

Improving Hypopituitarism Screening Frequency in a Traumatic Brain Injury (TBI) Clinic for Veterans with TB

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Improving Hypopituitarism Screening Frequency in a Traumatic Brain Injury (TBI) Clinic for Veterans with TBI Giovanna Klimovitsky^{1 2}, Aditya Chauhan^{1 2}, Shalamar D. Sibley^{1 2 1} Metabolic Section, Minneapolis VA Health Care System, Minneapolis, MN 55417, USA ² Division of Diabetes, Endocrinology, and Metabolism, Department of Medicine, University of Minnesota – Twin Cities, Minneapolis, MN 55455, USA Background Traumatic brain injury (TBI) is a major public health issue affecting both the general population and veterans. Despite clinical guidelines, hypopituitarism remains underscreened in TBI patients. Quality improvement efforts are limited, and provider-level barriers and real-world screening practices are not well understood. This quality improvement project aims to identify current hypopituitarism screening practices in the TBI clinics at Minneapolis Veterans Affairs Health Care System (MVAHCS), evaluate barriers to screening, and implement targeted interventions to enhance screening rates. Methods A total of 834 unique visits to the TBI clinic between October 1, 2023, and October 31, 2024, were identified. A randomized sample of 70 patients (approximately 8% of visits) was selected for detailed chart review. Screening practices were assessed for compliance with established hypopituitarism screening guidelines outlined by Tan et al. Following the baseline assessment, an anonymous REDCap survey was distributed to all five TBI clinic providers to identify perceived barriers to hypopituitarism screening. The survey evaluated provider knowledge of screening criteria, appropriate testing practices, and potential system-level challenges. Results Baseline review demonstrated that among the 70 randomized patients, 20 patients (28.5%) met the Tan criteria for hypopituitarism screening. Of these eligible patients, only 6 patients (30%) received complete screening as recommended Our anonymous provider REDCap survey administered to providers in a dedicated TBI clinic had an 80% response rate. The most commonly reported barrier to screening was a knowledge gap regarding the specific recommended criteria, with additional concerns identified regarding the cost of the laboratory evaluation. Conclusions This QI initiative identified provider-level barriers to hypopituitarism screening in TBI patients, primarily due to knowledge gaps. In response, an informational email aligned with Tan et al. 2017 guidelines was distributed. Provider practices are being reassessed after a one-month follow up period, with the goal of ensuring that all eligible patients are screened for hypopituitarism. Future interventions may include modifications to the standardized intake clinic note template, integration of EMR alerts, development of standardized order sets, and continued dissemination of educational materials.