

Esketamine Administration in an Outpatient Infusion Center: A Novel Idea for a Community Hospital

Virginia Ryan, MSN,RN; Virginia Grace, BSN,RN; and Judith Driscoll, BSN, RN

Background

- Major depressive disorder (MDD) is a debilitating illness affecting 264 million people worldwide (Zenebe et al.,2001).
- MDD is the second most common psychiatric disorder affecting about 30% of adults over the age of sixty-four (Zenebe et al., 2001).
- Globally, about 34% of the adolescent population have been diagnosed with depression since 2001 (Shorey et al.,2022).
- The Covid-19 pandemic resulted in an elevation in these rates, prompting the necessity for evidence-based treatment options (Racine et al., 2021).
- TRD is failure of two or more antidepressant medications during a major depressive episode (Dwyer et al., 2020).
- Esketamine is a novel therapeutic treatment for treatment resistant depression (TRD) (d'Andrea et al, 2023).

Setting

- 171-bed Magnet with Distinction™
 designated community teaching hospital
 in the Northeast U.S.
- The Outpatient Infusion Center (OPIC) is a 14-chair unit offering numerous medications and treatments to a diverse patient population.

Purpose

• To identify and implement workflow and nursing practice changes to support self-administration of esketamine, a nasal spray, in the OPIC.

Implementation Process

To learn best

practices for

Esketamine

ambulatory

in an

setting

administration

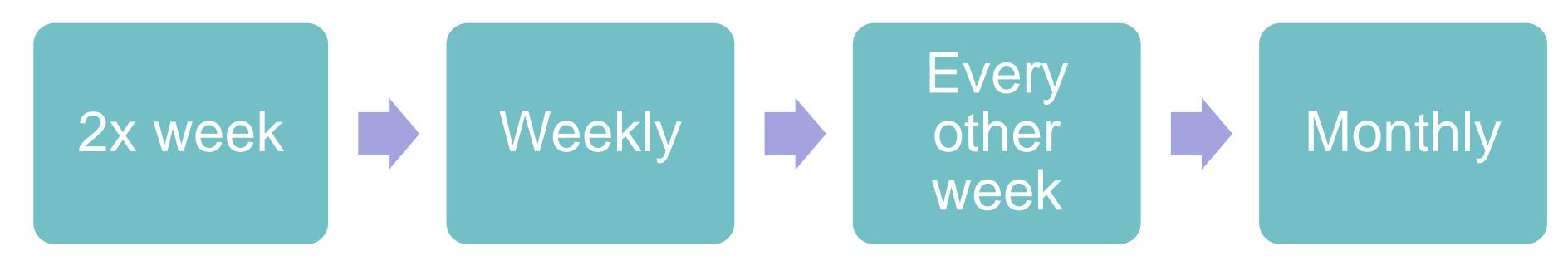
Consultation McLean Hospital OPIC Practice Changes Treatment

- New workflow
 - Purchased equipment
 - New policy
 - Developed education/competencies for nursing staff
 - Developed patient education materials

- *November 2020*:
- 1st Patient
- 2020-Feb 2024:
- 65 active patients
- 15 on waitlist pending scheduling
- Additional patients being added daily

OPIC Infusion Strategy

3-hour appointments; frequency of treatment regime changes over time



Results

- November December 2020: 4 patients completed 19 scheduled appointments (PACU)
- By CY23, the patient volume increased to 65 individual patients with a total of 1711 completed esketamine appointments (PACU & OPIC)
- CY24 YTD: 653 completed infusions in OPIC

Completed Esketamine Visits
CY20-CY24 YTD

September 1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1

Outcomes

 Based on evaluation of initial practice changes, amendments to workflow and discharge criteria were adopted which increased the number of daily appointments available for patients to receive this therapeutic treatment.

2023 - 2024	Daily Appointments
February 2023	10
October 2023 - Present	15

Discussion

- OPIC clinical nurse leadership contributed to the success of this initiative through the planning, implementing, and ongoing assessment of this new treatment option for patients.
- By embracing change, OPIC clinical nurses have improved access for patients with TRD to receive this treatment while providing exceptional safe care to a diverse patient population in an active outpatient infusion center setting.

Next Steps

• Ongoing evaluation of the esketamine process to identify possible areas for improvement.

Contact Information

vryan2@bwh.harvard.edu







Esketamine Treatments in an Outpatient Infusion Center: A Novel Strategy for the Management of Treatment Resistant Depression in a Community Hospital

Authors

Virginia Ryan, MSN, RN

Virginia Grace, BSN, RN

Judy Driscoll, BSN, RN

References

- Dwyer, J. B., Stringaris, A., Brent, D. A., & Bloch, M. H. (2020). Annual research review: Defining and treating pediatric treatment-resistant depression. Journal of Child Psychology and Psychiatry, and Allied Disciplines, 61(3), 312–332. https://doi.org/10.1111/jcpp.13202
- Shorey S, Ng ED, Wong CHJ. Global prevalence of depression and elevated depressive symptoms among adolescents: A systematic review and meta-analysis. British Journal of Clinical Psychology 2022: 61:287-305. https://doi.org/10.1111/bjc.12333
- Zenebe, Y., Akele, B., W/Selassie, M., & Necho, M. (2021). Prevalence and determinants of depression among old age: A systematic review and meta-analysis. Annals of General Psychiatry, 20(1), 55. https://doi.org/10.1186/s12991-021-00375-x