Management of Older Adults with Post-Hip Fractures
By the year 2050, people that are 65 and older will comprise 21% of the United States population (U.S. Census Bureau, 2004).

In 2006, 316,000 admissions to the hospital were a result of a hip fracture in patients older than 65 years old and is projected to rise to over 500,000 cases by the year 2040 (Center for Disease Control, 2010).

Approximately 90% of hip fractures result from falls (Center for Disease Control, 2010).

Hip fractures are expensive.
Problems with Post-Hip Fractures

- Elderly patients with hip fractures generally have poor prognoses.
- Hip fracture patients are also at high risk for developing complications.
- Problems with hip fracture recovery.
- QOL.
Target Population

- Target population are elders who are 65 and older who suffered a hip fracture.
Focus is on a home-based rehabilitation program for the target population.
The program aims to improve the quality of life for post-hip fracture patients over the age of 65 by:

1. Decreasing complications of post-surgery
2. Increasing attendance of rehabilitation
3. Decreasing depression/apathy post-surgery
4. Avoiding readmission to the hospital
5. Decreasing falls
6. Increase ability to perform ADLs and IADLS and
7. Decreasing mortality rates during the first year of post-hip fracture.
Key players in the CM program

- RN case managers
- Geriatricians
- Home health nurses
- Physical therapists
- Occupational therapists
- Psychiatrist
- Pharmacists
- Home health aides
- Dieticians
- Social workers
PATIENT

RN Case Manager

Dieticians & Pharmacists

Geriatricians & Specialties

Social workers

Physical & Occupational Therapy

Home Health Nurses

Home Health Aids
Referral from hospital, SNF, acute rehab

Does pt meet criteria?

No

Refer to other resources or alternative placements

Yes

RN CM meets with pt at facility

CM sets up home appt

CM evaluation

CM sets up appt with Geriatrician

Discharge pt at 60 days or earlier if meets criteria

PT stays home

Case Management Program for Patients ≥ 65 Years with Hip Fractures

RN CM meets with pt at facility

CM sets up home health

CM checks on pt weekly through the first 60 days

Cont. HH without RN CM

See if pt qualifies for HH for another 60 days

Med review

Pain assess

Osteoporosis screen

Depression & Delirium assess

Lab work

ADL assess

F/U with pts
# Discharge Criteria

The patient can be discharged at any time within the 60 days or at 60 days if all of the following criteria are met:

1. Physical therapy and occupational therapy agree that the patient can be independent at home.

1. The registered nurse has ensured that all wounds have healed. Wounds include surgical incisions and pressure ulcers if patient developed them.

1. The geriatrician and nurse case manager believe the patient is stable enough to stay home.

* If the patient does not meet discharge criteria by 60 days, the nurse case manager will check if the patient continues to qualify for home health. If the patient does qualify for home health, the nurse case manager will discharge the patient from the program with home health. If the patient does not qualify for home health, the nurse case manager will have to look for an alternative placement or find additional support for the patient such as a permanent caregiver.

** For all patients who have been discharged home from the program, they will be contacted monthly by phone for follow up by the nurse case manager until:

(a) The patient no longer wishes to receive the calls
(b) The patient has passed away
(c) The patient has reached his or her 6 months post-hip fracture time.
# Program Evaluation - Structure

<table>
<thead>
<tr>
<th>Structure</th>
<th>Indicator</th>
<th>Instrument/Measure</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualified multidisciplinary staff</td>
<td>Training appropriate to area</td>
<td>Licensure, credential, certification, resume</td>
<td>100% qualified staff</td>
</tr>
<tr>
<td>Multidisciplinary staff education</td>
<td>Geriatric &amp; Orthopedic knowledge</td>
<td>Pre/post test</td>
<td>Score of ≥90% on post-test</td>
</tr>
<tr>
<td>Enrollment</td>
<td>Referrals to program and patients enrollment</td>
<td># of patients with hip fractures enrolled in the program</td>
<td>Enrollment ≥ 90%</td>
</tr>
</tbody>
</table>
# Program Evaluation - Process

<table>
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<tbody>
<tr>
<td>Patient participation in rehabilitation</td>
<td>Attendance</td>
<td>Progress notes from physical therapy</td>
<td>Attendance ≥ 90%</td>
</tr>
<tr>
<td>RN Case Manager contacting patients weekly during the first 60 days of enrollment</td>
<td>Call logs</td>
<td>Logins by user ID and data entry by user ID</td>
<td>Contact ≥ 90%</td>
</tr>
<tr>
<td>RN Case Manager contacting patients monthly after discharged home from the program</td>
<td>Call logs</td>
<td>Logins by user ID and data entry by user ID</td>
<td>Contact ≥ 90%</td>
</tr>
<tr>
<td>Patients receive wound care at the hip incision site at least twice weekly</td>
<td>Home visit logs</td>
<td>Progress notes from wound care nurse</td>
<td>Wound care Contact ≥ 95%</td>
</tr>
</tbody>
</table>
### Program Evaluation - Outcome

<table>
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<tr>
<td>Readmissions to hospital</td>
<td>% of hospital admission</td>
<td>Program progress notes</td>
<td>Readmissions &lt; 10%</td>
</tr>
<tr>
<td>Costs</td>
<td>% healthcare costs saved</td>
<td>Healthcare expenses</td>
<td>Program will save &gt; 25% of healthcare costs</td>
</tr>
<tr>
<td>Quality of life</td>
<td>1. Quality of Life Expectations and Outcomes</td>
<td>1. Self rated quality of life scale pre and post program with the SF-36 tool</td>
<td>1. QOL Scores maintain or improved</td>
</tr>
<tr>
<td></td>
<td>2. Infection at surgical site</td>
<td>2. % of surgical site infection</td>
<td>2. Infection &lt; 10%</td>
</tr>
<tr>
<td></td>
<td>3. Falls while enrolled in the program</td>
<td>3. % of falls</td>
<td>3. Falls &lt; 10%</td>
</tr>
<tr>
<td></td>
<td>4. Adequate nutrition</td>
<td>4. MNA score</td>
<td>4. More than 80% of patients have MNA score &gt; 18 at discharge from the program</td>
</tr>
<tr>
<td></td>
<td>5. Pain Management</td>
<td>5. Pain scale assessment pre and post program</td>
<td>5. Pain less than 2/10 during and post program</td>
</tr>
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## Program Evaluation - Outcome

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<td>Change of residency</td>
<td>1. Board and Care 2. Nursing Home 3. Assisted Living</td>
<td>1. % admitted into Board and Care 2. % admitted into Nursing Home 3. % admitted into Assisted Living</td>
<td>1. Board and Care admissions will be less than 15%. 2. Nursing Home admissions will be less than 15%. 3. Assisted Living admissions will be less than 15%.</td>
</tr>
<tr>
<td>Program satisfaction</td>
<td>Patient satisfaction</td>
<td>Patient Satisfaction Survey</td>
<td>Patient will report “very satisfied” with the program</td>
</tr>
</tbody>
</table>
Funding

- Medicare A and B
- John A. Hartford Foundation
- Other funding sources
According to the American Academy of Orthopaedic Surgeons (2008), the Medicare payment system has provided a flat fee reimbursement to hospital systems, which in turn leads to reduce lengths of stay for patients with hip fractures in order to manage health care costs.

The AAOS also explains that Medicare and insurance companies are reducing length of stay without coordinating the post-acute phase, which includes rehabilitation and home support.
Key Points/Summary

- Why would someone be interested in this program?
- RN Case Manager Role in the program
References