


Review of a Pharmacist-Led Telephone Follow-Up Program for Ambulatory Patients Receiving Chemotherapy At a Tertiary Cancer Centre

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Objective	Methods
<ul style="list-style-type: none">Assess the feasibility of a pharmacist-led telephone follow-up program in patients receiving parenteral anticancer therapy	<ul style="list-style-type: none">A chart review was conducted to determine the number of chemotherapy patients contacted from June 5 2013, to June 20, 2016 by the Odette Cancer Centre PharmacyPatients were included in the call-back program if:<ol style="list-style-type: none">Patient received first chemotherapy with 2+ supportive medicationsPatient received a new treatment regimen (i.e. different chemotherapy regiment in the past)Patient had changes made to supportive medication(s) based on adverse effects experienced after previous cycle(s)Patient had not received treatment in over three months

Results

- A total of 6,984 calls were made
- Age ranged from 13 years old to 92 years old
- Palliation was the most common treatment intent among the patients, recorded in 37.4% of the cohort
- The most common primary cancer sites were gastrointestinal and gynaecological cancer, followed by lymphoma, lung, and head & neck cancer
- 314 patients (9.9%) were never reached, with the two most commonly cited reasons being a busy-line and that the patient was not feeling well (hence did not want to talk)

Patient Demographics

Gender	
Male	1346 (43.4%)
Female	1758 (56.6%)
Age (years)	
Median	61
Range	13-92
Treatment Intent	
Adjuvant	653 (21.0%)
Curative	971 (31.3%)
Neoadjuvant	320 (10.3%)
Palliative	1160 (37.4%)
Primary Cancer Site	
Gastrointestinal	761 (24.5%)
Gynaecological	690 (22.2%)
Lymphoma	369 (11.9%)
Lung	340 (11.0%)
Head&Neck	331 (10.7%)
Breast	175 (5.6%)
Genitourinary	165 (5.3%)
Leukemia	54 (1.7%)
Multiple myeloma	53 (1.7%)
Skin	50 (1.6%)
Other/Unknown	118 (3.8%)

	2013	2014	2015	2016	2013-2016
Total Attempts	1316	2228	2424	1005	6984
Total Successful	1235 (93.8%)	1908 (85.6%)	1759 (72.6%)	609 (60.6%)	5511 (78.9%)
Number of Unique Patients	726	1022	1000	436	2184
Number of Patients Never Reached	102 (14.0%)	88 (8.6%)	91 (9.1%)	33 (7.6%)	314 (9.9%)
Number of Patients Receiving:					
1 st Call	726 (100%)	1022 (100%)	1000 (100%)	436 (100%)	3184 (100%)
2 nd Call	403 (55.5%)	565 (55.3%)	541 (54.1%)	213 (48.9%)	1722 (54.1%)
3 rd Call	230 (31.7%)	317 (31.0%)	301 (30.1%)	83 (19.0%)	931 (29.2%)
4 th Call	108 (14.9%)	177 (17.3%)	172 (17.2%)	28 (6.4%)	485 (15.2%)
5 th Call	65 (9.0%)	102 (10.0%)	94 (9.4%)	12 (2.8%)	372 (8.6%)
>5 th Call	37 (5.1%)	68 (6.7%)	58 (5.8%)	4 (0.9%)	167 (5.2%)
Number of Patients Successfully Reached After:					
1 Call	556 (76.6%)	835 (81.7%)	796 (79.6%)	342 (78.4%)	2529 (79.4%)
2 Calls	59 (8.1%)	81 (7.9%)	92 (9.2%)	51 (11.7%)	283 (8.9%)
3 Calls	9 (1.2%)	13 (1.3%)	21 (2.1%)	10 (2.3%)	53 (1.7%)
4 Calls	1 (0.1%)	4 (0.4%)	2 (0.2%)	0 (0%)	7 (0.2%)
5 Calls	1 (0.1%)	1 (0.1%)	1 (0.1%)	0 (0%)	3 (0.1%)
5+ Calls	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)

Odette Cancer Centre Chemotherapy Suite Workflow

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graph TD; A[Patients screened for new start chemotherapy, change of regimens, and change of] --> B[Pharmacist/pharmacy student collects Best Possible Medication History, then assesses all new medications (to be dispensed) for appropriateness and safety (i.e. identifying any drug interactions).]; B -- "If appropriate" --> C[Pharmacist/student counsels patient/caregiver on use of antiemetics and other supportive medications, providing a medication calendar.]; B -.-> D[If pharmacist identifies any concern (e.g. interaction with other medications), physician is notified with recommendations from pharmacist. A new order received from physician if]; C --> E(Pharmacist schedules patient for telephone follow-up in 1-2 days.); E --> F(During the call, pharmacist inquires about side effects and any concerns the patient may have); F -- "No issue identified" --> G(Prevention strategies reiterated to patient for management of side effects); F --> H[Pharmacist addresses issue(s) by: <br/>✓ providing non-pharmacological interventions <br/>✓ emailing physician with medication or other recommendations <br/>✓ liaising with Nursing Team]; G --> E; H --> E;
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Conclusions

- The telephone follow-up program for chemotherapy patients has proven to be a feasible and successful program; it has been well-received and achieving its objective to provide further patient care