Comparison of Discontinuation Rates in Patients Receiving an Oral Anticancer Agent Before and After Implementation of a 14-day Pharmacist Check-in Protocol

**BACKGROUND**

Due to their many adverse effects, oral anticancer agents (OAAs) result in high discontinuation rates and low adherence. While evidence exists that mitigating these adverse effects improves adherence, there is a lack of data demonstrating the impact health system specialty pharmacy (HSSP) pharmacists have on improving discontinuation rates.

**OBJECTIVES**

Compare discontinuation rates in patients on oral anticancer medication before and after a pharmacist-led check-in protocol is put in place to contact patients within 14 days from therapy start.

**METHODS**

A retrospective, multicenter, observational study comparing discontinuation rates and reasons of patients across TrellisRx partner health systems receiving oral anticancer agents, before and after implementing a technology-facilitated protocol requiring a pharmacist to contact patients within 14 days from therapy initiation.

- **Patients** were stratified into 2 groups: pre-protocol (March 2020-December 2020) and post-protocol (March 2021-December 2021) and evaluated for discontinuation rates and reasons as reported by the clinical pharmacist in the Arbor® specialty pharmacy technology platform.
- **During this follow up,** adverse effect management and mitigation strategies, additional counseling, and question assistance were provided. Providers were contacted when additional supportive care medication was required to mitigate the side effects patients reported.
- **Discontinuation reasons cited for endpoints were those most directly impacted by pharmacist intervention.**

**DATA COLLECTION AND ENDPOINTS**

- **Primary endpoints:** discontinuation rates in patients receiving oral oncology for overall and for reasons of drug intolerance, patient choice, and patient being unreachable.
- **Secondary endpoints:** discontinuation rates in patients receiving oral anticancer treatment due to disease interaction, drug interaction, financial hardship, prior authorization (PA) denial, or changes in therapy.

**RESULTS**

Comparison of the pre-protocol and post-protocol groups for the primary endpoint

- 9,414 therapies evaluated overall.
- The pre-protocol group encompassing 4,060 therapies had an overall therapy discontinuation rate of 40.4% or 1,641 therapies discontinued overall, of which 513 were discontinued for intolerance, choice, or patient unreachable.
- The post-protocol group encompassing 5,354 therapies had an overall therapy discontinuation rate of 29% or 1,557 therapies discontinued overall, of which 220 were discontinued for intolerance, choice, or patient unreachable.
- Overall, there was approximately an 11% decrease in discontinuations following implementation of a pharmacist-led check-in protocol.

Discontinuation rates pre-protocol (n=1,641)

<table>
<thead>
<tr>
<th>Reason</th>
<th>Pre-protocol</th>
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<tbody>
<tr>
<td>Drug intolerance</td>
<td>276</td>
</tr>
<tr>
<td>Patient choice</td>
<td>195</td>
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<td>Patient unreachable</td>
<td>42</td>
</tr>
<tr>
<td>Secondary endpoints</td>
<td>11</td>
</tr>
<tr>
<td>Other</td>
<td>1117</td>
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Discontinuation rates post-protocol (n=1,557)

<table>
<thead>
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<th>Reason</th>
<th>Post-protocol</th>
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<tbody>
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<td>Drug intolerance</td>
<td>151</td>
</tr>
<tr>
<td>Patient choice</td>
<td>54</td>
</tr>
<tr>
<td>Patient unreachable</td>
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<tr>
<td>Secondary endpoints</td>
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<td>Other</td>
<td>1337</td>
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**DISCUSSION AND CONCLUSIONS**

**Implications**

- **Overall,** patients who received follow-up with a HSSP pharmacist within 14 days following initiation of an oral anticancer agent had lower overall discontinuation rates than patients prior to the implementation of the check-in protocol.
- When a check-in protocol was implemented, a significant drop in discontinuations due to drug intolerance, patient choice, and patient being unreachable occurred.

- **Secondary endpoints** impacted discontinuation less directly overall; however, the increase in discontinuations due to interactions between OAAs and medications, as well as disease interaction, persisted.
- **HSSPs** are uniquely positioned to limit financial barriers to therapy with resources to facilitate rapid insurance approval with availability of comprehensive medical records, contacts with manufacturers to maximize patient assistance programs, as well as full access to health system departments and grants designed to provide help to patients with otherwise insurmountable financial challenges.

**REFERENCES**