# **Opening An Inpatient Pediatric Rehabilitation Unit Within A Children's Hospital: From Needs Assessment Through Evaluation** Sharon Maley BSN, RN, Jessica Seich BSN, RN, CPN, Micah Baird, MD Akron Children's Hospital, Akron, Ohio

#### **Analysis:**

Infants and children with complex medical, physical, and functional needs as a result of disabilities following an acute hospitalization for injury or illness often require inpatient rehabilitation to best meet their recovery needs. However, the availability of inpatient pediatric rehabilitation beds for our facility was non-existent. This lack of service resulted in many patients and families being up-rooted from their familiar surroundings and homes, families, and extended support systems to be transferred to another facility to receive intense inpatient rehabilitation.

Providing our patients and families with a rehabilitation continuum of care was our goal. Implementing an Inpatient Rehabilitation Unit would allow Akron Children's Hospital to keep these patients and families where they were familiar and where they had a support system already in place. The unit would provide comprehensive treatment of the complex medical, physical, and functional needs of children with disabilities from the intensive care unit through the transition to community based services.

#### **Rehabilitation Continuum Of Care**



Established inpatient pediatric rehabilitation units were selected for site visits. Cincinnati Children's Hospital Medical Center, Children's Hospital Colorado, Kennedy Krieger Institute, and St Louis Children's Hospital were visited and offered guidance and support to our rehabilitation team. Lessons learned from these visits were put into a table format and compared. Positive aspects and areas for improvement were highlighted and focused on during the development and planning phases.

#### **Design:**

The vision for an Inpatient Rehabilitation Unit at Akron Children's Hospital included having an interdisciplinary team approach to provide intensive, family centered, rehabilitative and medical care to facilitate functional recovery and community reentry.

The inpatient rehabilitation team includes nursing, case management, occupational therapy, physical therapy, speech therapy, social work, physiatry, psychology/behavioral health,

child life specialist, expressive therapy, and a hospital-based school teacher all working together to reach the patient's goal of increasing functional independence.

Educational needs of the nursing staff were identified and pretesting was done prior to completion of online learning modules on the topics of rehabilitation nursing, occupational therapy, physical therapy, and speech therapy.

In-services were done by the medical director/ physiatrist and the psychologist to educate nursing staff.

The goal was to give nurses a foundation and basic knowledge on inpatient rehabilitation and the rehabilitation continuum of care, while focusing on how the needs of a rehabilitation patient differ from other hospitalized children.



## **Development:** Services Provided:

•Case Management/Care Coordination (both medical and rehabilitative) from pre-admission to discharge to an outpatient program

 Individualized therapeutic evaluation and intensive physical, occupational and speech therapy up to 6 hours daily to optimize activities of daily living (including bowel/bladder management), strength and mobility, cognition and communication, social interaction

• Family teaching by multidisciplinary staff

 Intensive psychological services for adjustment and behavioral concerns

•Neuropsychological evaluation to guide medical treatment of neurocognitive deficits and to assist with school reentry

• Educational integration (tutoring/classroom) and transition back to school

 Medical coordination including necessary specialty and subspecialty consultative services

 Integration of leisure/play into therapeutic process (therapeutic recreation, art/music therapy)

Community reentry

#### **Education For Nursing & Medical Assistants:**

4 online learning modules with pretests and posttests included: •Rehabilitation Nursing 101 Encouraging Children to "Do" Rather than "Have Done"

- •An overview of rehabilitation nursing on an Inpatient Pediatric Rehabilitation Unit
- Role of the nurse in rehabilitation therapy
- •Occupational Therapy 101
- Provided a description of the role of the occupational therapist Common goals of occupational therapy
- Physical Therapy 101
- Provided a description of the role of the physical therapist
- Common goals of Physical therapy
- Speech Therapy 101
- Provided a description of the role of the speech therapist
- Specialty diets

An in-service with the medical director/physiatrist and the psychologist provided education on rehabilitation continuum of care and behavior concerns. This was videotaped and saved for future viewing.

After the opening of the unit a hands-on training session for the nursing staff was completed. This education was delivered by an Inpatient Occupational and Physical Therapist.

• Functional Data Sheet was introduced and explained

•Frequently used therapy equipment and adaptive equipment was demonstrated

- Education and competency validation of safe transfers
- Question and answer session

#### Implementation:

A renovation of a dedicated area within an existing inpatient unit was completed. This renovation included an adaptive restroom, an on-unit treatment area, and 5 inpatient rooms with accommodations for a parent or guardian to remain at the bedside, supporting family-centered care.

# **Opening Day October 29, 2012**

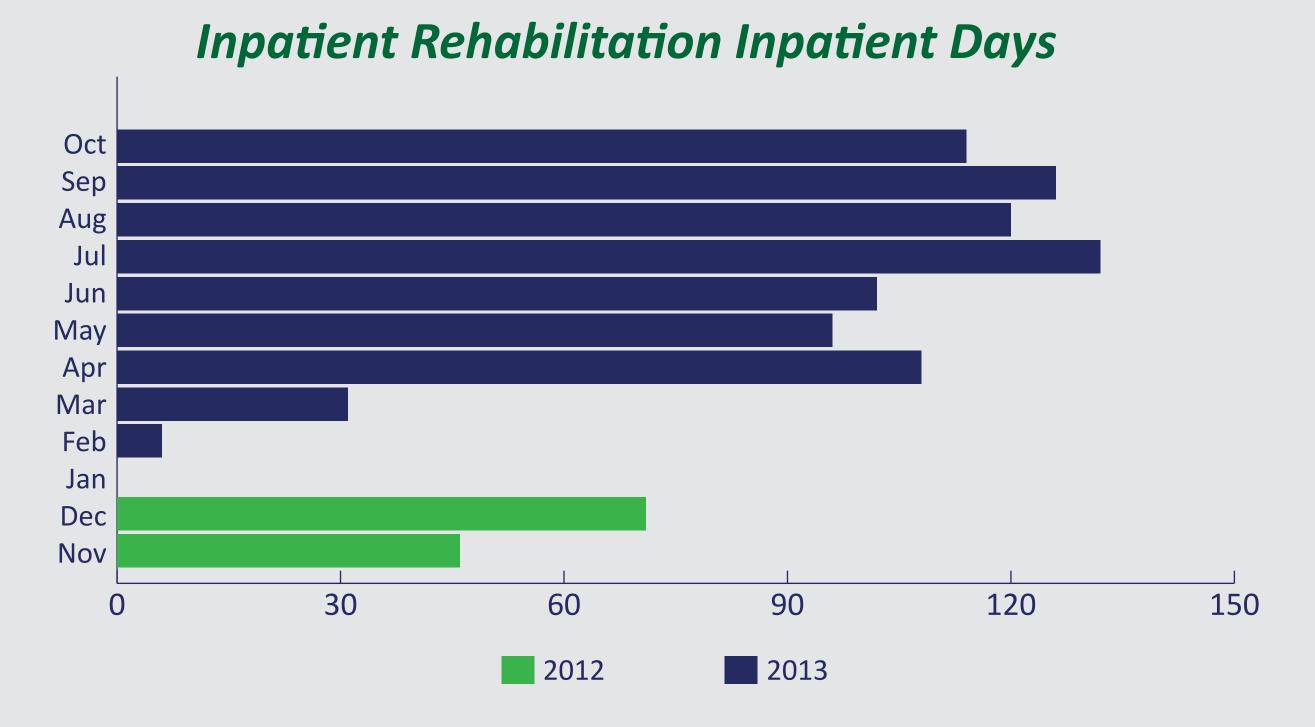






## **Evaluation**:

During our first year, we had the privilege of serving 40 patients and their families with an average length of stay of 20 days.



Diagnoses summary of our first year of operation included:

- Brain Tumors
- Traumatic Brain Injury
- Spinal Cord Injury
- Acute respiratory failure
- Encephalitis
- Rhizotomy
- •Cerebral Palsy
- Scoliosis

# **Next Steps:**

Upon review of the program, opportunities exist to increase the quality of patient care as well as to improve operational efficiencies.

Add additional bed capacity on existing unit

•Expand both Inpatient Rehab and Day Rehab Programs to a shared 18-bed unit allowing for optimal usage of facilities, equipment, and staffing

•Obtain CARF Accreditation as a Comprehensive Integrated Pediatric Inpatient Rehabilitation Facility

•Obtain CARF Specialty Accreditation as a Pediatric Brain Injury Program

Implement patient and family satisfaction survey

Continue to educate nursing staff

Encourage and support certification of nursing staff

Data sited on this poster was taken from November 2012-October 2013.

# **References:**

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