

# Oral Chemotherapy Management

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IHA Hematology Oncology Consultants

**Carol Yarrington, PharmD, BCOP**

St. Joseph Mercy Health System

# About IHA Hematology Oncology Consultants

- Providers and Staff
  - 10 Medical Oncologists
  - 5 APP's
  - 8 Oncology Care Managers (Oncology RN's)
  - Scribes
  - Medical Assistants/Receptionists in provider teams
  - 1 Regional Pharm.D employed by SJMHS – Clinical Oncology/Informatics
- Sites in Ann Arbor, Brighton, Canton and Chelsea
- EMR = ARIA (Varian Medical Systems)

# About IHA Hematology Oncology Consultants

- Medicare OCM Site
- Michigan Cancer Research Consortium
- MOQC Participating Practice
- QOPI Certified Practice

# Oral Chemotherapy Team

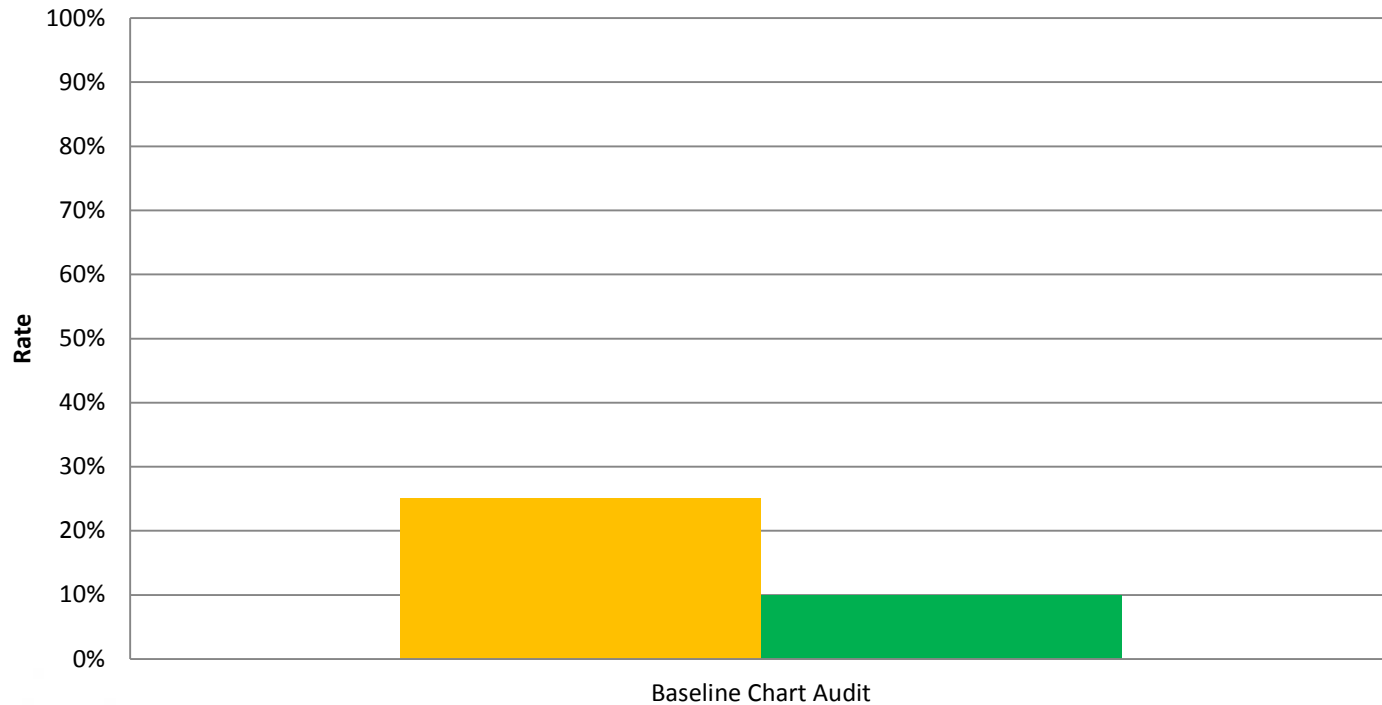
- Katie Beekman, MD – Physician Lead
- Laura Bushey, RN – Care Manager
- Kathy Davis – Clinical Coordinator (MA Lead)
- Anne Gentz, CMOM – Program Manager
- Carol Yarrington, Pharm.D., BCOP -  
Pharmacist

# Background

- Gaps in oral oncolytic measures identified based on QOPI data
- Initial meeting with MOQC in Dec 2015
- Performed baseline assessment with a chart audit and performance survey
- Developed next steps for quality improvement with MOQC

# Baseline Data – Dec 2015

## Oral Oncolytic Start Date Documentation and Symptom Assessment Rate



■ Start Date Documentation Rate

■ Symptom Assessment Rate

n = 20 charts



# Process Development

- Group met and prioritized the following:
  - Start Date Capture
  - Patient Education Sessions
  - Patient Symptom and Adherence Assessments

# Start Date Capture

- Assign a flag in the chart for patients on orals
- When oral chemotherapy is initiated
  - Patient referred to an MA who focuses on prescription coverage and financial access
  - Patient scheduled for a chemotherapy teach session with the pharmacist (support from pharmacy students)
  - Start date captured through specialty pharmacy report and recorded in the EMR



# Patient Education

## Who

- Pharmacist and 4<sup>th</sup> Pharmacy students
- All oral chemo patients

## When

- Prior to any new start
- Appointment scheduled at check-out on day of prescription

## Chemo Teach

## What (is discussed)

- Modified MOQC oral chemo patient ed
- Self-management instruction
- Patient intake for PRO
- Follow-up plan

## What (is documented)

- Start date
- Patient consent
- Education session
- Medication Reconciliation

## Capecitabine (Xeloda®)

Pronounced: [cape-CITE-a-bean] and [zeh-LOE-duh]

### About Your Medication

Capecitabine limits the growth of cancer cells. After capecitabine is absorbed into your body, it becomes an active chemotherapy drug "5-fluorouracil" that interferes with the cancer cell's ability to make proteins and divide into more cancer cells.

Capecitabine comes as a 150 mg tablet and a 500 mg tablet. Your dose may be a combination of both tablet strengths, and may be more than one tablet.

#### **YOUR DOSE:** By mouth,

Take (\_\_\_\_x 500 mg tablets and \_\_\_\_x 150 mg tablets) in the morning

And

Take (\_\_\_\_x 500 mg tablets and \_\_\_\_x 150 mg tablets) in the evening, according to the schedule below.

Take within 30 minutes of eating food.

#### **YOUR SCHEDULE:**

Take your capecitabine tablets on days \_\_\_\_ to \_\_\_\_, followed by a \_\_\_\_ day rest period (when no tablets are taken). This \_\_\_\_ day period is one treatment cycle.

### How to Take Your Medication

- Take your capecitabine twice daily at approximately the same times each day. Take within 30 minutes of eating food.
- Swallow capecitabine tablets whole with a glass of water. Do not crush or chew the tablets.
- If you miss a dose of your capecitabine, take the medicine as soon as possible. If it is closer to the time of your next dose, skip the missed dose and do not double the next dose. Instead, continue your regular dosing schedule and check with your doctor.

### Follow-up:

- **Physician appointment:** You will see your oncologist or their physician assistant/nurse practitioner once each cycle
- **Lab Work:** Complete blood count with differential and comprehensive metabolic panel prior to each cycle while on therapy

### Important Precautions/ Storage and Handling/Disposal

- If you are allergic to capecitabine or 5-fluorouracil (5-FU), you should not take capecitabine.
- If you have ever been told you lack an enzyme called “DPD” (dihydropyrimidine dehydrogenase), you should not take capecitabine.
- If you have a history of heart, liver, or kidney problems, talk to your healthcare provider before taking capecitabine.
- Let your healthcare provider know if you are taking the blood thinner warfarin (Coumadin®) or the seizure medicine phenytoin (Dilantin®). The doses of these medicines may need to be changed or the levels of these medicines may need to be checked more often while taking capecitabine.
- Capecitabine may be harmful to an unborn child. If sexually active with a partner that is pregnant or who may become pregnant during and 2 weeks after treatment, two forms of contraception must be used (a condom and another effective form of birth control).
- Capecitabine may pass into breast milk and could potentially harm nursing infants. Do not breastfeed while taking capecitabine.
- The use of gloves is recommended when directly handling capecitabine tablets. Remember to wash your hands after taking or handling capecitabine without gloves.
- Capecitabine may stay in the body for several days after a dose is taken. It may be present in bodily fluids or waste, including sweat, urine, feces, and vomit. Always wear gloves when cleaning up or coming into contact with bodily fluids.
- Cover the toilet before flushing; **double-flush the toilet for at least 5 days after the last dose** of capecitabine.
- Keep your capecitabine in a safe place, away from other family members’ medications and away from any food or drinks. Keep the medication out of reach from children and pets.
- Store the medication at room temperature in a dry location – avoid storing your medication in the bathroom.
- Return expired, damaged, or unused capecitabine to your specialty pharmacy for disposal. Do not discard into the garbage or toilet, or anywhere that children or pets may have access.

## **What foods and drugs may interact with my capecitabine?**

Please talk to your healthcare provider at your cancer clinic before starting or stopping any medications, vitamins, or herbal supplements, because some of these may interact with your capecitabine. Some examples of products that interact with capecitabine include:

- Some pain medications, including celecoxib (Celebrex®), diclofenac (Voltaren®), ibuprofen (Motrin®), and meloxicam (Mobic®)
- Certain medications for blood sugar, such as glipizide (Glucotrol®), glyburide (Diabeta®), glimepiride (Amaryl®), and nateglinide (Starlix®)
- Some medications for the heart and/or high blood pressure, including losartan (Cozaar®), irbesartan (Avapro®), and torsemide (Demadex®)
- Some medications for mood, including fluoxetine (Prozac®) and amitriptyline (Elavil®)
- Gout medicines including allopurinol
- Warfarin (Coumadin®)
- Phenytoin (Dilantin®)
- Leucovorin (folinic acid)


Folic Acid (a B-vitamin)

## Capecitabine (Xeloda®) Side Effect Summary

This list does not include all possible side effects of capecitabine. If you have an unusual symptom, call the clinic. Below are management tips for the **most common** side effects:


- **Decrease in blood cell counts** (70%- usually mild)
- **Diarrhea** (60 %, sometimes severe)
- **Hand-Foot Syndrome** (60%, sometimes severe) or **Inflamed/irritated skin** (40%, usually mild)
- **Nausea and Vomiting** (50%, usually mild)
- **Fatigue** (40%, sometimes severe)
- **Mouth Sores** (25%, sometimes severe)

<b>Decrease in Blood Cell Counts</b> (low red blood cell count, 70%; low white blood cell count and platelets, 25%) Usually mild	
<b>What Can I Do...</b>	<b>Call the Oncology Clinic when you have...</b>
<ul style="list-style-type: none"><li>• Wash hands regularly</li><li>• Avoid close contact with others who are sick</li><li>• Avoid activities with a high potential for injury and bleeding (contact sports, etc.)</li><li>• The clinic will monitor your labs regularly. Make sure not to miss clinic visits or lab draws</li></ul>	<ul style="list-style-type: none"><li>• Temperature of 100.5°F or higher- <b>CONTACT THE Oncology CLINIC IMMEDIATELY</b></li><li>• Any signs of infection (chills, feverish sweats, burning upon urination/ painful urination)</li><li>• Unusual tiredness or weakness</li><li>• Shortness of breath, difficulty breathing</li><li>• Unusual bleeding or bruising</li></ul>



# Patient Symptom and Adherence Assessment

- MOQC PRO assessment completed by patient prior to each visit – includes ESAS and adherence question
- Initiated with 5 drug pilot
  - Abiraterone (Zytiga)
  - Capecitabine (Xeloda)
  - Enzalutamide (Xtandi)
  - Erlotinib (Tarceva)
  - Temozolomide (Temodar)



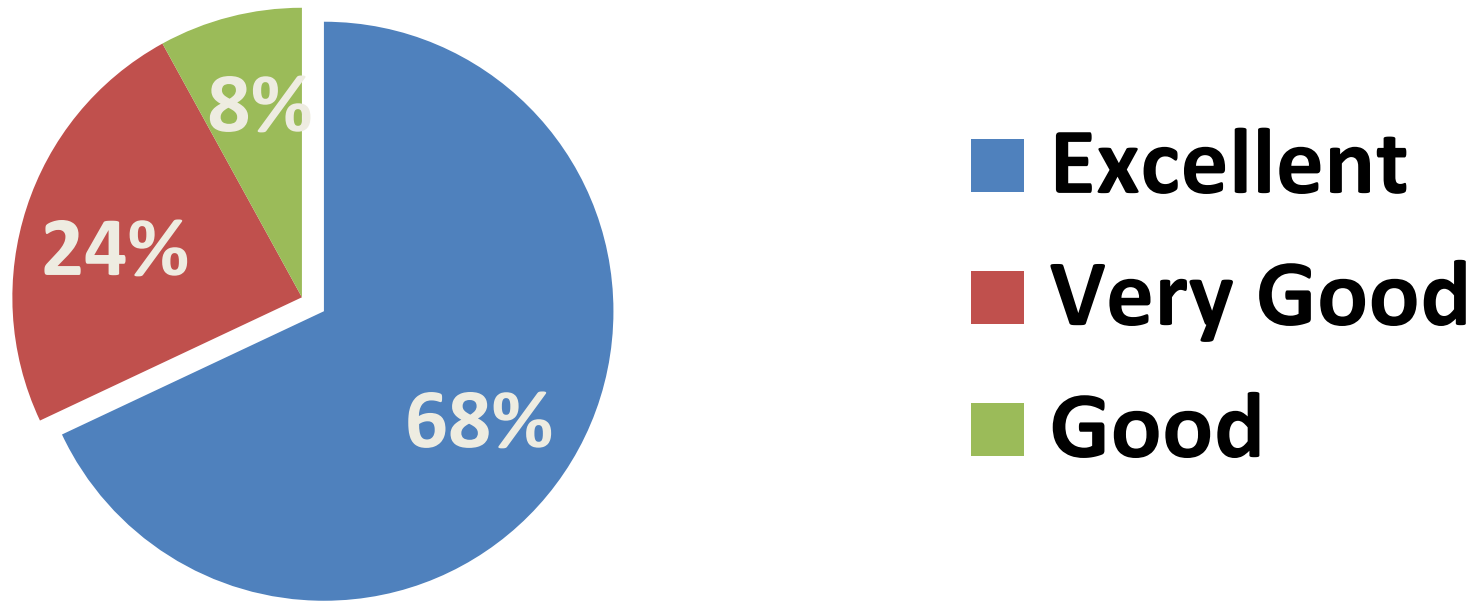
# Patient Symptom and Adherence Assessment

- Patient instructed to arrive 10-15 min early to appointment
- Patient completes PRO
  - MA reviews & triages symptoms scored via ESAS  $\geq 4$  or non-adherence to RN and/or physician
  - PRO scanned in EMR



# PRO Results

## Self Reported Adherence





# PRO Results

- 51 assessments were completed by 34 patients.
- Of the 48 completed ESAS assessments, 77% included at least 1 moderate side effect and 46% included at least 1 severe side effect.
- 24% of patients reported low-moderate confidence to self-manage their symptoms.
- Less than excellent adherence was reported in 32% of patients with the most commonly reported reason being related to side effects or concerns about side effects and long term effects (50%).

# Patient Symptom and Adherence Assessment

- Moved from 5 drugs to all patients taking oral chemotherapy
- Created a standard phone call at 7-14 days s/p first dose. Recently one more phone call after 2<sup>nd</sup> fill.
  - Phone calls by pharmacy and triaged to nursing when high symptom burden or non-adherence reported

# Implementation Challenges

- Workflow
  - Patient identification
  - Multiple clinicians involved
- Time
  - Competing initiatives – OCM, QOPI re-certification, etc
  - Extra form for patient to complete
- Communication
  - To physician and in EMR



# Benefits

- Earlier identification of symptoms and ability to intervene
- Identification of drug interactions
- Enhanced patient knowledge
- Consistent process and information communicated by all providers

# Patient Feedback

- Most frequent : “I didn’t know why they scheduled me for this- it’s just a pill. I am so glad they did!”
- Leave feeling much better about what it going to happen
  - where does the drug come from
  - how/when do I take it
  - risks to family members
  - how to manage side effects
  - when to call



# Next Steps

- Audit to quantify clinical interventions derived from phone f/u and PRO reporting
- Patient satisfaction survey
- PRO format – paper vs portal vs phone app

# Questions

