

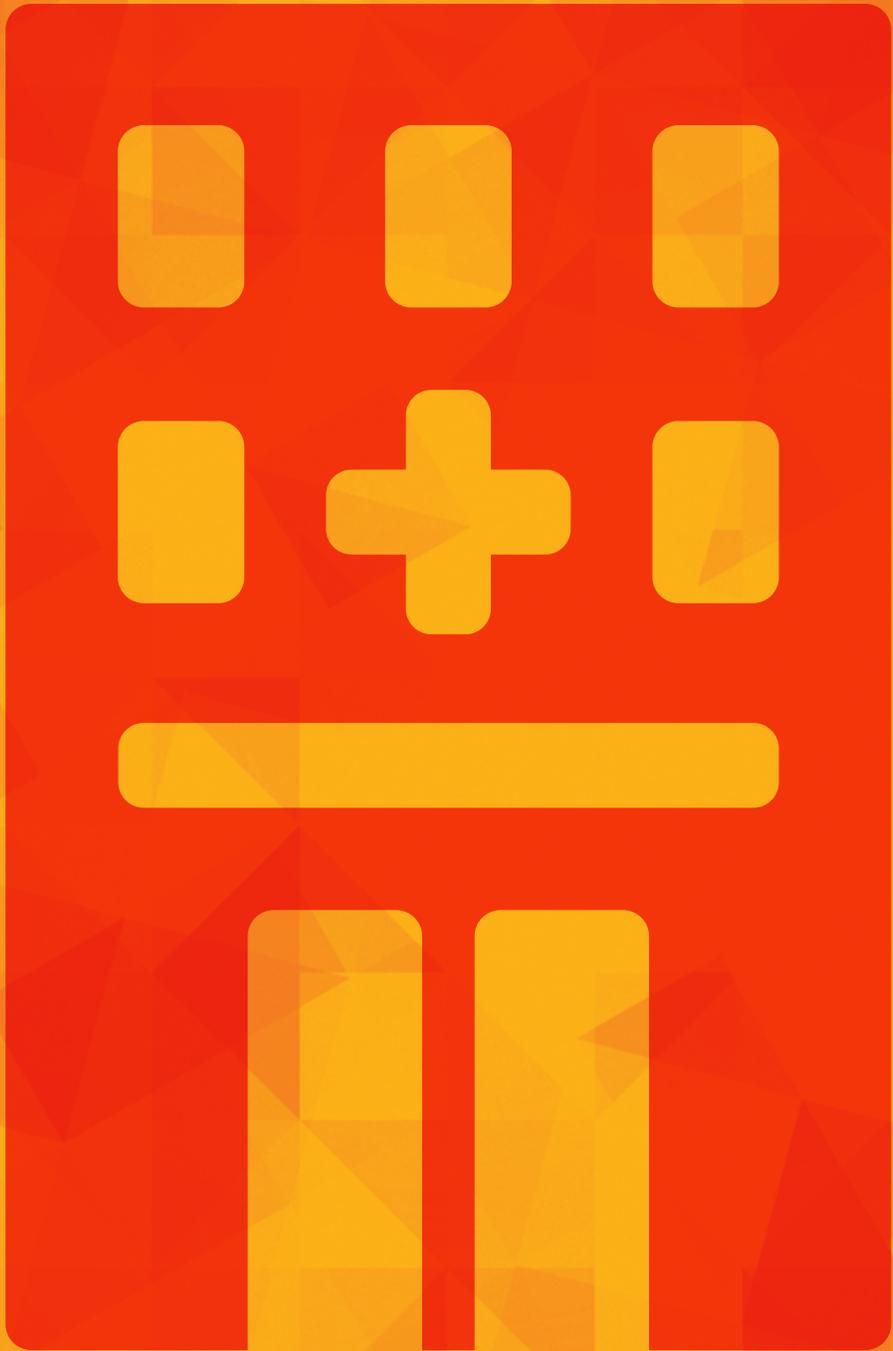
REHABILITATION INSTITUTE

ANNUAL REPORT 2015



HealthPartners®

Regions Hospital®



Welcome to Regions Hospital Rehabilitation Institute

In 2015, we had a year of growth and success for both our inpatient and outpatient programs. The inpatient unit noted growth in census as well as in programs targeted to the specific needs of our patients. Regions Hospital was the first hospital in Minnesota to achieve Comprehensive Stroke Center certification – and our patients benefit from outstanding initial acute care as well as enhanced stroke education, rehab programming and peer support programs in both acute care as well as the rehabilitation unit.

For patients living in certain areas, there is a free community paramedic post-discharge visit. This is available to inpatients with stroke and brain injury who have been seen in our acute hospital and acute inpatient rehab.

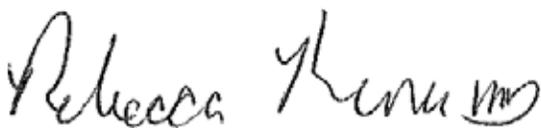
Opportunities for people with spinal cord injury continue to expand including programming from acute care and inpatient rehab to outpatient therapies and follow-up care. In rehabilitation, patients and their support people are invited to participate in an individual education session with a physician who specializes in spinal cord injury. The outpatient program now offers a regular ReWalk exoskeleton clinic.

As part of our growth, our leadership team was expanded. Marny Farrell was named director of outpatient and Donna Jensen's focus was shifted to director of inpatient services for the Rehabilitation Institute. The outpatient program also added a rehabilitation psychologist, Garry Allen, PsyD, LP.

As we look to the future, we are planning and developing new facilities and programs for the HealthPartners Neuroscience Center, which is scheduled to open April 3, 2017. The center will house therapies, interdisciplinary clinics and research – all coordinated and working for the benefit of each patient.

We remain committed to living our mission: providing exceptional individualized care in safe, healing environments and offering services of great value as we address the challenges of an ever-changing health care environment.

I am honored to represent the many skilled, compassionate and dedicated employees of Regions Hospital Rehabilitation Institute and to share with you our 2015 annual report.



Rebecca Koerner, MD

Medical Director

Regions Hospital Rehabilitation Institute





Exoskeleton Clinic

Regions Hospital and ReWalk Robotics give patients with spinal cord injuries the chance to walk again.



“Imagine what it’s like for our patients to stand for the first time in months or even years...”

WE HAVE PARTNERED WITH REWALK ROBOTICS to help patients with spinal cord injury and other neurological conditions walk again. The monthly exoskeleton clinic gives patients the opportunity to try a new wearable device that provides powered hip and knee motion to enable individuals with spinal cord injuries to stand upright and walk under the guidance of our trained physical therapists. In 2015, Regions’ ReWalk clinic offered 21 patients the opportunity to experience the benefits of using the system as part of their physical therapy.

“By collaborating with the ReWalk team to bring the exoskeleton system to Regions Hospital, we’re able to provide this new technology to the patients in our community,” says Steven Jackson, MD, a physical medicine and rehabilitation physician and director of the division of spinal cord injury with HealthPartners and Regions Hospital. “Imagine what it’s like for our patients to stand for the first time in months or even years. In many ways, the psychological benefits are just as great as the physical benefits.”

The ReWalk system is the first device of its kind that is FDA-approved for use in the home and community. ReWalk manufactures two exoskeleton systems, a rehabilitation model designed for clinical use, and a personal system which can be used by individuals for home use. Clinical studies of the ReWalk system have shown several potential health benefits for the user, including reduction of needed medication, increase in lean muscle mass, decreased body fat and improved pain management.

ELIMINATING
PATIENT
FALLS

10%
FALL REDUCTION

0
FALLS WITH
INJURY

TWO OF OUR SAFETY GOALS in acute inpatient rehabilitation were to reduce patient falls by 10 percent in 2015 and to have no falls with injury. Both of these goals were met in 2015! To achieve these great results, all newly admitted patients were provided with a tab alarm and bed alarm until cleared to be independent from these devices. In addition, all patients used seat belts in their wheelchairs, and constant supervision was provided when patients were returned to the unit and to their rooms. Nursing also follows an intentional hourly rounding process to address patient needs and to increase safety. If a fall occurs, the nursing team conducts a post-fall Huddle to identify any opportunities for improvement in care and processes.



EXCELLENCE
IN BRAIN
INJURY CARE

OUR PATIENTS WITH TRAUMATIC BRAIN INJURY far exceeded national benchmarks in functional improvements made in the program and progress made per day, and had a higher rate of discharge to home.

2015

Third year of zero reportable pressure ulcers

20142013

THE GOAL OF ZERO REPORTABLE PRESSURE ulcers was met in 2015, and is the third consecutive year for zero reportable pressure ulcers. Tactics used to assure skin integrity of rehab patients included assessing each patient on admission using the Braden Risk Assessment tool, discussing risks for skin breakdown at weekly interdisciplinary team rounds and specific focus on those patients with risks of existing skin breakdown, poor nutrition and limited bed mobility. Individualized plans of care were developed when risks were identified and included pressure mapping, defining appropriate bed and wheelchair positioning, and use of the p500 mattress. Staff, patient and family education are also part of the culture of maintaining good skin integrity.



HealthPartners
NEUROSCIENCE CENTER

Neuroscience Center planning & groundbreaking

GROUNDBREAKING OCCURRED IN JULY 2015 for the new HealthPartners Neuroscience Center which will be a destination for individuals with neuroscience diagnoses to receive a broad range of specialized services in one location. Specialties will include neurology, neurosurgery and spine care, pain management and physical medicine and rehabilitation. Regions Hospital Imaging and Rehabilitation each have an integral role in the center to broaden the continuum of care for this population of patients, family members and community. The driving concept in the development of the entire center, facilities, environment and team interaction is to “think differently” regarding patient care and experience.

The Rehabilitation Institute is dedicated to the promotion of optimal function and performance in the lives of individuals. The new facility will provide specialized rehabilitation services and resources to do just that for people with stroke, brain injury, pain, acute to chronic spine symptoms, Parkinson’s disease, dementia, spinal cord injury, movement disorders, multiple sclerosis, amyotrophic lateral sclerosis (ALS), brain and spine tumors and other neurologic conditions.

The current outpatient neuroscience rehabilitation services will be moving from Regions Hospital campus to a new 20,000 square foot space in the Neuroscience Center. This specially designed space is dedicated to outpatient physical, occupational, speech and aquatic therapy, along with rehabilitation psychology. The new therapy space will leverage technology, layout, lighting and sound blocking to optimally treat a broad range of individuals. It will have a full adaptive gym to allow for individuals with different abilities to improve their endurance and strength, adding a much needed adaptive gym to the community of St. Paul. A quiet technology gym will house the latest training equipment for both cognitive and physical impairments. The planned therapy pool offers full accessibility with a lift, space for one-on-one aquatic therapy and underwater treadmills with video feedback for optimal gait training. The space will be a truly healing environment that will encourage individuals to achieve their goals and will challenge them to strive toward new goals.

The driving concept is to “think differently” regarding patient care and experience.

REHAB PROGRAM GROWTH

13% INCREASE IN ADMISSIONS SINCE 2014

ACUTE INPATIENT REHABILITATION had 389 admissions, which is the highest number of admissions ever and 13% growth over 2014.

THE PEER MENTOR PROGRAM EXPANDED with the addition of two trained peer mentors with amputations.

IMPROVED ACCESS TO OUTPATIENT THERAPY: Through centralized scheduling and other process improvements, we achieved a 7.5% improvement in access of care without increase in staffing or budget.

OUTPATIENT PHYSICAL THERAPY WAS RELOCATED from 295 Phalen Blvd. to Suburban Square in St. Paul and a new PT Clinic was opened within the Orthopaedics and Sports Medicine Clinic at HealthPartners Specialty Center at 435 Phalen Blvd. in St. Paul.



GARRY ALLEN, PSYD., LP, joined the Rehabilitation Institute to expand outpatient rehabilitation psychology services.



MD NEWS

ADVANCES IN REHABILITATION CARE made by our physical medicine and rehabilitation (PM&R) and acute inpatient staff were featured in the October 2015 issue of *MD News* in Minnesota. *MD News* is a widely read physician-to-physician magazine that includes topics of interest to physicians related to business and clinical practices. The article featured three of our PM&R physicians, Rebecca Koerner, MD, Keith Moench, MD, and Steven Jackson, MD, and highlighted the new acute inpatient rehabilitation facility that opened in fall 2014 as well as advances in care and rehabilitation of people with brain injury and spinal cord injury.

For more information visit:

minnesota.mdnews.com/digital-editions.



TOWN HALL FORUM HELD IN NOVEMBER

REGIONS CO-HOSTED ITS FIRST TOWN HALL FORUM in coordination with the Minnesota Brain Injury Alliance (MN BIA) during which three elected officials, Sandra Pappas (President of MN Senate), Representative Sheldon Johnson, and Senator Foung Hawj, were present to hear over 15 testimonials from patients, caregivers and staff involved in the care of those with brain injury and stroke and their suggestions for how to improve the rehabilitation process and remove barriers for those recovering. Prior to the Town Hall Forum, patients and caregivers received training from the MN BIA and Regions Hospital staff in how to tell their stories effectively as well as how to advocate for issues of importance to them.



Sandra Pappas



Sheldon Johnson



Foung Hawj

COMMUNITY PARAMEDIC/EMS PROGRAM IMPLEMENTED

REGIONS ACUTE INPATIENT REHABILITATION cares for about 200 patients with brain and spinal cord injuries each year. When a patient returns home, the transition back to the community can be scary. With a new medical condition, patients may have difficulty moving or communicating with others. If an emergency comes up, patients and their loved ones often don't know who to call for help. In 2015, we started partnering with community paramedics from St. Paul Fire Department to try and solve this problem. The result is a new optional program to bring a community paramedic to meet with the patient and family prior to leaving the hospital. The paramedic talks about health or safety issues common to the patient's diagnosis and how first responders like police officers, firefighters and paramedics can help. The paramedic can also visit the patient's home following discharge. Initial results have demonstrated that patients and families feel safer returning home knowing that help is just a phone call away.



IN DECEMBER 2015, THE JOINT COMMISSION RECERTIFIED REGIONS HOSPITAL AS A COMPREHENSIVE STROKE CENTER.

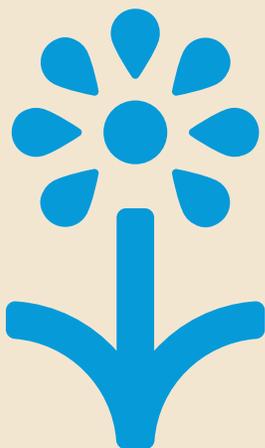
Only 96 hospitals in the nation are The Joint Commission Certified Stroke Centers. Through this certification, Regions Hospital is recognized for the excellent stroke care it provides each and every day.

SARA OBERG, BM, MA, CCC-SLP, was elected in November by the Early Hearing Detection and Intervention's newborn hearing screening advisory committee of the Minnesota Department of Health as vice chair for 2016 and president chair for 2017.

REBECCA KOERNER, MD, became division head for Neuroscience, Pain and Neurosurgery.

KEITH MOENCH, MD, became section head for HealthPartners Physical Medicine and Rehabilitation.

STEVEN JACKSON, MD, FAAPMR, became board-certified in spinal cord injury.



CERTIFICATIONS

KAYLA BRINKMAN THEIMER, MA, CCC-SLP, obtained interactive metronome certification for outpatient speech therapy.

SHEILA EICHMANN, CCC-SLP, AND KAYLA BRINKMANTHEIMER, CCC-SLP, obtained certification in the Guardian Way neuromuscular electrical stimulation (e-stim) application for use with dysphagia and facial weakness.

EVAN PAGE, MA, CCC-SLP, obtained partial lymphedema certification to apply toward lymphedema management of patients with head and neck cancer.

COMMUNITY SUPPORT AND AWARENESS

A rehab team consisting of **AMANDA BRAWLEY, DPT, KATY BLOOR, OTR/L, JILL DANBURGKNUDSEN, OTR/L, JENNIFER RIXEN, DPT**, conducted 31 Think First classes that reached approximately 620 middle school and high school students in St. Paul on the topic of brain injury and spinal cord injury prevention.

AMY STENMAN, PT, volunteered at the Cottage Grove Safety Camp (July 2015).

PRESENTATIONS

STEVEN D. JACKSON, MD, FAAPMR, to Amery Hospital (Amery, WI) on spinal cord injury prognosis (March 2015).

LISA MACKALL, M.S., CCC-SLP, to MN Brain Injury Alliance Annual Conference, “The Family Perspective from a Medical Professional” (April 2015).

SARA OBERG, B.M., M.A., CCC-SLP at the Minnesota Hands and Voices Family Event, “Maximizing Communication with Your Child Who is Deaf or Hard of Hearing.” Sara also leads an Adult Cochlear Implant Social Group (June 2015).

MEGAN CAHILL, DPT, to the Regions Hospital Breast Cancer support group and the Leukemia Lymphoma support group (July and September 2015).

STEVEN D. JACKSON, MD, FAAPMR, on SCI Prognosis, Healthcare Horizons Conference, Grand Forks, ND (October 2015).

MARNY FARRELL, MPT, on “Technological Advances in the Treatment of Spinal Cord Injury,” Injury of the Spine Symposium at Regions Hospital for community and staff (November 2015).

STEVEN D. JACKSON, MD, FAAPMR, on “Life Begins after Injury”, SCI Symposium (November 2015).

EVAN PAGE, M.A., CCC-SLP, to TCSLP (Twin Cities Speech Language Pathologist), “Swallowing and Communication Intervention in Oncology: It’s more than just Aspiration.”

STEVEN D. JACKSON, MD, FAAPMR, on neurogenic bowel/bladder to Regions Hospital nursing and therapies staff (multiple presentations 2015).

GRETCHEN NIEMIOJA, MD, EVAN PAGE, CCC-SLP, MEGAN CAHILL, PT, to the Cancer Rehabilitation lecture series (2015).

RESEARCH

A \$10,000 PARKINSON’S GRANT was received from the National Parkinson’s Disease Foundation to support a balance and coordination aquatic class for individuals with Parkinson’s disease.

COGNITION LINKED TO ENDURANCE AND VIGOROUS EXERCISE RESEARCH (CLEVER-PD trial) was carried out investigating the relationship between endurance training and improvements in cognitive function and quality of life in people with Parkinson’s disease, in collaboration with Julia Johnson, MD, and funded through a research, education and development grant.

TSOS: POST TRAUMATIC STRESS DISORDER study funded by National Institute of Health with Keith Moench, MD, as the primary investigator, following a program designed by the University of Washington and the American College of Surgeons to follow trauma patients that score high on PTSD markers to make sure they get the follow-up they need post-discharge.

PATIENTS SERVED BY REHAB IMPAIRMENT CATEGORY

389 TOTAL PATIENTS

MAJOR MULTIPLE TRAUMA W/BRAIN OR SPINAL CORD INJURY
19 patients | 4.9%

AMPUTATION LOWER EXTREMITY
21 patients | 5.4%

NON-TRAUMATIC SPINAL CORD INJURY
32 patients | 8.2%

TRAUMATIC SPINAL CORD INJURY
18 patients | 4.6%

MISCELLANEOUS
15 patients | 3.9%

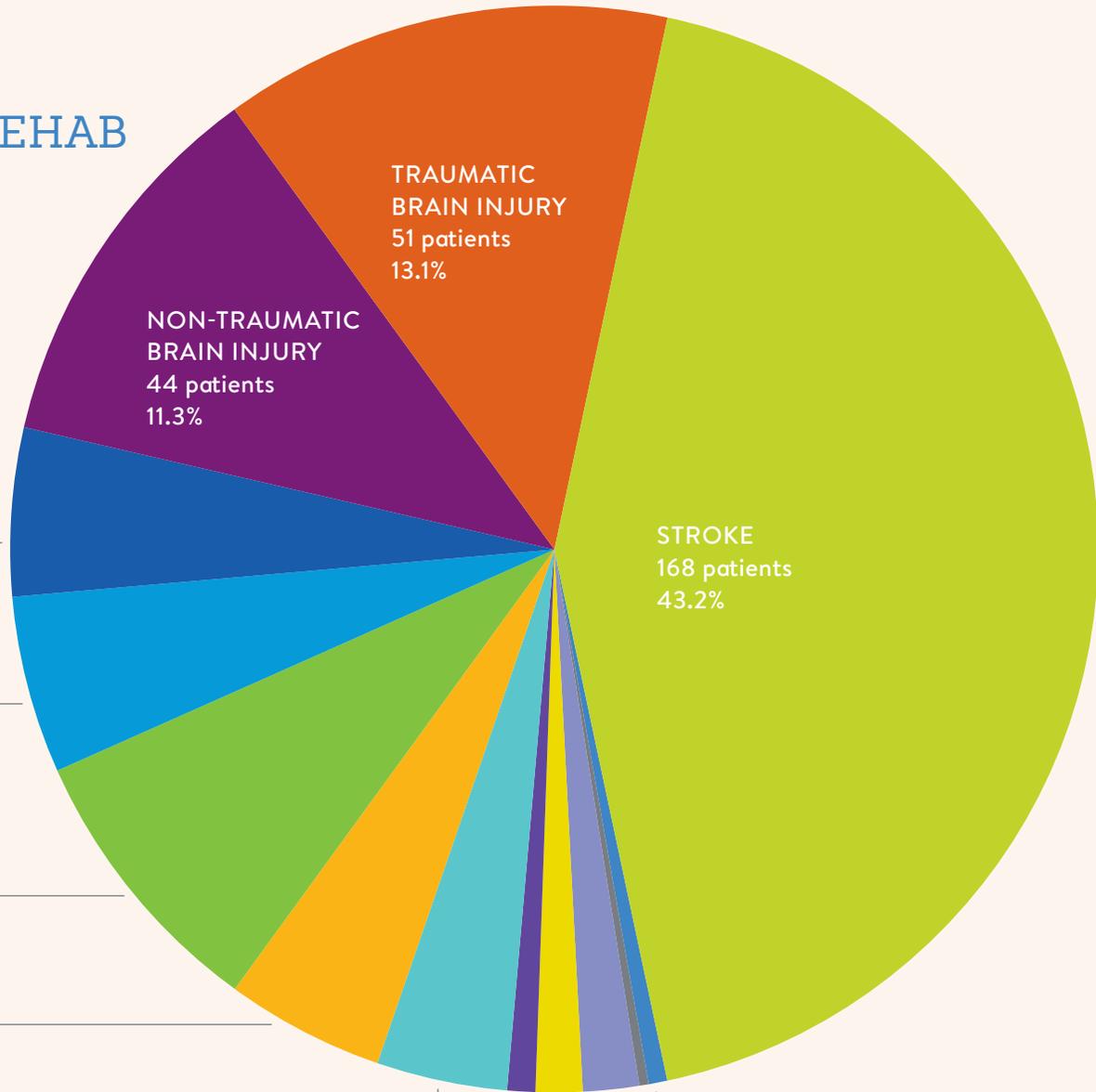
GUILLAIN BARRE
4 patients | 1.0%

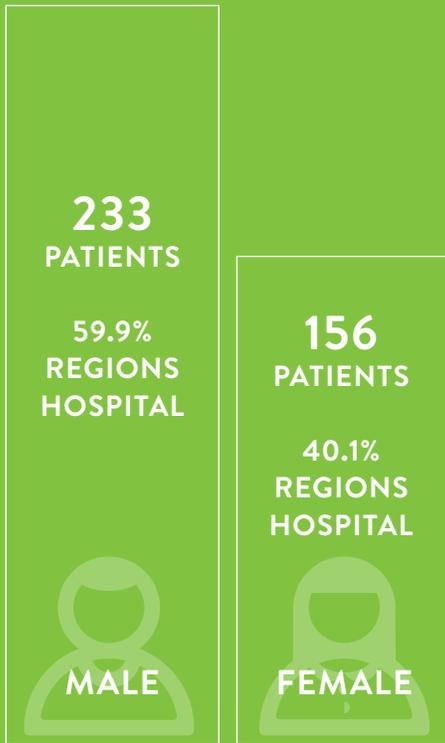
BURNS
5 patients | 1.3%

NEUROLOGICAL
6 patients | 1.5%

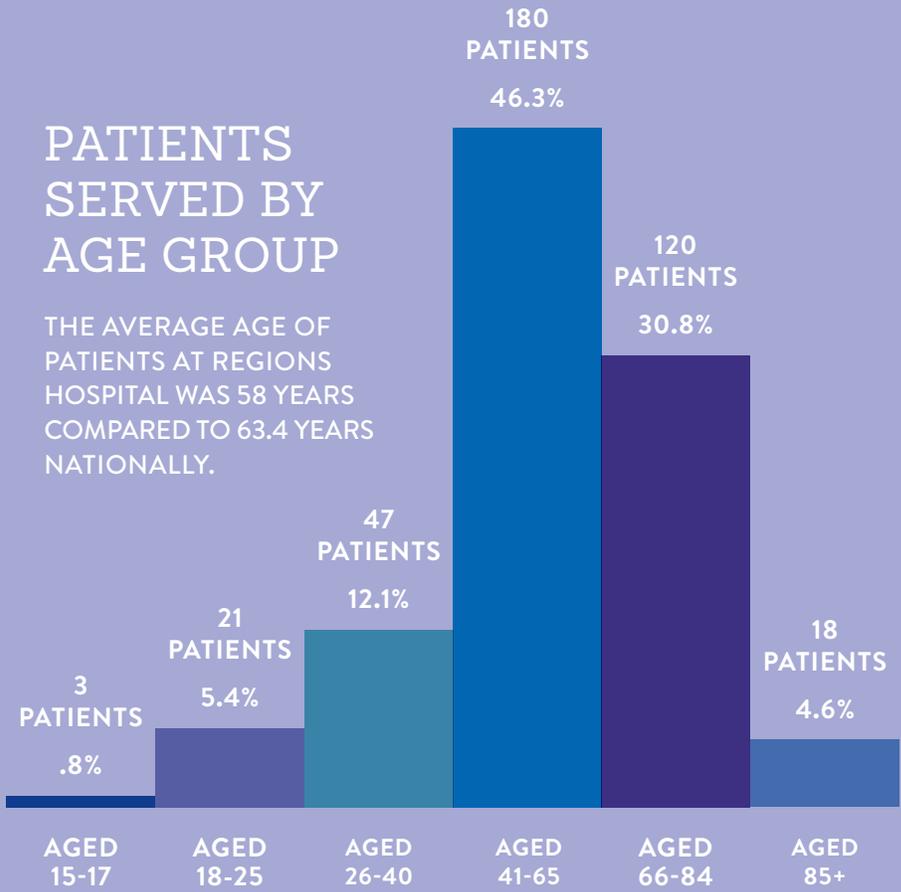
OTHER ORTHOPEDIC
1 patient | 0.3%

CARDIAC
2 patients | 0.5%





GENDER OF PATIENTS SERVED



FUNCTIONAL OUTCOMES

Regions Hospital patients make greater functional improvements from admission to discharge and greater improvement per day than the national average. Over two thirds of all patients return to home or community following acute inpatient rehabilitation.

ALL PERSONS SERVED 389 PATIENTS	REGIONS HOSPITAL MEAN	NATIONAL ADJUSTED MEAN*
Length of stay in days (lower is better)	14.3	14.4
Functional improvement/FIM change (higher is better)	29.4	26.2
Length of stay efficiency (higher is better)	2.35	2.32
DISCHARGE DESTINATION		
To home and community	68.4%	76.4%
To long term care, includes transitional care unit	20.3%	20.3%
To acute care	10.5%	9.1%

*Regions Hospital utilizes the Uniform Data System for Medical Rehabilitation as the source for benchmarking data and outcomes comparison.

FUNCTIONAL OUTCOMES FOR PATIENTS WITH TRAUMATIC BRAIN INJURY



At Regions, patients with brain injury made significantly greater functional improvement from admission to discharge and made greater progress per day than the national benchmarks, and the rate of discharge to home exceeded the national average.

TRAUMATIC BRAIN INJURY 51 PATIENTS	REGIONS HOSPITAL MEAN	NATIONAL ADJUSTED MEAN*
Length of stay in days (lower is better)	13.1	13.2
Functional improvement/FIM change (higher is better)	40.8	27.6
Length of stay efficiency (higher is better)	3.4	2.61
DISCHARGE DESTINATION		
To home and community	80.4%	78.2%
To long term care, includes transitional care unit	7.8%	11.8%
To acute care	7.8%	9.1%

FUNCTIONAL OUTCOMES FOR PATIENTS WITH STROKE

Regions Hospital patients with stroke made greater functional improvements from admission to discharge than the national average.

STROKE 168 PATIENTS	REGIONS HOSPITAL MEAN	NATIONAL ADJUSTED MEAN*
Length of stay in days (lower is better)	14.9	14.6
Functional improvement/FIM change (higher is better)	27.7	25.8
Length of stay efficiency (higher is better)	2.1	2.23
DISCHARGE DESTINATION		
To home and community	63.1%	74.9%
To long term care, includes transitional care unit	28.6%	17.0%
To acute care	8.3%	7.7%

*Regions Hospital utilizes the Uniform Data System for Medical Rehabilitation as the source for benchmarking data and outcomes comparison.

FUNCTIONAL OUTCOMES FOR PATIENTS WITH NON-TRAUMATIC BRAIN INJURY

Our patients with non-traumatic brain injury made greater improvement from admission to discharge than the national adjusted average.

NON-TRAUMATIC BRAIN INJURY 44 PATIENTS	REGIONS HOSPITAL MEAN	NATIONAL ADJUSTED MEAN*
Length of stay in days (lower is better)	13.1	11.7
Functional improvement/FIM Change (higher is better)	27.6	24.5
Length of stay efficiency (higher is better)	2.55	2.52
DISCHARGE DESTINATION		
To home and community	72.7%	79.2%
To long term care, includes transitional care unit	13.6%	10.2%
To acute care	13.6%	10.2%

FUNCTIONAL OUTCOMES FOR PATIENTS WITH MAJOR MULTIPLE TRAUMA WITH BRAIN OR SPINAL CORD INJURY

Patients with major multiple trauma with brain or spinal cord injury made greater functional improvements from admission to discharge as well as greater progress per day of rehabilitation.

MAJOR MULTIPLE TRAUMA WITH BRAIN OR SPINAL CORD INJURY 19 PATIENTS	REGIONS HOSPITAL MEAN	NATIONAL ADJUSTED MEAN*
Length of stay in days (lower is better)	20.2	19.0
Functional improvement/FIM change (higher is better)	42.3	34.8
Length of stay efficiency (higher is better)	2.45	2.45
DISCHARGE DESTINATION		
To home and community	63.2%	79.6%
To long term care, includes transitional care unit	31.6%	10.1%
To acute care	5.3%	8.6%

*Regions Hospital utilizes the Uniform Data System for Medical Rehabilitation as the source for benchmarking data and outcomes comparison

FUNCTIONAL OUTCOMES FOR PATIENTS WITH SPINAL CORD INJURY

IN 2015, PATIENTS with traumatic spinal cord injury had a shorter length of stay, however gains made were somewhat lower than national average and patients were discharged more frequently to a transitional care center for continued rehabilitation. This is an area for continued focus in 2016.

TRAUMATIC SPINAL CORD INJURY 18 PATIENTS	REGIONS HOSPITAL MEAN	NATIONAL ADJUSTED MEAN*
Length of stay in days (lower is better)	15.8	20.6
Functional improvement/FIM change (higher is better)	21.8	25.6
Length of stay efficiency (higher is better)	1.56	1.96
DISCHARGE DESTINATION		
To home and community	50%	72.3%
To long term care, includes transitional care unit	22.2%	15.2%
To acute care	22.2%	10.4%

PATIENTS WITH non-traumatic spinal cord injury made greater functional improvements throughout their stay as well as per day, and had a shorter length of stay, than the national benchmarks.

NON-TRAUMATIC SPINAL CORD INJURY 32 PATIENTS	REGIONS HOSPITAL MEAN	NATIONAL ADJUSTED MEAN*
Length of stay in days (lower is better)	14.8	15.6
Functional improvement/FIM change (higher is better)	27.6	26.7
Length of stay efficiency (higher is better)	2.23	2.18
DISCHARGE DESTINATION		
To home and community	68.8%	73.3%
To long term care, includes transitional care unit	18.8%	14.4%
To acute care	12.5%	11.7%

*Regions Hospital utilizes the Uniform Data System for Medical Rehabilitation as the source for benchmarking data and outcomes comparison

NUMBER OF PATIENTS WITH SPINAL CORD INJURY (SCI) BY LEVEL AND TYPE IN 2015

LEVEL & TYPE OF INJURY	NUMBER OF TRAUMATIC SCI	NUMBER OF NON-TRAUMATIC SCI
Paraplegia Incomplete	4	17
Paraplegia Complete	2	1
Paraplegia	0	1
Quadriplegia	0	3
Quadriplegia Incomplete C1-4	6	2
Quadriplegia Incomplete C5-8	3	4
Quadriplegia Complete C1-4	2	0
Quadriplegia Complete C5-8	1	0
Other	0	4
TOTAL	18	32

AGE OF PATIENTS WITH SPINAL CORD INJURY (SCI) IN 2015

AGE GROUP (YEARS)	TRAUMATIC SCI NUMBER OF PATIENTS	NON-TRAUMATIC SCI NUMBER OF PATIENTS
15-17	0	0
18-25	1	0
26-40	4	6
41-65	11	16
66-84	2	9
85+	0	1

DISCHARGE TO 90 DAY FOLLOW UP/
DURABILITY OF OUTCOMES

93.6%

AT 90 DAY FOLLOW-UP MAINTAINED OR IMPROVED THEIR FUNCTIONAL LEVEL

PERCENT OF ALL PATIENTS WHO MET PREDICTED GOALS BY DISCHARGE

60.5%

TOP 25%

NATIONALLY IN FAVORABLE RESPONSES TO "HOW WOULD YOU RATE YOUR HOSPITAL STAY?"

Patient/Family Resources

For information on any of our classes or support groups, call 651-254-3200 or visit regionshospital.com/rehab.

Brain Injury Support Group

Communication Practice Group

SPOHNC – St. Paul Relish Support Group

Stroke Support Group

Therapy Pool Classes

- Stretch, strength and core
- Balance class
- Boot camp (intense fitness and water aerobics)

Every gift has an impact

OUR PATIENTS FEEL YOUR SUPPORT. Through generous donations to the Rehabilitation Institute, we've been able to provide equipment and programs that we could not otherwise afford. Donations help purchase cutting-edge rehabilitation technology and fund support groups that help patients and families keep moving forward. It also provides clinical staff with scholarships to remain at the top of their practice. Please consider a tax-deductible donation today.

PLEASE SEND CONTRIBUTIONS TO:

Regions Hospital Foundation
Mail Stop 11202C
640 Jackson St.
St. Paul, MN 55101
651-254-2376
regionshospitalfoundation@healthpartners.com



For more information or to make a referral to acute inpatient rehabilitation, call 651-254-3620.



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