Brain Injury Program

TIRR Memorial Hermann is a nationally recognized rehabilitation hospital that returns lives interrupted by neurological illness, trauma or other debilitating conditions back to independence.

Some of the world’s leading physicians in rehabilitation medicine provide care at TIRR Memorial Hermann. The patient care environment blends passionate people, exemplary care and a commitment to each patient’s overall quality of life.

TIRR Memorial Hermann offers comprehensive rehabilitation programs and services that address the individual needs of each patient. Core rehab programs include:

- Stroke
- Brain Injury
- Spinal Cord Injury
- Amputation
- Neuromuscular Rehabilitation
  - Neurodegenerative diseases
    - Includes multiple sclerosis, Parkinson’s disease, post-polio syndrome, rheumatoid arthritis, lupus
  - Multiple trauma
  - Any debilitating conditions

TIRR Memorial Hermann’s comprehensive inpatient, outpatient and vocational services are accredited by CARF, the Commission on Accreditation of Rehabilitation Facilities.

Our programs focus on maximizing the patient’s functional abilities by providing specialized medical management, nursing and therapy services in individual, group and community settings.

With our interdisciplinary team approach, support groups, counseling and individualized training are provided to prepare patients, their families and caregivers for additional responsibilities upon discharge.

(continued)
We are committed to seeing the potential in every person and often give opportunities to those who have no other options. In our commitment to the development of the patients' full potential, goal setting and treatment planning are creative and aggressive.

Even after coming out of the coma, Don had a long road to recovery. In addition to his more visible injuries, he had suffered severe brain damage resulting in significant short-term memory loss. Still, he worked diligently relearning how to walk, talk and take care of himself. And as he progressed in his recovery, he decided he wanted to continue his schooling and applied for admission to Texas A&M University.

Brain Injury Program Information

The Brain Injury Program team at TIRR Memorial Hermann is composed of affiliated physicians, therapists, nurses, case managers and social workers dedicated to specialized care of persons with brain injury.

- Designated education classes to teaching you or your family about brain injury
- Provides patient rooms, nursing care units and gym space specifically designed to meet the unique needs of a person with brain injury

Types of Brain Injury (BI)

- Traumatic Brain Injury (50%)
- Non-Traumatic Brain Injury (28%)
- Traumatic Brain Injury with Spinal Cord Injury (8%)
- Brain Injury with Fracture or Amputation (14%)

(continued)
Brain Injury Program

In 2017, a total of 385 patients were discharged from the Brain Injury Program

- Non-Traumatic Brain Injury: trauma is not the cause of injury
  - Ex. Surgery related injuries, tumors
  - 107 patients (28%)
- Traumatic Brain Injury: trauma is the cause of injury
  - Ex. Falls, motor vehicle accident
  - 194 patients (51%)
- Traumatic Brain Injury with Spinal Cord Injury
  - 30 patients (8%)
- Brain Injury with Fracture or Amputation
  - 53 patients (14%)

Age and Gender

Adults

- In 2017, a total of 384 adult patients were discharged from the Brain Injury Program

<table>
<thead>
<tr>
<th>Adult Brain Injury Demographics</th>
<th>Non-Traumatic Brain Injury</th>
<th>Traumatic Brain Injury</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (average years)</td>
<td>54</td>
<td>44</td>
</tr>
<tr>
<td>Male</td>
<td>66 (62%)</td>
<td>210 (79%)</td>
</tr>
<tr>
<td>Female</td>
<td>40 (38%)</td>
<td>55 (21%)</td>
</tr>
</tbody>
</table>

- Non-Traumatic Brain Injury
  - Age: 54 years
  - Male: 66 (62%)
  - Female: 40 (38%)

- Traumatic Brain Injury
  - Age: 44 years
  - Male: 210 (79%)
  - Female: 55 (21%)

Adolescents (age 13-17 years old)

- In 2017, a total of 13 adolescent patients were discharged from the Brain Injury Program

<table>
<thead>
<tr>
<th>Adolescent Brain Injury Demographics</th>
<th>Non-Traumatic Brain Injury</th>
<th>Traumatic Brain Injury</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (average years)</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Male</td>
<td>0</td>
<td>9 (75%)</td>
</tr>
<tr>
<td>Female</td>
<td>1 (100%)</td>
<td>3 (25%)</td>
</tr>
</tbody>
</table>

- Non-Traumatic Brain Injury
  - Age: 16 years
  - Female: 1 (100%)

- Traumatic Brain Injury
  - Age: 16
  - Male: 9 (75%)
  - Female: 3 (25%)

(continued)
Brain Injury Program

Length of Stay
How many days do patients with Brain Injury stay at TIRR Memorial Hermann?

<table>
<thead>
<tr>
<th>Sunday</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>27</td>
<td></td>
<td>26</td>
<td>TIRR 26 days</td>
</tr>
<tr>
<td>28</td>
<td>29</td>
<td>30</td>
<td>31</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

Each patient care team contributes to the decision about how long you will be at TIRR Memorial Hermann, based on your individual rehabilitation needs.

Average length of stay (LOS)
- TIRR Memorial Hermann: 26 days

(continued)
Meeting Goals

Assistance in Setting Patient Goals and Meeting Patient Goals

The rehabilitation process begins by setting patient goals. The care team, working with you, or your family member, helps to establish goals that you will be working towards achieving prior to discharge. These goals assist the team to development a patient specific treatment plan.

- In 2017, the mean score for staff assisting the patient, or family members, with meeting their discharge goals was at 93 for patients in the Brain Injury Program.

Upon discharge, patients often continue working towards their goals through Outpatient therapy programs, such as those offered at TIRR Memorial Hermann Adult and Pediatric Outpatient Rehabilitation or other outpatient therapy campuses within the Memorial Hermann Rehabilitation Network.

(continued)
Average Number of Treatment Hours

How Much Therapy Do Patients Receive?

Therapy services include physical, occupational, speech, neuropsychologists/psychologists as well as music and recreational therapies. Each member of your care team will evaluate you. This team will help develop and coordinate your treatment plan. Based on this treatment plan, you will receive combined therapy equaling three or more hours per day, for five out of seven days a week.

- On average, patients receive three to four hours of therapy per day among all disciplines, which may include group therapy sessions.
- The maximum number of hours of therapy that can be provided is between five and six hours per day.
- Rehabilitation nursing services, along with other medical care needs, are key components of the therapeutic process which assist in transitioning the skills learned in therapy to outside of therapy sessions. These needs may be scheduled or unscheduled and require attendance or participation to maximize independence, training, and/or recovery.
- While therapy is maximized during the week, weekend therapies are considered an integral part of the treatment schedule as well.
- The Weekend Program includes (as designed by your team):
  - Education classes for families and patients
  - Therapeutic activities
  - Community re-entry activities
  - Medical management
  - Individual therapy sessions
  - Group sessions
- Scheduled therapy sessions may begin as early as 7 a.m. and can occur as late as 8 p.m., depending on patient goals that your team identifies. Therapeutic activities at TIRR occur every day of the year.
Brain Injury Program

The Results of Rehab

How Many Brain Injury Patients Go Home to the Community?

You and your care team will work together to decide the safest and most appropriate place to discharge.

- In 2017, 78 percent of brain injury patients were discharged home or a place in the community from TIRR Memorial Hermann.

TIRR Memorial Hermann patients are most often discharged home; however, some patients go to acute-care hospitals for additional treatment or surgery. Some patients may go to a transitional setting such as a skilled nursing facility, long-term care or transition to other post acute care services within the Memorial Hermann Post-Acute Network.

Sometimes patients with medical complications have to return to an acute-care hospital for further medical care. At times, these transfers are unplanned and are called “unplanned acute care transfers.”

![Discharge Location in 2017](image)

### Discharge Location in 2017

<table>
<thead>
<tr>
<th>Location</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home/Community</td>
<td>78%</td>
</tr>
<tr>
<td>Skilled Nursing Facility (SNF)</td>
<td>9%</td>
</tr>
<tr>
<td>Acute Care (planned)</td>
<td>5%</td>
</tr>
<tr>
<td>Acute Care (unplanned)</td>
<td>7%</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
</tr>
</tbody>
</table>
You will be asked to complete a satisfaction survey after your stay at TIRR Memorial Hermann. You will be asked to rate the overall care at the hospital on a scale of 1 to 5 and the scores are converted to a scale of 0 to 100.

2017:
- Patients with brain injury and their families rated their care 91.8 points out of 100.
- When patients and family members were asked if they would recommend TIRR Memorial Hermann to others, 91 percent responded that they would.
THANK YOU

for choosing TIRR Memorial Hermann
for your rehabilitation care.