

Development of a Concussion Pathway in Acute Care.

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Development of a Concussion Pathway in Acute Care

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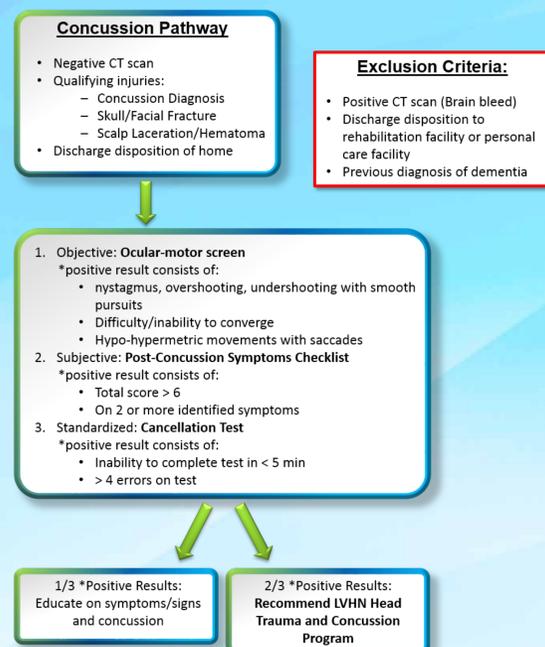
INTRODUCTION/ OVERVIEW

This project took place at Lehigh Valley Hospital, a 981 bed hospital with a designated Level I trauma center. Approximately a year and a half ago the Rehabilitation Department at LVHN began a Trauma focused service line with a designated therapy staff.

Through this focused service line approach, it was discovered that there are limited resources in place for clients admitted after trauma with concussive symptoms. There is a growing need to identify these individuals acutely and to ensure proper care and education while hospitalized. An occupational therapy driven performance improvement project was initiated over a 12 month period to develop a clinical practice guideline for the concussion population in the inpatient acute care setting. The guideline included evidence based measures to determine presence of concussive symptoms. Ultimately, the goal was to make appropriate referrals along the continuum of care.

METHODS or PROGRAM DESCRIPTION

- An Occupational Therapist driven clinical pathway was developed for a 12-month performance improvement project based on observation completed at outpatient LVHN Head Trauma and Concussion program, as well as literature reviews to assist with components of concussion screen.
- Trauma census was reviewed daily (Monday-Friday) and the following algorithm was applied:



RESULTS/ CONCLUSION

Figure 1: FY2017 Concussion Performance Improvement Project



- 445 clients were identified as maintaining diagnosis of concussion, facial/skull fracture, or scalp laceration or hematoma upon admission.
- 135 clients were excluded due to discharge disposition of rehabilitation, living in a facility at time of admission, diagnosis of dementia, or deceased during hospitalization.
- 80% (247/309) were successfully screened by a trauma service occupational therapist prior to discharge.
- 59% (145/247) screened positive for concussion symptoms and highlights the need for occupational and physical therapists to provide a more comprehensive assessment in the acute setting for this population.
- 39% (57/145) of the clients who screened positive for concussion symptoms actually received a referral for the concussion clinic from the Trauma Providers.
- 89% (51/57) of clients receiving the referral for the concussion clinic attended their follow up visit.

LESSONS LEARNED

- Screening daily census for diagnosis associated with concussive symptoms proved to be time consuming, and could ultimately have a negative impact on trauma staff efficiency/productivity.
- The success of any similar project relies upon the Trauma Service providers, as they are responsible for placing both the OT order prior to discharge and for placing the referral for the concussion clinic and head trauma program upon OT recommendations.
- Patient education provided by occupational therapists proved to be important following a positive concussion screen, as 12 patients followed up with the concussion clinic without receiving a referral to do so from the Trauma Service Providers.
- Majority of trauma clients are an at-risk population with mild TBI at time of discharge. They often have decreased resources to travel to the concussion clinic as well as a decreased motivation for follow through.
- Staffing limitations were identified given the current 1:21 staffing ratio. Ideally, a 1:13 ratio would increase Occupational Therapists ability to screen all potential concussion patients.

FUTURE DIRECTIONS

A multidisciplinary approach to concussion screening and management in the acute care setting is planned for an additional 12-month performance improvement project. While the occupational therapy portion of the screen is challenged to be administered on the day of evaluation, physical therapy will additionally complete a balance test to assist with outpatient recommendations. A nursing piece would also be beneficial to increase management of concussion symptoms in the acute care environment and assist with caregiver/family education. Furthermore, the trauma rehabilitation team is exploring access to making direct referrals to the LVHN Head trauma and concussion program to increase number of referrals placed based on therapist recommendations.

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