

IMPACT OF A PHARMACIST MANAGED ORAL CHEMOTHERAPY CLINIC ON CANCER PATIENTS

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IRB EXEMPT



DISCLOSURE STATEMENT

- Jacob Link
- Potential conflict of interest: none
- Project sponsorship: none
- Proprietary information or results of ongoing research may be subject to different interpretations
- Speaker's presentation is educational in nature and indicated agreement to abide by the non-commercialism guidelines provided



LEARNING OBJECTIVES

- Create materials necessary to educate, counsel, and monitor patients receiving oral chemotherapy agents
- Describe ways that pharmacy technicians can assist in patient attainment of their prescribed oral chemotherapy agents



ST. PETER'S HEALTH

- Community Hospital
- Located in the capital city of Montana
- 125 total staffed beds



PRE-TEST ASSESSMENT QUESTION 1

What materials are necessary for a pharmacist managing an oral chemotherapy clinic prior to implementation?

- Monitoring tools
- Insurance formularies
- Safe-handling information
- Education materials
- A and C
- A, C, and D



PRE-TEST ASSESSMENT QUESTION 2

What is a way pharmacy technicians can improve patient care in this area?

- Enroll patients in assistance programs
- Speak to the oncologist about insurance-approved medications
- Counsel patients
- Schedule patients for follow-up



BACKGROUND

- Over the last decade, the utilization of oral chemotherapy has increased
- Although this may be more convenient for patients, it presents barriers for monitoring
- These medications are harder to obtain due to costs and strict requirements for pharmacies



BACKGROUND

- The 2018 American Society of Clinical Oncology best practice guidelines emphasize pharmacists' role in managing oral oncolytic medications
- Pharmacists can ensure safety and efficacy
- Capture prescriptions and increase volume to in-house specialty pharmacy

Mackler, Emily, et al. "2018 Hematology/Oncology Pharmacists Association Best Practices for the Management of Oral Oncolytic Therapy Pharmacy Practice Standard." *Journal of Oncology Practice*, vol. 15, no. 4, 2019, doi:10.1200/JOP.18.00581.



PURPOSE

- Improve monitoring, education, and follow-up with patients receiving oral chemotherapy treatment



MATERIALS

- Monitoring program
- Oral chemotherapy checklists
- Medication calendars
- Education materials
- Storage and handling information
- Business cards



WORKFLOW

- Automatic referral program
- Counseling on specialty pharmacy process
- Patient receives medication
- Patient returns for medication counseling
- One week follow-up
- Subsequent follow-up visits or phone calls



METHODS: STUDY DESIGN

- Quality improvement project
- Implemented an oral chemotherapy pharmacist position
- Investigated whether pharmacist intervention increased the quality of care of patients receiving oral chemotherapy agents



METHODS: INCLUSION CRITERIA

- Patients prescribed oral chemotherapy medications and who are monitored through the St. Peter's Health Cancer Treatment Center



METHODS: STUDY GROUPS

- Patients receiving oral chemotherapy agents prior to pharmacist implementation
- Patients receiving oral chemotherapy agents after clinic implementation (01/22-03/22)



METHODS: PRIMARY AND SECONDARY OUTCOMES

- Primary outcome:
 - Clinical adherence
- Secondary outcomes:
 - Patient satisfaction
 - Pharmacist time spent on interventions
 - Time to treatment initiation

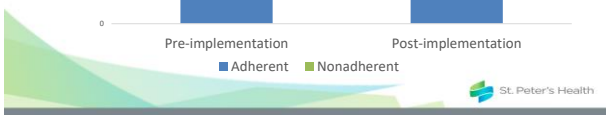
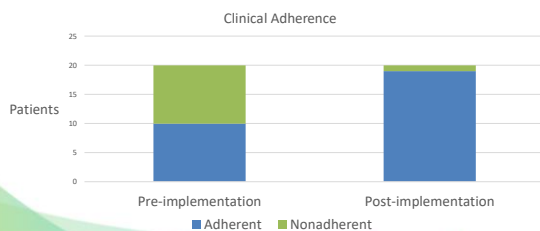


METHODS: SAMPLE SIZE

- Sample size
 - Receiving oral chemotherapy prior to implementation of clinic: 20 patients
 - Receiving oral chemotherapy after implementation of clinic: 20 patients



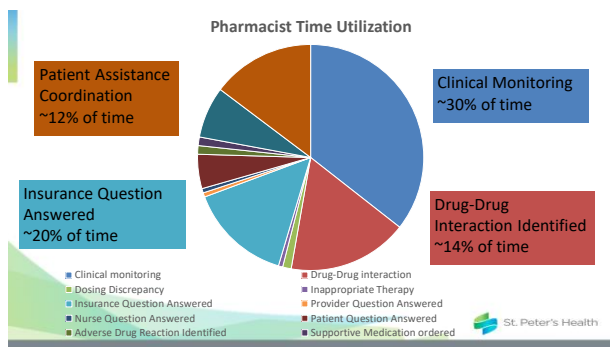
RESULTS: PRIMARY OUTCOME



RESULTS: SECONDARY OUTCOMES

- Time to treatment initiation
 - Before implementation: 9 days (IQR 0-20 days)
 - After implementation: 3.33 days (IQR 0-10 days)
- Pharmacist interventions (02/22-3/22)
 - 53 hours of pharmacist time
 - 72 patients; ~45 minutes spent/patient
- Patient satisfaction
 - Pending





DISCUSSION: INTERPRETATION OF RESULTS

- Pharmacist implementation into the oral chemotherapy clinic improved patient care
- Other studies show quicker time to treatment initiation and similar number of pharmacist intervention

Mancini, Robert, et al. "Implementation of a Pharmacist-Managed Interdisciplinary Oral Chemotherapy Program in a Community Cancer Center." *Journal of Hematology Oncology Pharmacy Practice*, vol. 1, no. 2, Jun. 2011, pp. 23-30

Battis, Brandon, et al. "The Impacts of a Pharmacist-Managed Outpatient Clinic and Chemotherapy-Directed Electronic Order Sets for Monitoring Oral Chemotherapy." *Journal of Oncology Pharmacy Practice*, vol. 23, no. 8, Dec. 2017, pp. 582-590, doi:10.1177/1078152116672134.



DISCUSSION:

- Limitations
 - Amount of data
 - Lack of documentation on patients prior to implementation of oral chemotherapy clinic
- Strengths
 - Improved patient care
 - Implemented full-time pharmacist position
 - Captured prescriptions and increased revenue (~\$900/script)



DISCUSSION: LESSONS LEARNED

- Utilize resources
- Introduce service in person



CONCLUSIONS

- The number of patients receiving oral chemotherapy is increasing and pharmacists can make a positive difference in their care
- This project is still ongoing and the service will continue to grow
- We are seeing positive preliminary results and patient outcomes



FUTURE DIRECTIONS/FOLLOW-UP

- Integrate patient monitoring program into the pharmacist workflow
- Continue to grow our patient population size and prescription volume
- Implement a pharmacy technician into our workflow process



ACKNOWLEDGEMENTS

- Co-investigators
 - Megan McKay, PharmD, BCPS, CPP
 - Starla Blank, PharmD, BCPS
 - Taylor Sandvick, PharmD
- Other
 - Rachel Solberg, PharmD – oral chemotherapy pharmacist at Bozeman Deaconess Hospital



PRE-TEST ASSESSMENT QUESTION 1

What education point is important when counseling a patient starting an oral chemotherapy medication?

- a. Adherence
- b. Prognosis
- c. Side effects
- d. Specialty pharmacy specifics
- e. a and b
- f. a, c, and d



PRE-TEST ASSESSMENT QUESTION 2

What is a way pharmacy technicians can improve patient care in this area?

- a. **Enroll patients in assistance programs**
- b. Speak to the oncologist about insurance-approved medications
- c. Counsel patients
- d. Schedule patients for follow-up



QUESTIONS

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REFERENCES

- Mackler, Emily, et al. "2018 Hematology/Oncology Pharmacist Association Best Practices for the Management of Oral Oncolytic Therapy: Pharmacy Practice Standard." *Journal of Oncology Practice*, vol. 15, no. 4, 2019, doi:10.1200/jop.18.00581.
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