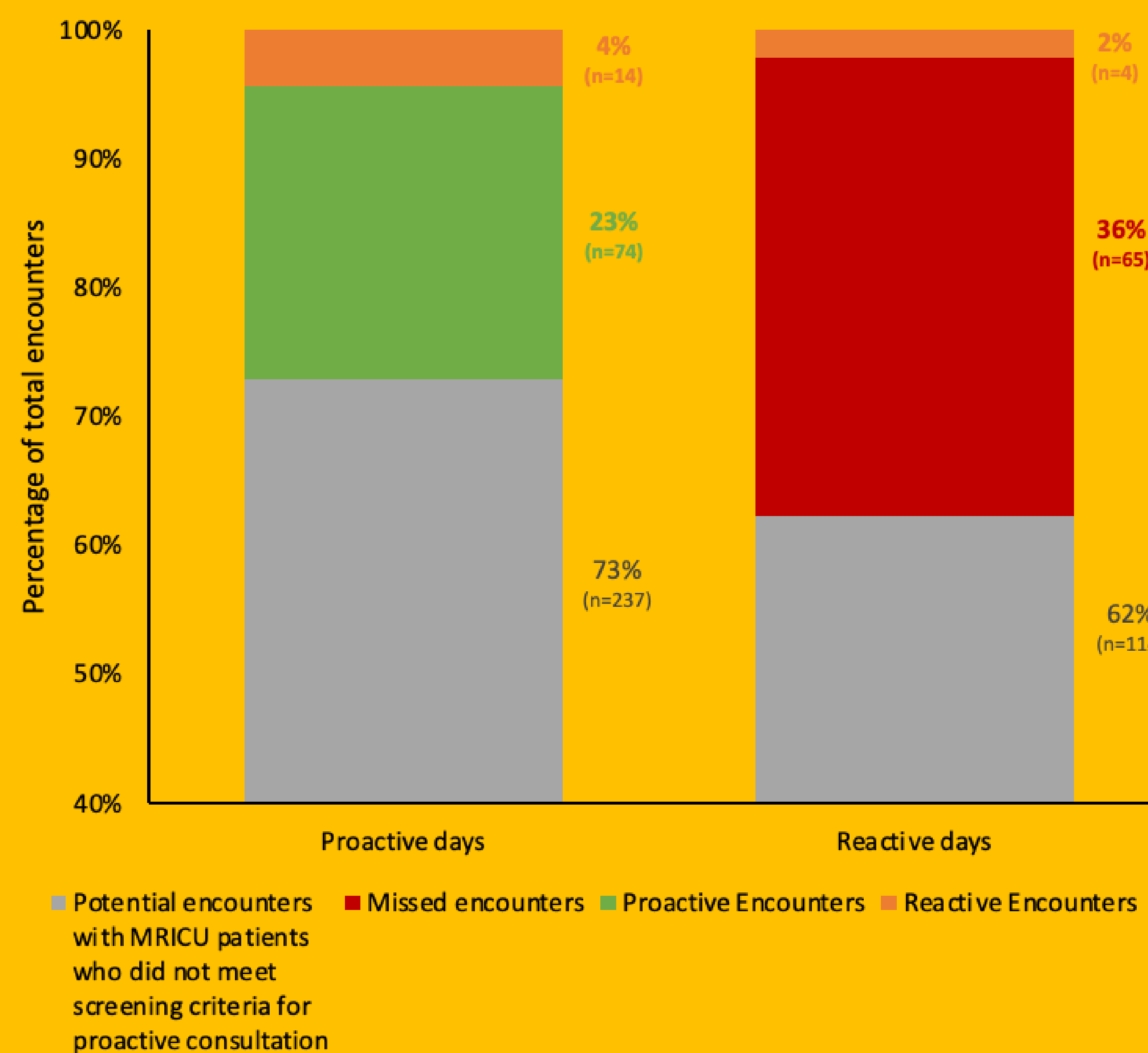
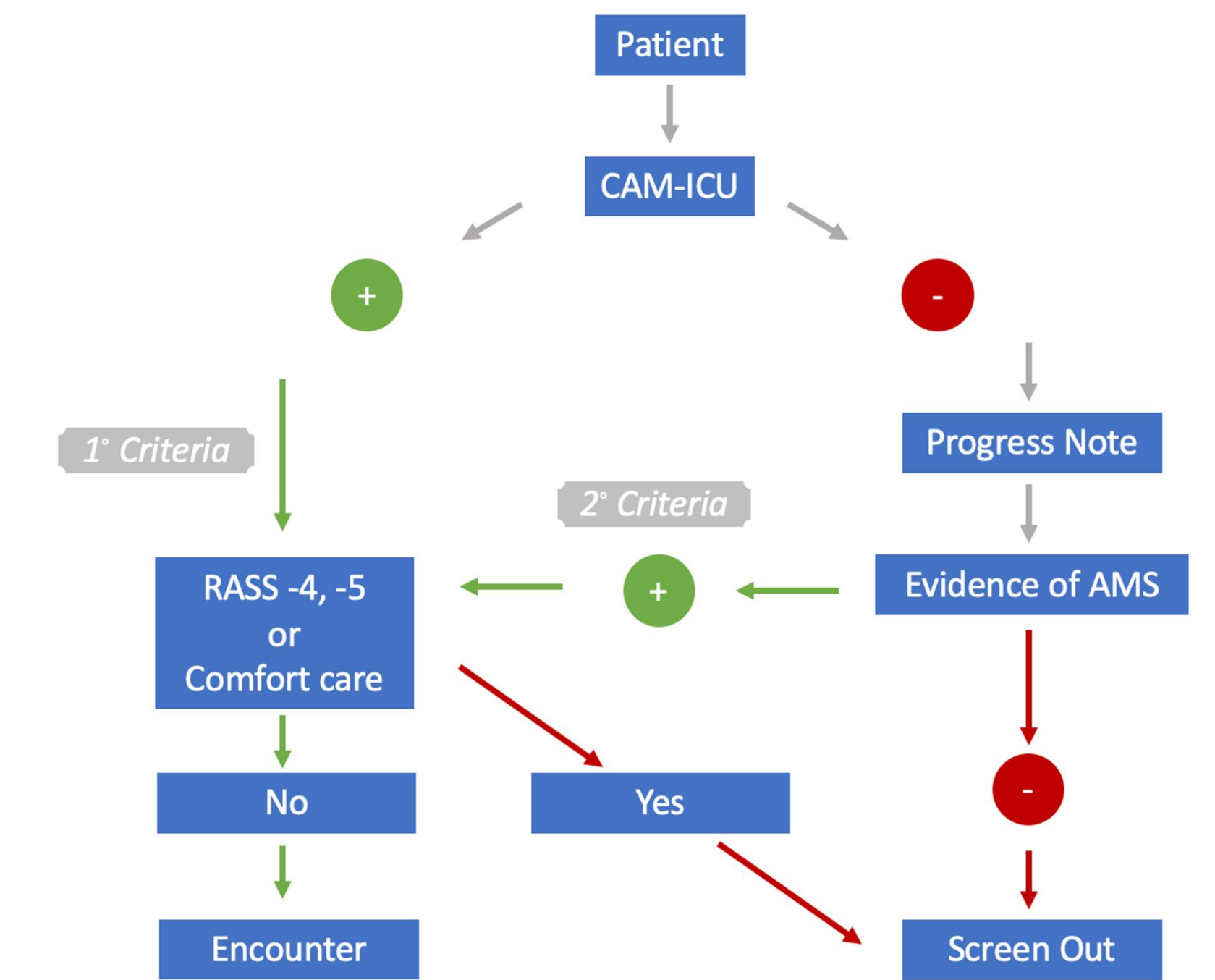


Figure 2. Algorithm depicting the screening criteria used to identify patients at risk for delirium



## Results

- On proactive days of service provision, the average rate of encounters was 27% (n=88), while on reactive days the average rate was 2% (n=4).
- The percentage of new consults was 12% (n=38) on proactive service days versus 1% (n=2) on reactive service days.
- On proactive service days, 0.3% (n=1) of new consults were reactively initiated for delirium, and 0.6% (n=2) of new consults were reactively initiated for a concern other than delirium, with 3% (n=11) of encounters were re-assessments for reactive consults.
- Ultimately, 4% (n=14) of encounters on proactive service days were due to reactive consults.
- In contrast, on reactive service days, 36% (n=65) of admitted patients would have met screening criteria for an encounter with the critical care psychiatry consult service, though none of these patients received any psychiatric consultation.

## Conclusion

- This study demonstrated opportunities for increased psychiatric engagement with critically ill patients with delirium by using proactive consultation.
- Additionally, it highlighted potential “missed opportunities” for engagement when utilizing the traditional, reactive model of care.
- Limitations of this study include variations in CAM-ICU and AMS documentation and varying consult preferences among teams.
- Future studies can evaluate the utilization of proactive psychiatric consultation across ICU settings and its value for critically ill patients with delirium.

## References

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