Impact of Specialty Pharmacy Services on Pneumococcal Vaccination Rates in a Large Inflammatory Bowel Disease Population

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BACKGROUND

- Inflammatory bowel disease (IBD) is a chronic condition involving inflammation and ulcers within the gastrointestinal tract; moderate to severe IBD typically requires biologic therapy for treatment, resulting in immunosuppression.1

- The Centers for Disease Control and Prevention (CDC) recommends pneumococcal (PNA) vaccination for adults 19-64 years old who have certain chronic medical conditions and are immunocompromised, as well as all adults 65 years or older.1

- The CDC vaccination timeline is shown below for immunocompromised patients aged 19-64 years:

- The CDC vaccination timeline is shown below for immunocompromised patients greater than 65 years of age if no prior PNA vaccine:

- Vaccination rates do differ among specialists; reasons for this may include varying rates of vaccine hesitancy, education provided, or provider/pharmacist interaction (Provider 3 works primarily remote).

- Both study groups had higher rates of vaccination among patients less than sixty-five years old when compared to national rates, with the pharmacist-group exhibiting greater benefit.2

- Covid-19 vaccination rates were consistent with state-wide vaccination rates.4

- Limitations consist of the following: inability to categorize “other” vaccines, lack of up-to-date vaccination assessment, and impact of other care team members on vaccination rates.

- With PCV20 becoming the primary PNA vaccine, it is anticipated that vaccination rates will increase among all age groups due to a less complex vaccine regimen and continued pharmacist education within the clinic.

OBJECTIVE

- The purpose of this study is to assess the impact of clinical specialty pharmacy services and education on compliance with vaccine recommendations in subjects with IBD.

METHODS

- The following is a retrospective analysis of subjects with IBD managed by specialty providers at Parkview Physicians Group Gastroenterology Clinic between April 1, 2020 and May 31, 2022.

- Subjects were included if they had a diagnosis of Crohn’s disease or ulcerative colitis and were prescribed monoclonal antibody therapy; biosimilars were included.

- Subjects were separated into a pharmacist-care group or a control group, managed exclusively by their IBD specialist; this is considered standard of care.

- The pharmacist-care group included patients actively receiving infliximab, golimumab, certolizumab pegol, or ustekinumab; these patients received vaccine recommendations from a Parkview specialty pharmacist.

- The control group, or provider group, included patients actively receiving infliximab or vedolizumab.

- The primary endpoint consisted of PNA vaccination rate comparison between the pharmacist-managed group and the control group.

- Secondary endpoints included evaluation of differences between the two groups in vaccination rates based on visit type, IBD specialist, and age.

- Covid vaccination compliance rates were compared as an additional secondary endpoint.

- Subjects were included in the vaccinated group if they received at least one dose of a Covid-19 vaccine.

RESULTS

<table>
<thead>
<tr>
<th>Baseline Characteristics</th>
<th>Pharmacist 69%</th>
<th>Provider 64%</th>
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<tbody>
<tr>
<td>Mean Age, year</td>
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</tr>
<tr>
<td>Gender</td>
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<td>0</td>
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<tr>
<td>Other Asian</td>
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<tr>
<td>Patient Declined</td>
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<tr>
<td>Crohn’s Disease (CD)</td>
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<td>Ulcerative Colitis (UC)</td>
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<td>172</td>
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<tr>
<td>Government</td>
<td>117</td>
<td>153</td>
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</tbody>
</table>

PHARMACIST PNA VACCINATION RATES

- The pharmacist-care group was more likely to be vaccinated against PNA; the biggest difference was noted among patients who received PCV13 and PPSV23, further completing the recommended regimen.

- During this study, visits were conducted via telemedicine or face-to-face due to the Covid-19 pandemic, with fifty-nine percent of subjects engaging in both visit types. Vaccination rates were not impacted between those seen solely in-person versus virtually, which supports the continued use of a hybrid model.

- Vaccination rates do differ among specialists; reasons for this may include varying rates of vaccine hesitancy, education provided, or provider/pharmacist interaction (Provider 3 works primarily remote).

- Both study groups had higher rates of vaccination among patients less than sixty-five years old when compared to national rates, with the pharmacist-group exhibiting greater benefit.

- Covid-19 vaccination rates were consistent with state-wide vaccination rates.

- Limitations consist of the following: inability to categorize “other” vaccines, lack of up-to-date vaccination assessment, and impact of other care team members on vaccination rates.

- With PCV20 becoming the primary PNA vaccine, it is anticipated that vaccination rates will increase among all age groups due to a less complex vaccine regimen and continued pharmacist education within the clinic.

DISCUSSION & CONCLUSIONS

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REFERENCES


5. What is Specialty Pharmacy? National Association of Specialty Pharmacy. Available at: https://www.nasp.org


Disclosure

All authors of this presentation have nothing to disclose concerning possible financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of the presentation.