Improving Compliance of Documentation of Oral Chemotherapy

Brittney S. Hale, PharmD, BCOP

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Institutional Overview

- 8 Affiliate clinics in the Southeast and Midwestern US
- Serving rural to suburban areas with diverse racial/ethnic demographics
- The Affiliate network cares for ~350 new oncology patients per year
### Mission of the St. Jude Affiliate Program

- To allow more children to receive St. Jude care close to home
- To increase the accruals on St. Jude clinical trials

<table>
<thead>
<tr>
<th>Site</th>
<th>BR</th>
<th>CLT</th>
<th>Huntsville</th>
<th>JC</th>
<th>PE</th>
<th>Shreveport</th>
<th>SF</th>
<th>Tulsa</th>
</tr>
</thead>
<tbody>
<tr>
<td>MD</td>
<td>4</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>APP</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>CRA</td>
<td>1.5</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td># new onc</td>
<td>39</td>
<td>37</td>
<td>29</td>
<td>23</td>
<td>51</td>
<td>28</td>
<td>26</td>
<td>45</td>
</tr>
</tbody>
</table>
Impact of COVID-19 Pandemic

- QTP team needed to slow down timeline of project
- Increased patient volumes at local affiliate clinics due to reduced patient volumes at SJCRH
- Change in patient visits
  - Telehealth introduced at affiliate clinics
- Changes made by QI project requires universal application
  - Telehealth visits now required providers to perform documentation usually provided by RNs
Team members

- Project Sponsor: Carolyn Russo, MD
- Team Leader: Brittney Hale, PharmD, BCOP
- Core Team Members:
  - Elizabeth Lindley Wadhwa, MD
  - Linda Stout, MD
  - Martina Hum, MD
- Other Team Members:
  - Huntsville:
    - CRA: Beatriz Renew, RN, OCN
    - Charge RN: Natosha Canterberry, RN, CPHON
  - Shreveport CRA: Carol Ashley, RN
  - Tulsa CRA: Kelly Henderson, RN
  - Memphis CRA: Paul Eddlemon, RN, BSN
- QTP Improvement Coach: Ashraf Mohammed, MD
17.4% of oral chemotherapy patient adherence documentation is non-compliant (per St Jude standards) at 3 St Jude affiliate clinics. This leads to re-work, poor research data quality, and healthcare team frustrations.
# Outcome Measure

## Baseline data summary

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline Outcome Measure:</td>
<td>% completed and accepted (by St Jude CRAs) documentation notes for oral 6-mercaptopurine (6-MP) and/or dexamethasone patient adherence</td>
</tr>
<tr>
<td>Patient population:</td>
<td>Pediatric ALL patients enrolled on the Total 17 protocol at St. Jude Affiliate Clinics (Huntsville, Shreveport, Tulsa) and receiving PO 6-MP and/or dexamethasone</td>
</tr>
<tr>
<td>Calculation methodology:</td>
<td>Numerator: # of non-compliant oral chemotherapy documentation instances Denominator: # of clinic visits for the month of January for on study Total 17 patients</td>
</tr>
<tr>
<td>Data source:</td>
<td>E-mail, and EMR</td>
</tr>
<tr>
<td>Data collection frequency:</td>
<td>Daily</td>
</tr>
<tr>
<td>Data limitations:</td>
<td>Missed e-mails</td>
</tr>
</tbody>
</table>
Baseline Data Showing Types of Incompliance

**Pareto Chart**

- **CN missing**: 12 cases, 38.7%
- **CN missing Item**: 11 cases, 37.9%
- **EN missing**: 5 cases, 18.5%
- **HIMS**: 3 cases, 10.5%

**Legend**
- **CN**: Compliance Note
- **EN**: Encounter Note
- **HIMS**: Note transmission related issue
We aim to improve documentation of oral chemotherapy (6-MP and dexamethasone) adherence for patients enrolled on the Total 17 protocol (as per St Jude standards) from 82.6% to 95% by 9/2020.
Process Map for Compliance Note Documentation

Patient Arrives to Clinic → Medication History Taken → RN assess and documents oral chemo compliance → MD sees patient, assess compliance & decides oral chemotherapy plan (documents in visit note) → When notes complete-all visit documentation faxed to Memphis (HIMS)

CRA sends updated records back to Paul & HIMS → MD or RN amends note → CRA reviews email and requests updated documentation (if needed)

Records uploaded to SJCRH EMR via HIMS

Paul Eddlemon reviews spreadsheet & requests information from affiliate (via email) → Missing information/errors added to spreadsheet

Paul reviews records, updates spreadsheet and notifies CRA

Affiliate information complete/correct → Yes

CRA reviews patient records to see if complete

No further action needed
Using a multi step-voting technique, the team found that: Lack of standardized documentation, unclear process owner, and lack of uniform place for the documentation in the EMR to be the top causes.

Problem Statement:
17.4% of oral chemotherapy adherence documentation is non-compliant (per St Jude standards) at 3 St Jude affiliate clinics. This leads to re-work, poor research data quality, and healthcare team frustrations.
How do you feel when a clinic based CRA asks for data confirmation or to correct data documentation?

19 responses
Voice of the Customer

How do you feel when you receive an email from SJ-CRA Memphis regarding documentation issues?

19 responses

- 1 (5.3%)
- 1 (5.3%)
- 5 (26.3%)
- 8 (42.1%)
- 4 (21.1%)

No Frustration
Voice of the Customer

Would you buy into a common dot phrase to simplify compliance documentation for oral chemotherapy across Affiliates?

19 responses

![Pie chart showing 94.7% response]
## Priority / Pay-off Matrix

### Countermeasures

<table>
<thead>
<tr>
<th>High Impact</th>
<th>Low Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High Ease of Implementation</strong></td>
<td><strong>Low Ease of Implementation</strong></td>
</tr>
<tr>
<td>Identify sole owner of documentation</td>
<td>Hire scribe</td>
</tr>
<tr>
<td>Use Uniform Dot Phrase</td>
<td>Hire in-clinic translator</td>
</tr>
<tr>
<td>Clarify SJCRH Documentation expectations</td>
<td>Have Affiliates/Memphis on same EMR</td>
</tr>
<tr>
<td>Integration between EMRs</td>
<td></td>
</tr>
</tbody>
</table>

**Easy**
- Medication Hx taken by MA

**Difficult**
- Identify gatekeeper to review records
- Integration between EMRs

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**Legend**
- High Impact
- Low Impact
- High Ease of Implementation
- Low Ease of Implementation

**Note:**
- ASCO Quality Training Program

**Page:** 15
<table>
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<td>Numerator: # of non-compliant oral chemotherapy adherence notes Denominator: # of patient visits enrolled on Total17 receiving PO 6-MP and/or dexamethasone</td>
</tr>
<tr>
<td><strong>Data source:</strong></td>
<td>EMR documentation reviewed by CRA prior to visit records being sent to Memphis</td>
</tr>
<tr>
<td><strong>Data collection frequency:</strong></td>
<td>Daily over 3 weeks</td>
</tr>
<tr>
<td><strong>Data limitations:</strong></td>
<td>Not all clinics were able to submit 3 weeks of data</td>
</tr>
</tbody>
</table>
SJ-Memphis
Documentation Requirements

• Medication name
• Dose
• Route
• Frequency
• Dates taken (start and stop)
• Any missed doses and why
Updated Process Map at Affiliate

1. **Patient Arrives to Clinic**
2. **Oral chemo compliance assessed & documented by RN using DOT phrase**
3. **MD sees patient, assesses compliance and decides future oral chemotherapy plans**
4. **CRA reviews visit records to see if complete**
   - **Yes**
     - **CRA contacts RN to updated compliance records**
     - **Records sent to SJ-Memphis via HIMS**
   - **No**
     - **CRA reviews records for completeness**
     - **RN updates note**
     - **Yes**
       - **CRA reviews records for completeness**
     - **No**
       - **Ran updates note**

1. **ASCO Quality Training Program**
# Test of Change

## PDSA Plan

<table>
<thead>
<tr>
<th>Date</th>
<th>Process Measure</th>
<th>PDSA Description</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/1-7/1</td>
<td>1</td>
<td>Create uniform Dot Phrase</td>
<td>Approved by SJCRH</td>
</tr>
<tr>
<td>7/27-8/21</td>
<td>2</td>
<td>Go-live for Dot Phrase approved by SJCRH</td>
<td>Used in 95% of clinic visits</td>
</tr>
<tr>
<td>7/27-8/21</td>
<td>3</td>
<td>Go-live for clinic RN completing oral chemotherapy documentation</td>
<td>Performed in 100% of clinic visits</td>
</tr>
<tr>
<td>7/27-8/21</td>
<td>4</td>
<td>Go-live for CRA to review compliance documentation prior to records being send to Memphis</td>
<td>5% identified as none compliant—were corrected prior to being sent to SJ-Memphis</td>
</tr>
</tbody>
</table>
Outcome Measure

Percent Compliance

% Compliant Documentation

1/1/2020 - 8/20/2020

CL 0.768
Balancing Measures

• Negative Balancing Measure:
  • Increased affiliate CRA workload
    • Increase in time to review chart: 2 min/chart
    • Time to clarify non-compliant documentation: 8 min/chart

• Positive Balancing Measure:
  • Stakeholders request to incorporate new work flow to all oral chemotherapy agents
    • Standardized workflow for all patients and providers
    • Standardized oral chemotherapy dot phrases were added at each affiliate site
Next steps

Sustainability Plan

New process has built-in auditing performed by the affiliate CRA
Conclusion

• Non-compliant oral chemotherapy documentation was improved by:
  • Standardizing oral chemotherapy compliance documentation
  • Identifying an owner of compliance documentation
  • Creating a “gatekeeper” to review patient charts prior to being sent to SCJRH shows significant