If you are viewing this course as a recorded course after the live webinar, you can use the scroll bar at the bottom of the player window to pause and navigate the course.

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Objectives

- As a result of this course, participants will be able to describe the current literature around readmissions including proposed readmission quality metrics throughout the continuum of care.

- As a result of this course, participants will be able to discuss the proposed quality metrics throughout the continuum of care and impact on occupational therapy.

- As a result of this course, participants will be able to discuss ways occupational therapy could address the systematic goal of preventing readmission occurrences.
Risk Factors for Readmissions

- 17.6% of hospital admissions result in readmissions within 30 days
- 6% result in readmissions within 7 days
- Results in $15 billion in spending

Reference: MedPac Report 2007
Small decline in risk-adjusted readmission rates

With condition-adjusted readmission rate declining by roughly 0.7% point from 2009-2011

CMS has reported further improvement from 2011-2012 (Blum, 2013)
Readmissions

THE NEW ENGLAND JOURNAL OF MEDICINE

SPECIAL ARTICLE

Rehospitalizations among Patients in the Medicare Fee-for-Service Program

Stephen F. Jencks, M.D., M.P.H., Mark V. Williams, M.D.,
and Eric A. Coleman, M.D., M.P.H.

- 1 in 5 Medicare patients rehospitalized in 30 days
- Half never saw outpatient doc
- 70% of surgical readmissions—chronic medical conditions
- Costs $17.4 billion


Hospital-Wide Readmission Rate

Source: 2007-2008 development data, volume ≥25
Dec. 2011
YNHH-GLO/CORE (Center for Outcomes Research and Evaluation)
Readmissions

- Nearly one in five patients who is discharged from the hospital will be readmitted within the month (30 days) and more than three-quarters of these readmissions are preventable (according to Centers for Medicare and Medicaid Services, 2009)

- Readmission rates have varied according to demographic, social and disease-related characteristics

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Readmissions

By Jordan Rau
KHN Staff Writer
AUG 02, 2013

Medicare will levy $227 million in fines against hospitals in every state but one for the second round of the government’s campaign to reduce the number of patients readmitted within a month, according to federal records released Friday.

Medicare identified 2,225 hospitals that will have payments reduced for a year starting on Oct. 1. Eighteen hospitals will lose 2 percent, the maximum possible and double the current top penalty. Another 154 will lose 1 percent or more of every payment for a patient stay, the records show. Hospitals that treated large number of low income patients were more likely to be penalized than those treating the fewest impoverished people.

The penalty program, which began in October 2012, is among the toughest of Medicare’s efforts to pay hospitals for the quality of their performances rather than merely the number of patients they treat. Unlike other new programs created by the federal health law, the readmissions program offers hospitals no rewards for improvements or the opportunity to opt out.
Readmissions

PUTTING YOUR CMS 30-Day Readmission Penalty in Context

2014 PENALTY DISTRIBUTION

- 5% (n = 173)
- 14% (n = 622)
- 34% (n = 1,585)
- 47% (n = 2,622)

HOW WILL HOSPITALS FARE IN 2014 VS. 2013?

Higher Penalties
3 of 10
No Change
3 of 10
Lower Penalties
4 of 10

PENALTIES BY THE NUMBERS

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Penalty of CMS FFS Payment</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Total Penalty</td>
<td>1280M</td>
<td>1227M</td>
</tr>
<tr>
<td>Hospitals Assessed Maximum Penalty</td>
<td>278</td>
<td>5.8</td>
</tr>
<tr>
<td>Hospitals Assessed No Penalty</td>
<td>1,285</td>
<td>1,154</td>
</tr>
</tbody>
</table>

Readmissions

REPORT TO THE CONGRESS
Medicare and the Health Care Delivery System

An Illustration of How Spending on Post-Mate Care and Readmissions in Low-Spending Areas Could Be Used as Inputs to Setting Benchmarks

<table>
<thead>
<tr>
<th>Condition</th>
<th>National Average Spending Post-Mate Care + Readmissions</th>
<th>Mean of national average and average low-spending areas</th>
<th>Percent Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke</td>
<td>$14,228</td>
<td>$11,423</td>
<td>8%</td>
</tr>
<tr>
<td>Single pneumonia &amp; sepsis</td>
<td>5,600</td>
<td>4,978</td>
<td>11</td>
</tr>
<tr>
<td>Convalescent care</td>
<td>5,541</td>
<td>5,734</td>
<td>4</td>
</tr>
<tr>
<td>Heart failure &amp; shock</td>
<td>7,079</td>
<td>6,497</td>
<td>9</td>
</tr>
<tr>
<td>Major skill &amp; large bowel procedures</td>
<td>4,753</td>
<td>4,543</td>
<td>4</td>
</tr>
<tr>
<td>Major joint replacement</td>
<td>8,642</td>
<td>7,146</td>
<td>10</td>
</tr>
<tr>
<td>Hip &amp; lower procedures except major joint replacement</td>
<td>22,475</td>
<td>20,810</td>
<td>7</td>
</tr>
<tr>
<td>Fracture of hip &amp; pelvis</td>
<td>16,754</td>
<td>15,457</td>
<td>8</td>
</tr>
<tr>
<td>Kidney &amp; urinary tract infections</td>
<td>8,565</td>
<td>7,349</td>
<td>10</td>
</tr>
<tr>
<td>Septicemia without ventilator days</td>
<td>8,781</td>
<td>7,901</td>
<td>10</td>
</tr>
</tbody>
</table>

Note: Areas were defined using Medicare statistical areas and statewide areas. Postcare services include services furnished in skilled nursing facilities, home health agencies, and inpatient rehabilitation hospitals, and surgery is hospital. Most care spending, summing the FFS data after adjusting from the hospital data shown are on a hospital charge basis, not a Medicare claim basis. Percent changes are calculated using Medicare claims data. The table adjusted spending using Medicare claims data of similar groups and standard deviations for differences in variance and weights or payments such as those, adjustments, visits, and other parameters.
Costs of Readmissions

Table 1. Total all-cause 30-day readmissions and aggregate costs for the study population by payer, 2011

<table>
<thead>
<tr>
<th>Study population</th>
<th>Number of readmissions (in thousands)</th>
<th>Readmissions as a percentage of total study population readmissions</th>
<th>Total cost of all-cause 30-day readmissions (in millions)</th>
<th>Readmission total cost as a percentage of total cost of study population readmissions</th>
<th>Readmission rate per 100 admissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicare (65+ years)</td>
<td>1,800</td>
<td>15.9</td>
<td>24,600</td>
<td>18.2</td>
<td>58.2</td>
</tr>
<tr>
<td>Medicaid (18 to 64 years)</td>
<td>700</td>
<td>20.6</td>
<td>7,600</td>
<td>18.4</td>
<td>16.6</td>
</tr>
<tr>
<td>Privately insured (18 to 64 years)</td>
<td>600</td>
<td>16.9</td>
<td>8,100</td>
<td>19.5</td>
<td>5.7</td>
</tr>
<tr>
<td>Insured (18 to 64 years)</td>
<td>200</td>
<td>4.9</td>
<td>1,500</td>
<td>3.7</td>
<td>10.6</td>
</tr>
<tr>
<td>Total</td>
<td>3,300</td>
<td>100.0</td>
<td>41,200</td>
<td>100.0</td>
<td>13.0</td>
</tr>
</tbody>
</table>

Source: Weighted national estimates from a readmissions analysis file, derived from the Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project (HCUP), State Inpatient Databases (SID), 2011.

Cost of Readmissions

Table 2. The conditions with the most all-cause 30-day readmissions for Medicare patients aged 65 years and older, listed by total number of readmissions in descending order, 2011

<table>
<thead>
<tr>
<th>Condition category</th>
<th>Total number of readmissions (in thousands)</th>
<th>Readmissions as a percentage of total Medicare readmissions</th>
<th>Total cost of all-cause 30-day readmissions (in millions)</th>
<th>Readmission total cost as a percentage of total cost of Medicare readmissions</th>
<th>Readmission rate per 100 hospital discharges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Congestive heart failure</td>
<td>19,500</td>
<td>7.3</td>
<td>1,147</td>
<td>7.3</td>
<td>24.5</td>
</tr>
<tr>
<td>Severe sepsis or septic shock</td>
<td>9,400</td>
<td>3.4</td>
<td>1,143</td>
<td>3.9</td>
<td>21.0</td>
</tr>
<tr>
<td>Chronic obstructive pulmonary disease exacerbation</td>
<td>8,500</td>
<td>3.2</td>
<td>904</td>
<td>4.0</td>
<td>11.0</td>
</tr>
<tr>
<td>Acute myocardial infarction</td>
<td>6,600</td>
<td>2.6</td>
<td>1,500</td>
<td>6.6</td>
<td>21.6</td>
</tr>
<tr>
<td>Acute respiratory failure</td>
<td>5,700</td>
<td>2.2</td>
<td>682</td>
<td>2.8</td>
<td>18.8</td>
</tr>
<tr>
<td>Acute noncardiac surgery</td>
<td>5,100</td>
<td>2.0</td>
<td>472</td>
<td>1.9</td>
<td>18.8</td>
</tr>
<tr>
<td>Anemia requiring transfusion</td>
<td>4,000</td>
<td>1.6</td>
<td>549</td>
<td>2.8</td>
<td>18.8</td>
</tr>
<tr>
<td>Total</td>
<td>73,196</td>
<td>33.3</td>
<td>5,591</td>
<td>33.3</td>
<td>19.4</td>
</tr>
</tbody>
</table>

*Clinical Classifications Software (CCS) ICD-10 code

Note: Detailed conditions are currently targeted by the CMS Hospital Readmissions Reduction Program.

Source: Weighted national estimates from a readmissions analysis file, derived from the Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project (HCUP), State Inpatient Databases (SID), 2011.
Readmissions

Readmissions within 180 days

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home</td>
<td>45</td>
<td>14.6%</td>
</tr>
<tr>
<td>Inpatient Rehab</td>
<td>17</td>
<td>7.7%</td>
</tr>
<tr>
<td>Skilled Nursing Facility</td>
<td>35</td>
<td>14.8%</td>
</tr>
</tbody>
</table>

- Retrospective cohort examined 606 orthopedic patients in acute care
- Outcome examined discharge destination and readmission
- Discharge to ARU was associated with lower risk of hospital readmission

The highest percentage of readmissions comes from patients who did NOT receive post-acute care

- Community: 56.2%
- Skilled Nursing Facility: 18.9%
- Home Health: 14.4%
- Emergency Department: 5.3%
- Inpatient Rehab: 3.1%
- Other: 2.0%

Percent of readmissions by source, 30-day fixed length episodes, 2007-2009

Reference: Debelow/DeVanco Analysis of 5% Sample of Medicare Claims Data (2007-2009)
**Readmissions**

Percent of 30-day fixed-length episodes with readmissions by first setting of post-discharge care:

- LTCH: 17%
- IRF: 12%
- SNF: 22%
- HHA: 28%
- Outpatient Rehab: 20%

*Reference: E1*International and Care Settings* Setting*

---

**Factors Leading to Post-Acute Care Setting**

- Information and data exchange
- Episode-based quality metrics
- Partnerships to reduce readmissions
- Bundled payments

- Acute-care hospital
- LTACHs
- IRFs
- SNFs
- HHAs
Readmissions

Trends in Length of Stay and Short-term Outcomes Among Medicare Patients Hospitalized for Heart Failure, 1993-2006

Habib M. Krumholz, MD, SM research group
Hector Bueno; Joseph S. Ross; Yun Wang, et al.


- Observational study of 6,855,461 Medicare FFS hospitalizations for HF, 1993 and 2006, with 30-day f/u.
  - Mean age = 80
  - 82% Htn, 58% DM, 37% COPD
- LOS 8.8 days down to 6.3
- Discharges to SNF increased from 13% to 20%
  - Discharge to home decreased from 74% to 67%
- 30 day readmission increased from 17.2% to 20.1%
  - Post-discharge mortality increased from 4.3% to 6.4%
- In-hospital mortality declined from 8.5% to 4.3%
- 30-day mortality declined from 12.8% to 10.7%

Readmissions

Hospital Readmission Among Older Adults Who Return Home With Unmet Need for ADL Disability

Glen DePalma, MS,1 Haiping Xu, PhD,2 Kenneth E. Covinsky, MD,3 Bruce A.Craig, PhD,1 Eric Stallard, ASA,4 Joseph Thomas III, PhD,5 and Laura P. Sands, PhD 6

1Department of Statistics, Purdue University, West Lafayette, Indiana.
2Department of Resuscitation, Indiana University School of Medicine, Indianapolis.
3Institute of Geriatrics, University of California at San Francisco, San Francisco Veterans Affairs Medical Center.
4Center for Population Health and Aging, Duke University, Durham, North Carolina.
5College of Nursing, Center for Aging and the Life Course, Regenstrief Institute for Health Care Engineering, Center for Health Discovery, Seniors and Policy, Purdue University, West Lafayette, Indiana.
6School of Engineering and Center for Aging and the Life Course, Purdue University, West Lafayette, Indiana.

Unmet need for new ADL disabilities after return home from the hospital is particularly vulnerable to readmissions

Patients’ functional needs after discharge should be evaluated and addressed

Readmissions

All-cause readmissions within 30 days of discharge linked survey data on 29 factors including:

- Education level
- Income
- Smoking history
- Work status
- Ability to bathe, feed, and dress themselves

Researchers found that about 50% of the difference between the hospitals with the highest and lowest readmissions rates could be explained by those 29 factors-including the kind of patients they see, not the kind of care they provide including the variables bulleted above.

Hospitals with the highest readmissions had patients who were “less mobile, had more difficulty with activities of daily living, more chronic conditions, less education, lower income, lower assets, etc.”

Readmissions

- Functional impairment is associated with increased risk of 30-day all-cause hospital readmission for Medicare Seniors, especially those admitted for heart failure, myocardial infarction, or pneumonia
- Functional impairment may be an important but under-addressed factor in preventing readmissions


Functional status on Admission to CIIRP is strongly associated with readmission before planned discharge from CIIRP. Efforts to reduce hospital readmissions should consider patient functional status as an important and potentially modifiable risk factor.
Readmissions

Approximately 11% of SCI patients experience Return to Acute (RTAC) during the course of rehabilitation for a variety of medical and surgical reasons. RTAC's are associated with longer rehabilitation length of stay.

Efforts to reduce readmissions to acute care should include greater scrutiny of older, lower functioning patients with burn injury who are evaluated at admission to inpatient rehabilitation.
Readmissions

Original Research

Risk Factors for Discharge to an Acute Care Hospital From Inpatient Rehabilitation Among Stroke Patients

Pamela S. Roberts, PhD, OTR/L, SCFES, FAOTA, CPHQ; Margaret A. Duff, PhD, MS; Richard Y. Riggs, MD; Roselle Messr, PhD; Beverly Bergquist, RN; and Carol V. Granata, MD

Objective: To identify medical and functional health risk factors for being discharged directly from an acute hospital from an inpatient rehabilitation facility among patients who have had a stroke.

Setting: Academic medical center.

Participants: A total of 499 patients with a primary diagnosis of stroke were discharged directly from the acute hospital during the study period (2009-2012). 398 were discharged directly to an acute care hospital and 101 were discharged to other settings.

Methods: A retrospective chart review.

Main Outcome Measurement: Medical risk factors for discharge to other settings.

Results: Significant differences in demographic characteristics and functional outcomes were found between the two groups. Higher rates of mortality were associated with being discharged to other settings. Significant predictors included age, stroke severity, and functional independence.

Conclusion: Significant predictors for discharge to other settings include age, stroke severity, and functional independence.


Readmissions

Original Research

Transferring Inpatient Rehabilitation Facility Cancer Patients Back to Acute Care (TRIPBAC)

Arash Asher, MD; Pamela S. Roberts, PhD, OTR/L, SCFES, FAOTA, CPHQ; Catherine Breese, MS, Gonet Zabelchick, Richard V. Riggs, MD; and Andre Rogatko, PhD

Objective: To determine predictive factors for transferring inpatient rehabilitation facility cancer patients back to acute care (TRIPBAC).

Setting: A cohort study of patients with cancer admitted to an IRF in 2008 to 2010.

Methods: A retrospective chart review of patients with cancer admitted to an IRF was conducted. Predictors were identified using a multivariate logistic regression analysis.

Main Outcome Measurement: Predictive factors for transferring inpatient rehabilitation facility cancer patients back to acute care.

Results: Significant predictors for transferring include age, performance status, and functional independence.

Conclusion: Age, performance status, and functional independence are significant predictors for transferring inpatient rehabilitation facility cancer patients back to acute care.

Readmissions

Among post-acute rehabilitation facilities providing services to Medicare fee-for-service beneficiaries, 30-day readmission rate ranged from 5.8% for patients with lower extremity joint replacement to 18.8% for patients with debility.

Higher motor and cognitive functional status were associated with lower hospital readmission rates across six impairment categories (stroke, lower extremity fracture, lower extremity joint replacement, debility, neurologic disorders and brain dysfunction).

Readmissions

Affordable Care Act and Reducing Readmissions

- §3026
- §3501
- §399KK
- §3025

- Beginning in FY 2011
- Community - Based Care Transitions Program
- For Period FY 2011-2014
- AHQR funding for projects related to QI research and technical assistance. Topics identified include reducing readmissions.
- March 2012
- Program for eligible hospitals to improve their readmission rates through Patient Safety Organizations
- Beginning in FY 2013
- Hospitals with higher than expected readmissions rates will experience decreased payments for Medicare discharges.
Readmission Quality Metrics

Readmissions

- Centers for Medicare and Medicaid (CMS) focus is to reduce avoidable readmissions

- As readmission rates affect payment and post acute care services move toward a bundled payment system, understanding the implications of discharge destinations as it influences outcomes and payment is imperative
Readmissions Technical Aspects

- Measured within 30-day time frame
- All cause
- Risk standardized

Readmissions: 30-Day Time Frame

- Index admission: first admission for a patient within a specific time period
- Readmission clock starts counting at day of discharge
- Readmission: an admission to any acute care hospital that occurs within 30 days of discharge
- Considered a meaningful time frame for hospitals to coordinate and collaborate with clinical providers in the community-based setting

Example of Readmission Measurement Timeframes

Readmissions

- **Goal:** To be consistent with the NQF-endorsed CMS hospital risk-adjusted 30 day readmission measures
- **Considerations**
  - Planned versus Unplanned
  - Time period for readmission
  - Risk adjustment
  - Condition specific risk adjustment
**Readmissions Definitions**

**Planned versus Unplanned**
An intentional rehospitalization within 30 days from acute care hospital that is a **scheduled** part of the patient’s plan of care (e.g. chemotherapy)

**Preventable versus Not Preventable**
Not-preventable if (1) **planned** rehospitalization, (2) **unforeseen rehospitalization for newly developed conditions** not related to known diseases during index hospitalization

**Related versus Unrelated**
Rehospitalization **related** to care delivered during previous admission, represents a potentially avoidable rehospitalization

---

**Rehabilitation Readmissions**

- Discharge to acute hospital **during** inpatient rehabilitation program
- Discharge to Acute hospital **after** completion of inpatient rehabilitation program (within 30 days)
Quality Measure for Readmissions

- NQF #2502 All-Cause Unplanned Readmission Measure for 30 days Post Discharge from Inpatient Rehabilitation Facilities
  - Measure estimates the risk-standardized rate of unplanned, all-cause readmissions for patients discharged from an IRF who were readmitted to short-stay acute-care hospital or a long-term care hospital within 30 days of an IRF discharge
  - Measure is based on data for 24 months of IRF discharges to non-hospital post-acute levels of care or to the community

---

Quality Measure for Readmissions

- NQF # 2375-PointRight On-Point 30 Day SNF Rehospitalizations
  - All cause, risk adjusted rehospitalization measure
  - Provides the rate at which all patients (regardless of payer status or diagnosis) who enter SNFs from acute hospitals and are subsequently rehospitalized during their SNF stay, within 30 days from their admission to the SNF
Quality Measure for Readmissions

- NQF # 2510-Skilled Nursing Facility 30-Day All Cause Readmission Measure (SNFRM)
  - Measure estimates the risk-standardized rate of all-cause, unplanned hospital readmissions for patients who have been admitted to a SNF (Medicare FFS) within 30 days of discharge from their prior proximal hospitalization
  - Prior hospitalization is defined as an admission to an IPPS, CAH, or a psychiatric hospital
  - Measure is based on 12 months of SNF admissions

Quality Measure for Readmissions

- NQF #2505-Emergency Department Use without Hospital Readmission During the First 30 Days of Home Health
  - Percentage of home health stays in which patients who had an acute inpatient hospitalization in the 5 days before the start of their home health stay used an emergency department but were not admitted to an acute care hospital during the 30 days following the start of the home health stay
Quality Measure for Readmissions

• NQF #2380-Rehospitalization During the First 30 Days of Home Health
  • Percentage of home health stays in which patients who had an acute inpatient hospitalization in the 5 days before the start of their home health stay were admitted to an acute care hospital during the 30 days following the start of the home health stay

Quality Measure for Readmissions

• NQF # 2512-All-Cause Unplanned Readmission Measure for 30 Days Post Discharge from Long-Term Care Hospitals (LTCHs)
  • Measures estimates the risk-standardized rate of unplanned, all-cause readmissions for patients (Medicare FFS) discharged from a LTCH who were readmitted to a short-stay care hospital or a LTCH, within 30 days of an LTCH discharge
  • The measure is based on data for 24 months of LTCH discharges to non-hospital post-acute levels of care or to the community
Quality Measure for Readmissions

- Refer to National Quality Forum

Occupational Therapy and Prevention of Readmissions
Readmission Measures

- CMS Readmission measures for:
  - Acute Myocardial Infarction (AMI) 19.7% (2009)
  - Heart Failure (HF) 24.7% (2009)
  - Pneumonia (PN) 18.4% (2009)
- New 2015:
  - Total Knee Arthroplasty/Total Hip Arthroplasty (TKA/THA)
  - Acute exacerbation of Chronic Obstructive Pulmonary Disease (COPD)

The Impact of Readmission to Hospital

- Is disruptive to patients and caregivers
- Puts patients at additional risk of hospital-acquired infections and complications
- Some readmissions are unavoidable, but may also result from
  - Poor quality of care
  - Inadequate coordination of care
  - Lack of effective discharge planning and transitional care

Horwitz et al., 2011; Goldfield, et al., 2008
Reduction in Readmissions

- More beneficiaries are receiving post-discharge care through
  - Emergency departments
  - Observational stays
  - Other non-inpatient settings without material improvements in quality of care
Reducing Hospital Readmissions

**Implications:**
- Greater demand for OT personnel to screen acute care patients prior to discharge, educate, plan for D/C
- Self-management approach to develop goals and action plans, identify barriers and supports
- SNFs and home health therapists will benefit from emphasizing how they prevent readmission

Reducing Hospital-Acquired Conditions

- Reduced Medicare payments to certain hospitals for hospital-acquired conditions by 1% for each patient with this condition (effective 2015)
- Nationwide, 2,592 hospitals will lose a combined $420 million

**Implications:**
- Analyze risk for these conditions and take action
- Evaluate health literacy
- Education of staff and patients
- Early mobilization to lessen fall risks
- Recommend needed equipment and how to use it
Hospital Acquired Conditions

- Foreign body retained after surgery
- Air embolism
- Blood incompatibility
- Injuries from Falls and Immobility
- Pressure Ulcers
- Deep Vein Thrombosis/Pulmonary Emboli (DVT/PE)
- Manifestations of poor glycemic control
- Surgical Site Infections (SSI)
- Venous Thromboembolism
- Catheter-Associated Urinary Tract Infections (CAUTI)
- Central Line Associated Blood Stream Infections (CLABSI)
Injuries from Falls and Immobility

- Inpatient fall rates range from 1.7 to 25 falls per 1,000 patient days
- Extrapolated hospital fall statistics indicate that the overall risk of a patient falling in the acute care setting is approximately 1.9 to 3 percent of all hospitalizations


Injuries from Falls and Immobility

- Older age increases risk of falls
- Fall rates are higher in geriatric and general medical units than in surgical units
- 45.2% were related to toileting falling on the way from the bed or chair to the bathroom
- Average hospital stay for patients who fall:
  - 12.3 days longer
  - 61% increase in patient-care costs

Falls Scenario

Patient is a 54 year old male who was totally independent prior to admission. Patient was in the hospital for a right basal ganglia stroke with left hemiparesis. Patient has difficulty with weight shifting. Overall for mobility he is moderate assist and maximum assist with activities of daily living. He was left in the bathroom alone and was reaching with his right hand for the toilet paper on the left side and lost his balance.

Injuries from Falls and Immobility

What role can OT play in fall prevention in each practice setting?
Pressure Ulcers

- 1.3 million to 3 million adults have a pressure ulcer, estimated cost of $500 to $40,000 to heal each ulcer
- The incidence of pressure ulcers varies by clinical setting
- 0.4% to 38.0% for hospitals (with the national average of 7-10%)

Hospitalizations Related to Pressure Ulcers among Adults 18 Years and Older. http://www.hcup-us.ahrq.gov/reports/statbriefs/sb64.pdf

Pressure Ulcer Scenario

Patient is a 60 year old female who was involved in a motor vehicle accident and is s/p a laminectomy of multiple levels. The patient sustained a C6-7 incomplete spinal cord injury. The patient is overall maximum assist for mobility and daily activities in the acute care hospital. The nursing staff has difficulty moving the patient and waits for the therapy staff for out of bed activities and often leaves the patient out of bed in a chair for hours.
Pressure Ulcers

What role can OT play in pressure ulcer prevention in each practice setting?

DVT, PE and Venous Thromboembolism

- Significant cause of morbidity and mortality in hospitalized patients
- Almost all hospitalized patients are at risk for VTE
- Approximately half of all VTE's are hospital-acquired
- PE is recognized as the cause of death for more than 100,000 patients annually
Patient is a 84 year old male who was admitted to the hospital for multiple medical issues including congestive heart failure, diabetes mellitus out of control, renal failure, and lower extremity weakness. Patient has been in the hospital for 3 weeks and has been in and out of intensive care.

What role can OT play in VTE prevention in each practice setting?
Poor Glycemic Control

- Diabetes affects over 20 million individuals in the USA
- Estimated to account for 22% of all hospital inpatient days
- Includes diabetic ketoacidosis, non-ketotic hyperosmolar coma and hypoglycemic coma
- Poorly controlled glucose is associated with increased morbidity, mortality, costs and length of stay among hospitalized patients

Reduction in Readmission Rates

- Initiatives include:
  - Quality of care during the initial admission
  - Improvement in communication with patients, caregivers and clinicians
  - Patient education
  - Pre-discharge assessment
  - Coordination of care after discharge

- Successful randomized trials have reduced 30-day readmission rates by as much as 20-40%²

¹Naylor et al., 1994; 1999; Krumholz et al., 2002; van Walraven et al., 2002; Conley et al., 2003; Coleman et al., 2004; Phillips et al., 2004; Jovicic et al., 2006; Garasen et al., 2007; Mistiaen et al., 2007; Courtney et al., 2009; Jack et al., 2009; Koehler et al., 2009; Weiss et al., 2010; Stauffer et al., 2011; Voss et al., 2011
²Horwitz et al., 2011
Partnership for Patients

Two Goals for safer, higher quality care:

1. **Making Care Safer.** Reduce preventable hospital-acquired conditions by 40% compared to 2010 = approximately 1.8 million fewer injuries to patients.

2. **Improving Care Transitions.** Decrease preventable complications during a transition from one care setting to another to reduce all hospital readmissions by 20% compared to 2010 = more than 1.6 million patients will recover from illness without a preventable complication requiring re-hospitalization within 30 days of discharge.

Opportunities for OT Managers and Practitioners

- Participation in Care Coordination
  - Unmet ADL needs is correlated with increased incidence of readmission (DePalma et al. 2012)
  - Transition involving coping with functional disability without adequate help (DePalma et al. 2012)
  - Only 4% went home with home care services (Weier et al, 2010)
  - Absence of home care services increases admission/readmission
Opportunities for OT Managers and Practitioners

- Functional needs should be carefully assessed prior to discharge and **AFTER** discharge.

- Most post discharge/transitional care focuses on medical management; few assess functional needs (Naylor et al, 2011)

Opportunities for OT Managers and Practitioners

- Positively impacting the incidence of Hospital Acquired Conditions (HAC)
  - Role in Fall Prevention (in all practice settings)
  - Early Intervention Programs
    - Impact on cognition, DVT, pressure ulcers
  - Health Literacy: helping the team to understand the impact for carry over of education and participation for patients

- Incorporating self management strategies in our interventions
Opportunities for OT Managers and Practitioners

- Leadership roles on hospital based readmission tasks forces
- Primary Care Occupational Therapy

Creative Solutions

- Consistently using Best Practice through Outcome Measures
- Research project addressing self management for patients with Heart Failure or other risk factors
- Using paramedics for transfers home and home assessment
Implications for Research

- Health services research on effect of health insurance expansion
- Comparative effectiveness research
- Factors that trigger and prevent hospital acquired conditions
- Factors that trigger and prevent readmission and high utilization of hospital services
- Outcomes of community based prevention and wellness services aimed at reducing impact of chronic diseases
- Addressing health disparities
- Innovation grants

Overall Implications for OT

- **More individuals** should seek and receive health care since they will have insurance or Medicaid
- **Increased demand** for OT for outpatient adults and elective surgeries, such as joint replacements
- More children that have birth conditions will be eligible for outpatient therapy due to the **habilitation clause**
- Increased emphasis on **quality, efficiency, outcomes, home and community supports, cost benefit** of therapy
- Need **outcome studies** of OT and team based care
- **Unknowns:** % still remaining uninsured, states’ Essential Benefit Package coverage of therapy, Medicare cuts to private practice, and bundling of payment for acute and sub-acute care
# Contact Information

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