

Oncology Pharmacists: Expanding Outpatient Service Models to Increase Patient Impact and Safety

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Background

Cancer Care Services at The Royal Brisbane and Women's Hospital (RBWH) is the largest cancer care service in Queensland. The service encompasses Medical Oncology, Haematology and Bone Marrow Transplant, the Queensland Haemophilia Centre and Radiation Oncology, and provides all treatment modalities within these streams. The pharmacy service within cancer care currently operates within most areas including the inpatient wards, the outpatient dispensary and the day therapy unit. As demonstrated in outpatient clinics in other clinical areas, pharmacists can contribute to patient care through collaboration with the multidisciplinary team. The provision of outpatient oncology services by pharmacists is still limited, but this role is an emerging one. There is limited literature to date that suggests that pharmacists can add value while satisfying the needs of patients with cancer, addressing medication use and symptoms, and potentially generating revenue for the practice. (1) The value that clinical pharmacists can bring to outpatient clinics other than oncology clinics has been highlighted extensively, providing added weight to the argument for incorporating these professionals into the cancer care model. Researchers who published a 2010 Cochrane synthesis of investigations measuring the effectiveness of clinical pharmacists in outpatient settings concluded that interventions provided by clinical pharmacists resulted in mostly positive clinical and humanistic outcomes (2)

The pharmacy team at RBWH with the assistance of activity-based funding commenced an outpatient pharmacy clinic within Cancer Care Services. The role of the outpatient pharmacist within the cancer care service at RBWH would hopefully increase the number of medication reviews of patients prior to receiving chemotherapy enabling increased patient safety, increased information and education of patients and increased patient satisfaction. The introduction of this role though would be challenging in an area that is already extremely busy, efficient and highly scheduled.

Description

This outpatient pharmacy clinic service would enable

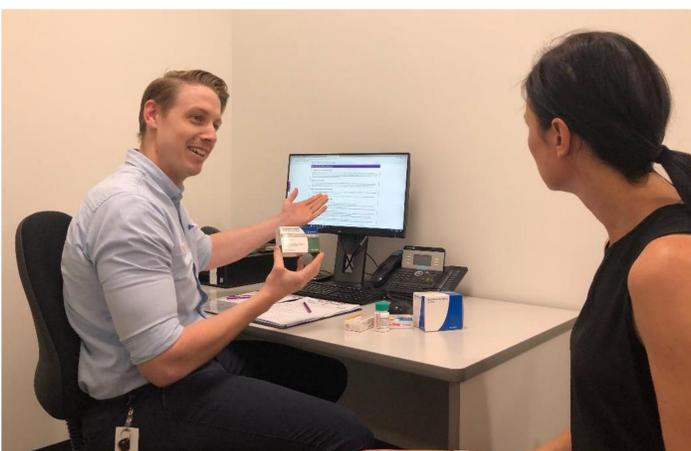
- Medication reviews prior to patients receiving chemotherapy,
- Medication reviews of patients having difficulty managing medications
- Patients counselling on oral chemotherapy
- Follow up of high risk discharge patients from the inpatient wards

Action

In consultation with pharmacy, medical, nursing and administrative staff a working party was formed to establish the outpatient pharmacy clinic to ensure maximum benefit and impact was achieved through the clinic. Factors including patient cohort, appointment scheduling, clinic room availability, referral methods, and key performance indicators were discussed. The group met monthly to discuss the progression of the clinic and any barriers that arose during the implementation of the clinic. The main barriers to overcome were scheduling of pharmacy appointments in a service line that the patients were already highly scheduled in and an appropriate space to perform the services required of the outpatient clinic pharmacist.

Evaluation

Over the first 3 months (January – March 2019) 215 patients were reviewed within the outpatient clinic. This consisted of 56.3% from Medical Oncology and 43.7% from Haematology and Bone Marrow Transplant with patients being on an average of 7.5 medications. Within the cohort 57% of the patients were taking PINCHA medications and 37% received counselling on new medications. There were 37 medication interventions mostly involving drug-drug interactions and medication optimisation.



Total Number of Medications	1605
Average Number of Medications per patient	7.5
Percentage of Patients on High Risk Medication (PINCHA)	57%
	Potassium 0.02% (2/123)
	Insulin 8.1% (10/123)
	Narcotics 48% (59/123)
	Cytotoxic 65% (80/123)
	Heparins and Anticoagulants 13.8% (17/123)
	Antimicrobials 16.3% (20/123)
Percentage of Patients who received medication counselling on NEW medication	37% (79/215)

Table One: High Risk Medications and Counselling

Intervention Type	Number
Administration - Change of Route	2
Adverse Drug Reaction	1
Drug-Drug Interaction	14
Deprescribing	6
Medication Optimisation	6
Dosing – prescribed inadequate dose of drug	1
TDM	2
Not receiving drug for a condition	1
Total	33

Table Two: Pharmacist Medication Optimisations

Implications

Outpatient oncology practice is a growing area of opportunity for pharmacists to provide clinical services as part of a multidisciplinary team. This is of benefit both to the multidisciplinary team and the patient, ensuring the best possible outcomes. With the growing complexity of oncology treatments, the pharmacist's role is vital to ensure quality use of medicines, safety and patient centred care.

This clinic demonstrated immediate impact with patients, medical and nursing staff and addressed a significant gap within the clinical pharmacy service to Cancer Care Services at RBWH. There was a sharp increase in pre-chemotherapy medication reviews leading to a significant number of pharmacist medication optimisations. There was also anecdotal evidence of patient satisfaction with many patients expressing their appreciation of spending time to discuss medications with the pharmacist and concerns they have with regards to therapy in a more appropriate and private space.

As part of succession planning, pharmacist training is currently being undertaken to ensure continuity of care within the outpatient pharmacy clinic. A patient satisfaction survey is also being developed and distributed in conjunction with Cancer Care Services Safety and Quality and Consumer Engagement.

References

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