

# Neurodegenerative Diseases, Debilitating Conditions and Multiple Trauma Program (Neuromuscular Rehab)

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.

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**Neuromuscular Rehabilitation Program**



**Oscar Rangel, Guillain Barré**

Therapy is often overlooked for persons with complex or chronic conditions because of the nature of these conditions. However, rehabilitation services have proven to be invaluable for many of these patients, providing them with improved function, mobility, strength and the confidence to tackle the challenges of everyday life.

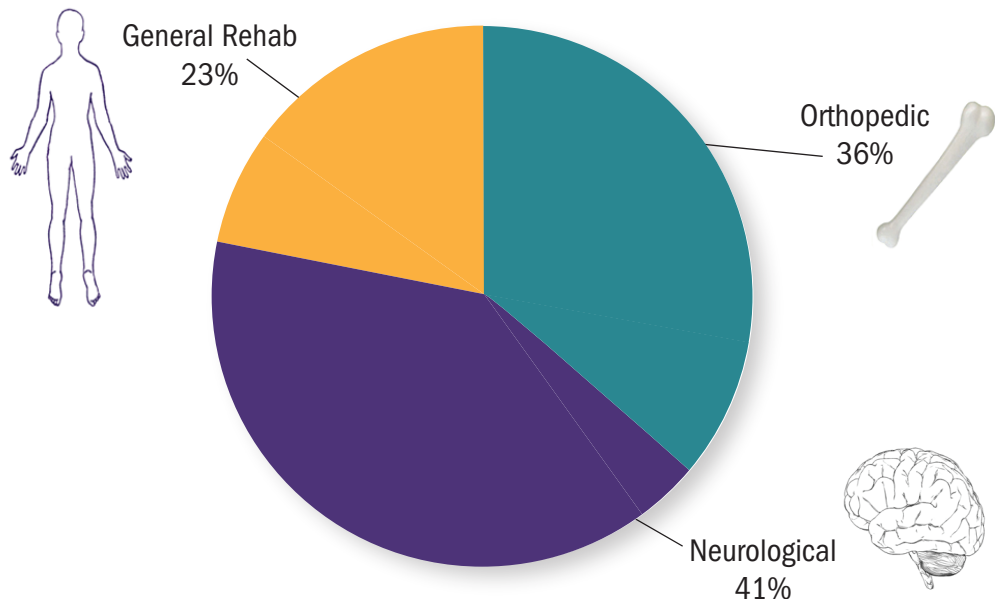
Oscar was diagnosed with Guillain Barré, a rare nervous system disorder that results from nerve damage caused by the body’s own defenses (immune system), usually in response to an infection or other illness. He was paralyzed and made very few improvements in therapy during his acute care stay.

Oscar was transferred to TIRR Memorial Hermann and was in our neurodegenerative diseases program for six weeks. When he arrived, Oscar was ventilator dependent and could not eat, stand up or sit up in a chair. He and his family started to see improvements immediately in specialized therapy that helped to treat Guillain Barré. His daughter was even able to participate in therapy with him; Oscar would reach out to her and hand her things. Oscar says that each team member was important in his recovery.

**Neuromuscular Rehabilitation Program Information**

The Neuromuscular Rehabilitation Program at TIRR Memorial Hermann has a team of physicians, therapists, nurses, case managers and social workers dedicated to specialized care of persons with complex injuries and rehabilitation needs. This Program was designed to meet the various needs of patients with different types of injuries.

**Types of Injury**



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**Neuromuscular Rehabilitation Program**

- In 2017, 183 patients were discharged from the Neuromuscular Rehabilitation Program.

Type of rehab/injury	Number of patients	Percentage of patients	Examples
<b>General rehab</b>	43	23%	Heart or lung problems
<b>Orthopedic injuries</b>	51	33%	Multiple fractures or amputations
<b>Neurological injuries</b>	75	41%	Multiple Sclerosis and Guillain Barré

**Age and Gender**

**Adults**

- In 2017, a total of 182 adult patients were discharged from the Neuromuscular Rehab Program

	<b>Adult Neuromuscular Rehab Demographics</b>		
	<b>General Rehab (n=43)</b>	<b>Orthopedic Injury (n=65)</b>	<b>Neurological Injury (n=74)</b>
<b>Age (average years)</b>	61	61	52
<b>Male</b>	21 (49%)	36 (55%)	41 (55%)
<b>Female</b>	22 (51%)	29 (45%)	33 (45%)

• **General Rehab**

- Age: 61 years
- Male: 21 (49%)
- Female: 22 (51%)

• **Orthopedic Injury**

- Age: 61 years
- Male: 36 (55%)
- Female: 29 (45%)

• **Neurological Injury**

- Age: 52 years
- Male: 41 (55%)
- Female: 33 (45%)

**Adolescents (age 13-17 years old)**

- In 2017, a total of 1 adolescent patient was discharged from the Neuromuscular Rehab Program

<b>Adolescent Neuromuscular Rehab Demographics</b>	
<b>Neurological Injury (n=1)</b>	
<b>Age (average years)</b>	14
<b>Male</b>	100%

• **Neurological Injury**

- Age: 14 years
- Male: 1 (100%)

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**Neuromuscular Rehabilitation Program**

**Length of Stay**

**How many days are Neuromuscular Rehab Program patients at TIRR Memorial Hermann?**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
					<b>TIRR</b> 22 days	
21	22	23	24	25	26	27

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

Type of Rehab/Injury	Average Length of Stay at TIRR Memorial Hermann
<b>Orthopedic injury</b>	15 days
<b>Neurological injury</b>	19 days
<b>General rehab</b>	18 days

This is a comparison of similar patients with a brain injury at other rehabilitation facilities across the country.

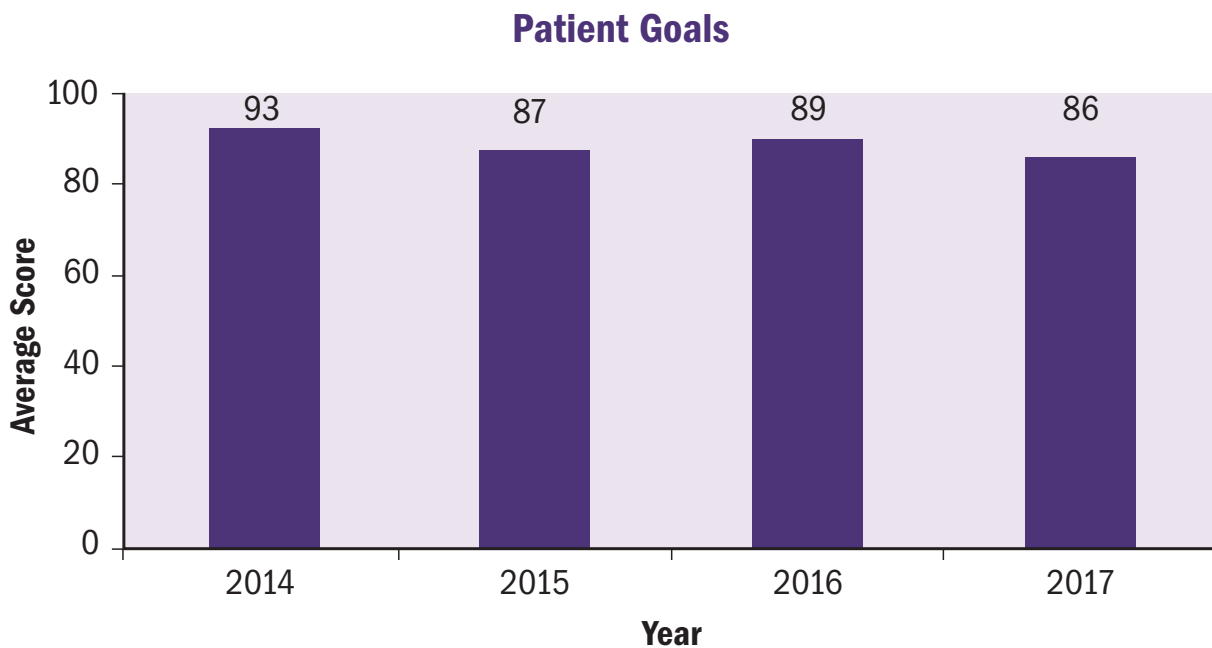
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## Neuromuscular Rehabilitation Program

### 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 2016, the mean score for staff assisting the patient, or family members, with meeting their discharge goals was at 86 for those patients in the Neuromuscular Rehab 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.

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## Neuromuscular Rehabilitation Program

### 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.
- 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.

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**Neuromuscular Rehabilitation Program**

**The Results of Rehab**

**How Many Neuromuscular Rehab Patients Go Home to the Community?**

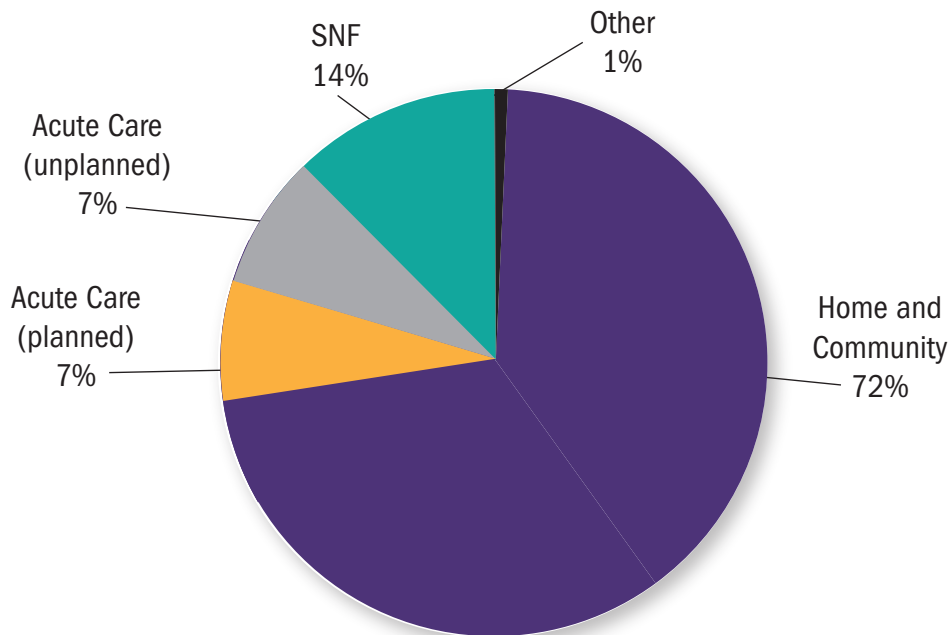
You and your care team will work together to decide the safest and most appropriate place to discharge.

- In 2017, 72 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**



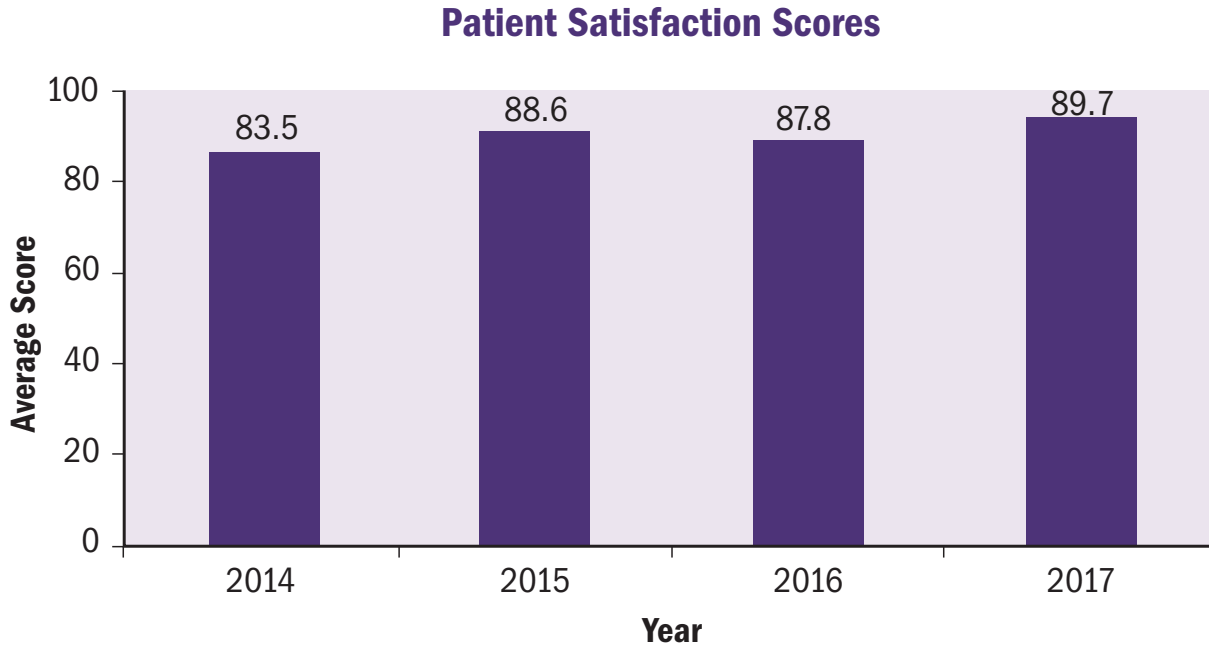
Patient Discharge Location	
Home/Community	75%
Skilled Nursing Facility (SNF)	12%
Acute Care (planned)	1%
Acute Care (unplanned)	10%
Other	2%

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Neuromuscular Rehabilitation Program

**Patient Satisfaction**

**How TIRR Memorial Hermann Neuromuscular Rehab Patients Feel About Their Care**



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 89.7 points out of 100.
- When patients and family members were asked if they would recommend TIRR Memorial Hermann to others, 93% percent responded that they would.

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## **THANK YOU**

for choosing TIRR Memorial Hermann  
for your rehabilitation care.

