Specialized Spinal Cord Injury (SCI) Medical Home

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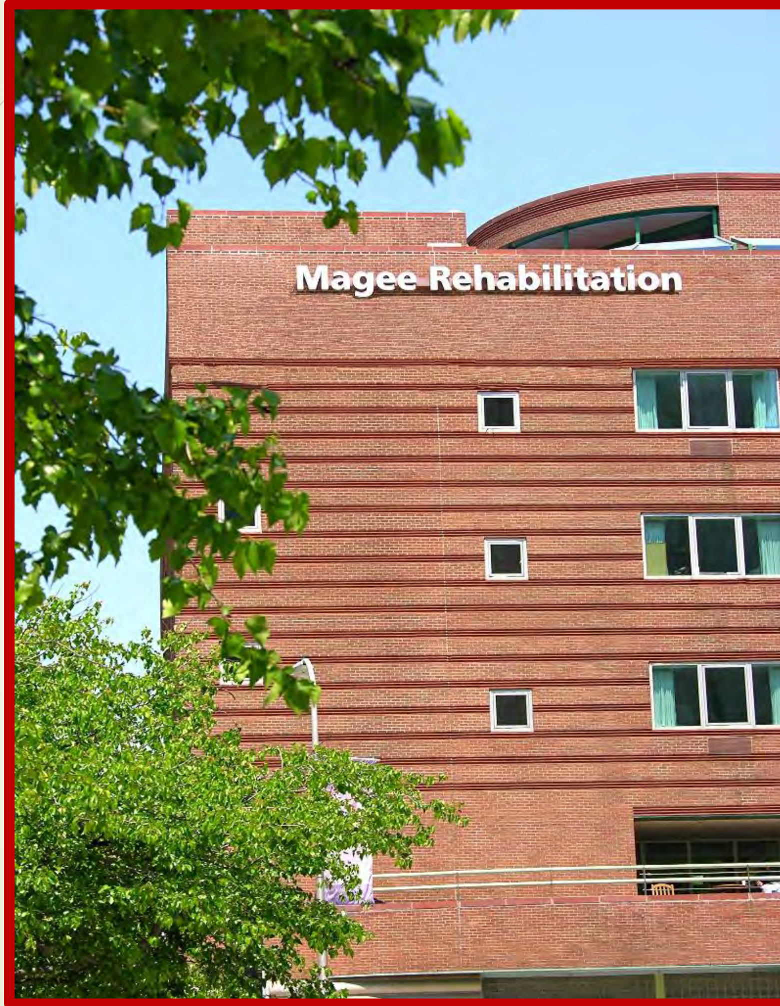
MAGEE REHABILITATION HOSPITAL

About Magee



96 Bed Inpatient
Acute Rehab Hospital

What is the Specialized SCI Medical Home?

- Definition
- Specialized services – not primary care
- Grant and Magee funded

Why is it needed?

- Care after discharge often reactive, not proactive
- Patients and care givers often overwhelmed
- High risk of readmissions, ED visits, equipment failure and medical supply chain disruption

Community challenges faced by patients

- Primary care and other providers often unfamiliar with SCI specialized care
- Patients and families are overwhelmed by the challenges posed by this new condition
- Domestic abuse
- Access to medical specialists
- Transportation
- Financial and insurance quagmires

Medical challenges met

- Many complications were proactively prevented:
  - Bladder infections/complications
  - Bowel impaction
  - Medication confusion/noncompliance
  - Inadequate nutrition
  - Respiratory complications
  - Medical complexity/co-morbidities
  - Unsafe housing/homelessness

Case #1

- 78 year old male with C4 ASIA D central cord syndrome
- Fell in his home, found 12 hours later
- Neurogenic bowel, neurogenic bladder, type 2 diabetes, hypertension and COPD
- Ambulatory with limited hand function
- Returned home alone
- Limited family support
- Medicare/ PA Medical Assistance

Goals of the project

- Improve quality of life for patients and caregivers
- Reduce hospital readmissions and visits to ED
- Demonstrate to health insurance providers that proactive care management for this population yields cost savings

Selection criteria

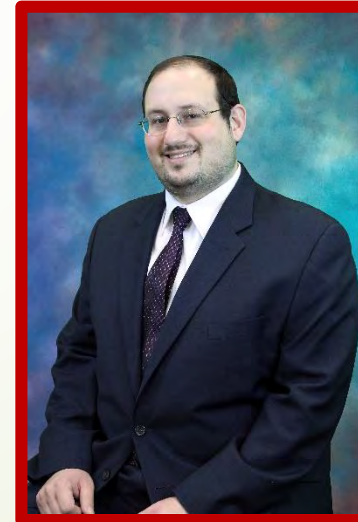
- New sudden onset SCI
- High risk of complications
- Will return to the community
- Willing to return to our outpatient center

125 patients discharged into the program through 12/31/16

- Rural, suburban, and urban settings
- Ages 14 – 90+ years
- 10% are 70 or older
- 45% have paraplegia, 55% have tetraplegia – 3 are home on ventilators
- 17% Medicare/26% Medicaid/5% both
- 50% commercial insurance

The Team

- Physicians, certified rehabilitation nurses and case managers
- Additional team members as needed
  - Pharmacists
  - Wound nurses (WOCN)
  - Dietitians
  - Peer mentors
  - Seating specialists



How does it work?

- Pre-discharge Planning
- At Discharge Transitions
- Post-discharge Care

Pre-discharge

- Meet the team
- Medication education with a clinical pharmacist
- Hand off case management and nursing communication

At discharge

- Complex medication reconciliation (most of these patients are on 12-20 medications)
- Patients discharged with 30 days of medications
- Pharmacy and nursing provide medication education

Post-discharge

- Access to a 24/7 hotline with RN and physician availability
- Active case management
- “Check up” phone calls
- 1 month PM+R follow up with team

Results to date - Readmissions

- 51 of the enrollees have completed at least one full year in the program
- Incidence of readmission – 0.39
  - 17 patients had 20 readmissions
  - Compares favorably with the readmission incidence of 0.50, calculated from the 2015 annual report of the National Spinal Cord Injury Statistical Center (NSCISC)*

*There are some differences in how these numbers are reported.

Results to date - ECS

- The Effective Consumer Scale (ECS) measures the skills of patients in managing their own healthcare.
- 74% of the patients demonstrated improvements from baseline to 1-year in the ECS

Effective Consumer Scale – sample questions

Please check how much of the time each statement is true of you.

	Never	Rarely	Some-times	Usually	Always
How I Use Health Information					
1. I understand the facts I receive about my disease	☐	☐	☐	☐	☐
2. I know how to adapt general health information to my own situation	☐	☐	☐	☐	☐
3. I know who can help me judge the quality of the information I receive about my disease	☐	☐	☐	☐	☐
How I clarify my priorities					
4. When I make decisions about my disease, I am clear about what matters most in my life	☐	☐	☐	☐	☐
5. I can compare the good points and bad points of a decision about my disease	☐	☐	☐	☐	☐
6. I can set sensible goals to manage my disease	☐	☐	☐	☐	☐

Results to date – ED Visits

- For the 51 patients who have been enrolled in the program for at least one year, the one-year incidence of ED use is 0.65.
- Comparative numbers are not yet available.

Successes

- Majority of patients have remained out of the hospital and many ED visits have been avoided
- Numerous obstacles to care have been removed
- Strong collaborations have developed with home health nurses and therapists who call the Medical Home for advice
- Fruitful conversations with private insurers re: willingness to share data and develop a billing model to support medical home services

Spin offs– Virtual LIFE (Living Independently for Everyone)

- Collaborative pilot program
- Tests a model to coordinate care and services for adults with complex physical disabilities leaving a long term care facility
- Independent living with appropriate supports.

Future opportunities

- Additional linkages with primary care physicians
- Improving access to specialty physician services
- Providing options other than 911 for persons with urgent, but not emergent, medical issues
- Telemedicine services
- Expanding to include persons with other chronic disabilities
- Influence government policy

Lessons learned

- Patients and families are overwhelmed upon discharge
- There's no such thing as too much support
- Relationships matter
- We need to anticipate what might go wrong
- Feedback loop from outpatient to inpatient

Case #2

- 42 year old male with C5 ASIA A tetraplegia
- Work related injury – metal beam fell on head
- Neurogenic bowel and bladder
- Ventilator dependent respiratory failure initially; no longer on vent at discharge
- Hypertension, anxiety, depression
- Lives alone with 24 hour nursing
- Workers Comp Insurance

Takeaway thoughts

- The need is tremendous
- Very few patients decline to participate
- Pharmacist involvement is critical
- Necessity of regular team meetings and over-communication

References

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