Impact of a Specialty Pharmacy Benefit on Rheumatoid Arthritis Medication Adherence and Functional Status: A Continuation Study

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Background

- Patients with rheumatoid arthritis (RA) have benefitted from the introduction of tumor necrosis factor (TNF) inhibitors, however, multiple studies have reported that rates of medication adherence are sub-optimal.[1-2] Lower RA disease activity is associated with lower adherence rates.[2]
- Proportion of days covered (PDC) is the preferred method to measure medication adherence at a population level. A threshold of 0.80 is shown to be reflective of clinical benefit.[3]
- Specialty pharmacies offer various management strategies to improve adherence in patients with RA to help improve disease status. [4]
- Adherence to biologics for RA has been poorly studied, and limited studies exist that measure the impact of a specialty pharmacy benefit on adherence correlated to a functionality score from the Health Assessment Questionnaire II (HAQ-II).
  - The HAQ-II is a 10-item questionnaire used to measure disability or physical function. Higher scores indicate greater disability.[5]
- RA is one of the few chronic diseases where patient-reported outcome measures are often the best predictors of treatment response.[5]

Purpose

To determine the impact of a specialty pharmacy benefit on RA medication adherence and functional status.

Methods

Study Population & Intervention:

- Members with claims for TNF-inhibitors (adalimumab, etanercept, certolizumab pegol, golimumab) used for RA treatment were included, provided they received at least two fills within each time period.

Design:

- A retrospective analysis was conducted using an internal pharmacoadherence application for members who met the inclusion criteria.
- Members of this commercial client were mandated to fill at the specialty pharmacy beginning in 2018.

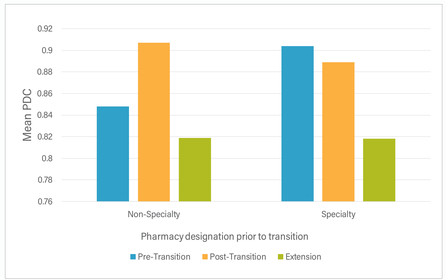
Outcomes:

- Pharmacy claims were analyzed to calculate PDC in each time period and were compared for differences.
- Members with a baseline HAQ-II score after the transition were compared to subsequent HAQ-II scores for a correlation with adherence.

Results

- 101 members with RA met the inclusion criteria for having at least two fills in each time period and 26 members had completed HAQ-II assessments in each time period.
  - The mean age was 48.8 and approximately 77% of members were female.
- Prior to transition, 34% of members were filling at non-specialty pharmacies and 66% of members were filling at specialty pharmacies.
- Members were overall adherent (PDC≥0.80) in both groups in each time period (Figure 1).
  - Adherence increased from pre- to post-transition for members filling at non-specialty pharmacies prior to transition, but decreased during the extension time period.
  - For members filling at specialty pharmacies prior to transition, adherence declined in each time period.

Figure 1: Adherence Changes Measured by PDC



The percent of adherent members increased post-transition for those members previously filling at non-specialty pharmacies (65.2% vs. 84.8%, Figure 2).

Figure 2: Accepted Adherence Level Achieved

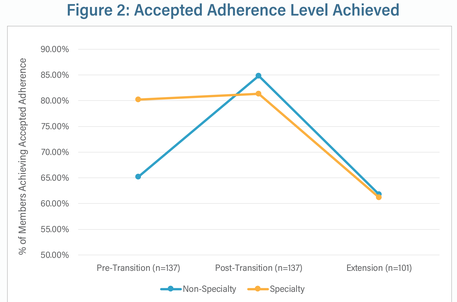
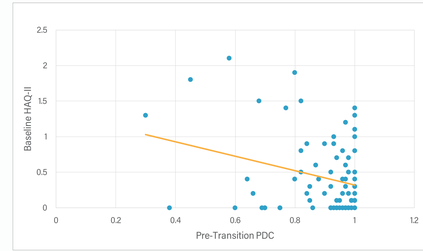


Figure 3: Patient-Reported Outcomes Measured by HAQ-II Scores

A non-statistically significant lower HAQ-II score was found in members filling at a specialty pharmacy pre-transition compared to members filling at non-specialty pharmacies pre-transition at all three time points (Figure 3).

Figure 4: Correlation of Pre-Transition PDC and Baseline HAQ-II



A statistically significant inverse relationship was found between baseline HAQ-II score and pre-transition PDC value (r=-0.200, p=0.035) for 92 members filling at specialty pharmacies prior to transition with completed functional assessments at the pre-transition period (Figure 4).

A non-statistically significant inverse relationship was found between 12-month HAQ-II score and extended PDC value (r=-0.125, p=0.378) for 52 members filling at specialty pharmacies prior to transition with completed functional assessments at the extension period.

Limitations

- A major limitation involves incomplete or refused patient completed HAQ-II assessments leading to an inadequate sample size to achieve significant results.
- Having insufficient data regarding additional therapy for RA treatment was also a limitation of this study.

Conclusions

- PDC is significantly correlated to HAQ-II scores at baseline.
- Adherence is shown to increase for members transitioning from a non-specialty to specialty pharmacy.
- Efforts must be focused on helping maintain desired adherence rates in patients with RA to have a continued benefit on functional disease status.
- More analysis is needed to determine if the HAQ-II is an appropriate functionality questionnaire to assess RA disease status.

Disclosures

This research was conducted by Lumicera Health Services and Navitus Health Solutions, based in Madison, WI without external funding.

References

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