The Revised BIDMC Electroconvulsive Therapy Protocol

The Problem
- Psychiatry residents were experiencing challenges in completing the medical evaluation of psychiatric inpatients planning to undergo electroconvulsive therapy (ECT) in a timely manner.
- Delays in the initiation of ECT were noted due to the ECT team’s request for additional consults and tests before ECT could safely be performed.
- Discrepancies were noted between the written ECT protocol and the verbal instructions from the ECT team, such as the time cutoff after which benzodiazepines should be held on the day prior to ECT to minimize effects on the seizure threshold.
- This project primarily impacts the psychiatry, anesthesia, medicine, and neurology departments.
- Patients benefit, as we hope to streamline their medical clearance for ECT and minimize delays in the treatment of their acute psychiatric illnesses.
- This improvement opportunity relates to the Institute of Medicine’s Dimensions of Quality Care including effectiveness, efficiency, timeliness, and safety.

Aim/Goal
The primary goal of this interdisciplinary project is to improve communication between the inpatient psychiatric service and the ECT team by revising the existing ECT Protocol. Another goal of this project is to improve patient care and minimize delays in the initiation of ECT, which could potentially reduce the average length of stay for ECT patients on the inpatient psychiatric unit.

The Team
- Claire Twark, MD, Psychiatry Resident
- Karen Losi, RN, ECT team
- Helen Farrell, MD, Psychiatry Attending
- Kerry Bloomingdale, MD, Psychiatry Attending, ECT team
- Cris Coconcea, MD, Medical Director of Inpatient Psychiatry

The Interventions
- Gather information from current residents about opportunities for improvement of the ECT Protocol based on the challenges that they experienced using the existing protocol
- Collaborative meeting between psychiatry resident Claire Twark, MD, and ECT team member Karen Losi, RN, to review and revise the existing protocol, focusing on consultations of other services, required testing, and medication administration
- Review of the existing literature including “Medical Evaluation of Patients Undergoing Electroconvulsive Therapy” (Tess and Smetana, 2009) as recommended by Helen Farrell, MD and Cris Coconcea, MD
- Solicit input from Helen Farrell, MD, Kerry Bloomingdale, MD, and Cris Coconcea, MD, on the revised protocol
- Implement the new ECT Protocol by coordinating with the inpatient psychiatry chief residents and posting the revised protocol in the resident work room

The Results/Progress to Date
Thus far, psychiatry residents and the ECT team have reported improved clarity and communication regarding the complex and multidisciplinary process of preparing psychiatric inpatients for ECT. Both teams feel that patient care has improved as a result of the revised ECT Protocol.

Lessons Learned
Hospital protocols are used to make numerous decisions that affect patient care. When staff members notice an improvement opportunity for a protocol, revisions are best made with an in-person, multidisciplinary meeting. In this case, notations were made on a copy of the existing protocol in a meeting with both a psychiatry resident and an ECT team member present. Edits were then retyped and distributed to multiple attending psychiatrists for final approval. This approach proved effective. Staff who use a certain protocol the most are often best equipped to make improvements which will ultimately help their peers and patients alike.

Next Steps/What Should Happen Next
- Continued monitoring of the effectiveness of the revised protocol based on resident and ECT team feedback
- Address challenges that may interfere with the successful implementation of this revised protocol
- The revised ECT Protocol is seen as a living document that can continue to change based on the needs of the departments involved and advances in our understanding of the medical evaluation of ECT patients
- Future revisions could address whether the medical consultant should determine the need for other consults (neurology, cardiology, etc.)
- Ideas for a future project include a chart review of ECT patients before and after the initiation of this revised protocol to assess for faster initiation of ECT and potentially an associated reduction in the average length of stay on the inpatient psychiatric unit
- Revise other protocols on the inpatient psychiatric unit as needed using this multidisciplinary process

For more information, contact:
Claire Twark, MD, PGY-2 in Psychiatry
twark@bidmc.harvard.edu