



Reducing the rate of falls in patients undergoing electroconvulsive therapy

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Background

Patient falls result in physical and economic burdens to patients and medical institutions (LeLaurin & Shorr, 2019). Electroconvulsive therapy (ECT) has been cited as a risk factor for falls (Brown, 2017). Psychiatry staff aim to provide the safest care possible for their patients who receive ECT treatment (Jayaram, 2015). There is limited research on the prevention of falls in patients receiving ECT.

Aim of the Project

To reduce the risk of falls in patient receiving ECT treatment through standardization of unit protocols and patient education pre- and post-treatment.

Standardization across all units is the first step in ultimately reducing the occurrence of falls in patients undergoing ECT.

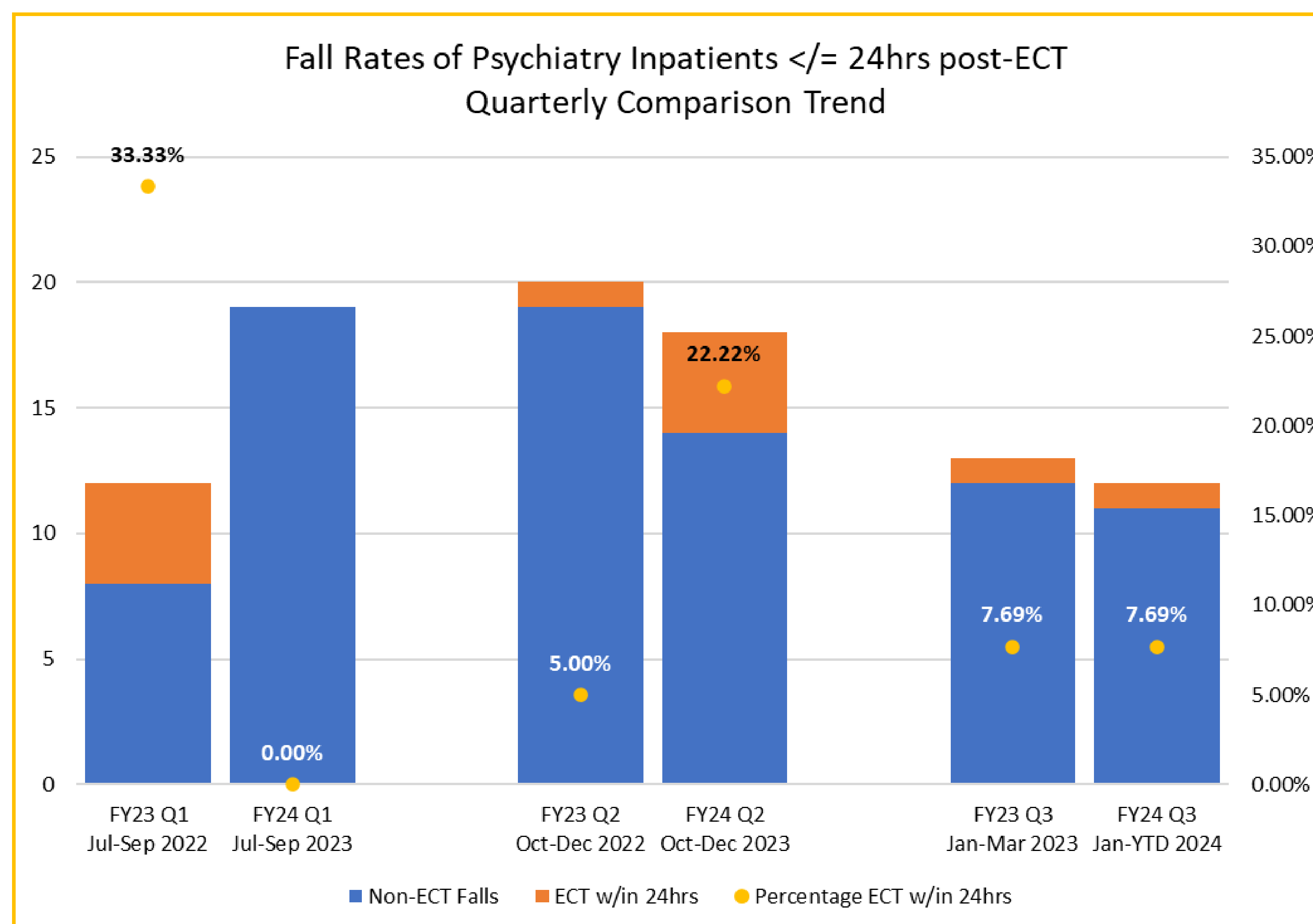
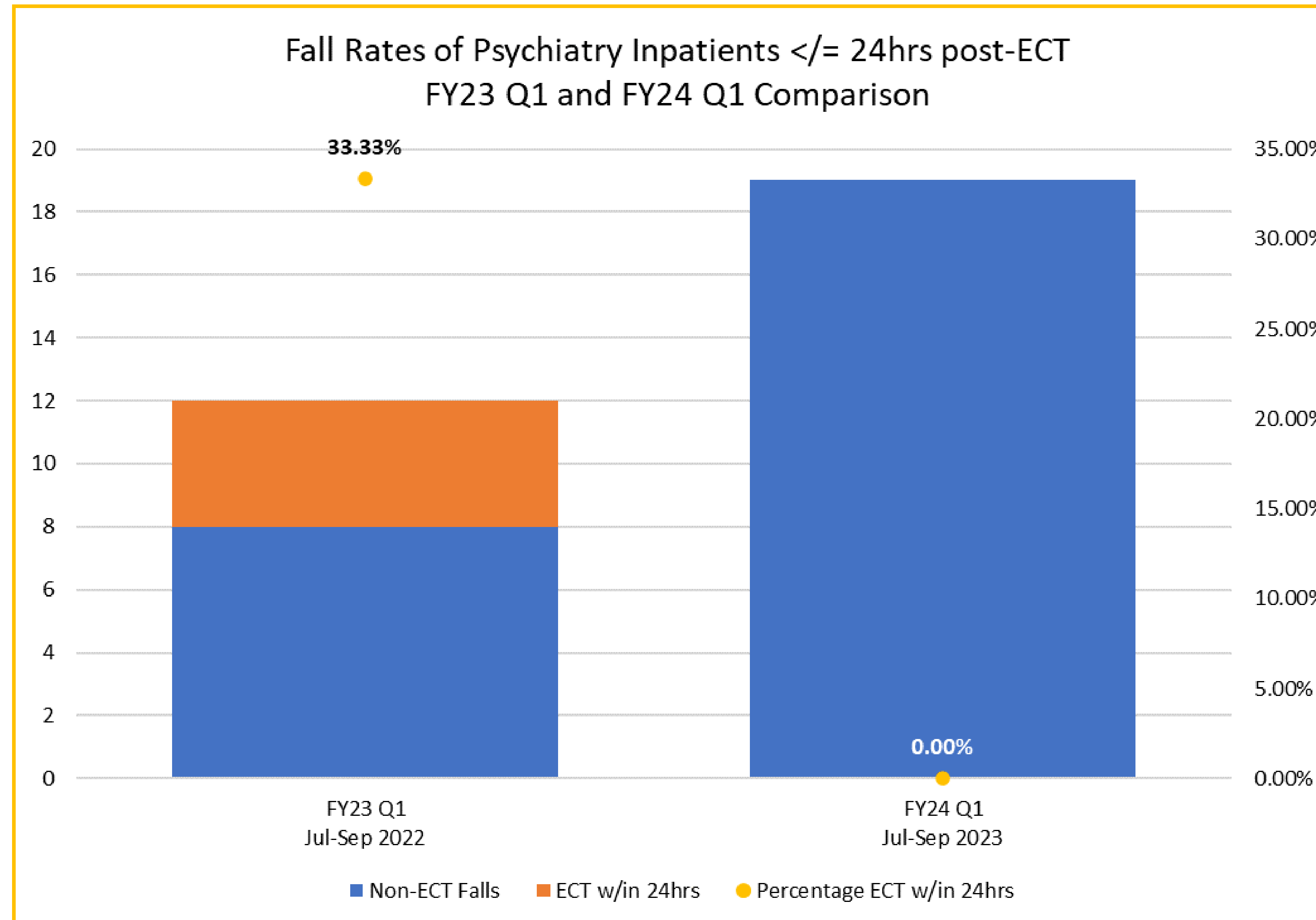
Description of the Intervention

The IHI Model for Improvement was utilized to address this problem. A standardized protocol was piloted from 7/3/23 – 9/30/23.

The protocol included:

- 1) Patients would wait 4 hours before showering independently following ECT.
- 2) The patient would remain on the unit for 24 hours post-ECT.
- 3) ECT patients received increased fall-risk education at three points during the ECT process: Pre-procedure on the unit; Pre-procedure in prep; Post-procedure on the unit.

Outcomes Measures and Results



Description of Data Collection and Analysis

Outcome Measurement: Fall rates among the adult inpatient ECT patient population was gathered, comparing CY2022 Q3 to CY2023 Q3 (Jul-Sep). Psychiatric inpatients who received ECT prior to the fall were included in the numerator, while the denominator was the total fall count for all psychiatry inpatients. Data was collected via Tableau. Qualitative data was gathered via a Qualtrics survey for nurses to provide feedback regarding adherence to the piloted protocols and barriers to the process.

Implications for Practice

Pilot adopted as standard protocol across the four inpatient psychiatry units.

Lessons Learned

- Future efforts will include a more formal rollout of education and pilot to include reminders at key process points.
- Barriers include memory issues in patients receiving ECT, consistent handoff messaging between multidisciplinary roles, and the milieu environment.
- Would like to widen the data collection to include specific ECT-related factors such as seizure duration time and anesthetic choice.
- Noted increase in rate of falls quarter after pilot. Sustainment of new process needed.

References

Brown, A. M. (2017). Reducing falls after electroconvulsive therapy: A quality improvement project. *Journal of Psychosocial Nursing and Mental Health Services*, 55(7), 20-29. <https://doi.org/10.3928/02793695-20170619-04>

Jayaram, G. (2015). *Practicing patient safety in psychiatry*. Oxford University Press.

LeLaurin, J. H., & Shorr, R. I. (2019). Preventing falls in hospitalized patients: State of the science. *Clinics in Geriatric Medicine*, 35(2), 273-283. <https://doi.org/10.1016/j.cger.2019.01.007>