Spinal Cord 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)
Spinal Cord Injury Program

We consider our mission to be accomplished when persons with spinal cord injuries, within the scope of their individual capabilities and opportunities, achieve a quality of life with personal independence, productive functioning and maximum state of health.

“My first day there was very frightening, because I understood for the first time that I was headed down a different path,” Meena says. “I thought they transferred me to TIRR Memorial Hermann so that I could learn to walk again, but instead they were teaching me to be functional in a wheelchair. I knew it was the start of a journey of learning the ‘new me,’ so I gritted my teeth and moved forward. My son was 3 weeks old when the accident occurred. My kids were my motivation to get better and get home.”

Meena Dhanjal Outlaw, Spinal Cord Injury

The Spinal Cord Injury (SCI) 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 a spinal cord injury.
- Two-week series of educational classes dedicated to teaching you and your family about spinal cord injury
- Provides patient rooms, nursing care units and gym space specifically designed and equipped to meet the unique needs of a person with spinal cord injury

Types of Spinal Cord Injury (SCI)

- Traumatic Spinal Cord Injury 69%
- Non-Traumatic Spinal Cord Injury 31%

(continued)
Spinal Cord Injury Program

In 2017, a total of 320 patients were discharged from the Spinal Cord Injury Program
- Non-Traumatic Spinal Cord Injury: trauma is not the cause of injury
  - Ex. Surgery related injuries, tumors
  - 100 patients (31%)
- Traumatic Spinal Cord Injury
  - Ex. Falls, motor vehicle accident
  - 200 patients (69%)

Age and Gender

Adults
- In 2017, a total of 314 adult patients were discharged from the Spinal Cord Injury Program

<table>
<thead>
<tr>
<th>Adult Brain Injury Demographics</th>
<th>Non-Traumatic Spinal Cord Injury (n=99)</th>
<th>Traumatic Spinal Cord Injury (n=215)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (average years)</td>
<td>58</td>
<td>44</td>
</tr>
<tr>
<td>Male</td>
<td>61 (62%)</td>
<td>156 (73%)</td>
</tr>
<tr>
<td>Female</td>
<td>38 (38%)</td>
<td>59 (27%)</td>
</tr>
</tbody>
</table>

- Non-Traumatic Brain Injury
  - Age: 58 years
  - Male: 61 (62%)
  - Female: 38 (38%)

- Traumatic Brain Injury
  - Age: 44 years
  - Male: 156 (73%)
  - Female: 59 (27%)

Adolescents (age 13-17 years old)
- In 2017, a total of 6 adolescent patients were discharged from the SCI Program

<table>
<thead>
<tr>
<th>Adolescent Brain Injury Demographics</th>
<th>Non-Traumatic Spinal Cord Injury (n=1)</th>
<th>Traumatic Spinal Cord Injury (n=5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (average years)</td>
<td>13</td>
<td>17</td>
</tr>
<tr>
<td>Male</td>
<td>1 (100%)</td>
<td>3 (60%)</td>
</tr>
<tr>
<td>Female</td>
<td>0</td>
<td>2 (40%)</td>
</tr>
</tbody>
</table>

- Non-Traumatic Brain Injury
  - Age: 13 years
  - Male: 1 (100%)

- Traumatic Brain Injury
  - Age: 17
  - Male: 3 (60%)
  - Female: 2 (40%)

(continued)
Spinal Cord Injury Program

**Length of Stay**

How many days are Spinal Cord Injury patients 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>
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<td>1 2</td>
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<td>26 27</td>
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</tr>
<tr>
<td>28</td>
<td>29 30</td>
<td>31 1 2</td>
<td>26 days</td>
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</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 Herman: 29 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 toward achieving by discharge. These goals assist the team in development of a treatment plan, which is designed to help patients meet their discharge goals.

- In 2017, the mean score for staff assisting the patient, or family members, with meeting their discharge goals was at 91 for those patients in the Spinal Cord 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.

(continued)
TIRR Memorial Hermann is well known for its management of patients who require use of a ventilator. In 2017, TIRR admitted 37 patients on ventilators.

- Fully weaned at discharge: 23 patients (62%)
- Off ventilator for at least 8 hours daily: 5 patients (14%)
- Ventilator dependent at discharge: 11 patients (30%)
The Results of Rehab

How Many Spinal Cord 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, 76 percent of spinal cord 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

- **Home and Community**: 76%
- **Skilled Nursing Facility (SNF)**: 9%
- **Acute Care (planned)**: 4%
- **Acute Care (unplanned)**: 5%
- **Other**: 3%

### Patient Discharge Location

<table>
<thead>
<tr>
<th>Location</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>Home/Community</td>
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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 spinal cord injury and their families rated their care 87.5 points out of 100.
- When patients and family members were asked if they would recommend TIRR Memorial Hermann to others, 88 percent responded that they would.

(continued)
THANK YOU
for choosing TIRR Memorial Hermann
for your rehabilitation care.