



Implementing the “Brief Psychiatric Rating Scale” on the Samaritan Inpatient Mental Health Unit

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BACKGROUND

- The Brief Psychiatric Rating Scale (BPRS) is an 18-item psychiatric symptom rating scale designed to monitor change in psychiatric symptoms.
- Used primarily in medication and epidemiologic studies, although the literature suggests it can also be applied clinically. The BPRS is sensitive to change and with training can exhibit high inter-rater reliability.
- Each item is rated on a scale of 0 “not present”/“not assessed” to 7 “extremely severe.” The 18 items cover a range of symptoms from anxiety and depression to hostility, hallucinations, and unusual thought content, among others.
- A previous study (N = 1772) compared the BPRS to the Clinical Global Impressions Scale (CGI) and suggested that “minimally improved” according to the CGI scale corresponded with a BPRS change of 13%, and “much improved” corresponded to a BPRS change of 50%.²

OBJECTIVES

1. To implement routine use of the BPRS to the Samaritan Inpatient Mental Health (IPMH) Unit.
2. At least 75% of all admitted patients will have documented BPRS scores on admission (day 0), day 2, day 7, and every 7 days until discharged.
3. Describe the severity of illness of patients admitted to the IPMH unit.

METHODS

- A flowsheet was built into Epic to log BPRS scores
- PGY-1 psychiatry residents and Samaritan IPMH attending physicians were trained on these systems.
- Data from the flowsheet was collected from January 2021 through December 2021. All patients admitted to the inpatient mental health unit at GSRMC were included during this time period (N=293).

RESULTS

Figure 1. Percent of GSR Inpatient Psych of Encounters with BPRS Flowsheet Documentation by Month

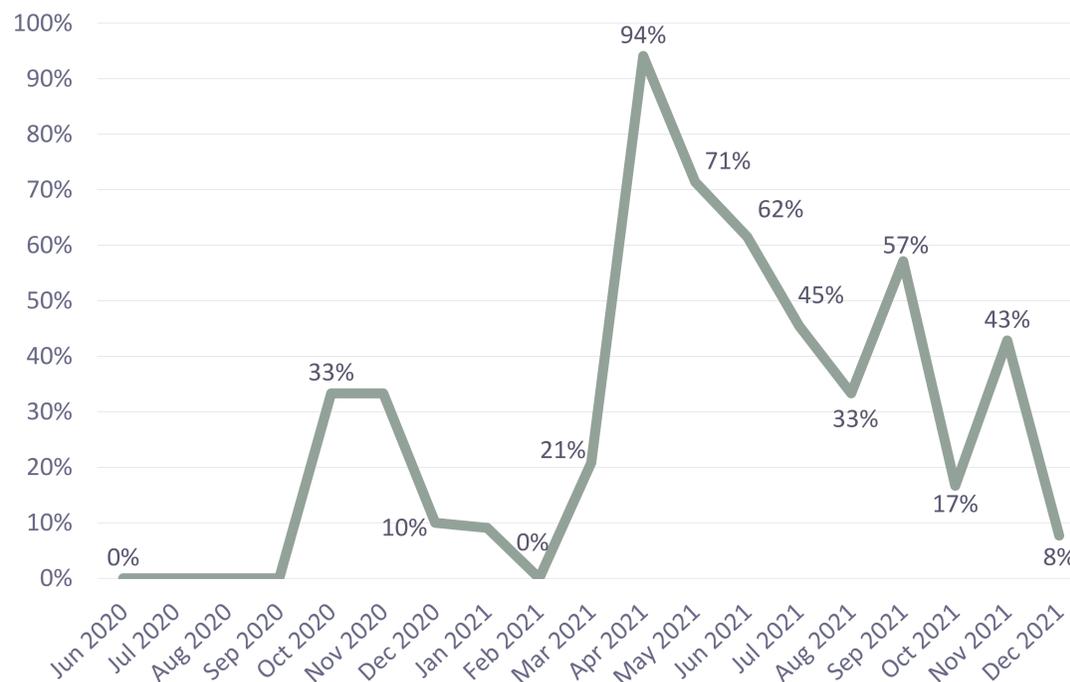


Figure 2. For the 77 encounters with BPRS use, how many times was the BPRS completed?

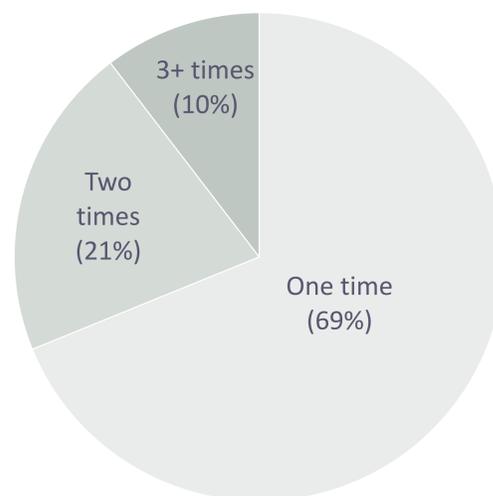
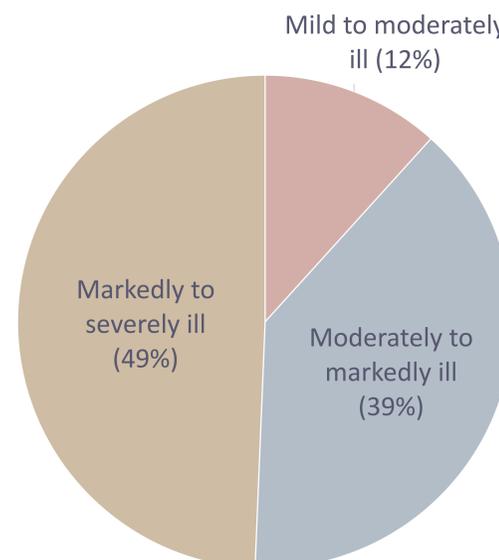


Figure 3. BPRS Severity of Illness (N=77)



CONCLUSIONS

- Our objective of obtaining scores on 75% of all patients admitted to the Samaritan IPMH unit was not met. Likewise, the goal of obtaining BPRS values on day 0, day 2, day 7 was not met.
 - Only 26% (N = 77/293) of IMPH patients had recorded BPRS scores.
 - Only 10% (N=8) of patients with BPRS scores recorded had 3 or more values in the flowsheet.
- Most patients on the Samaritan IPMH unit (88%) are markedly severely ill and moderately to markedly ill (Fig. 3).
 - This indicates a high level of acuity on this unit during the study period.
- Possible reasons for the failure to meet outcomes could include lack of continued training, poor buy-in, poor communication of objectives, and limited time or resources.

FUTURE IMPLICATIONS

- The BPRS has been proposed as a tool that can help predict the ramifications of early discharge, timeline of improvement, and potential for readmission.⁴
 - Implementing the routine use of the BPRS in the IPMH unit may allow clinicians to better predict outcomes using an objective measure of psychiatric illness severity and response to treatment.
- Insurance companies and health systems are increasingly recommending the use of standardized measurements to monitor psychiatric symptoms and progress³.
 - With the implementation of BPRS we ultimately hope to improve insurance coverage for our patients and reduce the amount of paperwork needed to justify hospitalizations on our IPMH unit.

REFERENCES & ACKNOWLEDGEMENTS

1. Mortimer AM. Symptom Rating Scales and Outcomes in Schizophrenia. *British Journal of Psychiatry*. 2007; 191(50):7-14.
2. Leucht et al. Equipercentile Linking of the Brief Psychiatric Rating Scale and the Clinical Global Impression Scale in a Catchment Area. *European Neuropsychopharmacology*. 2012; 22: 501-505
3. Bark et al. Evaluation of the Routine Clinical Use of the Brief Psychiatric Rating Scale (BPRS) and the Abnormal Involuntary Movement Scale (AIMS). *Journal of Psychiatric Practice*. 2011; 17(4): 300-304
4. Varner RV, Chen YR, Swann AC, Moeller FG. The Brief Psychiatric Rating Scale as an Acute Inpatient Outcome Measurement Tool: A Pilot Study. *J Clin Psychiatry*. 2000; 61(6): 418-421
5. Lachar et al. New Subscales for an Anchored Version of the Brief Psychiatric Rating Scale: Construction, Reliability, and Validity in Acute Psychiatric Admissions. *Psychological Assessment*. 2001; 13(3): 384-395
6. Overall, Gorham. The Brief Psychiatric Rating Scale. *Psychological Reports*. 1962; 10: 799-812
7. Brief Psychiatric Rating Scale (BPRS). San Mateo County Health Website. <https://www.smchealth.org/sites/main/files/file-attachments/bprsform.pdf>. Accessed June 9, 2020.