

Assessment and Management of Non-Operating Room Anesthesia (NORA) Malignant Hyperthermia in Non-Operating Room Patient Care Areas

Team Leader: Maridulce Belen S. Fortuno MSN RN CAPA
University of Maryland Medical Center - Midtown Campus, MD

Abstract Background Information: This project illustrates a regional medical center's multi-disciplinary approach in the management of the non-operating room anesthesia (NORA) malignant hyperthermia (MH) patient who experiences a reoccurrence of MH post-initial treatment in the operating room (OR). Given that there is a 25% reoccurrence of MH after presenting in the OR, there is a need for healthcare staff who practice outside of the OR to have knowledge of the critical time-sensitive steps in managing a NORA MH event after a patient's initial MH treatment.

Objectives of Project: It was identified during a 2025 mock The Joint Commission (TJC) survey that there was a gap in nursing and physician knowledge of NORA MH. The Department of Perioperative Services and Procedural Sites proactively set in motion a multi-disciplinary education plan to assess baseline knowledge of NORA MH management in inpatient care areas.

Process of Implementation: In preparation for a NORA MH code, a NORA MH care algorithm and NORA MH Code Record was developed for clinician use (examples to be inserted). With advance planning with nurse management of an inpatient surgical unit, the Rapid Response Team, and the Leadership Team of the Department of Perioperative Services and Procedural Sites, a mock MH code on an inpatient surgical unit was conducted.

Statement of Successful Practice: There were clear areas for development identified during the NORA MH code that could drive future multi-disciplinary educational needs: The Rapid Response Team physician lacked knowledge in the pharmacological treatment and cooling measures in the treatment of MH, and there was a discernable time lag identified in the retrieval of the MH box from inpatient pharmacy (reference table to be inserted).

Implications for Advancing the Practice of Perianesthesia Nursing: The goal after evaluation of the NORA MH mock code was to identify areas of improvement in the care of the NORA MH patient on an inpatient unit. With focused education, significant improvement in the diagnosis-to-drug infusion should decrease, thereby ensuring favorable patient outcomes. The implications could be further extrapolated and translatable into the ambulatory surgery arena. For the inpatient patient care areas, quarterly to biannual NORA MH codes could be utilized to increase recognition and decrease response time of staff.