

# BIDMC Brain Builders: A Pilot Year in Review

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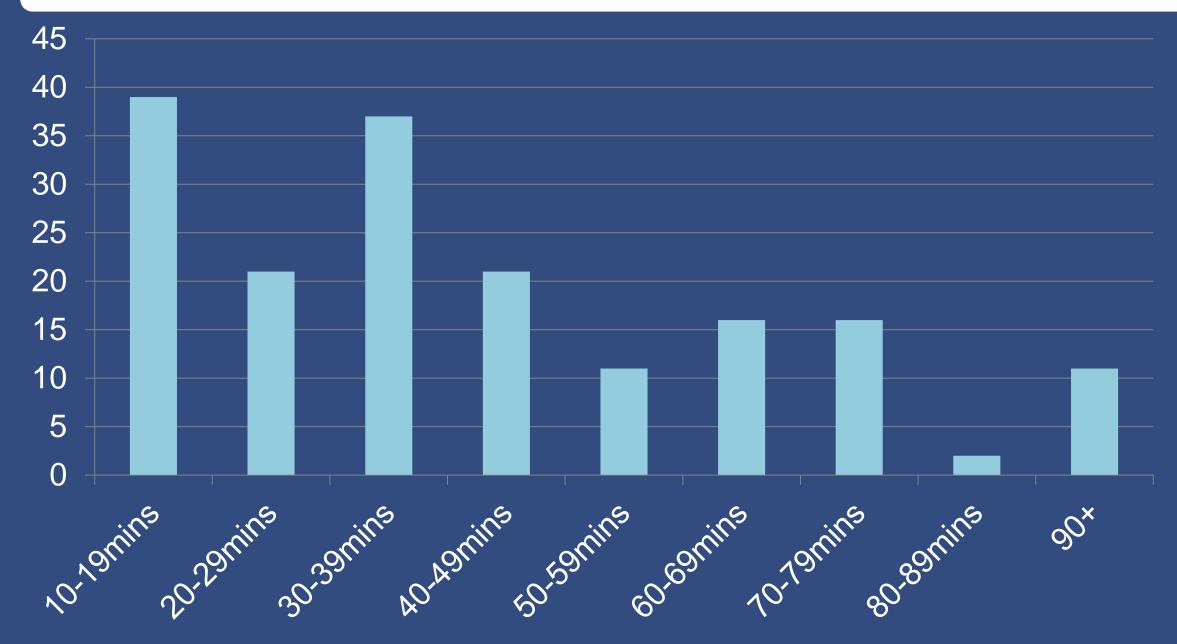
#### The Brain Builders Volunteer Program

Traumatic brain injury (TBI) is defined as "an alteration in brain function, or other evidence of brain pathology, caused by an external force"[1]. Research has shown that TBI patient outcomes can be improved by creating an enriching and stimulating environment during the early stages of recovery [2]. This empirical evidence served as the foundation for the BIDMC Brain Builders, a novel volunteer program organized and run by the Department of Neurosurgery.

Brain Builders is a volunteer program first implemented in October 2016 that focuses on providing interaction therapy for patients with traumatic brain injuries (TBI). Volunteers engage in a variety of activities with patients, including playing music, completing puzzles, or coloring. Sessions are tailored to fit each patient's needs, depending on the level of orientation, cognitive and communicative limitations, and personal preferences. The primary aim of these sessions is to improve psychological and emotional wellbeing by providing companionship, with a secondary aim of helping patients achieve neurocognitive rehabilitation goals.

- [1] Menon, DK et al. (2010). Position Statement: Definition of Traumatic Brain Injury. Archives of Physical Medicine and Rehabilitation, 11, 1637-40.
- [2] Schreiber, S et al (2014). Enriched environment improves the cognitive effects from traumatic brain injury in mice. Behavioural Brain Research. 271: (59-64)

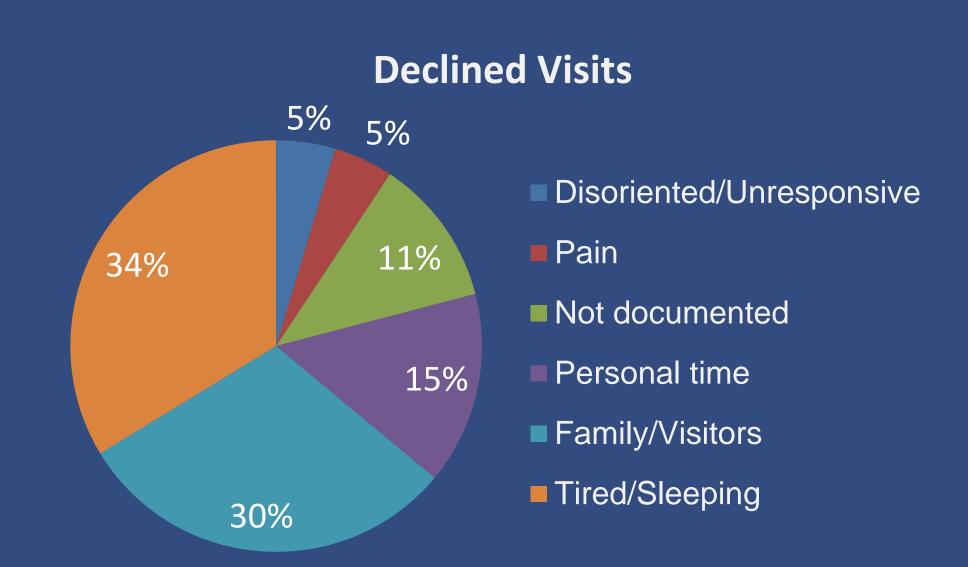
# Brain Builders Review Data October 2016 – February 2018



Average Visit Time	42 mins
Median Visit Time	35 mins

Total patient 121.45 visit hours

## Brain Builders Review Data October 2016 – February 2018



# completed visits	174
# declined visits	86

Total pts	175
# pts declined all visits:	57
# pts with 1+ completed visit:	118

The majority of patients are seen on Farr 6, Farr 11, and Rosenberg 6, and volunteers visit these floors on a regular basis. Patients on other floors are visited on request. While Brain Builders is primarily aimed toward TBI patients, we also visit patients who suffer from other neurological conditions or injuries, as well as those recovering after neurosurgery.

### Looking Ahead: Pilot Year Retrospective Review

In order to better tailor the aims of the Brain Builders programs to the needs of our patient population, we have an in-progress retrospective review of patients who participated in visits through Brain Builders during our pilot year, from October 2016-October 2017 (IRB# 2017P000604). This review is intended to elucidate trends and characteristics of this population, allowing us to better identify appropriate patients for our program and improve the program design.

The Review Team:

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