Maximizing Cost Savings: The Impact of Specialty Pharmacist Interventions at a Community Oncology Center

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BACKGROUND

- Health system specialty pharmacy (HSPS) pharmacists embedded with oncology clinics can utilize their clinical expertise and promptly intervene when medication therapy issues arise.
- Pharmacist interventions have been linked to improved patient outcomes and have cost savings implications. 1
- Average cost savings per pharmacist intervention for oncology medications ranges from $8,100 to $11,000. 1
- Identifying cost savings practices by pharmacists within HSPS clinics is crucial to understand the benefits provided to patients and the healthcare system.

OBJECTIVE

To determine the impact of HSPS pharmacist interventions on cost savings of oral oncolytics at a community oncology center.

METHODS

Study Design

- Single center, retrospective, observational study that analyzed interventions made by an oncology pharmacist for patients who received at least one oral oncologic from September 2019 to March 2023 at Summa Health Cancer Institute in Akron, Ohio.
- Physician-accepted interventions that resulted in dose reductions, held doses, changes in therapy, or changes in frequency were evaluated and total drug cost savings was calculated.
- Cost savings was calculated utilizing the average wholesale price of drugs listed on Lexicomp® as of May 31, 2023, by comparing the cost of drug that would have been dispensed if no intervention occurred versus the cost of drug ultimately dispensed.
- A 10% validation of cost savings interventions was completed using the National Community Oncology Dispensing Association (NCODA) Cost Avoidance and Waste Tracker. 2

INCLUSION CRITERIA

- Patients with a cancer diagnosis as indicated by International Classification of Diseases 10th revision (ICD-10) codes.
- Receiving clinical management by HSPS oncology pharmacist.
- Had one complete intervention(s) documented as adverse drug reaction (ADR), drug utilization review (DUR), lab, or regimen that resulted in dose reductions, held doses, changes in therapy, or changes in frequency.

EXCLUSION CRITERIA

- ≤ 18 years of age
- Patients receiving clinical management for a cancer medication administered any route other than oral

DATA COLLECTION AND ENDPOINTS

Pharmacist interventions documented in Arbor® specialty pharmacy technology platform were extracted from integrated clinical dashboards.

Endpoints

- Intervention types
- Intervention recommendations
- Intervention reasons
- Total cost savings

Average cost savings per intervention
Total cost savings per intervention type
Top 5 medications with highest cost savings

RESULTS

Interventions

- A total of 92 completed interventions was analyzed.
- 75/92 (81.4%) interventions resulted in cost savings for 44 different patients.
- Cost savings was associated with 24 unique medications.

Cost Savings

- The average cost of cost savings associated with pharmacist interventions was calculated to be $170,503.
- The average cost savings per intervention was $12,508.

<table>
<thead>
<tr>
<th>TABLE 2: Top 5 Medications with Highest Cost Savings</th>
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<tbody>
<tr>
<td>Medication</td>
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<tr>
<td>Crizotinib</td>
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<tr>
<td>Venetoclax</td>
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<td>Palbociclib</td>
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<td>Ixazomib</td>
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DISCUSSION AND CONCLUSION

1. This study provides further evidence that pharmacists embedded within HSPS oncology clinics play a pivotal role in ensuring the appropriate use of oral oncolytics.
2. As value-based health care delivery models become more of the norm, these types of interventions will be vital in demonstrating the value of pharmacist-embedded HSPS.
3. Additional research is needed to understand the impact of these interventions on patient outcomes, such as mortality, healthcare utilization, progression free survival, and quality of life.
4. To replicate this study at other sites, utilization of available oncology cost savings tools (such as the NCODA) may be beneficial to simplify the process for prospective cost savings.

Limitations

- Many other pharmacist interventions that may have resulted in cost savings, such as those relating to adherence and hospitalizations, were not included in this study.
- Cost savings for external pharmacy fills were likely undercalculated due to unavailable durations of therapy and number of dispenses.

REFERENCES