Hospital Outcome Measures and Discharge Planning

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Objectives

• Discuss importance of discharge planning in the acute care setting
• Summarize recent literature regarding discharge planning and outcome measures
• Explore clinical relevance of outcome measures
Discharge Plan

- Discharge Planning: coordination of follow up services for a patient prior to leaving the hospital with the aim of containing costs and improving patient outcomes
  - Many factors to consider

*The PT discharge recommendation and actual discharge location matched 83% of the time*
Components of Discharge

Biopsychosocial Model
(Engle 1980, Stineman 2001)

- Medical
- Cognitive/Emotional
- Physical Function
- Environmental
Importance

• Discharge planning is a major role of PT in the acute care setting

  Patients were 2.9x more likely to be readmitted to hospital within 30 days of discharge if PT recommendation was not implemented.

• History of inconsistency with discharge plans

• Readmission rates higher with inappropriate placement post acute care

• Triple Aim Medicare requirements
Use of Standardized Measurements

• Poor utilization of available measures
• Inconsistency across the acute care continuum
• Tools to help eliminate variability:
  – AM-PAC 6 Click (Activity Measure for Post Acute Care)
  – PLAN (Predicting Location after Arthroplasty Nomogram)
  – RAPT (Risk Assessment Prediction Tool)
AM-PAC 6 Click (Activity Measure for Post Acute Care)

- Developed by Cleveland Clinic
- Clinician reported outcome measure to determine appropriate discharge location
- Quick condensed form of AM-PAC
- Completed by PT and OT on eval and every follow-up
- Used for any condition
AM-PAC 6 Click Scoring

<table>
<thead>
<tr>
<th>6 Clicks</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulty Turning Over In Bed</td>
<td>2-A lot</td>
</tr>
<tr>
<td>Difficulty Lying On Back To Sitting</td>
<td>2-A lot</td>
</tr>
<tr>
<td>Help From Another Person Moving To And From Bed To Chair</td>
<td>3-A little</td>
</tr>
<tr>
<td>Difficulty Sitting Down And Standing Up From Chair With Arms</td>
<td>3-A little</td>
</tr>
<tr>
<td>Help From Another Person To Walk In Hospital Room</td>
<td>3-A little</td>
</tr>
<tr>
<td>Help From Another Person Climbing 3-5 Steps With A Railing</td>
<td>2-A lot</td>
</tr>
<tr>
<td>PT 6 Clicks Score</td>
<td>15</td>
</tr>
</tbody>
</table>

Select Single Option: (F5)

- 1-Unable
- 2-A lot
- 3-A little
- 4-None

0-24 total
0-17: institutional placement (rehab facility, assisted living)
18-24: non institutional placement (home health, OPPT)
AM-PAC 6 Click: Article 1

• Study provided evidence of the accuracy of 6 Click scores for predicting destination post discharge
• Suggests need to assess potential discharge destination early

Sensitivity: 0.820
Specificity: 0.723

Based on Jette, Stilphen, Ranganathan et al.
*AM-PAC “6-Clicks” Functional Assessment Scores Predict Acute Care Hospital Discharge Destination*
AM-PAC 6 Click: Article 2

• Study determined the interrater reliability of Basic Mobility 6 Click
• Mean difference between rater’s scores were near zero
• Levels of agreement were found to be large to nearly perfect

ICC: 0.849

Based on Jette, Stilphen, Ranganathan et al. *Interrater Reliability of AM-PAC “6-Clicks” Basic Mobility and Daily Activity Short Forms*
• Study provided evidence for construct validity of 6 Click scores
• Four methods to determine validity
• All P Values calculated found to be < 0.001
• Correlation with FIM was large
Internal Reliability: 0.96
Discharge for Specific Diagnoses

PLAN (Predicting Location after Arthroplasty Nomogram)

• Tool used pre-operatively to evaluate and predict discharge in patients s/p TKA/THR
  
  Will they return home?

• Projected exponential increase in TKA/THR

  Includes:
  
  - Age
  - Gender
  - Co-morbidities
  - WB Status
  - Home environment

Based on Barsoum, Murray, Klica et al.

Predicting Patient Discharge Disposition After Total Joint Arthroplasty in the United States
RAPT (Risk Assessment and Prediction Tool)

Designed to pre-operatively predict discharge for TKA/THA

Will they require extended inpatient rehab stay?

<table>
<thead>
<tr>
<th>Risk Assessment and Prediction Tool (RAPT)</th>
<th>Value</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What is your age group?</td>
<td>50-65 years</td>
<td>=2</td>
</tr>
<tr>
<td></td>
<td>66-75 years</td>
<td>=1</td>
</tr>
<tr>
<td></td>
<td>&gt; 75 years</td>
<td>=0</td>
</tr>
<tr>
<td>2. Gender?</td>
<td>Male</td>
<td>=2</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>=1</td>
</tr>
<tr>
<td>3. How far, on average, can you walk?</td>
<td>Two blocks or more (+/- rests)</td>
<td>=2</td>
</tr>
<tr>
<td>(a block is 200 meters)</td>
<td>1-2 blocks (the shopping centre)</td>
<td>=1</td>
</tr>
<tr>
<td></td>
<td>Housebound (most of the time)</td>
<td>=0</td>
</tr>
<tr>
<td>4. Which gait aid do you use?</td>
<td>None</td>
<td>=2</td>
</tr>
<tr>
<td>(more often than not)</td>
<td>Single point stick</td>
<td>=1</td>
</tr>
<tr>
<td></td>
<td>Crutches/frame</td>
<td>=0</td>
</tr>
<tr>
<td>5. Do you use community supports?</td>
<td>None or one per week</td>
<td>=1</td>
</tr>
<tr>
<td>(home help, meals-on wheels, district nurse)</td>
<td>Two or more per week</td>
<td>=0</td>
</tr>
<tr>
<td>6. Will you live with someone who can care for you after your operation?</td>
<td>Yes</td>
<td>=3</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>=0</td>
</tr>
</tbody>
</table>

Your score (out of 12)

KEY: Scores < 6 high risk …… prediction: discharge extended inpatient rehabilitation
Scores > 9 low risk …… prediction: discharge directly home
Scores 6-9 medium risk …… prediction: additional intervention to discharge directly home

Patient’s expectation of discharge destination is also a determinant. The prediction indicated by the score is discussed with the patient and a destination plan agreed to.

<table>
<thead>
<tr>
<th>Patient’s preference</th>
<th>Prediction (Score)</th>
<th>Agreed destination</th>
</tr>
</thead>
</table>

Fig. 1. Risk Assessment and Prediction Tool (RAPT) for hip or knee arthroplasty.

Oldmewood LB, McBurney H, Robertson VJ. Predicting risk of extended inpatient rehabilitation after hip or knee arthroplasty.
Clinical Relevance

• When used, outcome measures are an accurate tool to assist with appropriate discharge decision in the acute care setting

• Standardized measures reduce inconsistencies between therapist recommendations

• Leads to fulfillment of the Triple Aim
  – Better outcomes and patient satisfaction with decreased cost
References


References (Continued)

• Martin, Dan, PT, MPT. Presentation presented: Hospital Based Therapy Services; September 27, 2017; Bellarmine University, Louisville KY.

• Oldmeadow LB, McBurney H, Robertson VJ. Predicting risk of extended inpatient rehabilitation after hip or knee arthroplasty1
1No benefits or funds were received in support of this study. *The Journal of Arthroplasty*. 2003;18(6):775-779.
