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Reducing violence on the inpatient psychiatric unit using the BARS protocol one hour prior to shift change

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Background

Change of shift is known to be an anxiety producing time for patients which can result in increased episodes of violence. Review of the literature on studies regarding violent prevention and management revealed one study that specifically covered the use of the BARS (Behavioral Activity Rating Scale) protocol Swift et. al. (2001). This article discussed the use of BARS in the emergency room setting to assess agitation and predict violence with significant efficacy and reliability ($p < .001$). The authors' preliminary assessment compared BARS interventions and violent events from April 1 – May 13, 2015 with data from specifically timed pre-shift change BARS assessments from April 1-May 13, 2016. While this work showed a potential for decreased violent events including fewer assaults and code grays, there was not enough data to achieve a statistical significance.

Purpose

In an adult psychiatric unit, does assessing behavioral activity and intervening as indicated by unit BARS protocol one hour prior to shift changes result in decreased episodes of violence as evidenced by decreased code grays (behavioral emergencies), assaults and seclusion or restraint episodes within a two hour period following shift change.

BARS assessment protects first hour after shift change

	2015	2016	2017
Total CG	31	52	48
In 2 hours	10	12	21
% hour 1	10%	12%	10%
% hour 2	23%	12%	33%

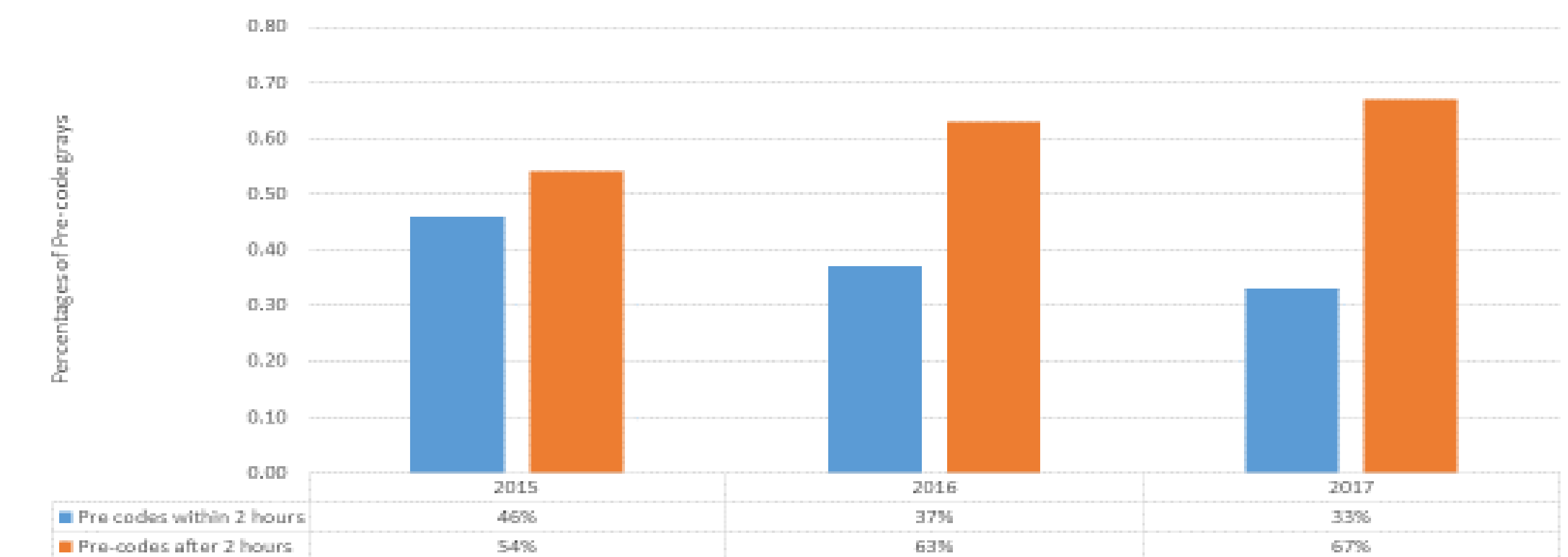
Methods

Investigators reviewed records of all patients assigned to the BARS protocol. Subjects included were patients in an adult inpatient psychiatric unit at Providence St. Vincent Medical Center, who were identified as violence risk patients and had a BARS protocol order.

The BARS scoring is as follows: **1.** Difficult or unable to rouse, **2.** Asleep but responds normally to verbal or physical contact, **3.** Drowsy, appears sedated, **4.** Quiet and awake (normal level of activity), **5.** Signs of overt (physical or verbal) activity, calms down with instructions, **6.** Extremely or continuously active, not requiring restraint or seclusion, **7. Violent, requires restraint or seclusion.** Patients were assessed and scored using the BARS protocol a minimum of six times per day, timed at 1000, 1400, 1800, 2200, 0200, and 0600. Patients scoring a 5 or higher on the BARS assessment were given as needed medication and were reassessed in one hour. Once the patient was scored a 4 or lower for four consecutive hours, the patient was returned to standard BARS monitoring. For extreme violence patients, enhanced BARS with more frequent assessments and interventions for a BARS of 4 or greater was used. The goal for Enhanced BARS was a score of 3.

Investigators studied data from January 2, 2017 – April 24, 2017 to verify preliminary results they found in their assessment in 2016. Specific data such as BARS assessment data, pre-code gray, code gray, assault, restraint, seclusion data was analyzed using univariate statistics. Statistical analysis was performed using Excel.

Pre-code grays decreased within two hours of shift change



Results

The results of the 2017 BARS study showed an increase of pre-code grays. Comparing 2015 to 2017 data demonstrated that pre-code grays increased overall, but decreased within two hours of shift change. The result was $p=0.016$. This is a significant finding, and is evidence that the use of the BARS assessment tool was successful. The researchers did not find significant differences in code grays, however the first hour after shift change has consistently lower than expected numbers for violence (see grid), indicating that there was a protective factor with the BARS protocol.

Discussion/Conclusions

Researchers expected to find a more dramatic decrease in the number of code grays and other violent events. The BARS protocol allowed for staff to provide support to violent patients. During this time, there were mitigating factors that likely played a role in the results of this study. These factors include the changes that occurred in the Red Pod, the main emergency room source of patient admissions to inpatient psych. Patients were staying less time in the ED and were transferred to the psychiatric unit earlier in their treatment.

In 2016, the average wait time in the ED was 1300 minutes, compared to 2017 which was 1188 minutes. Violence risk patients coming to the unit with less opportunity to begin psychiatric intervention may be more prone to a violent event. This may have increased the number of code grays during this study period and warrants further research.

References

- Cornaggia C., Beghi M., Pavone F., Barale F. (2009). Aggression in Psychiatry wards: A systematic review. *Psychiatry Research* 189 (2011)10-20.
- Schumacher J.A., Gleason S. H., Holloman G. H., McLeod W. T. (2010). Using a Single Item Rating Scale as a Psychiatric Behavioral Management Triage Tool in the Emergency Department. *Journal of Emergency Nursing* (2010) 36:434-8. DOI 10.1016/j.jen.2010.01.013.
- Swift R.H., Harrigan E.P., Cappelleri J.C., Kramer D., Chandler L.P. (2001). Validation of the behavioral activity rating scale (BARS): A novel measure of activity in agitated patients. *Journal of Psychiatric Research* 36 (2002) 87-95.

