

# *ASCO's Quality Training Program*

Project Title: Improving Documentation for Oral Chemotherapy at Trillium Health Partners

Presenter's Name: Dr. Katherine Enright, Bernadette Almeida  
Institution: Trillium Health Partners

Date: March 6, 2014



# Institutional Overview



- Trillium Health Partners
  - Credit Valley Hospital (Peel Regional Cancer Centre)
  - Mississauga Hospital
  - Queensway Health Centre
- Community Hospital with teaching affiliation with University of Toronto Mississauga Academy of Medicine
- CVH Site:
  - 10 medical oncologists + 12 radiation oncologist
  - 1900 new consults/yr
- Q-Site:
  - 6 medical oncologists
  - 850 new consults/yr



# Problem Statement

- During observations of 24 charts in October 2013 at Trillium Health Partners – Queensway Site, only 67% (8/12) of the components of an oral chemotherapy plan (as defined by ASCO-ONS) were documented in the medical record. This represents a potential safety risk as complete information regarding the oral chemotherapy plan was not readily accessible to all health team members.

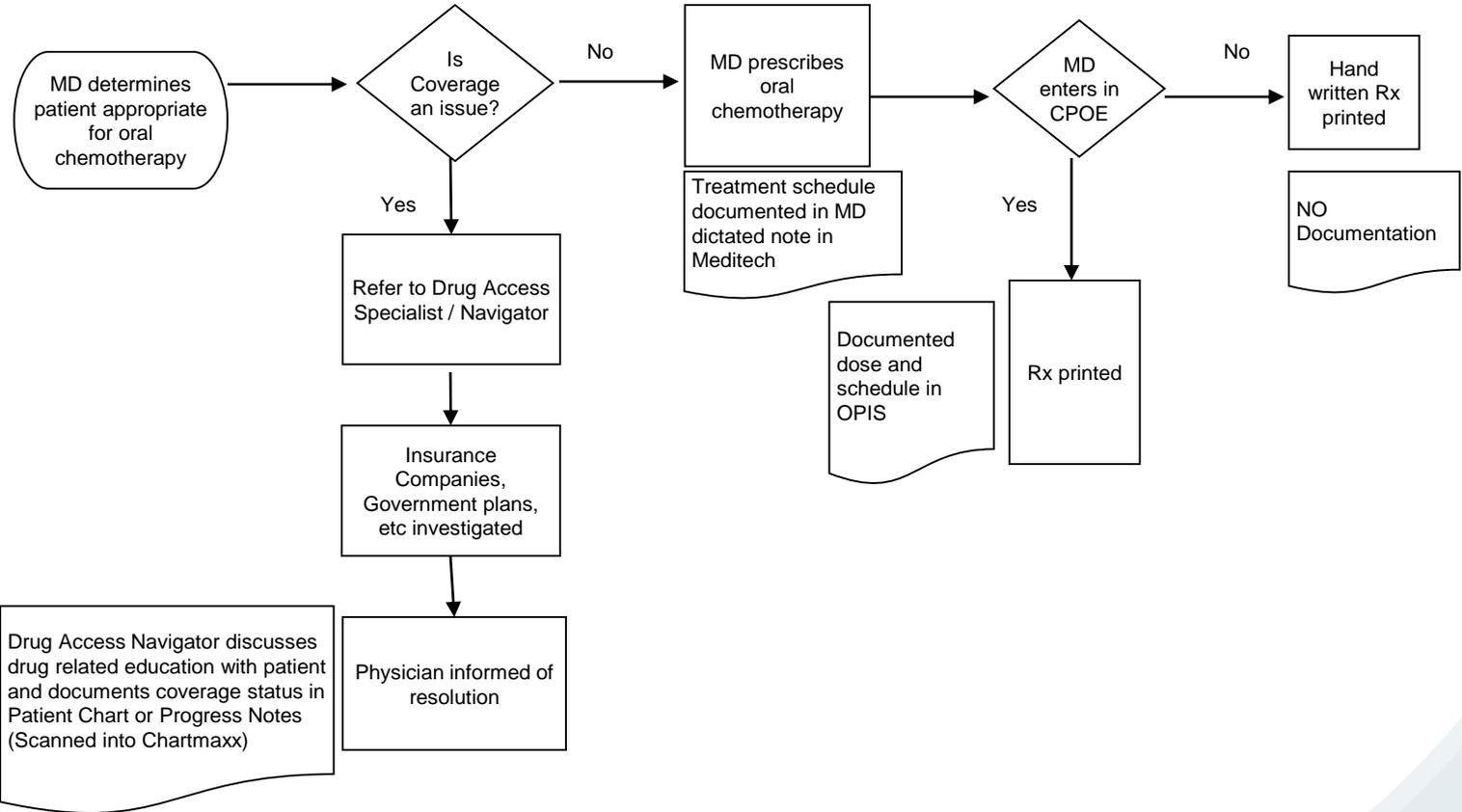
# Team Members

Role	Name	Job Function
<b><i>Project Sponsor<sup>#</sup></i></b>	Dr. Craig McFadyen	
<b><i>Team Leader<sup>+</sup></i></b>	Dr. Katherine Enright	
<b><i>Core Team Member<sup>*</sup></i></b>	Megan Macmillan	RN educator Lead - patient education
<b><i>Core Team Member<sup>*</sup></i></b>	Ron Fung	Pharmacy Lead – CPOE review
<b><i>Facilitator</i></b>	Bernadette Almeida	Team member who facilitates the team meetings to optimize group process Pharmacy Lead - provider education .
<b><i>Other Team Member<sup>^</sup></i></b>	Maritza Carvalho	RN Educator
<b><i>Other Team Member<sup>^</sup></i></b>	Catherine Sodoski	Patient Care Manager
<b><i>Other Team Member<sup>^</sup></i></b>	Trish Lymburner	Patient Educator
<b><i>Other Team Member<sup>^</sup></i></b>	Simerjit Gollee	Medication Access Specialist
<b><i>Other Team Member<sup>^</sup></i></b>	Linda Nixon	Primary oncology RN
<b><i>Other Team Member<sup>^</sup></i></b>	Laurie Van Dorn	RN educator
<b><i>Other Team Member<sup>^</sup></i></b>	Cynthia Warkman	Clinical Informatics
<b><i>Other Team Member<sup>^</sup></i></b>	Pam Johnson	Clinical Informatics
<b><i>Patient/ Family Member</i></b>	Liz Muscat	
<b><i>QTP Improvement Coach</i></b>	Laurie Kaufman	Provides remote support to the team regarding the science of quality improvement and participation in the QTP.

# Process Map

Directions: Drag and drop the symbols on the right to create a process map. Adjust formatting, sizing & swim lanes as needed.

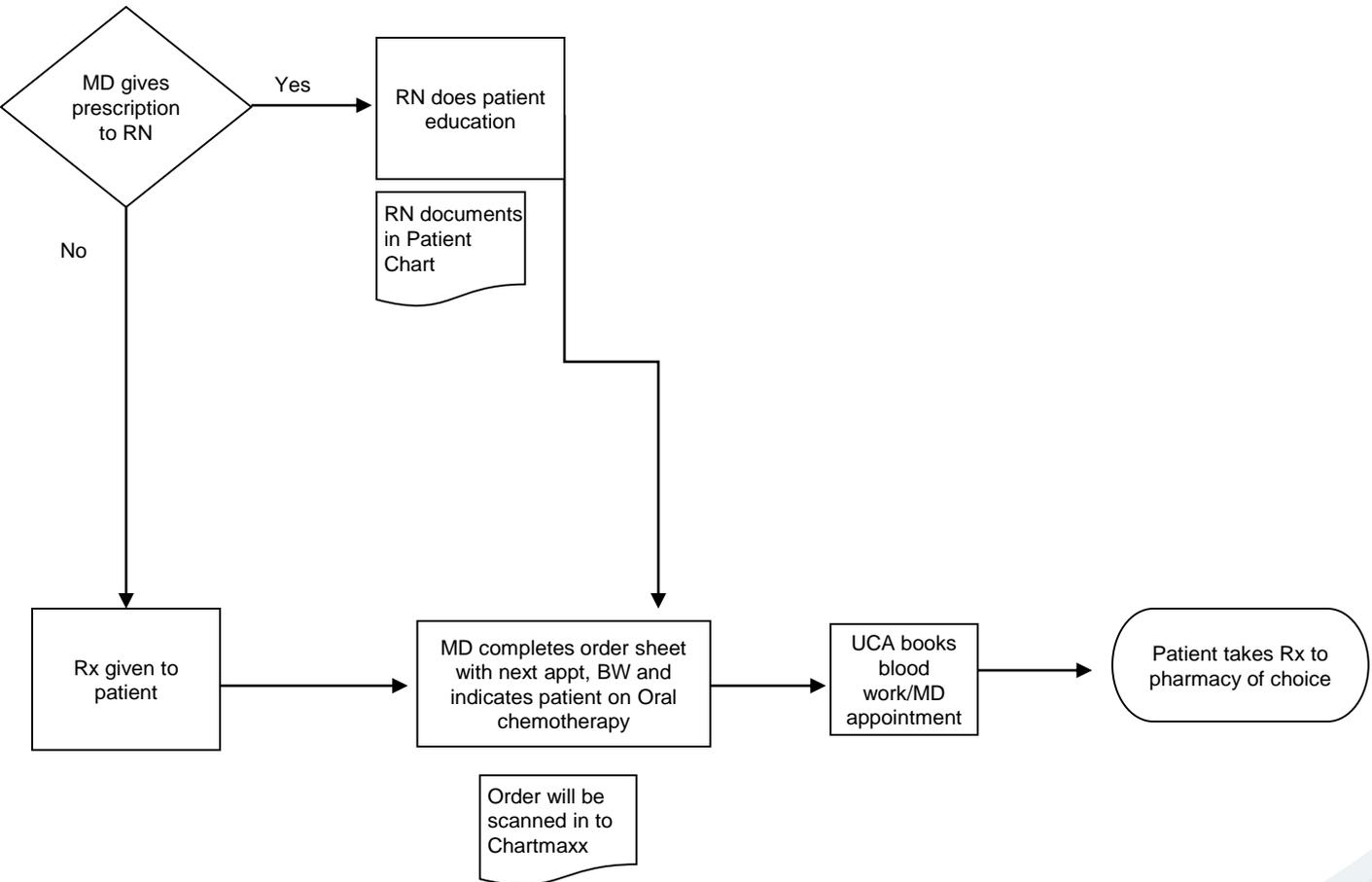
<b>Process Name:</b>	<b>Oral Chemo Current State - QHC</b>				
<b>Date Created:</b>	November 25/13	<b>Start Step:</b>	MD decides to start oral chemotherapy	<b>End Step:</b>	Rx given to patient



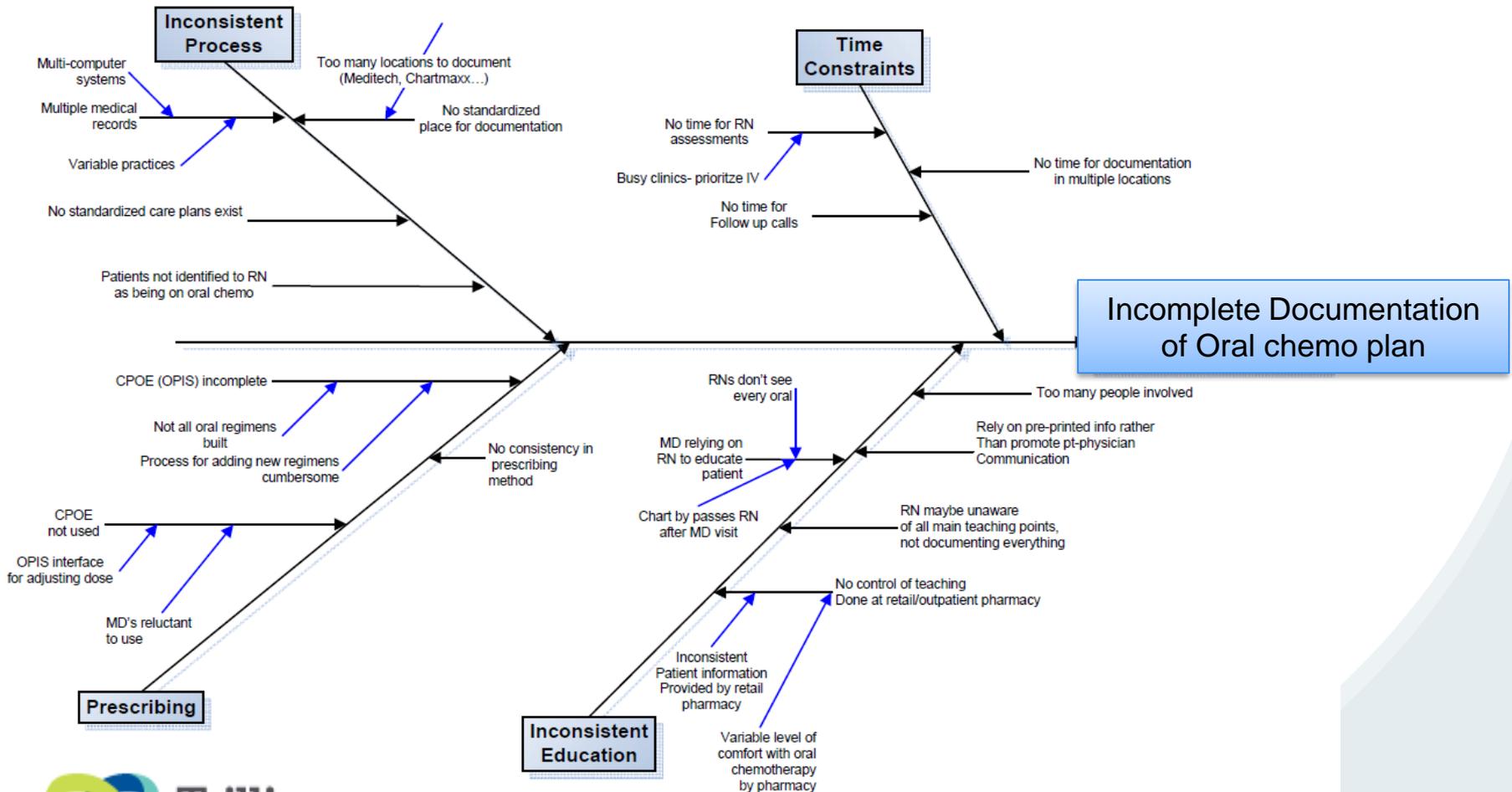
# Process Map

Directions: Drag and drop the symbols on the right to create a process map. Adjust formatting, sizing & swim lanes as needed.

<b>Process Name:</b>	Oral Chemo Current State - QHC				
<b>Date Created:</b>	November 25/13	<b>Start Step:</b>	Patient Arrives in Clinic	<b>End Step:</b>	Starts oral chemotherapy

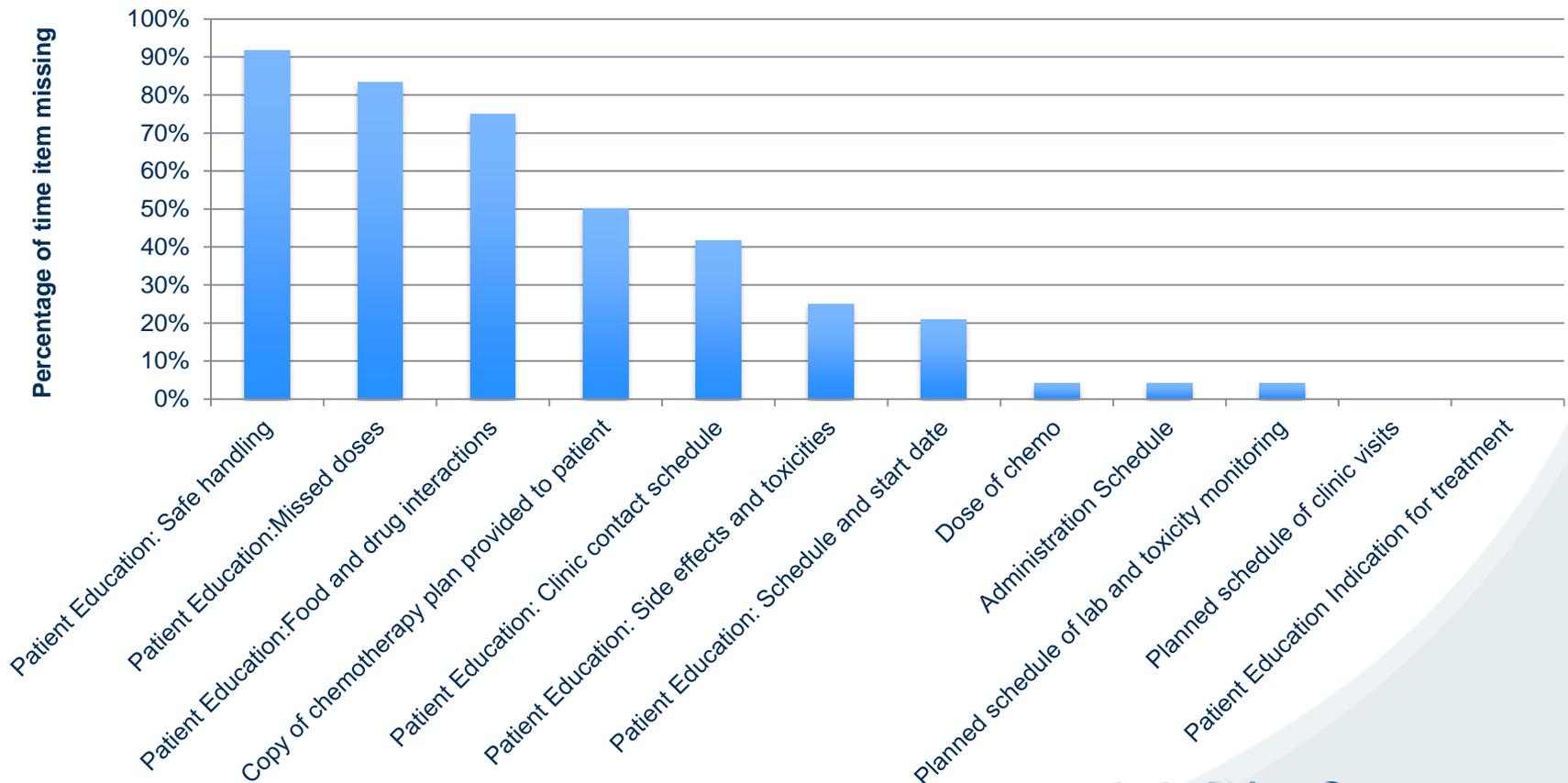


# Cause and Effect Diagram



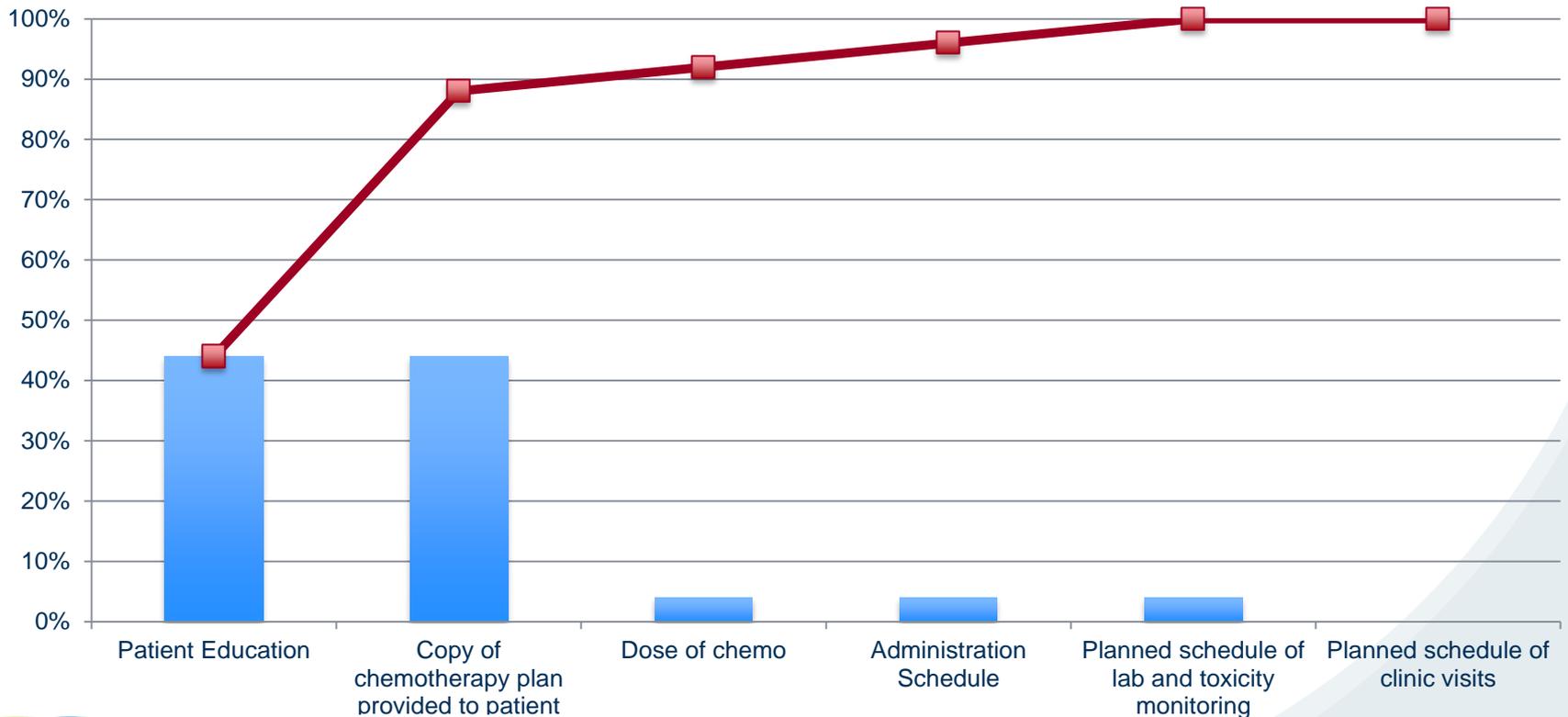
# Diagnostic Data

## Missing Components of Oral Chemotherapy Documentation (Q-site, n = 24)



# Diagnostic Data

Impact of targeting missing documentation components on documentation rate (Q-site, n = 24)



# Aim Statement

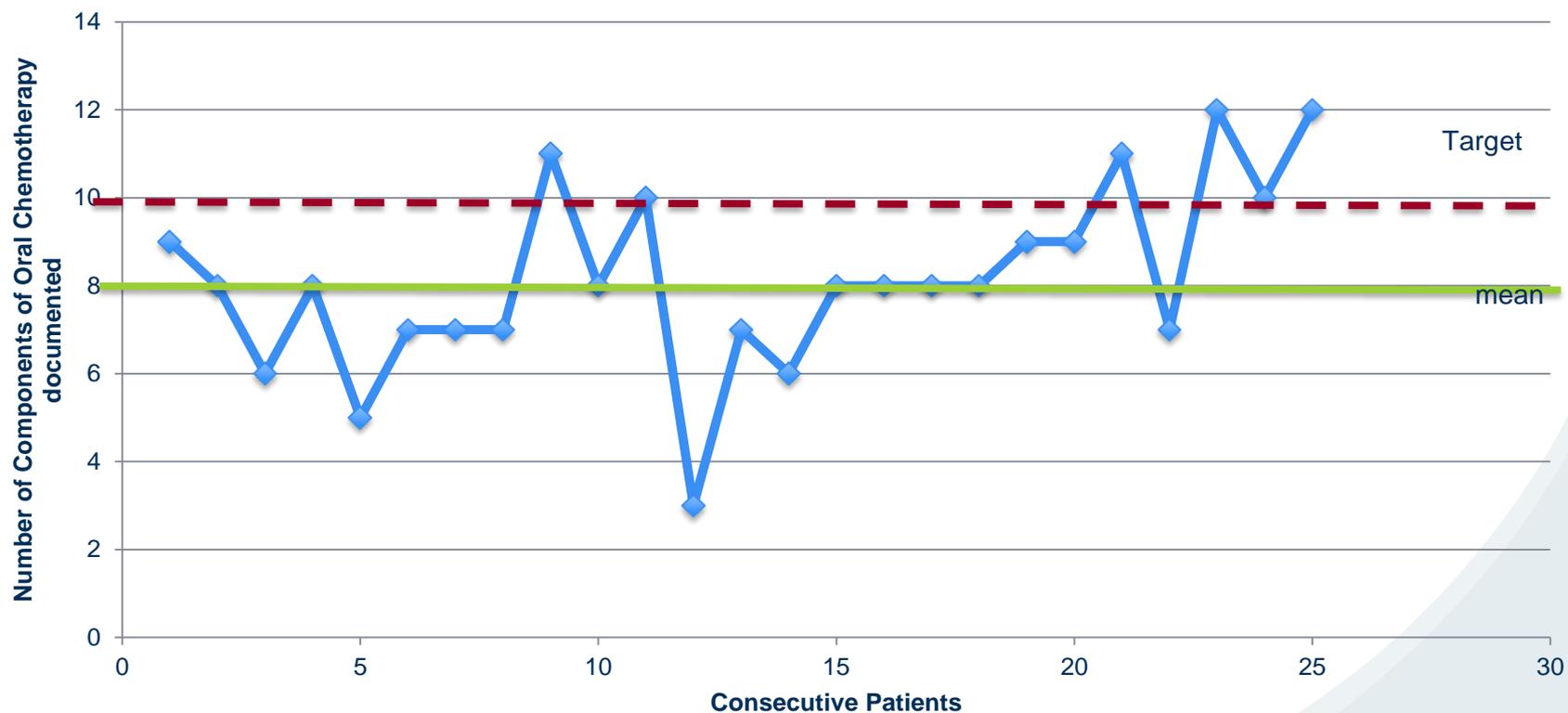
- Increase the components of the oral chemotherapy plan (as defined by ASCO-ONS) documented in the medical record prior to the first cycle of treatment from 67% (8/12) to 83% (10/12) March, 6 2014 at Trillium Health Partners – Queensway Site.

# Measures

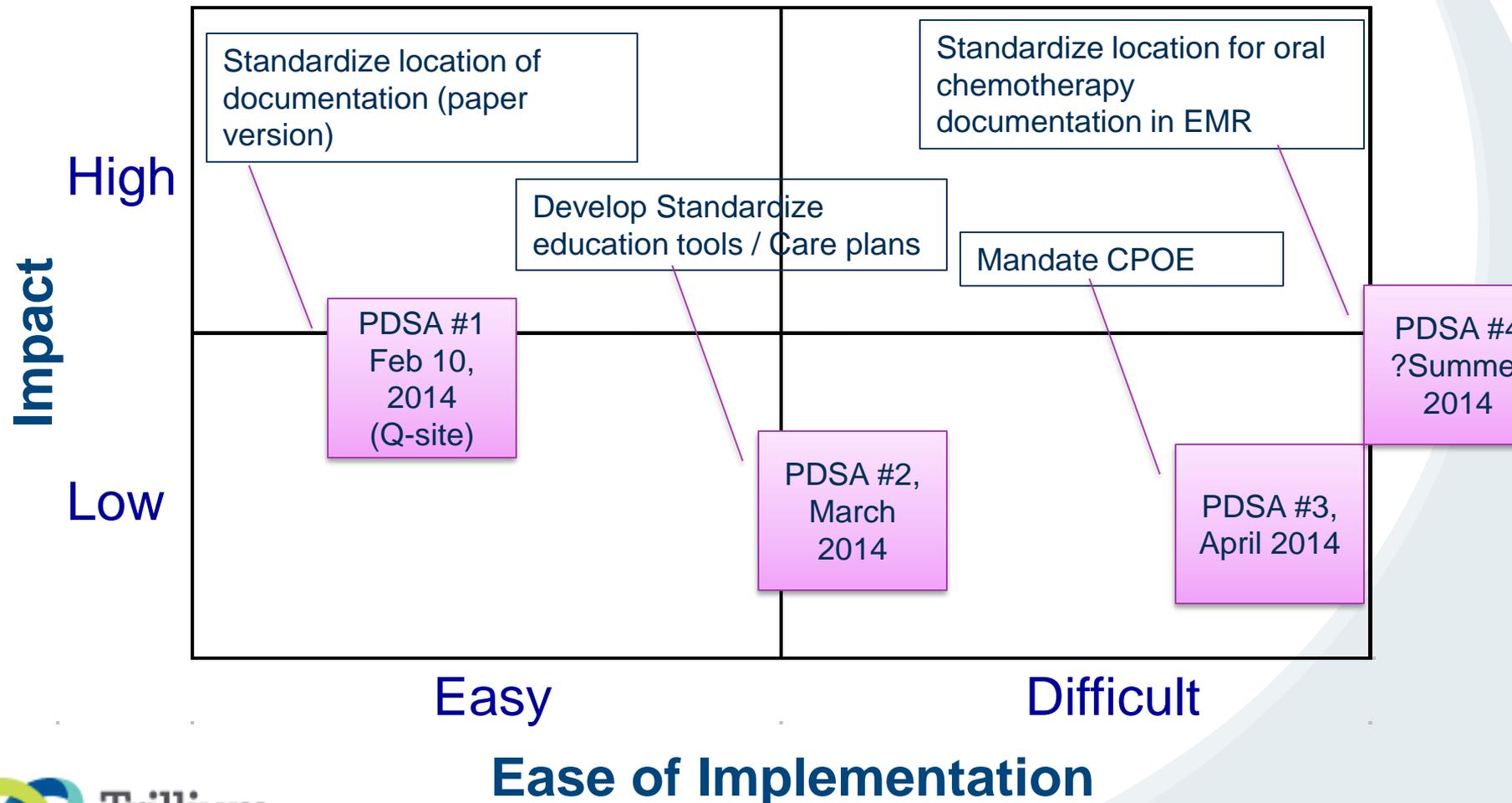
- Measure:
- Outcome Measure:
  - Total number of components of oral chemotherapy documented prior to first cycle of chemotherapy.
    - Documentation components includes: dose of chemotherapy, administration schedule, lab/toxicity monitoring schedule, clinic schedule, patient education, copy of plan to patient.
- Process Measure:
  - Percentage of patients where oral chemotherapy flow sheet used to document oral chemotherapy.
- Balance measure:
  - Number of providers documenting components of care plan, length of time taken document oral chemotherapy treatment information from chart.
- Patient population:
  - Patients on oral chemotherapy during October 2013. First 25 patients seen in month at Q Site
- Calculation methodology:
  - Numerator: number of components of oral chemotherapy documentation in medical medical record prior to first cycle of treatment
  - Denominator: 12 (total number of components of oral chemotherapy documentation).
- Data source:
  - Medical record, CPOE
- Data collection frequency: q 2 months
- Data quality (any limitations):
  - Incomplete capture of patients on oral chemotherapy (Q-site)

# Baseline Data

Total number of components of oral chemotherapy documentation in medical record (Q-site, n = 24)



# Prioritized List of Changes (Priority/Pay-Off Matrix)



# PDSA Plan (Tests of Change)

Date of PDSA cycle	Description of intervention	Results	Action steps
Feb 10, 2014	Introduce Standardize chemotherapy flow sheet which includes check boxes for documentation at Q –site (M Site plan for March 2014)	Increase documentation components, decrease retrieval time	Approve final flow sheet (Feb 5/14) RN education (Feb 7/14)
March 1, 2014	Introduce drug specific oral chemotherapy care plans		Develop last 8 Approval of all by small group Approval of all by content experts
April 2014	Encourage/mandate CPOE use		

# Materials Developed



## Interdisciplinary Flow Chart

Diagnosis		Patient Education Prior to Initiation of Oral Chemotherapy
Treatment Protocol		Drug information sheet provided
Treatment Intent		Drug dose, frequency, missed dose discussed Drug side effects and toxicities discussed Food and drug interaction discussed
Allergies Confirmed		Safe handling discussed, brochure provided Nausea/Vomiting brochure given
Baseline Height	Cm	Diarrhea/Constipation brochure given Hand and foot syndrome brochure given
Baseline Weight	Kg	Planned clinic visit discussed Clinic /PN Contact information provided
Clinical Trial		PT. understand information & plan of care
CVAD		PT. may require further teaching on next visit

Teaching check list completed: Date \_\_\_\_\_ Sign \_\_\_\_\_ RN/RPh  
Cycle # \_\_\_\_\_

Date & Time					
Weight					
ESAS Reviewed					
Adherence (Oral chemo)					
Appetite					
Nausea 0-4					
Vomiting 0-4					
Stomatitis 0-4					
Diarrhea 0-4					
Constipation					
Heartburn					
Irregular Heart Beat					
Cough/SOB					
Fluid Retention					
Skin Changes/Rash					
Numbness & Tingling					
Pain 0-10					
GU Changes					
Fatigue					
Difficulty Sleeping					
Hearing/ Vision Changes					
RN Signature					

Oncology Clinic Interdisciplinary Flow Chart POP (02/2014)

PDSA #1  
Flow Sheet

PDSA #2  
Drug Specific  
care plans

### 1. What is Capecitabine?

Capecitabine, also called Xeloda®, is an oral chemotherapy used to treat your:

- Breast Cancer
- Colorectal Cancer
- Stomach Cancer
- Esophageal Cancer
- Other: \_\_\_\_\_

### 2. Why will I be taking capecitabine?

- The goal of your treatment is to cure your cancer.
- The goal of your treatment is to decrease the risk of your cancer returning.
- The goal of your treatment is palliative that is to control the growth of your cancer and improve your quality of life.
- Other: \_\_\_\_\_

### 3. How many tablets of capecitabine will I be taking?

- Your dose is \_\_\_\_\_mg.
- This means you will take \_\_\_\_\_ of the 150mg tablets AND \_\_\_\_\_ of the 500mg tablets.

### 4. How do I take my tablets?

- Take your tablets by mouth twice a day.
- Do not crush or cut the tablet.
- Take the tablets 30 minutes after breakfast and dinner.

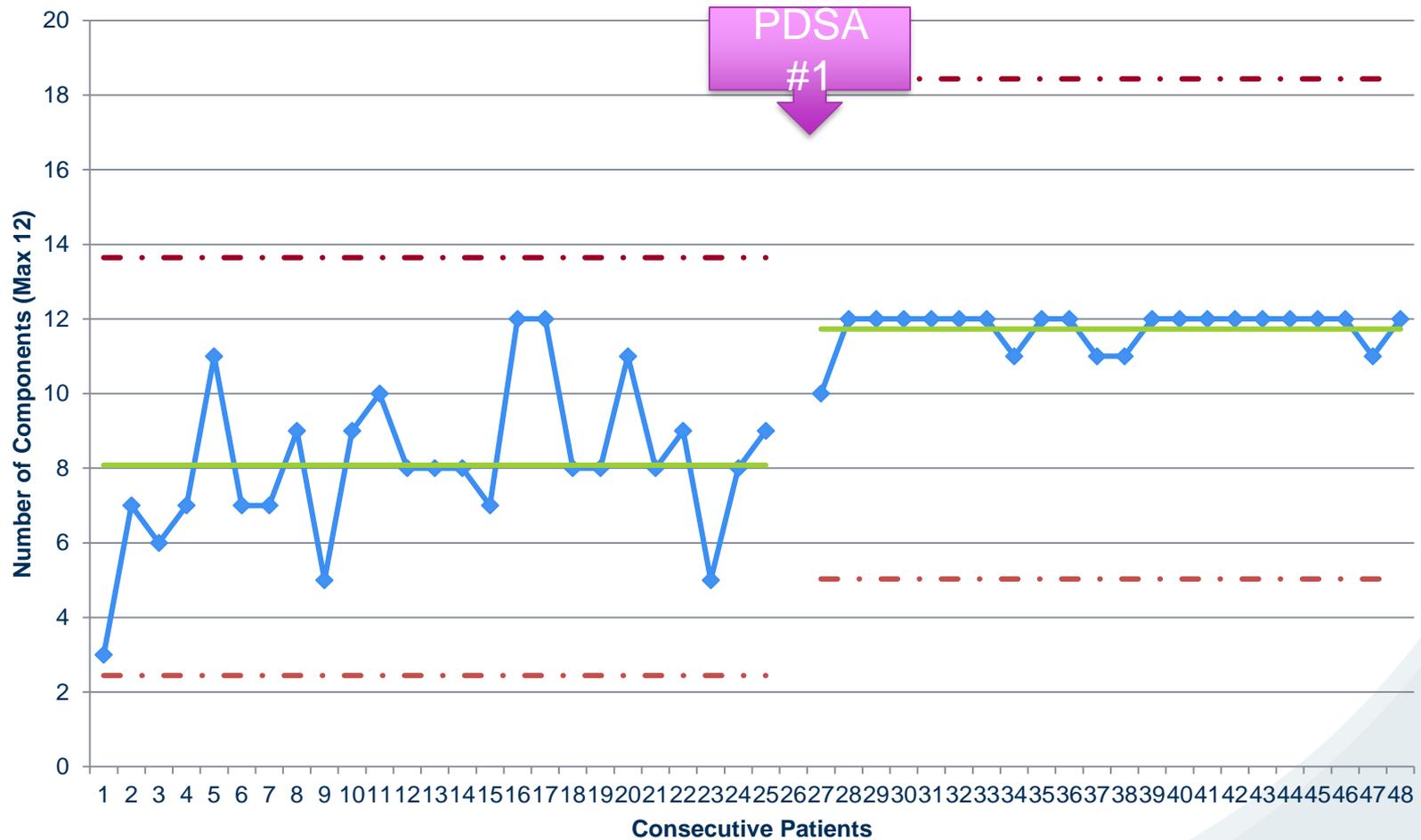
### 5. What is my schedule?

- The tablets will be taken for 14 days in a row and then a 7 day break.
- The tablets will be taken Monday through Friday, on the days of radiation.
- The tablets will be taken every day without a break.
- The tablets will be taken \_\_\_\_\_

\*\*please look at the calendar on page# \_\_\_\_\_

# Change Data

Post PDSA#1 Number of components of oral chemotherapy documented in chart (Q site, N =47)



◆ Measured   
 — Mean   
 - . - . Lower Control Limit   
 - . - . Upper Control Limit

# Conclusions

- PDSA #1 – Standard Documentation flow sheet
  - Resulted in a statistically significant improvement in components of oral chemotherapy documented in chart with an increase in mean from 8/12 to 12/12.
  - Surpassed Aim of 10/12

# Next Steps/Plan for Sustainability

- Complete measurement on impact on documentation time (balance measure)
- Process Measure: Flow sheet used 100% of time. This will need to be tracked overtime from drop off.
- Next Steps:
  - Ensure sustainability, continue to measure documentation compliance after initial role out
  - Launch at CVH Site
  - Introduce drug specific care plans
  - Work with IT on electronic documentation flow sheet

# Lessons Learned

- Diagnostic data can be very informative
  - Identified that the highest priority was to establish a simple/sing process step for documentation
- Focus on 1 PDSA had unexpected spill over effect to other areas as it raised awareness of issues around oral chemotherapy.
- Start with small changes in a controlled environment before expanding
  - Original goal to launch at both sites simultaneous proved too difficult
  - Planned role out once process stable.

# Improving Documentation for Oral Chemotherapy at Trillium Health Partners

**AIM:** Increase the components of the oral chemotherapy plan (as defined by ASCO-ONS) documented in the medical record prior to the first cycle of treatment from 67% (8/12) to 83% (10/12) March, 6 2014 at Trillium Health Partners – Queensway Site.

## INTERVENTION

- Introduction of a standardized oral chemotherapy nursing flowsheet.
  - Nursing flow sheets for parenteral chemotherapy were modified to include components of documentation specific to oral chemotherapy.
  - Flow sheets were incorporated in identical step of documentation process currently used for documenting parenteral chemotherapy.
  - RN education was provided prior to introduction and assistance provided in first week of use in clinics.

## TEAM:

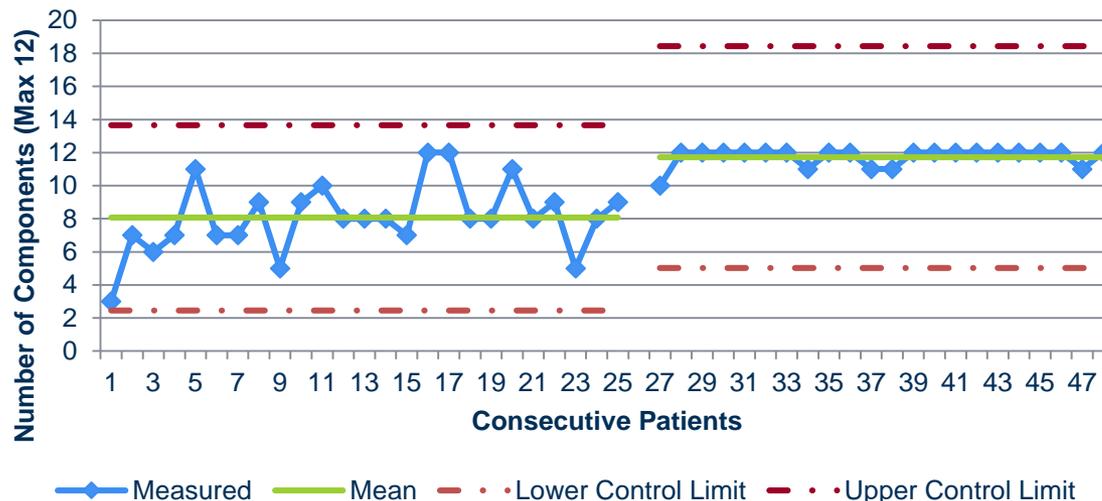
- Medical Oncology:  
Dr. Katherine Enright
- THP Oncology Nursing:  
Catherine Sodoskii, Megan MacMillan, Maritza Carvalho, Laurie Von Dorn, Linda Nixon, Simerjit Gollee,
- THP Oncology Pharmacy:  
Bernadette Almeida, Ron Fung
- THP Medical Informatics  
Cynthia Warkman,
- THP Psychosocial Oncology  
Trish Lymburger, Natasha Winters

## PROJECT SPONSORS:

- Dr. Craig McFadyen - Head of Oncology, Regional Vice President CWMH LHIN

## RESULTS:

**Post PDSA#1 Number of components of oral chemotherapy documented in chart (Q site, N =47)**



## CONCLUSIONS:

- The introduction of a standardized oral chemotherapy nursing flowsheet resulted in a statistically significant improvement in the number of components of oral chemotherapy documented in chart with in the first month of introduction.
- The mean number of components of oral chemotherapy documented increased from 8/12 to 11/12, this met the aim of the study

## NEXT STEPS:

- Ongoing evaluation will evaluate for sustainability over time
- Plan to implement at other clinical Trillium Health Partners Site in March 2014.