Oral oncology adverse event reporting via text messaging integrative collaboration between specialty pharmacy and oncology provider clinic



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Background

- The cost of care in cancer treatment increases substantially when adverse effects (AEs) occur.^{1,2}
- Lack of system integration between specialty pharmacies and clinics presents collaboration and data challenges.³
- In specialty pharmacy, reliance on phone and fax communication related to oncology patient AEs is potentially inefficient and ineffective.
- Additionally, reliance on phone calls limits the ability to connect with modern patients who increasingly prefer digital methods.⁴
- Optum Specialty Pharmacy, in collaboration with Optum Care Cancer Center, designed a pilot program with an objective to reduce AE severity via early intervention with pharmacist counseling and triage for medical management.

Goals

- Reduce potentially preventable ER or hospitalization via proactive screening, adverse effect counseling, and triage via real time electronic health record task communication.
- Mitigate the worsening of an AE while also providing the opportunity for in-clinic management and influence decision making regarding emergency care and subsequent inpatient care decisions.

Methods

- Design:
 - Eligible patients were offered option to complete AE screening via text messages
 - Tool: PRO-CTCAE⁵
 - Frequency: baseline and biweekly for 10 weeks total
 - AEs assessed: nausea, vomiting, constipation, diarrhea, pain, shortness of breath, cough, and fatigue
 - Program was offered by phone for those not able to text
- Interventions: specialty pharmacy team triaged patients based on severity of AE reported
- Low severity: phone consultation by specialty pharmacist
- Moderate to high severity: triage to the clinic plus addition of task to oncologist in partner clinic electronic health record (EHR)
- Inclusion Criteria: new to therapy with oral oncolytic from Optum Care Cancer Center and dispensed by Optum Specialty Pharmacy
- Timeframe: 90-day enrollment period
- Statistical analysis: descriptive statistics were used to report patient demographics, surveys completed, and healthcare cost avoidance

Results

Table 1. Demographics		
Eligible patients, n	143	
Enrolled patients, n	35	
Text enrollment, %	77	
Female sex, %	47	
Average age, years	66	

Figure 1. Adverse Events

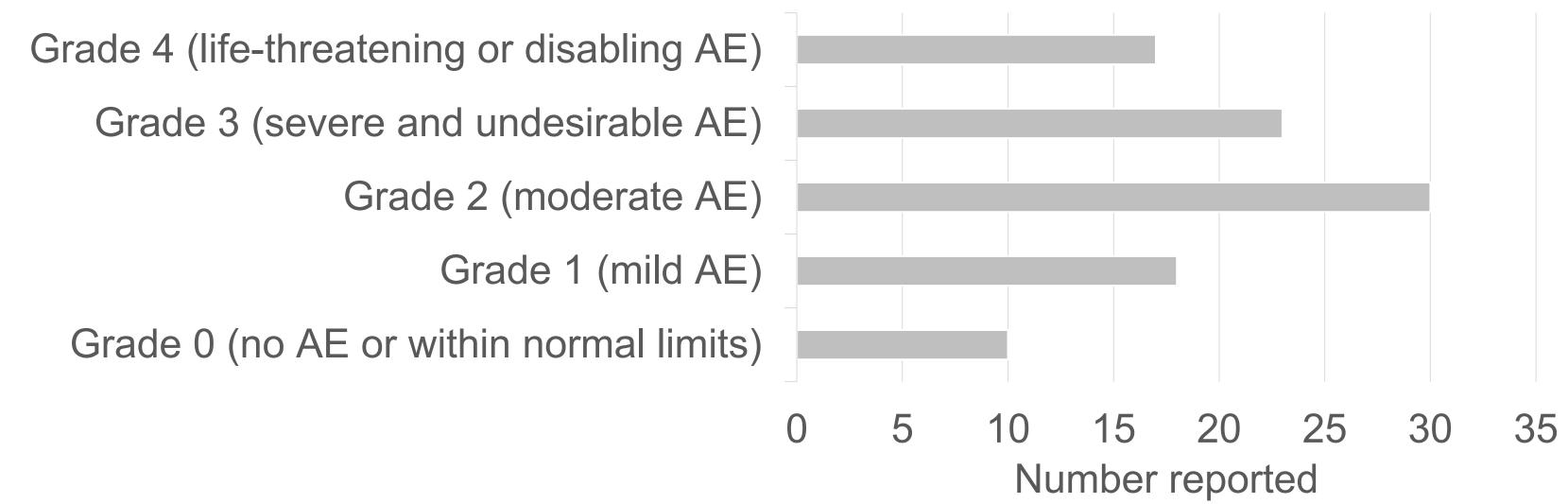


Figure 2. Task Outcomes

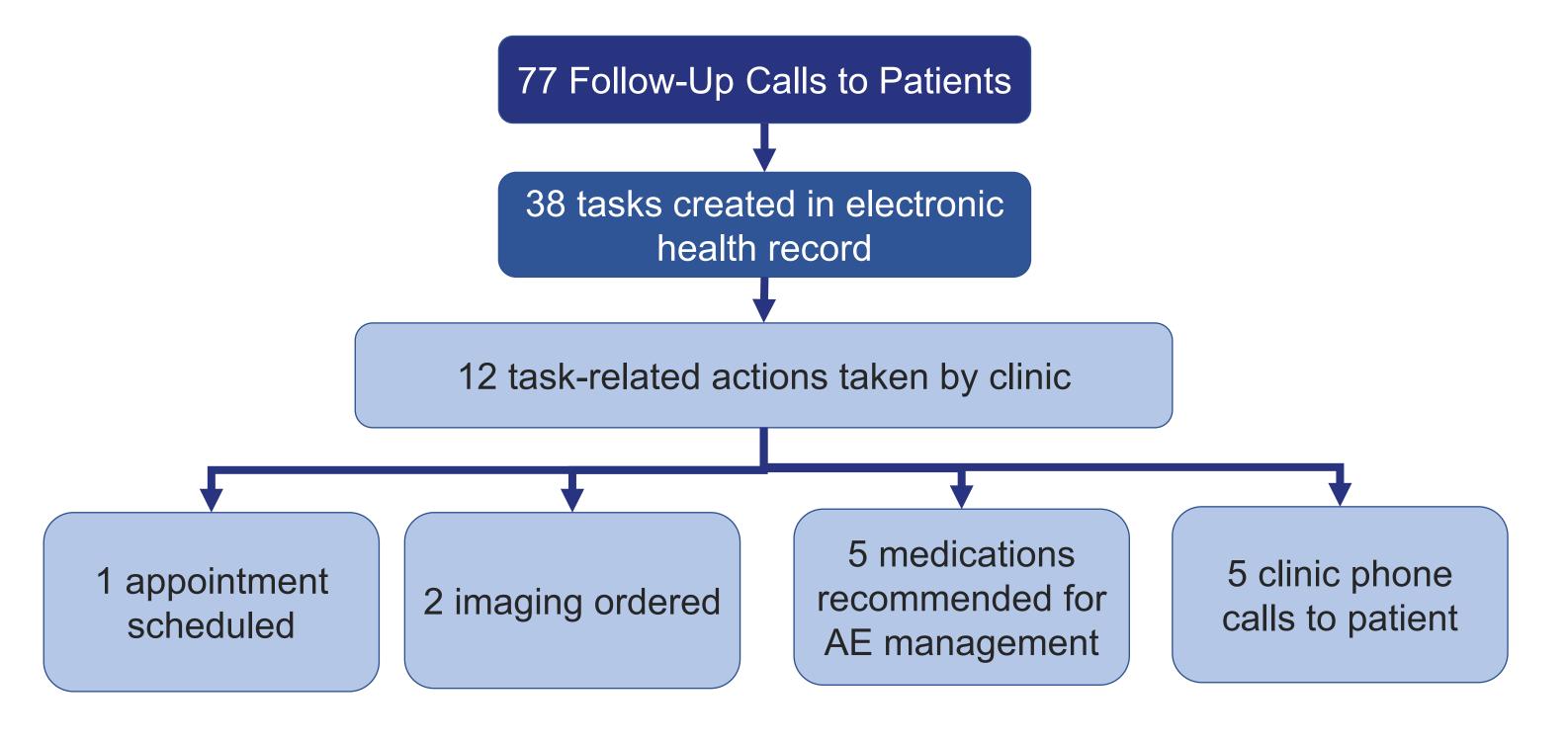


Table 2. Potential Healthcare Cost Avoidance⁶

Adverse Event Managed	Potential Healthcare Cost Avoidance per Incident	Total Potential Healthcare Cost Avoidance during Pilot
Pain	\$4,756	\$14,268
Cough	\$576	\$576
Nausea	\$1,965	\$1,965
Diarrhea	\$3,265	\$3,265
Nausea and Vomiting	\$2,860	\$2,860
		\$22,934

Discussion

- This novel pilot successfully enrolled 24.5% of eligible patients with 31% of participants reporting moderate to high severity AEs.
- Of EHR tasks entered, 31.6% resulted in actions taken by the clinic allowing for early intervention and potential healthcare cost avoidance.
- Total potential cost avoidance during the pilot period was \$22,934.
- Expansion of this program to a larger patient population over a longer period could result is significant cost avoidance.

Limitations

 This short time period and small sample size represents a partnership with only one pharmacy and one clinic. Results may vary in other settings.

References

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Disclosures / Contact

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