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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.1,2

• Pharmacist involvement with medication therapy management significantly affects patient health outcomes, but the benefit of a standardized clinical follow-up assessment frequency is lacking in specialty pharmacy literature.3

• One study evaluated the interventions made by pharmacists prior to a standardized frequency follow-up guide to determine optimal consultation intervals.4

• 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; Study2019000511

• Study design: Retrospective cohort study

• Study timeline
  • Data collection: August 2019 – March 2020

• Inclusion criteria
  • Started a new specialty medication for an inflammatory condition
  • Received ≥ 1 pharmacist Specialty Medication Management Services (SMMS) Inflammatory Assessment follow-up attempt

• Exclusion criteria
  • Patients who have opted out of SMMS program
  • Patients age <18 years

• Standardized pharmacist follow-up occurs at month 1 and 4 after the patient receives 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 (P/S) questions, etc.

Baseline Characteristics

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Study Group N=154</th>
<th>Primary Medication(s), N. (%)</th>
<th>Study Group N=154</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, years, mean (range)</td>
<td>46 (20-73)</td>
<td>adalimumab (45, 28.2)</td>
<td>adalimumab (45, 28.2)</td>
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<td>Sex, female, No. (%)</td>
<td>102 (66.2)</td>
<td>tocilizumab (17, 11.3)</td>
<td>tocilizumab (17, 11.3)</td>
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<tr>
<td>Primary Condition, N. (%)</td>
<td>154</td>
<td>tofacitinib (12, 7.8)</td>
<td>tofacitinib (12, 7.8)</td>
</tr>
<tr>
<td>Psoriasis (Ps)</td>
<td>20 (13.1)</td>
<td>etanercept (13, 7.1)</td>
<td>etanercept (13, 7.1)</td>
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<tr>
<td>Psoriatic Arthritis (PsA)</td>
<td>30 (19.6)</td>
<td>certolizumab pegol (10, 6.5)</td>
<td>certolizumab pegol (10, 6.5)</td>
</tr>
<tr>
<td>Rheumatoid Arthritis (RA)</td>
<td>25 (16.2)</td>
<td>anakinra (5, 3.2)</td>
<td>anakinra (5, 3.2)</td>
</tr>
<tr>
<td>Alopia Cicatricialis (AI)</td>
<td>17 (11.1)</td>
<td>etanercept (9, 5.8)</td>
<td>etanercept (9, 5.8)</td>
</tr>
<tr>
<td>Arthritis Seropositive (AS)</td>
<td>30 (19.6)</td>
<td>tocilizumab (13, 7.1)</td>
<td>tocilizumab (13, 7.1)</td>
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<tr>
<td>Multiple Myeloma (MM)</td>
<td>8 (5.2)</td>
<td>rituximab (2, 1.3)</td>
<td>rituximab (2, 1.3)</td>
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<td>Uveitis (U)</td>
<td>24 (15.6)</td>
<td>bevacizumab (12, 7.8)</td>
<td>bevacizumab (12, 7.8)</td>
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<tr>
<td>Other</td>
<td>11 (7.1)</td>
<td>guselkumab (2, 1.3)</td>
<td>guselkumab (2, 1.3)</td>
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<tr>
<td>Crohn’s Disease (CD)*</td>
<td>4 (2.6)</td>
<td>ustekinumab (2, 1.3)</td>
<td>ustekinumab (2, 1.3)</td>
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<tr>
<td>Systemic Lupus Erythematosus (SLE)*</td>
<td>4 (2.6)</td>
<td>adalimumab (2, 1.3)</td>
<td>adalimumab (2, 1.3)</td>
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<tr>
<td>Inflammatory Bowel Disease (IBD)</td>
<td>10 (6.5)</td>
<td>adalimumab (2, 1.3)</td>
<td>adalimumab (2, 1.3)</td>
</tr>
<tr>
<td>IBD, Ctrl (Infl Bowel D)</td>
<td>10 (6.5)</td>
<td>adalimumab (2, 1.3)</td>
<td>adalimumab (2, 1.3)</td>
</tr>
<tr>
<td>Uveitis (Uv)</td>
<td>6 (3.9)</td>
<td>guselkumab (2, 1.3)</td>
<td>guselkumab (2, 1.3)</td>
</tr>
</tbody>
</table>

Results

Primary Objective

• There were a total of 36 deviations: 26 at month 2, 10 at month 3

By condition (Fig. 1), most deviations were seen with Ps (n=22, 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 other medications shared similar frequency of deviations ranging from n=1-3, 2.8-8.3% Results were most likely influenced by the conditions/medications having the largest subpopulations of their categories.

• When evaluating by proportion of deviations reported per number of patients associated with primary condition or medication (Fig. 1 and Fig. 2), the most common deviations were as follows:
  • Primary condition – AS (n=7, 70%), RA (n=7, 28%), SLE (n=1, 25%) and MD (n=2, 25%)
  • By medication – certolizumab pegol (n=2, 200%), guselkumab (n=2, 40%), secukinumab (n=5, 34.6%)

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 most 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).

• QoL metrics (Table 2) were not consistently reported, however, there is notable improvement from baseline to month 4. At month 0, average patient-reported QoL was 5.6 across all conditions, while after 4 months of treatment, QoL scores improved to 3.6.

• Tofacitinib and AS required the most pharmacist consultation time. Tofacitinib averaged 19.2 minutes per consultation

• AS averaged 15.2 minutes per consultation

• Monthly average consultation time was consistent across all months, ranging from 10.3-10.7 minutes per consultation

Conclusions

• The standardized pharmacist follow-up frequency guide provides a clinically meaningful strategy to monitor 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 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

• Linda Huynh: Nothing to disclose

• Adam Saulles: Nothing to disclose

References


Figure 1

Figure 2

Figure 3

Figure 4

Figure 5

Figure 6

Figure 7