



# 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

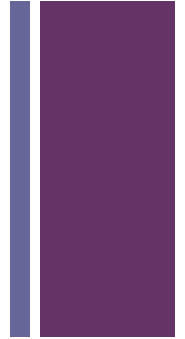
## History and Background

- 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

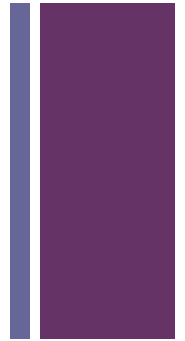
## Research questions and considerations

- 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

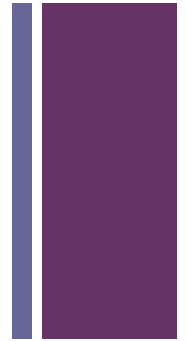
	Physician-referred	Self-referred
Average age	45.9	43.5
Average visits/episode	7.0	5.9
Allowable amount/episode	\$420.00	\$347.00
Allowable amount/60 days after	\$65.00	\$62.00
Related non-PT claims during PT Episode	56.3%	43.0%
Saw a qualifying referral physician during PT episode	49.4%	45.6%





- 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

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