



Impact of a Nurse-Led Compliance and Persistence Program on Patient Compliance with Oral Oncology Therapies



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Background

- The number of oral oncolytics being utilized to treat patients has substantially increased in the past several years
- While these drugs may be more convenient for patients, the shift from intravenous (IV) to oral therapy has resulted in cancer patients having less in-person contact with nurses and fewer opportunities for treatment and symptom management education
- Nurses are positioned to enhance care for cancer patients receiving oral oncolytic therapy due to their expertise in medication management, patient education, self-care management training and focus on quality of care

Objective

- This study aims to determine the impact a nurse-led compliance and persistence program has on adherence among patients on oral oncolytics

Methods

- From August 2013 to February 2022, we identified patients who initiated oral oncolytic therapy supported by a Compliance and Persistency (C&P) program
- A C&P program is a nurse-led patient outreach comprised of a call cadence designed to support new patients on a treatment plan established by their oncologist
- Patients in C&P programs (study group) were compared to those patients not supported by a nurse-led C&P program (control group) using pharmacy claims
- Each patient was followed for 12 months
- During the study period, we compared medication possession ratio (MPR), defined as the sum of the days' supply of medication divided by the number of days between first fill and last fill exhaust date during the study
- A logistic regression model examined demographic factors associated with adherence
- p-values < 0.05 were significant

Results

- In total, 7,300 patients were enrolled in the study, of which 5,771 (79.1%) received therapy supported by a nurse-led program
- There were significant differences in age (61.2 vs 59.2; $p < 0.01$) and percent African American (12.6% vs. 13.6%; $p = 0.02$) in the study group compared to controls, respectively
- Program impact results were adjusted for demographic differences between groups
- After 12 months, patients in the study group reported 5.7% points higher MPR compared to those in the control group (90.9% vs. 85.2%; $p < 0.01$)

Table 1. Baseline Characteristics

	Study (N = 5,771)	Control (N = 1,529)	p-value
Age, mean (SD)	61.2 (12.2)	59.2 (11.8)	0.0001
Gender female, N (%)	2,995 (51.9)	816 (53.4)	0.2948
Median income in the patient household area, mean (SD)	\$61,270 (\$27,829)	\$62,544 (\$26,418)	0.1072
College degrees in the patient household area, mean rate (SD)	18.4 (9.2%)	18.8% (8.8%)	0.1298
African-American, mean rate (SD)	12.6% (15.1%)	13.6% (14.7%)	0.0207
Asian, mean rate (SD)	5.8% (9.4%)	5.6% (9.0%)	0.456

SD, standard deviation

Table 2. Medication Characteristics by Group

	12-months	Study (N = 5,771)	Control (N = 1,529)	p-value
Fill Count		5.3	4.0	0.0001
Medication possession ratio (MPR)		90.9%	85.2%	0.0001

Conclusion

- Our findings suggest that patients supported by a nurse-led program have better adherence to oral oncolytic therapy
- The study group showed higher adherence to therapy, suggesting that the standard of care group may benefit from nurse-led outreach programs to manage their oral oncolytic therapy effectively
- A multidisciplinary patient support approach contributed to improved patient outcomes, as demonstrated by a statistically significant improvement in MPR

“Patients receiving oral oncolytic therapies in an educational nursing program demonstrated a positive effect on overall medication compliance as demonstrated by a statistically significant improvement in MPR.”

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