

Clinical and Economic Impact of Pharmacy Student Integration in an Ambulatory Hematology/Oncology Clinic

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OBJECTIVE

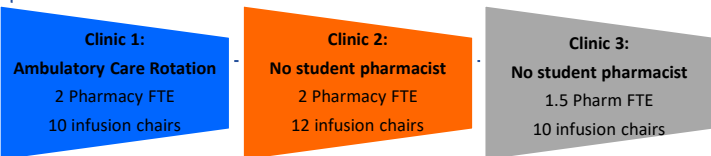
Demonstrate that the addition of pharmacy students to an outpatient ambulatory oncology center can expand the reach of clinical pharmacists by increasing clinical interventions and economic impact.

BACKGROUND

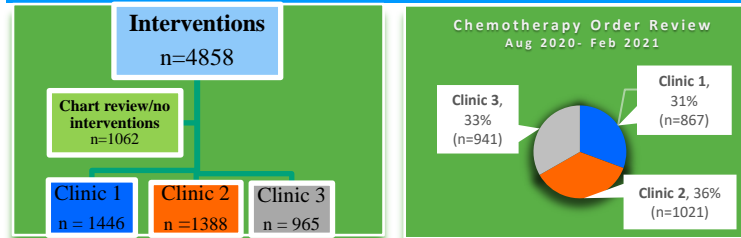
- Oncology patients have a high risk of drug related problems¹.
 - Rich learning environment for student pharmacists
- Studies have demonstrated the impact of pharmacists in ambulatory oncology².
- Student pharmacists can contribute meaningfully to the advancement of ambulatory care practice by working as pharmacist extenders³
 - Lack of data demonstrating the value of student pharmacists in ambulatory oncology setting
- Pharmacists' responsibilities include ensuring appropriate dosing and safety for patients prior to anticancer treatment delivery⁴
 - Tasks include:
 - Chemotherapy order verification
 - Compounding and technician review
 - Drug information and medication education
 - Medication reconciliation
 - Outpatient prescription coordination
 - Clinical trial participation

METHODS

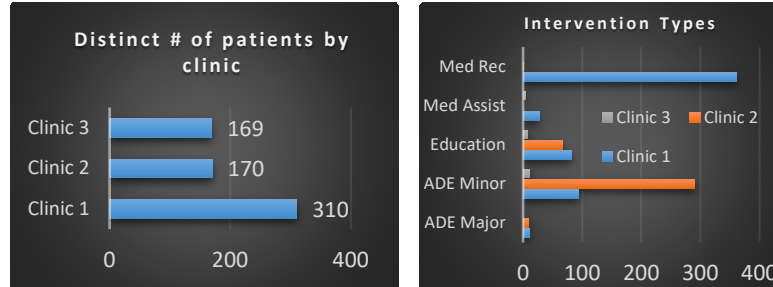
Retrospective, observational, multi centered chart review



RESULTS



OUTCOME



Intervention (value \$)	Clinic 1 n (\$US)	Student n (\$US)	Clinic 2 n (\$US)	Clinic 3 n (\$US)
ADE prevention-Major (\$2162) ⁶	10 (21,620)	0	9 (19,458)	0
ADE prevention-Minor (\$536) ⁷	93 (49,898)	14 (7,504)	291 (155,976)	11 (5,896)
Education	82	15	66	8
Med reconciliation (\$50) ⁷	32 (1600)	330 (16,500)	1 (50)	0

Discussion

- Student pharmacists were able to extend clinical impact of the pharmacy as evidenced by a distinct number of patients seen by pharmacy and by completing a substantial number of medication reconciliations for Clinic 1.
- Financial impact by student pharmacists during the study period was approximately \$24,000 when reviewing specific interventions
- Limitations:
 - Small study within one healthcare system
 - Clinical interventions and pharmacy services are not standardized between clinics
 - Baseline characteristics for specific patients not obtained
 - Lack of documentation in any area or by any group could affect the outcome
- Future directions
 - Consider using a standardized tool to document pharmacy interventions prospectively
 - Discuss standardizing pharmacy services provided by clinics

References

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