



# The Madonna Minute

A briefing about the programs and innovations at Madonna Rehabilitation Hospital

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5401 South Street, Lincoln, NE 68506

1.800.676.5448

www.Madonna.org

## Long Term outcome measurements

“What’s next?” That’s the question journalist and author John Hockenberry consistently asked himself when facing challenges. A car accident at age 19 left him paraplegic. As he made his way through our nation’s complex system of health care he came to the conclusion that rehabilitation is all about “what’s next.” As the only CARF accredited rehabilitation hospital in the United States with a full continuum of care including Long Term Acute Care Hospital, Acute Rehabilitation, Transitional Care, Outpatient Rehabilitation and Medical Fitness, Madonna Rehabilitation Hospital exemplifies John Hockenberry’s philosophy and is committed to the lifelong success of those we serve.

An important part of quality assurance is measuring our patients’ progress as they move on to what’s next in their lives. Madonna contacts patients six months and one year after hospital discharge. This past year, the hospital collected information on 161 individuals between October 1, 2010, and June 30, 2011. In this article, initial findings from our first year of data collection are presented.

Disease (body function/structure): The rate of re-hospitalization for

Re-hospitalizations		
	MRH	Literature
Brain Injury	21.5%	20-23%
Stroke	29.2%	61.9%
Spinal Cord	34.3%	28-37%
All	26.7%	34%

patients served at Madonna was equal or better to the numbers represented in the literature. (3-6). Combining diagnoses, the re-hospitalization rate for children and adolescents was 22.2 percent. These numbers include both planned and unplanned re-hospitalizations. The most common reason cited was for neurological changes, such as seizures, which was strong in the stroke and brain injury group. Infections, more common in the spinal cord injury population, and cardiovascular issues, more common in the stroke population, were also reported.

Madonna promotes follow-up with each individual’s community based primary care physician, so we were pleased to see that 93 percent reported seeing their physician within the previous six months. Research shows that regular exercise is very important for prevention of secondary complications. This is particularly true of individuals who have experienced mobility impairments, and thus find it more challenging to do this. We were pleased to see that 70% reported some form of regular exercise. Future efforts will be focused on defining this area more, comparing hours and types of activities.

Impairments and Activity Limitations: Individuals were asked if they had made gains, stayed the same, or declined in 6 functional domains: Mobility, Self Care, Communication,

Wellness	
PCP visit	93%
Regular exercise	70%

The World Health Organization developed the International Classification of Function, Disability and Health (ICF) (2) which identifies six factors that impact the outcomes of persons with catastrophic illnesses and injuries. Those factors include: Disease (body function/structure), Impairments, Activity Limitations, Participation Restrictions, Personal Factors and Environmental Factors.

Cognition, Interpersonal Relationships, and Social-Emotional. The percentage reporting making gains or staying the same was positive across all of those areas. Although the maintenance of gains reported exceeded Madonna’s goal of 90 percent in each area, the area of Social-Emotional was the lowest at 91 percent, which is common following a serious injury or illness.

Maintenance of Gains	
Brain Injury	95%
Stroke	92%
Spinal Cord	96%
Child/Adolescent	94%
All	94%

Participation The ability to return to life roles is ultimately what rehabilitation is all about. There is not a great deal of literature published regarding return to life roles, but research claims a range of 13-70 percent return to work for individuals

Return to:	Driving	Homemaker	Work/School
Brain Injury	66.7%	83.7%	94%
Stroke	66.7%	73.9%	51.7%
Spinal Cord	51.5%	57.1%	55.2%
All	59.4%	75.8%	77.9%

with brain injury and stroke, and 13-51 percent for persons with spinal cord injury. It appears the outcomes of Madonna patients are not only within that range, but in some cases, surpass the range.

**Personal & Environmental Factors:** Of the 161 individuals contacted, 160 (99.4 percent) were still living in a community setting. The majority (85%) were living with spouse or other family member. Five (3%) were living in an Assisted Living Facility and the remaining 11% were living home alone.

By gathering long term outcome information, Madonna hopes to be able to discover ways to alter their programming in ways that would promote the best long term success for the adults and children we serve with

Brain Injury, Spinal Cord Injury, Stroke and other Neurological Conditions.

For more information about our specialty programs or our long term outcomes, please contact Karen Divito, Director Rehabilitation Programs at (402) 483-9872 or [kdivito@madonna.org](mailto:kdivito@madonna.org).

#### References

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