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

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

Is Coverage an issue?

Yes → Refer to Drug Access Specialist / Navigator

Insurance Companies, Government plans, etc investigated

Drug Access Navigator discusses drug related education with patient and documents coverage status in Patient Chart or Progress Notes (Scanned into Chartmaxx)

No → MD prescribes oral chemotherapy

Treatment schedule documented in MD dictated note in Meditech

Physician informed of resolution

MD enters in CPOE

Yes → Documented dose and schedule in OPIS

Rx printed

No → Hand written Rx printed

NO Documentation

End Step: Rx given to patient

Start Step: MD decides to start oral chemotherapy
Patient takes Rx to pharmacy of choice

MD gives prescription to RN

Yes

RN does patient education

No

RN documents in Patient Chart

Rx given to patient

MD completes order sheet with next appt, BW and indicates patient on Oral chemotherapy

Order will be scanned in to Chartmaxx

UCA books blood work/MD appointment

Patient takes Rx to pharmacy of choice

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

Incomplete Documentation of Oral chemo plan
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)

- **High Impact**
  - PDSA #1
    - Feb 10, 2014
    - (Q-site)
  - PDSA #2
    - March 2014
  - PDSA #3
    - April 2014
  - PDSA #4
    - ?Summer 2014

- **Low Impact**
  - Standardize location of documentation (paper version)
  - Develop Standardize education tools / Care plans
  - Mandate CPOE

- **Easy**
  - Standardize location for oral chemotherapy documentation in EMR

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

Interdisciplinary Flow Chart

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Patient Education Prior to Initiation of Oral Chemotherapy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment Protocol</td>
<td>Drug information sheet provided</td>
</tr>
<tr>
<td>Treatment Intention</td>
<td>Drug dose, frequency, side effects discussed</td>
</tr>
<tr>
<td>Allergies Confirmed</td>
<td>Food and drug interaction discussed</td>
</tr>
<tr>
<td>Baseline Height cm</td>
<td>Nausea/Vomiting brochure given</td>
</tr>
<tr>
<td>Baseline Weight Kg</td>
<td>Diarrhea/Constipation brochure given</td>
</tr>
</tbody>
</table>

Teaching checklist completed: Date __________ Signature __________ RN/RPh __________

Cycle #

Data & Time

ESAS Reviewed

Adherence (Goal Setting)

Appetite

Nausea 0-4

Vomiting 0-4

Stomach 0-4

Diarrhea 0-4

Constipation

Hiccups

Irregular HeartBeat

Cough/SOB

Pain Location

Skin Changes/Rash

Numbness & Tingling

Fatigue

Dyspnea

Difficulty Sleeping

Mood Changes

RN Signature

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 1.

PDSA #1 Flow Sheet

PDSA #2 Drug Specific care plans
Change Data

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

<table>
<thead>
<tr>
<th>Consecutive Patients</th>
<th>Number of Components (Max 12)</th>
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<tbody>
<tr>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
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<tr>
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<td>11</td>
<td>18</td>
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<td>12</td>
<td>20</td>
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PDSA #1

Measured
Mean
Lower Control Limit
Upper Control Limit

ASCO
Quality Training Program
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/single 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.

RESULTS:

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.