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Standardizing Specialty Pharmacist Follow-Up Frequency in Patients Prescribed Inflammatory Disease-Modifying Therapies

Rochelle Castrillo, PharmD; Linda Huynh, PharmD Candidate 2020; Tara Berkson, PharmD, BCACP; Adam Saulles, PharmD, CSP, BCACP

Background

- Monitoring for non-adherence, side effects, laboratory parameters, and health status changes is essential for patients diagnosed with inflammatory conditions, especially those initiating targeted therapy.
- Pharmacist involvement with medication therapy management positively impacts patient health outcomes, but the benefit of a standardized clinical follow-up assessment frequency is lacking in specialty pharmacy literature.
- One study evaluated the interventions made by pharmacists prior to a standardized frequency follow-up guide to determine optimal consultation intervals.
- This study implemented the standardized follow-up frequency guide determined from the previous study.

Purpose

- Evaluate the clinical value and utility of a standardized pharmacist follow-up frequency in patients prescribed inflammatory disease-modifying therapies.
- Determine if any frequency changes are necessary to optimize the follow-up intervals for specific inflammatory conditions or specialty medications.

Objectives

- **Primary objective**
  - Determine quantity of pharmacist deviations from the follow-up frequency guide by inflammatory condition and medication regimen
- **Secondary objectives**
  - Categorize and assess the reasons for pharmacist deviation from the guide
  - Assess quantity and types of pharmacist interventions made during deviations from the guide by medication and condition
  - Evaluate patient reported medication adherence and quality-of-life (QoL) metrics
  - Calculate pharmacist time spent per assessment

Methodology

- **IRB Status:** Approved; Study2019000111
- **Study design:** Retrospective cohort study
- **Study timeline:** Data collection: August 2019 – March 2020
- **Inclusion criteria:**
  - Started a new specialty medication
  - Patients age <18 years
  - Standardized specialty pharmacist follow-up occurs at month 1 and 4 after the patients receive their refill
  - Deviations are defined as consultations occurring at month 2 or 3, as these are outside of the standard follow-up intervals outlined in the frequency guide.
  - Interventions are defined as any pharmacist (RPh) action taken to help improve clinical outcomes for the patient such as adherence concerns, identifying drug interactions, side effect management, product/stability (PR) questions, etc.

Baseline Characteristics

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Demographics</th>
<th>Study Group N=154</th>
<th>Primary Medication(s), No. (%)</th>
<th>Study Group N=154</th>
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<tbody>
<tr>
<td>Age, years, mean</td>
<td>46 (range 20-73)</td>
<td>adalimumab 45 (28.2)</td>
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<td>Sex, female, No. (%)</td>
<td>102 (66.2)</td>
<td>secukinumab 26 (16.9)</td>
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<td>Primary Condition, No. (%)</td>
<td>39 (25.2)</td>
<td>dupilumab 17 (11.3)</td>
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<td>Psoriatic Arthritis (PsA)</td>
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<td>etanercept 11 (7.1)</td>
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<td>rituximab-rose 10 (6.5)</td>
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<td>adalimumab 9 (5.8)</td>
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<td>Monthly Consultation (CNS)</td>
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<td>tocilizumab 4 (2.6)</td>
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<td>Ulcerative Colitis (UC)</td>
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<td>adalimumab 3 (1.9)</td>
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<td>Uveitis (UV)</td>
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<td>adalimumab 3 (1.9)</td>
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</table>

Results

**Primary Objective**

- There were a total of 36 deviations: 26 at month 2, 10 at month 3
- By primary condition (Fig. 1), most deviations were seen with Ps (n=8, 22.2%), followed by PsA, AS, and RA (each: n=7, 19.4%)
- By medication (Fig. 2), most deviations were associated with adalimumab (n=12, 33.3%), and secukinumab (n=9, 25%), while all other medications shared similar frequency of deviations ranging from n=1-3, 2.8-6.3%
- Results were most likely influenced by the conditions/medications having the largest subpopulations of their categories.

**Secondary Objectives**

- Reasons for deviations included (Fig. 4): unable to reach patient during standardized follow-up frequency (41.7%), RPh clinical decision that sooner follow up was necessary (27.8%), patient initiated consult (25%), and RPhs failed to attempt follow-up consultation at month 1 and/or 2 (5.6%)
- Thirty-six total deviations between months 2 and 3 resulted in 27 interventions (Fig. 3).
  - Most common interventions were due to medication reconciliation and side effect management
  - Pharmacist interventions (Fig. 6 & 7) were required mostly often for:
    - PsA (n=26, 21.5%), Ps (n=21, 17.4%), and AD (n=16, 13.2%)
    - Adalimumab (n=39, 32.2%), secukinumab (n=19, 15.7%), and dupilumab (n=16, 13.2%)
  - Patients taking adalimumab reported missed or late doses most frequently (33.3% of the 24 reported).

Discussion

- The standardized pharmacist follow-up frequency guide provides a clinically meaningful strategy for monitoring and follow-up with patients prescribed high-cost, high-risk inflammatory disease-modifying therapies.
- By establishing that the majority of clinically significant interventions occurred during the standardized frequency intervals, this guide accomplished maintaining patient safety, in addition to aiding patients with their clinical goals and overall quality of life.
- In addition, this data supports continuing a standard follow-up frequency at month 1 and 4 by demonstrating that no critical interventions were missed and most deviations occurred due to pharmacists inability to reach patients during the pre-defined intervals.
- One limitation of this study was the inconsistent reporting of QoL metrics.
- It is reasonable for specialty pharmacists to utilize a standardized follow-up frequency guide that provides flexibility for modifications based on clinical judgment to manage patients diagnosed with an inflammatory condition.

Disclosure

- Rochelle Castrillo: Nothing to disclose
- Tara Berkson: Nothing to disclose
- Adam Saulles: Nothing to disclose
- Linda Huynh: Nothing to disclose

References

1. Anghil LA, Firas AM, Oprean RN. Medication Adherence and Persistence in Patients with Autoimmune Rheumatic Disease: A Narrative Review. JDrugs Aging. 2018