

A Retrospective Chart Review of Rapid Response and Code Blue Events on Adult Inpatient Psychiatry Units with Emergency Response Team Collaboration and Intervention

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Introduction

Patients with serious mental illness have been shown to have excess medical mortality and morbidity (1). These medical comorbidities continue upon psychiatric admission with one psychiatric hospital finding 90% of patient admitted to have at least one medical comorbidity and 50% taking at least one nonpsychiatric medication. In this study, 2.1% of patients need to interrupt their psychiatric hospitalization for medical hospitalization over a 2.5-year span (2). Another 44-bed adult psychiatric hospital noted 72 rapid responses in approximately 8 months (3). Otherwise, literature on the management of acute medical issues and management on inpatient adult psychiatry units are limited.

Methods

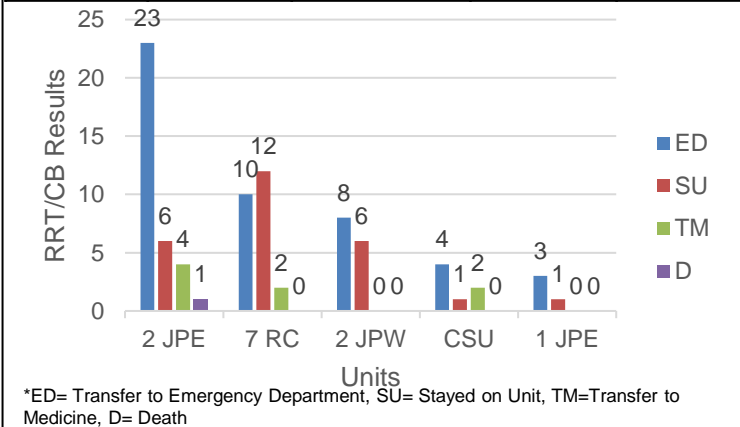
The electronic medical record was queried for all code blue (CB) and rapid response (RRT) events that occurred on the inpatient adult crisis stabilization unit (CSU), geriatric psychiatric unit (2 JPE), adult mood disorder unit (7 RC), adult psychosis unit (2 JPW), and adult intensive care psychiatry unit (1 JPE) for two academic years (07/01/2023 – 06/30/2025). These events were compared and checked against records kept by our Emergency Response Team. These units included a total of 70 beds. All patient charts and events were reviewed and data collected.

References

- Miller, B. J., Paschall III, C. B., & Svendsen, D. P. (2008). Mortality and medical comorbidity among patients with serious mental illness. *Focus*, 6(2), 239-245.
- Leung, M. W., Xiong, G. L., Leamon, M. H., McCarron, R. M., & Hales, R. E. (2010). General-medical hospital admissions from a public inpatient psychiatric health facility: a review of medical complications over 30 months. *Psychosomatics*, 51(6), 498-502.
- Nguyen, L., Sharma, B., & Newton, R. (2021). Rapid response calls in inpatient psychiatric units. *Australasian Psychiatry*, 29(3), 309-314.

Results

Units	Hospital Days [Median (Mean)]	RRT/CB [Unique patients]	TM within 7 days after RRT/CB	30-day mortality after RRT/CB
2 JPE	110 (180)	34 (41%) [20]	17 (50%)	6 (18%)
7 RC	13 (70)	24 (29%) [23]	8 (33%)	0
2 JPW	79.5 (83)	14 (17%) [12]	8 (57%)	1 (7%)
CSU	2 (2)	7 (8%) [7]	5 (71%)	0
1 JPE	206 (242)	4 (5%) [2]	1 (25%)	0
Total	66 (118)	83 [56]	39 (47%)	7 (8%)



Discussion

The inpatient adult psychiatry units had 1 RRT/CB every 9 day at our study institution. The Emergency Response Team (ERT) service was identified as a resource that could help provide acute medical stabilization outside of a CB or RRT and triage from the adult inpatient psychiatry unit to higher levels of care as needed. This was in comparison to previous heterogenous methods of doing so. The ERT service was highlighted in the Psychiatry Department via email, provided a noon introductory lecture to psychiatry residents, and was incorporated to afterhours resident triage guidelines in March 2026.

At the conclusion of this academic year and into the next, we plan to follow RRTs and CBs to see if there is a reduction. Currently, we are working to obtain numbers for ERT service proactive rounding on inpatient adult psychiatry units to compare after intervention. Further analysis will be looking at time of day of events and correlation of deterioration index or National Early Warning System scoring to determine utility on these units.

Conclusions

Patients with serious mental illness usually have medical comorbidities that predispose them to excess medical mortality and morbidity. These conditions continue during inpatient psychiatric admission and can result in the development of medical emergencies as exemplified by our study hospital. Thus, opportunities exist for collaboration to infuse more medical resources into our adult psychiatry units and develop more extensive protocol surrounding triage.