Impact of an Ambulatory Clinical Pharmacist on Oral Oncolytics in a Hematology/Oncology Specialty Clinic Integrated with a Health System Specialty Pharmacy

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SCAN ME

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Background

- Integrated Health System Specialty Pharmacies (HSSPs) have a care model demonstrating improved outcomes compared to non-integrated specialty pharmacies.
- Patient-tailored pharmacist interventions have been shown to enhance medication adherence, leading to improved clinical outcomes and cost savings.[2]
- In September 2022, an ambulatory clinical pharmacist (ACP) was integrated into a Southeast Based Health System's oncology/hematology clinic to augment the impact of specialty pharmacy (SP) services provided between the health system and Shields Health Solutions.

Methods

Objectives: To characterize and quantify the impact of an ambulatory clinical pharmacist-provided service in a hematology/oncology clinic setting

Study Design: Retrospective, observational, single center analysis of pharmacist interventions for adult patients receiving oral oncolytic medications and enrolled in the patient management program. Descriptive statistics were used to analyze the groups.

- **Pre-ACP Integration:** March to August 2022
- **Post-ACP Integration:** September 2022 to February 2023

Data Collection: Patient demographics, intervention type, number and outcomes of interventions, primary malignancy, ICD10, and oral oncolytic information were collected from the electronic medical record

Cost Avoidance: Total cost avoidance was calculated by multiplying the intervention-specific cost avoidance, determined using current literature and benchmarks, by the number of interventions.

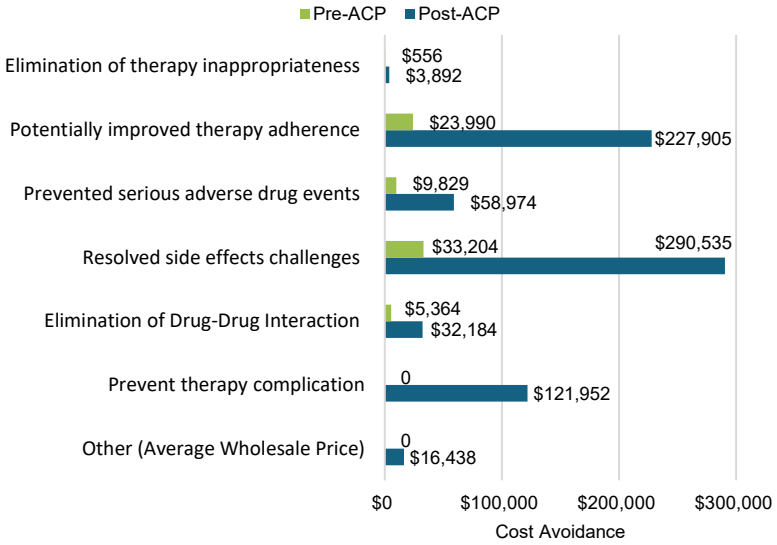
Results

In the pre-ACP integration period, there were 12 of 13 unique interventions that were accepted by providers identified for 12 patients, while in the post-ACP integration timeframe there were 134 of 139 unique interventions that were accepted by providers for 77 unique patients. **Table 1** describes the patient characteristics and intervention categories.

Table 1: Patient Characteristics and Interventions

CHARACTERISTIC	Pre-ACP Integration	Post-ACP Integration
Demographics		
Age, year n=mean	64	68
Sex, n		
Female	8	36
Male	4	41
Primary Malignancy, n		
Hematologic	3	14
Gynecologic	1	12
Colorectal	0	15
Prostate	1	11
Liver	0	5
Breast	1	8
Other	6	12
Intervention categories, n (%)		
• Elimination of Therapy Inappropriateness	2 (17)	14 (10)
• Potentially Improved Therapy Adherence	2 (17)	19 (14)
• Prevented Serious Adverse Drug Events	1 (8)	6 (5)
• Resolved Side Effect Challenges	4 (33)	35 (26)
• Elimination of Drug-Drug Interaction	3 (25)	18 (13)
• Prevent Therapy Complications	0	37 (28)
• Other	0	5 (4)
Total Number of Accepted Interventions	12	134

Figure 1: Cost Avoidance by Intervention Category



Total Cost Avoidance Post-ACP

Total Cost Avoidance Pre-ACP

Discussion

- Implementation of an ACP-provided service in a hematology/oncology clinic yields successful outcomes, as demonstrated by interventions and significant cost-avoidance in the post-HSSP group.
- The underestimation of cost avoidance for each intervention category might stem from the absence of prior data on oral oncolytic medications. This is because the dataset incorporated various sources, encompassing both inpatient and outpatient contexts, along with oncology and non-oncology data. The intention was to align the data as closely as feasible with the cost avoidance category.
- The integration of a HSSP model combined with ACP services adds value, allowing for optimization of oral oncolytic outcomes.
- Further analysis should encompass provider satisfaction and patient experience scores.

REFERENCES

1. Lankford C, Dura J, Tran A, et al. Effect of clinical pharmacist interventions on cost in an integrated health system specialty pharmacy. J Manag Care Spec Pharm. 2021;27(3):379-384. doi:10.18553/jmcp.2021.27.3.379

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