INTRODUCTION

It is my privilege to present the 2013 Annual Report for Regions Hospital Rehabilitation Institute’s acute inpatient rehabilitation services. Many of the people we serve face significant challenges in addition to an injury or illness, and we are honored to partner with them and their families in their recovery process.

As part of a Level 1 Trauma Center, we offer the highest level of care available to people dealing with a brain injury, stroke, spinal cord injury, amputation, burn or traumatic injury. We also care for people with a variety of illnesses that require intensive inpatient rehabilitation. Our inpatient program is certified by the Commission for Accreditation of Rehabilitation Facilities (CARF) for comprehensive medical and stroke specialty rehabilitation.

Last year was invigorating and productive for our program. Some highlights of the year include:

- Planning and designing of our new and expanded inpatient rehabilitation space, including nearly all private rooms, that will open in fall 2014
- Celebrating a significant improvement in the number of people discharged to the community
- Adding Gretchen Niemioja, MD, to the Physical Medicine and Rehabilitation staff to direct our cancer rehabilitation services
- Developing a mild brain injury or “concussion” clinic to better serve our patients
- Obtaining top “would you definitely recommend” scores from the people we serve for our inpatient rehabilitation care
- Renewing our focus on patient and family-centered care including input from the people we serve in designing the new inpatient rehabilitation unit

Our staff is rich with experience, expertise and dedication to those we serve, and I am prouder than ever to be part of this team. Please feel free to contact me if you have questions about our program at 651-254-2097.

Rebecca Koerner, MD
Medical Director
PROGRAM NEWS

More Space, New Equipment

Our therapy space expanded in 2013. With more room, we were able to add additional, state-of-the-art rehabilitation technology to better serve patients who have experienced a stroke, brain injury, spinal cord injury or other disorders of the central nervous system. These are excellent resources for regaining strength and coordination in the upper body while increasing the confidence to complete day-to-day tasks.

- **ArmeoSpring**: supports movement in the arm and hand when muscles are too weak to perform the actual task. It reinforces the person’s own movements to encourage independence.

- **Bioness H200 wireless hand rehabilitation system**: enhances a patient’s ability to perform daily activities with the affected hand, such as grasping a cup, while also working to re-educate the muscles of the hand.

Karate-inspired Physical Therapy

We have a variety of individualized exercises that we use to engage the people we serve to make their recovery not only successful, but also meaningful. In 2013, one of the highest rated activities for our patients was incorporating karate-inspired movements and techniques into their work with a physical therapist. Balance is a key to safe mobility in physical therapy as well as karate. These karate-like activities were motivating and empowering to patients working on weight shifting, crossing the midline of the body, and multi-step sequences during physical therapy.
**Improved Patient Satisfaction**

We regularly survey our patients to gain valuable feedback on their experience and level of satisfaction while in our care. In six of 12 months in 2013, 100% of our patients said they “would definitely recommend” Regions Hospital to family and friends, which met our goal those months of scoring in the top 10% of hospitals when compared to national benchmarks on patient satisfaction. Overall for the year, 78.2% of our patients “would definitely recommend” our program as compared to our annual goal of 84%, according to Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS). Our team approach to care is the most noted reason for a positive experience.

**Pool Renovated, Classes Expanded**

Often traditional physical therapy is delayed because patients cannot tolerate weight-bearing activity. Starting pool therapy at an earlier stage can help people return to daily activities faster. The buoyancy of the water allows movement and progress that might not otherwise be possible in land-based therapeutic exercise. We often include pool therapy as part of the plan of care during inpatient rehabilitation. In 2013, our therapeutic pool was completely renovated. Extensive improvements to the pool and surrounding facility, shower and dressing rooms, have given it a fresh look and feel. Classes were also added for people experiencing total joint replacement and cancer, as well as a class for balance improvement.
ShareGivers™ for Stroke Patients Introduced

For people who have experienced a stroke, connecting with another stroke survivor can be invaluable. In 2013, Regions Hospital introduced ShareGivers, a program that pairs volunteer stroke survivors with hospitalized stroke patients before they are discharged to offer information and encouragement. Patient, family and staff feedback indicates that the program has been beneficial and inspirational. Several of our former stroke rehabilitation patients have become ShareGivers volunteers. It’s an opportunity for them to share the skills they’ve learned and offer support to others. ShareGivers was developed in partnership with the American Stroke Association as part of the Stroke Center at Regions Hospital.

Committed to Community Awareness and Support

Each year, we participate in community efforts that promote injury prevention as well as support for people with disabilities. Think First is a unique program that provides talks to high school students about preventing brain and spinal cord injuries. In 2013, our staff presented the program to more than 2,900 students at local schools. We also worked with 160 elementary students at their area Safety Camps to help them understand brain injuries and how things are different for people with disabilities. Several staff also participated in “Walk for Thought,” an event that raises awareness and support for people living with a brain injury.
CONTINUALLY ENHANCING CARE

In 2013, we implemented several initiatives to continually improve patient safety and care:

**Hourly Checks on Patients**
We’ve adopted a systematic, proactive approach to addressing the needs of our patients called Intentional Hourly Rounding. Every hour during waking hours and every two hours at night, assigned staff members check to see if patients are in pain, need to change positions or need to use the bathroom. This system has prevented skin breakdowns, improved pain management, reduced patient anxiety and enhanced safety by preventing falls.

**Bar Codes to Reduce Errors**
In 2013, bar codes were added to patient name bands and medication packets. The nurse will receive an alert if the medication and patient don’t match. This has resulted in a significant reduction in medication errors.

**Instant Update on Patients**
Vocera is a lightweight badge that provides instant two-way communication between team members. The hospital’s nursing department has been using Vocera to communicate with each other for over five years. The therapy staff in the Rehabilitation Institute added the Vocera badge in 2013. This has greatly enhanced communication between the therapists and nurses by allowing instant updates on patient conditions or needs between two departments.

**Improved Team and Family Communication**
Every patient room received a new, upgraded white board. At a glance, these boards contain vital information such as goals, risk of fall, diet, pain management and other important information. The new boards are larger and have a better design flow to record this information. This enhanced tool has improved communication, increased patient safety and saved staff time.
Number of People Served by Age Group in 2013
(N = 288)

- 15-17: 94
- 18-25: 132
- 26-40: 25
- 41-65: 17
- 66-84: 2
- 85+: 18

Number of People Served by Diagnosis in 2013
(N = 288)

- Stroke (45.1%)
- Traumatic Brain Injury (12.2%)
- Non-Traumatic Brain Injury (9.4%)
- Major Multiple Trauma with Brain or Spinal Cord Injury (SCI) (7%)
- Traumatic SCI (6.6%)
- Non-Traumatic SCI (6%)
- Amputation Lower Extremity (3.8%)
- Miscellaneous (3.5%)
- Neurological (2.4%)
- Guillain Barre (1.7%)
- Burns (1.4%)
- Cardiac (0.3%)
- Major Multiple Trauma without Brain or SCI (0.3%)
- Fracture of Lower Extremity (0.3%)
RETURNING HOME

Most people are eager to return home after their rehabilitation stay. Their goals and preferences for reaching that milestone help to shape the type of care we provide. In 2013, we focused on providing greater preparation and support to patients and families in achieving the ultimate goal of returning home.

Color-coded Information on Stages of Recovery

Last year, we initiated a color-coding system to identify stages of recovery in people with a traumatic brain injury or other injuries causing a change in behavior. Each stage of recovery has its own color that is posted in the room along with education materials about that stage. Family members are reminded of behaviors to expect at each stage and are given suggestions for activities and ways to interact with their loved one. This system helps to maximize family members’ understanding and support of the patient, which greatly improves the recovery potential for the patient.

Enhanced Care Conference

Patients and their families are offered a care conference during their stay in the hospital. At that time, we provide hands-on training in caring for the patient as well as an outline of any therapies, support and equipment that will be needed for a safe return home. For the people who have suffered a stroke or brain injury, additional teaching time was added in 2013 to ensure that the patient and family understand these more complex recovery processes. Additionally, our educational materials were redesigned to make the information easier to read and understand for these patients and their families.

Discharge Destination in 2013 (N = 288)

- Home/Community: 72.6%
- Long Term Facility Care: 5.9%
- Acute Unit: 21.2%
- Transitional Care Center: 0.3%

*National Average*:

- Home/Community: 74.3%
- Long Term Facility Care: 7.6%
- Acute Unit: 9.7%
- Transitional Care Center: 8.4%

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

In July of 2013, Vince was at the gym working out when he noticed his right foot beginning to drag and felt his right hand getting weaker. His personal trainer called an ambulance that took him to Regions Hospital. A scan showed a large bleed in the left side of his brain from a stroke. After Vince was stabilized, he was transferred to the Regions Hospital acute inpatient rehabilitation unit. He spent 21 days working with the rehabilitation staff including physicians, nurses and therapists.

“My therapists worked with me every day and visited my house to see if there were any impediments to me going home.”

Vince’s family was involved in his care and recovery process. His wife participated in the stroke education classes and worked with the staff to understand the care and services that would be needed for a safe return home.

“The therapy team recommended that someone always be around at home at first. Sometimes I would forget that I had a stroke and would try to get around ‘as usual’ which wasn’t always safe.”

Vince transferred to outpatient therapy services at Regions Hospital to continue his recovery.

“After about a month at home, my team helped determine that I could be left alone—I don’t know who was happier about that, me or my wife!”
PROGRAM OUTCOMES

We measure the results achieved by our rehabilitation patients and compare those to regional and national benchmark data in order to identify opportunities for improvement in our program and services. The standardized, key measures of success for inpatient rehabilitation include length of stay (LOS), functional independence measure (FIM) change and length of stay efficiency (LOSE) for all patients.

Overall, LOS in our acute inpatient rehabilitation program is on par with the national average, and better than the national average for people with traumatic brain injury, major multiple trauma, traumatic and non-traumatic spinal cord injury, amputation, Guillain Barre, burns and fracture.

Our patients demonstrate greater functional improvements from admission to discharge than the national average. They show improvements which are better than or equal to the national average in 11 of 14 impairment categories.
Our program performs well in terms of efficiency and effectiveness as measured by LOSE, or average amount of change per day. Our patients demonstrate greater functional improvements per day than the national adjusted average for all patients, and in eight of 14 specific impairment groups.

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SPECIALTY PROGRAM OUTCOMES

Each year, we take a closer look at our high volume and specialty areas to guide us in providing optimal care and services to the patients and families we serve. Below are our outcomes grouped by stroke, traumatic brain and traumatic spinal cord injuries, which are three of our top four populations served.

Stroke Program
The majority of our patients are people who have experienced a stroke. They demonstrate greater functional improvements from admission to discharge than the national average. Our results are comparable to the national average in length of stay, improvement per day and discharge to home/community.

Traumatic Brain Injury Program
As part of a Level I Trauma Center, we care for some of the most severely injured people in our community, including those with a traumatic brain injury. Length of stay, functional improvement from admission to discharge, and improvement per day results are better than the national average. Discharge to home or community is comparable to the national average.
Traumatic Spinal Cord Injury Program
Serving people with spinal cord injuries is one of the areas of specialty within the Regions Hospital Rehabilitation Institute. Length of stay, functional improvement from admission to discharge, and improvement per day results are better than the national average. Discharge to home or community is slightly lower than the national average.

### Spinal Cord Injuries

- **Traumatic SCI**
- **Non-Traumatic SCI**

#### By Age Group

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<th>Paraplegic, Complete</th>
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<th>Quadriplegic, Incomplete C5-8</th>
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#### By Type & Level of Injury

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<th>Type &amp; Level of Injury</th>
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<tr>
<td>Other Non-Traumatic Spinal Cord Dysfunction</td>
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</tbody>
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NEW ACUTE INPATIENT REHABILITATION UNIT OPENING IN FALL 2014

In the fall of 2014, Regions Hospital will open a remodeled and expanded acute inpatient rehabilitation unit. The $5.5 million project will allow us to better serve our community with more beds, including nearly all private rooms, as well as improved family and education space. The project will relocate the inpatient unit to the fifth floor of Regions Hospital and expand our capacity from 16 to 21 beds, with 17 private rooms and two double rooms.

Early in the design process, we conducted a focus group and phone interviews with former patients and their family members to gain insight into the features that best promote patient and family-centered care, a healing environment and independence. The design team also visited other recently remodeled inpatient rehabilitation facilities to identify best practices in design, construction, and rehabilitation technology. This information was used to help us design a state-of-the-art acute inpatient rehabilitation unit.

However, we want to do more than simply move our program into new space. Our goal is to transform our care to consistently achieve exceptional results for the people we serve. To help us reach that goal, we have created four interdisciplinary teams that are assessing our overall program, including staffing, teamwork, clinical quality, patient outcomes, patient and family experience, access and growth. We’ve also included former patients and family members in this initiative to learn from their experiences. The teams will design and implement recommendations before moving to the new space as well as set up processes to continually improve care into the future.

Rendering courtesy of BWBR Architects, Inc.
COMMUNITY RESOURCES

For information on any of our classes or support groups, call 651-253-2376 or visit regionshospital.com/rehabilitation.

Brain Injury Support Group
651-254-2097

Communication Practice Group
651-254-2097

SPOHNC – St. Paul Relish Support Group
651-254-2097

Stroke Support Group
651-254-2097

Therapy Pool Classes
651-254-4797
  - 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 therapists with scholarships to remain at the top of their practice. Please consider a tax-deductible donation today.

Contributions can be sent to the following address:

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

Regions Hospital Foundation is a 501(c)3 nonprofit that raises funds for entities within the HealthPartners family of care.
For more information regarding the Rehabilitation Institute at Regions Hospital, please call 651-254-2097.

For admissions to Acute Inpatient Rehabilitation, please call 651-254-3620.