A Comparison of Health Care Use for Physician-Referred and Self-Referred Episodes of Outpatient Physical Therapy

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Objectives

Upon completion of this educational activity, participants will be able to:

- Define the importance of health services research
- Describe the significant differences between physician-referred and self-referred episodes of physical therapy services
- Distinguish between cost-effectiveness and resource-use of health services
- Identify relevant health services research topics
Outline

- Background
- Overview of research questions
- Data analysis
- Results
- Conclusions
- Future research
Study

History and Background

- 2001-2003: Initial discussion of research questions
- Collaboration: Agreement between University of Iowa and Wellmark, Inc.
- IRB-approved data repository: Development, access, and use by researchers
- Claims-based approach
- Operational definitions and assumptions
Overview

Research questions and considerations

- Compare patient profiles and health care use for physician-referred and self-referred episodes of PT on large, non-Medicare population

- Control for co-morbidities/persistence of health care use during the previous year

- Examine PT-use during the PT-episode of care and all related health care use at three separate time frames
  - 30 days prior to PT-episode
  - During PT-episode
  - 60 days following PT-episode
Data Analysis and Findings

- Claims-based approach to defining referral status.
  - 62,707 PT episodes, 28% self-referred; 72% physician-referred.

- Demographic and clinical similarities between two groups overall:
  - Greater proportion of PT episodes for women (59% vs 41%), but same gender mix in both referral groups.
  - Average age was lower in the self-referral group (43.5 vs 45.9 years)
  - Very similar with respect to ambulatory case-mix/comorbidities and types of conditions requiring physical therapy.
Clinical comparison of referral groups overall:

- Similar with respect to ambulatory case-mix/comorbidities and types of conditions requiring physical therapy.
- 90% of episodes in both groups were for musculoskeletal conditions (arthritis, spine, sprain/strain).
- Physician-referred had a higher proportion of arthritis cases (48.1% vs. 44.8%).
- Self-referred group had a higher proportion of spine and sprain/strain cases (10.2% vs. 8.6%).

Unadjusted health care use greater in physician-referred group, but perhaps appropriately so.
## Unadjusted Results

<table>
<thead>
<tr>
<th></th>
<th>Physician-referred</th>
<th>Self-referred</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average age</td>
<td>45.9</td>
<td>43.5</td>
</tr>
<tr>
<td>Average visits/episode</td>
<td>7.0</td>
<td>5.9</td>
</tr>
<tr>
<td>Allowable amount/episode</td>
<td>$420.00</td>
<td>$347.00</td>
</tr>
<tr>
<td>Allowable amount/60 days after</td>
<td>$65.00</td>
<td>$62.00</td>
</tr>
<tr>
<td>Related non-PT claims during PT Episode</td>
<td>56.3%</td>
<td>43.0%</td>
</tr>
<tr>
<td>Saw a qualifying referral physician during PT episode</td>
<td>49.4%</td>
<td>45.6%</td>
</tr>
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</table>
Comparison of referral groups, controlling for case-mix (ACG), age, gender, diagnosis group, and calendar year.

PT-use and cost of episode less in self-referred group compared to physician-referred group during PT episode.

After adjusting for patient characteristics, the self-referred group had

- fewer PT visits (80%-90%) and associated lower $
- lower allowable amounts for related, non-PT claims.
Summary of Key Points

- Results similar to previous studies; differences may be due to controlling for case-mix.

- During episode of PT care, health care use was lower in the self-referred groups for both PT and related non-PT claims, after adjusting for patient characteristics.

  - Overall, 86% as many PT visits; 87% of the (log) allowable amounts for PT claims.

  - Allowable amounts for related, non-PT health care use was lower in the self-referred group (e.g., $18 less for women and $44 less for men).
Discussion

- Role of physician as gatekeeper may be overstated
- Both PT and related non-PT claims/episode were less in self-referred vs. physician-referred group
- Future research: Gender differences, surgical v. non-surgical services, provider differences
Citation

- © Health Research and Education Trust
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- Health Services Research
References


References


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Data repository: Wellmark, Inc.