Improving Documentation of Pain Management at MedStar Washington Cancer Institute

Sekwon Jang, MD, Vishal N Ranpura, MD, Lynne S Wood, RN
MedStar Washington Cancer Institute

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Institutional Overview

- MedStar Washington Hospital Center is an academic not-for-profit hospital
- Located in northwest DC
- Region’s only Level I trauma center
- Eleven oncologists
- About 1500 visits/month in medical oncology
- In FY 2012, 2,375 new cancer cases were diagnosed and treated
Problem Statement

• Twenty five percent of MedStar Washington Cancer Institute hematology oncology clinic outpatients with pain ≥ 4 did not have documented plan of care for pain, potentially resulting in inadequate pain control. This was evidenced in Quarter II 2013 data.
<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Job Function</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Sponsor</strong>#</td>
<td>Sandra M. Swain, MD</td>
<td>Medical Director, Cancer Center</td>
</tr>
<tr>
<td><strong>Team Leader</strong>+</td>
<td>Sekwon Jang, MD</td>
<td>Attending physician</td>
</tr>
<tr>
<td><strong>Core Team Member</strong>ª</td>
<td>Vishal Ranpura, MD</td>
<td>Fellow physician</td>
</tr>
<tr>
<td><strong>Core Team Member</strong>ª <em>(if applicable)</em></td>
<td>Lynne Wood, RN</td>
<td>Assistant Nursing Director of Medical Oncology</td>
</tr>
<tr>
<td><strong>Facilitator</strong></td>
<td>Linda Self Stephanie Heller</td>
<td>Team member who facilitates the team meetings to optimize group processes.</td>
</tr>
<tr>
<td><strong>Other Team Member</strong>^</td>
<td>Sundeep Agrawal, MD</td>
<td>Fellow physician</td>
</tr>
<tr>
<td><strong>Other Team Member</strong>^</td>
<td>Charan Yerasi, MD</td>
<td>Resident physician</td>
</tr>
<tr>
<td><strong>Other Team Member</strong>^</td>
<td>Puja Chokshi, MD</td>
<td>Resident physician</td>
</tr>
<tr>
<td><strong>Other Team Member</strong>^</td>
<td>Jaylon Harkness, RN</td>
<td>Nurse Navigator</td>
</tr>
<tr>
<td><strong>Other Team Member</strong>^</td>
<td>Janet Beasley</td>
<td>Medical Office Assistant, Clinical</td>
</tr>
<tr>
<td><strong>QTP Improvement Coach</strong></td>
<td>Holley Stallings, BSN, CPHQ</td>
<td>Provides remote support to the team regarding the science of quality improvement and participation in the QTP.</td>
</tr>
</tbody>
</table>
Gold Card (Pain Assessment)
Clinical MOA
Assess pain intensity & record w/ vitals

Pain ≥ 4
Fill the Gold Card
Leave it in the Room
Hand it to provider
Leave it on provider desk

Assess pain by Provider
Address pain by Provider

Intervention(s)
- Referral to pain and palliative
- New pain RX
- Referral to psychosocial
- Education patient and family

Document plan of care for pain by provider

End

Clinical MOA
Practitioner
Cause & Effect Diagram

Electronic Health record
- No system to scan gold card in ARIA
- No trigger in EMR to remind pain documentation

Physician Documentation
- Not reviewing flow sheet/did not receive gold card
- Writing notes later
- Pain not a priority
- Fellow/Mid level notes

Patient Factor
- Goal of pain control unclear
- Patient does not bring up pain with MD
- Does not ask for refill or prescription

Gold Card/Communication
- Not using gold card
- No direct communication between MD-MOA
- Gold card in room/desk

Goal of pain control unclear
- Patient does not bring up pain with MD
- Does not ask for refill or prescription
Pareto Chart

Causes for Lack of Documented Plan of Care for Pain (November 2013)

- Pain unrelated to cancer
- Fellow note
- Patient denied pain
- Other
- Pain level acceptable
- NP/PA note
- No gold card
- Delay in note writing

Cumulative %
Aim Statement

• Achieve ≥ 90% documentation of plan of care in patients with pain ≥ 4 in hematology oncology clinic at MedStar Washington Cancer Institute by the conclusion of 1st Quarter in 2014.
Measures

• **Measure:**
  Documentation of pain management in Electronic Health Record (HER) system for patients with pain score ≥ 4

• **Patient population:**
  All patients in Hematology Oncology clinic with a MD/NP/PA clinic visit.

• **Calculation methodology:**
  All patients with pain score ≥ 4 in hematology oncology clinic (denominator)
  Patient with documentation of pain management in assessment and plan (numerator)

• **Data source:**
  Electronic Health Record system (provider’s notes and orders)

• **Data collection frequency:**
  Every two weeks

• **Data quality (any limitations):**
  None
Baseline Data (Nov 2013)

Rate of documented plan of care for pain ≥ 4
(p-chart, 3 sigma)

Baseline mean = 70%
Prioritized List of Changes (Priority/Pay-Off Matrix)

- **Fellow, NP/PA education**
- **Gold cards to fellows and NP/PA**
- **Faculty consensus on pain documentation**
- **EHR trigger for pain ≥ 4**
- **EHR template for pain documentation**
- **Nurse navigator involvement and documentation**

Ease of Implementation:
- **Easy**
- **Difficult**

Impact:
- **High**
- **Low**
Materials Developed (EHR trigger)
# Materials Developed (EHR trigger)

![EHR Software Interface](image)

## Vital Signs Form

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
<th>Normal Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>78.00 inches</td>
<td>(78.0 - 80.0)</td>
</tr>
<tr>
<td>Weight</td>
<td>lbs</td>
<td>(55.0 - 55.0)</td>
</tr>
<tr>
<td>BSA</td>
<td>sq.m</td>
<td>(-)</td>
</tr>
<tr>
<td>BMI</td>
<td></td>
<td>(18.0 - 30.0)</td>
</tr>
<tr>
<td>Temperature</td>
<td></td>
<td>(97.8 - 98.9)</td>
</tr>
<tr>
<td>Pulse</td>
<td>70 bpm</td>
<td>(60.0 - 100.0)</td>
</tr>
<tr>
<td>Respiration</td>
<td>12 L/min</td>
<td>(16.0 - 22.0)</td>
</tr>
<tr>
<td>Systolic</td>
<td>140 mm(hg)</td>
<td>(90.0 - 140.0)</td>
</tr>
<tr>
<td>Diastolic</td>
<td>80 mm(hg)</td>
<td>(65.0 - 90.0)</td>
</tr>
<tr>
<td>Pulse Oximetry (O2 Sat)</td>
<td>%</td>
<td>(90.0 - 100.0)</td>
</tr>
<tr>
<td>Pain</td>
<td>5</td>
<td>(0.0 - 10.0)</td>
</tr>
<tr>
<td>Fatigue</td>
<td></td>
<td>(0.0 - 10.0)</td>
</tr>
</tbody>
</table>
# PDSA Plan (Tests of Change)

<table>
<thead>
<tr>
<th>Date of PDSA cycle</th>
<th>Description of intervention</th>
<th>Results</th>
<th>Action steps</th>
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</thead>
<tbody>
<tr>
<td>1/6/14 – 2/21/14</td>
<td>- EHR trigger for pain ≥ 4</td>
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<td>- Gold cards to fellows, NP/PA</td>
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<tr>
<td></td>
<td>- Fellow, NP/PA education</td>
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<td></td>
<td>- Faculty consensus on documentation</td>
<td>160/179 (89%) had documented plan of care for pain ≥ 4 in provider note</td>
<td>- Survey providers for lack of documentation</td>
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<td>- Weekly reminder emails</td>
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<td></td>
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<td>- Continuous education of providers</td>
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<td>- Quarterly reports</td>
</tr>
</tbody>
</table>
Change Data (Jan-Feb, 2014)

Rate of documented plan of care for pain ≥ 4
(p-chart, 3 sigma)

Intervention:
Staff education
EHR trigger

Baseline mean=70%
Conclusions

• We observed improvement by 19% after intervention (70% to 89%)
• Almost met the aim of 90%
• Improvement was more marked during the first two weeks of post-intervention data collection
Next Steps/Plan for Sustainability

• Weekly reminder emails
• Continue to measure the documentation rate quarterly in 2014 and report it to staff
• Display the quarterly results in medical oncology clinic bulletin
• Pain documentation process orientation for new staffs and rotating residents/fellows
**Improving Documentation of Pain Management at MedStar Washington Cancer Institute**

**AIM:** Achieve ≥ 90% documentation of plan of care for pain control for patients with pain ≥ 4 in hematology oncology clinic at MedStar Washington Cancer Institute by the conclusion of 1st Quarter in 2014.

**INTERVENTION:**
Thirty percents of MedStar Washington Cancer Institute hematology oncology clinic outpatients with pain ≥ 4 in November 2013 did not have documented plan of care for pain, and two major reasons for lack of documentation was “pain unrelated to hematologic oncologic diagnosis” and “notes done by fellows”. In January 2014, we implemented action plans to increase the awareness of pain (EHR trigger for pain ≥ 4, clinical MOAs to hand pain assessment cards to fellows and NP/PAs) and to improve the documentation of pain management (education of Fellows and NP/PA, faculty consensus on documenting management for pain non directly related to hematologic or oncologic diagnosis).

**RESULTS:**

![Graph showing the rate of documented plan of care for pain ≥ 4 over time]

- **Mean (baseline)**
- **Actual value**
- **Lower control unit**
- **Upper control unit**

**CONCLUSIONS:**
- We observed improvement by 19% after intervention (70% to 89%)
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**NEXT STEPS:**
- Weekly reminder emails
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