

# Improving Care and Outcomes For Patients Receiving Oral Chemotherapy at a VA Hospital

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## Introduction & Background

- The Birmingham VA Medical Center is a 133 bed facility
- It currently provides oral chemotherapy for 68 patients.
- Chronic patient-administered oral chemotherapy presents unique issues in regards to patient safety.
- The development of multidisciplinary teams to manage oral chemotherapy patients has been shown to improve the care at other facilities

## Project Aim

Implement a pilot quality initiative of a Pharmacy driven monitoring of patients on oral chemotherapy

## Changes Made

- New multidisciplinary team was created including oncology physicians, an oncology pharmacist, and a scheduler
- Pharmacist was responsible for ensuring medication adherence, managing adverse drug effects and counseling patients on proper use of medications
- Pharmacist appointments were available as face to face meetings or as telephone appointments and were in addition to routine provider visits

## Project Design

- Stakeholders Involved**
- Oncology Pharmacist
  - Head of Oncology
  - Physicians
  - Scheduler
  - Nurse Practitioners (future)
  - Patients (future)

Baseline  
(N=10)

- August 1<sup>st</sup>- December 1<sup>st</sup> 2017
- Patients during the same time period not enrolled in the oral chemotherapy clinic were selected to compare outcomes

Intervention  
(Pilot)  
(N=10)

- August 1<sup>st</sup>- December 1<sup>st</sup> 2017
- Patients were selected to receive care through the oral chemotherapy clinic (select oral medications only)
- Patients included were not receiving additional treatment outside of the VA

Full implementation  
(Future)

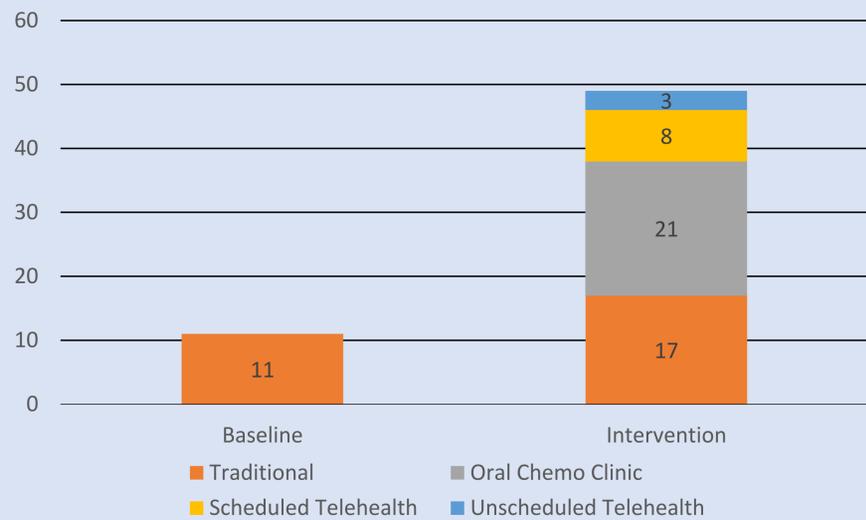
- In process now
- All patients receiving oral chemotherapy will be included in the pharmacist oral chemotherapy clinic
- Additional areas of improvement will be monitored such as: patient/provider satisfaction, pharmacist satisfaction and workload, utilization of technology-telemedicine
- Process will be refined using the PDSA model

### Measures Collected

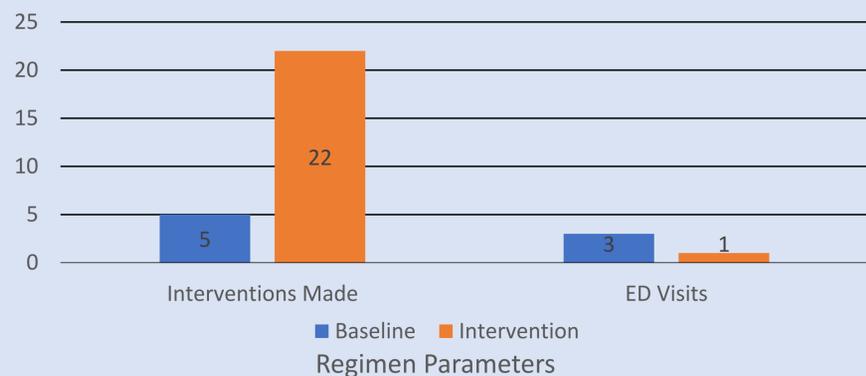
- Appropriateness of dosing and lab monitoring
- ED visits
- Treatment compliance
- Number of interventions

## Results

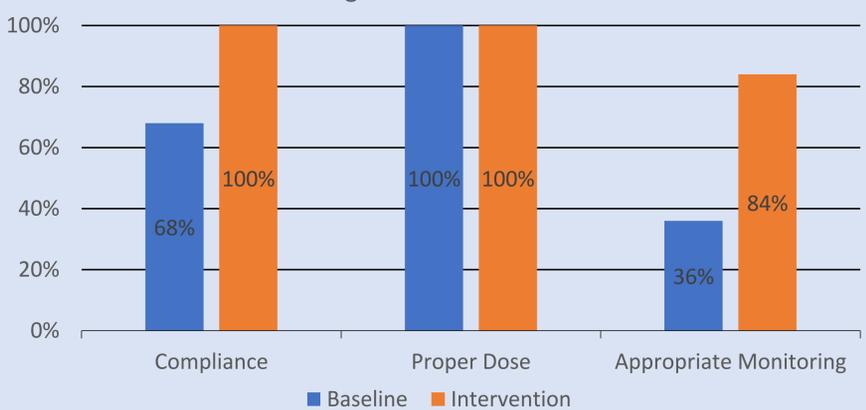
Frequency of Patient Contact



Therapy Interventions and ED visits



Regimen Parameters



## Discussion

- This small pilot study has shown the utility of a pharmacist run oral chemotherapy clinic in improving patient monitoring, drug compliance and number of patient interactions.
- Multidisciplinary approach to oral chemotherapy administration is safer and can be complimentary to routine physician visits
- We will prospectively collect data on medication discontinuation, grade of toxicity, patient satisfaction and other self reported barriers as well as frequency of ER visits and hospital admissions

## Lessons Learned?

- Barriers to care and safety with oral chemotherapy
- Developed new tools to help patients including dosing calendars for complex chemotherapy regimens and using available technology (phone calls ) to remotely monitor patients that are unable to travel to the clinic because of distance and financial burden

## Future Goals

The positive results from this pilot are allowing the expansion of the program. In the future we hope to:

- Incorporate a full time pharmacist in the oncology clinic work flow
- Include all patients receiving oral chemotherapy
- Use available low cost technology for remote monitoring
- Conduct further PDSA cycles to develop a sound process