National Database: 2023 Profile of People within the Traumatic Brain Injury Model Systems

May 2024   TBI Factsheet

This factsheet is a quick reference on demographics and the use of services by people with traumatic brain injury (TBI).

The Traumatic Brain Injury Model Systems National Database is a prospective, longitudinal multi-center study which examines the course of recovery and outcomes following the delivery of a coordinated system of acute neurotrauma and inpatient rehabilitation.

The Database includes large scale follow-up to 30 years post-injury. As of 31 December 2023, the database contained information on 20,426 persons with TBI. For further information, visit our Web site at **www.tbindsc.org**.

See below for a profile of persons with TBI following treatment and rehabilitation.
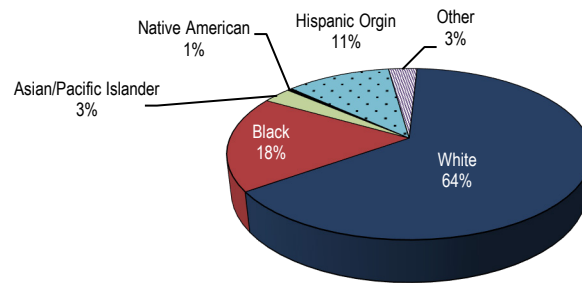
A 2023 Profile of Persons with Traumatic Brain Injury who Received Inpatient Rehabilitation

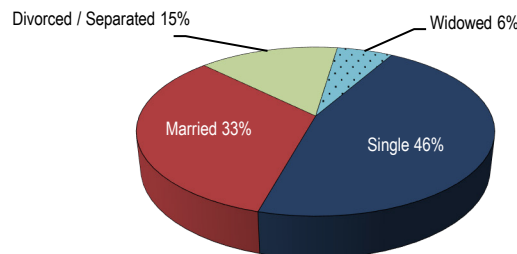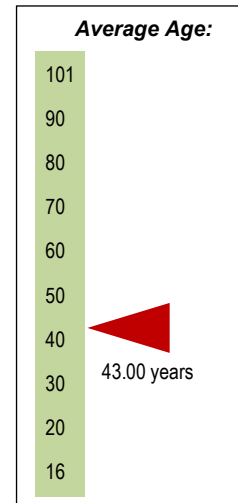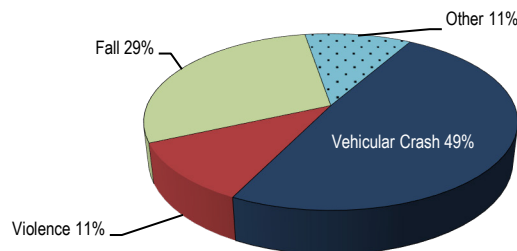### Persons with Traumatic Brain Injury at Time of Injury

Gender:

| Women 26% | Men 74% |

Race/Ethnicity:

Native American 1%
Hispanic Orgin 11%
Other 3%
Asian/Pacific Islander 3%
Black 18%
White 64%

Average Age:

101
90
80
70
60
50
40
30
20
16

43.00 years

Marital Status:

Divorced / Separated 15%
Widowed 6%
Married 33%
Single 46%

Cause:

Other 11%
Fall 29%
Vehicular Crash 49%
Violence 11%

> The majority of TBI cases in the database were employed white males who were married or single at the time of injury. Half of the cases were caused by vehicular crashes.
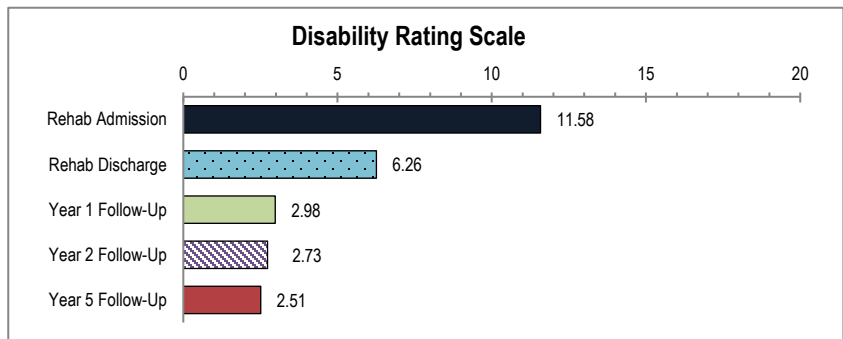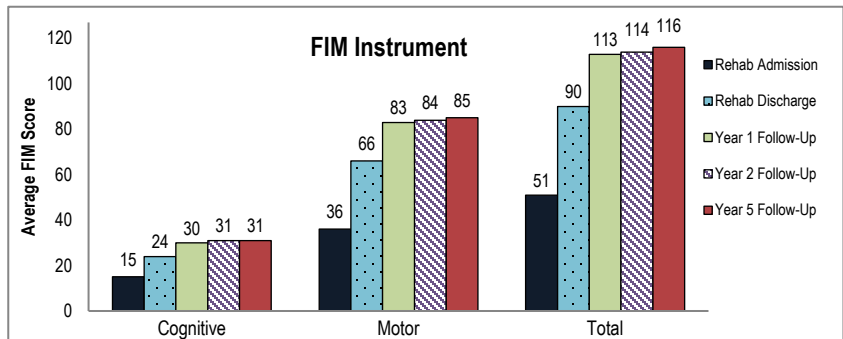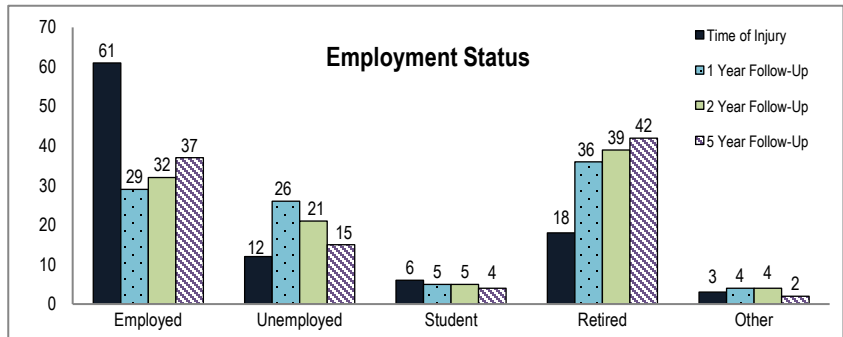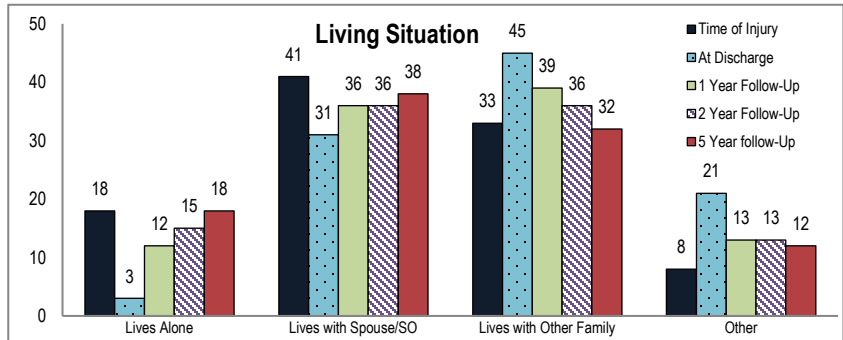
Persons with TBI Following Care and Rehabilitation Services

For many with TBI, increased independence and reduced need for overnight, part-time, or full-time supervision occurs over time.

Presently there are 16 TBI Model System Centers and 3 TBI Model System Longitudinal Follow-up Centers* sponsored by the National Institute on Disability, Independent Living, and Rehabilitation Research, Administration for Community Living, U.S. Department of Health and Human Services:

- University of Alabama at Birmingham Traumatic Brain Injury Care System, Birmingham, AL.
- *Northern California TBI Model System, San Jose, CA.
- Rocky Mountain Regional Brain Injury System, Englewood, CO.
- Indiana University / Rehabilitation Hospital of Indiana, Indianapolis, IN
- Spaulding-Harvard Traumatic Brain Injury Model System, Boston, MA.
- Southeastern Michigan Traumatic Brain Injury System, Detroit, MI.
- Mayo Clinic Traumatic Brain Injury Model System, Rochester, MN.
- *Carolinas Rehabilitation/Carolinas HealthCare System, Charlotte, NC.
- JKF Johnson Rehabilitation Institute Traumatic Brain Injury Model System, Edison, NJ.
- Northern New Jersey Traumatic Brain Injury System, West Orange, NJ.
- New York Traumatic Brain Injury Model System, New York, NY.
- Rusk Rehabilitation TBIMS at NYU, New York, NY.
- The Ohio Regional TBI Model System, Columbus, OH.
- Moss TBI Model System, Elkins Park, PA.
- *University of Pittsburgh Medical Center Traumatic Brain Injury Model System, Pittsburgh, PA.
- North Texas Traumatic Brain Injury Model System, Dallas, TX.
- The Institute for Rehabilitation and Research, Houston, TX.
- The Virginia Commonwealth TBI Model System, Richmond, VA.
- University of Washington Traumatic Brain Injury Model System, Seattle, WA.

Living Situation

Legend: Time of Injury, At Discharge, 1 Year Follow-Up, 2 Year Follow-Up, 5 Year follow-Up

Lives Alone: 18, 3, 12, 15, 18
Lives with Spouse/SO: 41, 31, 36, 36, 38
Lives with Other Family: 33, 45, 39, 36, 32
Other: 8, 21, 13, 13, 12

Employment Status

Legend: Time of Injury, 1 Year Follow-Up, 2 Year Follow-Up, 5 Year Follow-Up

Employed: 61, 29, 32, 37
Unemployed: 12, 26, 21, 15
Student: 6, 5, 5, 4
Retired: 18, 36, 39, 42
Other: 3, 4, 4, 2

FIM Instrument

Average FIM Score

Legend: Rehab Admission, Rehab Discharge, Year 1 Follow-Up, Year 2 Follow-Up, Year 5 Follow-Up

Cognitive: 15, 24, 30, 31, 31
Motor: 36, 66, 83, 84, 85
Total: 51, 90, 113, 114, 116

Disability Rating Scale

Rehab Admission: 11.58
Rehab Discharge: 6.26
Year 1 Follow-Up: 2.98
Year 2 Follow-Up: 2.73
Year 5 Follow-Up: 2.51

Source

MSKTC.org
SCI · TBI · BURN
Model Systems Knowledge Translation Center