

Letter to the Editor

Variables affecting post-inpatient admission outcomes

Sir,

In the United States, mental illness affects one in five people.¹ This high prevalence rate leads to a significant number of these individuals requiring inpatient psychiatric hospitalizations. Chronic and persistent mental illnesses lead to readmissions and extended average lengths of stays and fuel escalating health care costs. Estimates show a 12.2% increase in cost between 2005 and 2014.² Analyzing data from the Agency for Healthcare Research and Quality, Heslin and Weiss (2015) determined that approximately 20% of all Medicare patients are readmitted within 30 days of discharge (taking into account all illnesses), with costs totaling 15 – 20 billion dollars annually.³

There has been much research exploring factors that can help mitigate such high readmission rates. Much of this has focused on aftercare follow-up as a means to preventing readmissions, with the assumption that patients who keep follow-up appointments are more invested in ongoing treatment and preemptively manage worsening symptoms. There seems to be a difference in patient perception of the need and importance of follow-up after mental health hospitalizations versus non-mental health hospitalizations. For example, 70% of patients with heart-related conditions are compliant with aftercare appointments compared to only 42% of mental health patients, with nearly half of the latter missing an appointment at some point.^{4,5} These missed aftercare appointments by patients with mental illnesses lead to recurrent hospitalizations, repeat suicide attempts, worsening and intensified symptoms, and elevated rates of homelessness.⁶

With the reported follow-up rates of post-inpatient appointments (scheduled within seven days of discharge) reported so low, our group sought to identify factors that could affect this transition of care. Our inpatient cohort group was asked the following questions (measured on a Likert scale from 1 – 5) on the day of admission and the day of discharge, with the hopes that focused work with these patients during the hospitalization using a bridge assessment would have a positive impact on follow-up rates:

1. How important is your appointment with your psychiatrist to you?
2. How important is your appointment with your therapist to you?
3. How well do you remember to take your medications every day?

Our bridge assessment is an interactive tool that helps to identify barriers to follow-up care. Bachelors' level counselors meet with patients for approximately 15 minutes to listen to and educate them on the importance of aftercare treatment on the day of their discharge. Afterwards, we documented which patients attended their 7-day post-inpatient follow-up appointment in our clinic. Our institutional rate for arrived post-inpatient follow-ups prior to the bridge assessment tool is approximately 11%.

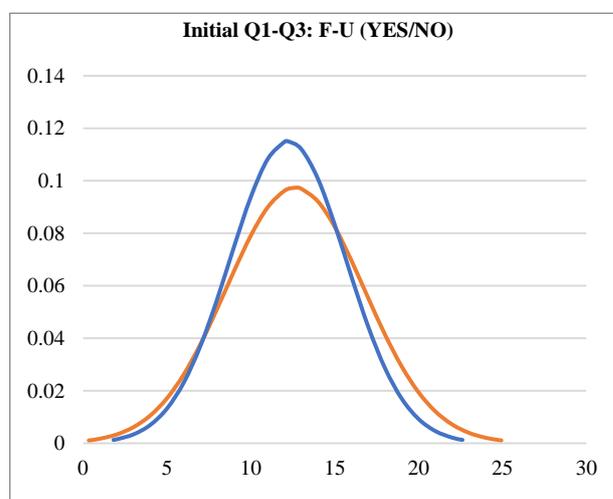


Figure 1: Compares the opinions of initially hospitalized patients regarding questions 1 – 3. ORANGE shows the mean LIKERT score (12.64) of patients who eventually did show up for their follow-up appointment, and the BLUE for those who did not (12.21).

x-axis defines Likert scores.

y-axis defines percentage of cohort.

On admission, the entire cohort group rated their perceived level of self-motivation relatively equally (Figure 1). After the bridge assessment on the day of discharge, both the patients who did and did not show up for follow-ups rated their perceived self-motivation higher on average than initially (14.5 and 13.14, respectively) (Figure 2). We found that 18% of these patients showed up for their post-inpatient appointments, compared to the 11% institutional average. Our cohort group sample was 61, so extrapolating conclusions from this small sample size may be difficult. However, it appears from our data that the bridge assessment may have had a positive impact on increasing our follow-up rate.

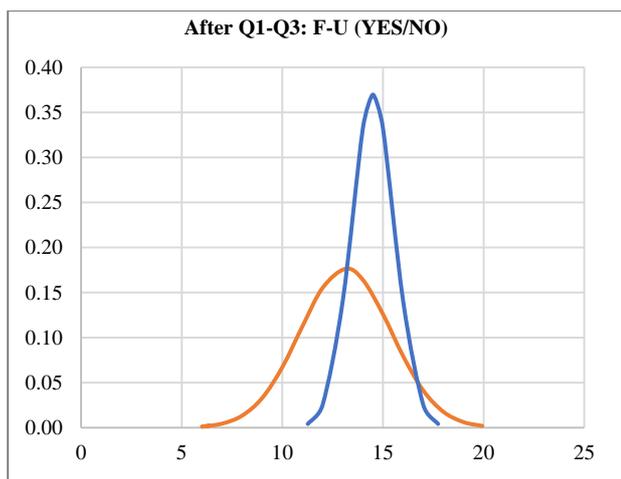


Figure 2: Compares the opinions of patients on the day of discharge after the bridge assessment regarding questions 1 – 3. BLUE shows the mean LIKERT score (14.5) of patients who eventually showed up for their follow-up appointments versus ORANGE for those who did not (13.14) on the day of discharge.

x-axis defines Likert scores.

y-axis defines percentage of cohort.

Why a brief meeting with a counselor would nearly double the likelihood of our patients showing up at a 7-day post-inpatient follow-up appointment is not fully clear. However, part of the rationale may be attributable to the concept of supportive counseling.⁷ Though not a formal counseling session, the bridge assessment allows patients time to talk about their psychosocial stressors and feel like someone is listening to them. DiMatteo et al discusses the positive effect of listening as a tool for increasing general adherence to medical treatment, including keeping follow-up appointments.⁸ Other existing literature demonstrates similar claims; however, these outcomes are generally achieved through establishing some type of therapeutic relationship between a patient and an existing provider/clinician (someone who continues in some ongoing capacity with the patient). Batscha et al study design used a clinician in the outpatient clinic to interface with patients before being discharged from the inpatient psychiatric unit.⁴ Though their cohort group was limited to 13 patients, the study's post-inpatient follow-up rate increased from 44% to 92% using this model. Our model uses a counselor that meets with the patient only during the course of their hospitalization (and not afterwards), and the positive effect of our bridge assessment increased our follow-up show rate from 11% to 18%. Further research is needed to distinguish if there are other mitigating factors which may have affected our cohort follow-up show rates (e.g. access to transportation, breadth of psychosocial support); however, our preliminary data suggests the potential benefits in a relatively simple bridge assessment model.

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REFERENCES

1. National Institute of Mental Health. Available at <https://www.nimh.nih.gov/health/statistics/mental-illness.shtml>. Accessed 21 June 2018.
2. McDermott KW, Elixhauser A, Sun R. Trends in hospital inpatient stays in the United States, 2005-2014 (HCUP Statistical Brief #225). Agency for Healthcare Research and Quality; 2017. Available at: <https://www.hcup-us.ahrq.gov/reports/statbriefs/sb225-Inpatient-US-Stays-Trends.pdf>. Accessed 21 June 2018.
3. Heslin KC, Weiss AJ. Hospital readmissions involving psychiatric disorders, 2012 (HCUP Statistical Brief #189). Agency for Healthcare Research and Quality; 2015. Available at <http://www.hcup-us.ahrq.gov/reports/statbriefs/sb189-Hospital-Readmissions-Psychiatric-Disorders-2012.pdf>. Accessed 21 June 2018.
4. Batscha C, Mcdevitt J, Weiden P, Dancy B. The effect of an inpatient transition intervention on attendance at the first appointment post discharge from a psychiatric hospitalization. *J Am Psychiatr Nurses Assoc*. 2011;17(5):330-8.
5. Killaspy H. Why do psychiatrists have difficulty disengaging with the out-patient clinic? Invited commentary on Why don't patients attend their appointments? *Adv Psych Treat*. 2007;13(6):435-7.
6. Kreyenbuhl J, Nossel IR, Dixon LB. Disengagement from mental health treatment among individuals with schizophrenia and strategies for facilitating connections to care: a review of the literature. *Schizophr Bull*. 2009;35(4):696-703.
7. Jacobs N, Reupert A. The effectiveness of supportive counseling, based on Rogerian principles: a systematic review of recent international and Australian research. *Psychotherapy and Counselling Federation of Australia*; 2014: 3-13.
8. DiMatteo MR, Sherbourne CD, Hays RD, Ordway L, Kravitz RL, McGlynn EA, et al. Physician's characteristics influence patients' adherence to medical treatment: results from the Medical Outcomes Study. *Health Psychol*. 1993;12(2):93-102.

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