Introduction

Psoriatic arthritis (PsA) is a chronic inflammatory disease that causes joint swelling and stiffness and imposes a substantial economic burden.1 Treatment options for PsA have increased over the past decade with the introduction of tumor necrosis factor alpha (TNFα) inhibitors in clinical practice. Despite these advances in treatment options for PsA, many patients remain untreated or under-treated.5

Objectives

The objective of this study was to examine treatment patterns, healthcare resource utilization, and costs associated with PsA among South Carolina Medicare Advantage with Prescription Drug (MAPD) plan members.

Methods

This retrospective cohort study evaluated data in patients with PsA (ICD-9-CM 714.0–4, 715.2–3, 715.8–9) from 0–45 based on the number of distinct drug classes using Generic Elixhauser Comorbidity Index (ECI) score (a risk score associated with hospitalization). The study included 1,011 patients; 60% (n=610) of these were aged from 18–89 years on index date and had continuous coverage from January 1, 2008 and December 31, 2013. The objective of this study was to examine treatment patterns, healthcare resource utilization, and costs associated with PsA among South Carolina Medicare Advantage with Prescription Drug (MAPD) plan members.

Results

Patients

The study included 1,011 patients; 60% (n=610) of these were aged from 18–89 years on index date and had continuous coverage from January 1, 2008 and December 31, 2013. Patients were predominantly based in the Southern and Midwestern regions of the United States,4 our findings suggest there may be gaps in treatment in patients with PsA using the MarketScan database,4 our findings suggest there may be gaps in treatment in patients with PsA using the MarketScan database,4 our findings suggest there may be gaps in treatment in patients with PsA using the MarketScan database,4 our findings suggest there may be gaps in treatment in patients with PsA using the MarketScan database,4 our findings suggest there may be gaps in treatment in patients with PsA using the MarketScan database,4 our findings suggest there may be gaps in treatment in patients with PsA using the MarketScan database,4 our findings suggest there may be gaps in treatment in patients with PsA using the MarketScan database,4 our findings suggest there may be gaps in treatment in patients with PsA using the MarketScan database,4 our findings suggest there may be gaps in treatment in patients with PsA using the MarketScan database,4 our findings suggest there may be gaps in treatment in patients with PsA using the MarketScan database,4 our findings suggest there may be gaps in treatment in patients with PsA using the MarketScan database,4 our findings suggest there may be gaps in treatment in patients with PsA using the MarketScan database,4 our findings suggest there may be gaps in treatment in patients with PsA using the MarketScan database,4 our findings suggest there may be gaps in treatment in patients with PsA using the MarketScan database,4 our findings suggest there may be gaps in treatment in patients with PsA using the MarketScan database,4 our findings suggest there may be gaps in treatment in patients with PsA using the MarketScan database,4 our findings suggest there may be gaps in treatment in patients with PsA using the MarketScan database,4 our findings suggest there may be gaps in treatment in patients with PsA using the MarketScan database,4 our findings suggest there may be gaps in treatment in patients with PsA using the MarketScan database,4 our findings suggest there may be gaps in treatment in patients with PsA using the MarketScan database,4 our findings suggest there may be gaps in treatment in patients with PsA using the MarketScan database,4 our findings suggest there may be gaps in treatment in patients with PsA using the MarketScan database,4 our findings suggest there may be gaps in treatment in patients with PsA using the MarketScan database,4 our findings suggest there may be gaps in treatment in patients with PsA using the MarketScan database,4 our findings suggest there may be gaps in treatment in patients with PsA using the MarketScan database,4 our findings suggest there may be gaps in treatment in patients with PsA using the MarketScan database,4 our findings suggest there may be gaps in treatment in patients with PsA using the MarketScan database,4 our findings suggest there may be gaps in treatment in patients with PsA using the MarketScan database,4 our findings suggest there may be gaps in treatment in patients with PsA using the MarketScan database,4 our findings suggest there may be gaps in treatment in patients with PsA using the MarketScan database.5

Comorbidities

At baseline, the mean (SD) ECI score was 5.9 (3.7) for MAPD plan members. Patients with chronic obstructive pulmonary disease (COPD) had a mean (SD) ECI score of 9.7 (4.0), whereas patients with rheumatoid arthritis (RA) had a mean (SD) ECI score of 2.8 (2.2).

Treatments

During the 12-month post-index period, 76% (n=467) of MAPD plan members received TNFi-based pharmacotherapy. Treatment patterns during the 12-month post-index period included lipids (74%; n=451/610), X-rays (59%; n=360/610), echocardiography (53%; n=326/608), and anti-inflammatory disease modifying antirheumatic drugs (ADMARDs; 50% of days or 28 days’ possession of non-TNFi). There were no PsA-related inpatient hospitalizations and ER visits.

TNFi treatment patterns

29 MAPD plan members and 73 commercial plan members initiated TNFi treatment during the 12-month post-index period:

- Of those initiating TNFi treatment, 76% (n=23/30) of MAPD plan members used monotherapy compared with 78% (n=57/73) of commercial plan members.

- The mean (SD) time to initial TNFi treatment after index diagnosis was 77 (50) days for MAPD plan members and 63 (47) days for commercial plan members.

- 52% (n=15/29) of MAPD plan members discontinued TNFi treatment within the first 24 months and 71/223 (62%) of commercial plan members, respectively.

Healthcare resource utilization

HCUR was observed for all patients without pre-index TNFi utilization.

- All-cause hospitalizations, ER visits, and outpatient visits were evaluated in all patients without pre-index TNFi treatment.

- All-cause and TNFi-related hospitalizations, outpatient visits, and ER visits for MAPD and commercial plan members are presented in Table 2.

- All-cause and TNFi-related costs were numerically higher for MAPD plan members compared with commercial plan members during the first 12 and 24 months post-index.

Summary

The majority of patients with PsA were treated with ADMARDs, NSAIDs, and/or corticosteroids.

- TNFi use was higher among those with a commercial plan than with an MAPD plan.

- The majority (52%) of patients with an MAPD plan and many (33%) with a commercial plan discontinued TNFi treatment in the first 12 months post-index.

- TNFi-related outpatient visits were greater for MAPD plan users versus non-TNFi users in the first 12 months post-index.

- TNFi-related costs were significantly higher for TNFi users compared with non-TNFi users.

Limitations

There were a greater number of MAPD plan members compared with commercial plan members and this may have resulted in the treatment of more severe cases.

Patients were predominantly based in the Southeastern and Midwestern States with limited membership in the Northwestern or Western States.

The use of over-the-counter drugs was not accounted for in this study and this could have contributed to the low numbers of patients receiving pharmacological treatment.

Less numbers of patients with an MAPD plan received TNFi treatment.

The clinical impact of TNFi treatment could not be evaluated using claims data.

Conclusion

In comparison with a published study of TNFi treatment in patients with PsA using the MarketScan databases, our findings suggest there may be gaps in the treatment of PsA and that TNFi treatment may be under-utilized, especially for MAPD members.

References


4. Acknowledgments and disclosures

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