Improving Efficiency of Same-Day Ill calls

R. Gregory Bociek, MD, MSc
Mary Wells, MD
Teri Schuldt, RN, BSN
Tracy Farrell, PA-C

December 5, 2019
# Team Members

<table>
<thead>
<tr>
<th>Team Member</th>
<th>Role</th>
<th>Discipline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greg Bociek, MD</td>
<td>Team Leader</td>
<td>Hem/Onc Faculty</td>
</tr>
<tr>
<td>Mary Wells, MD</td>
<td>Team member</td>
<td>Hem/Onc Fellow</td>
</tr>
<tr>
<td>Teri Schuldt, RN</td>
<td>Team member</td>
<td>Onc Case Manager</td>
</tr>
<tr>
<td>Tracy Farrell, PA-C</td>
<td>Team member</td>
<td>Malignant Heme</td>
</tr>
</tbody>
</table>

## Project Sponsors

- Julie Vose, MD, Chief, Division of Hematology/Oncology
- Susan Franco, RN, Manager, Cancer Care Coordination
- Theresa Franco, RN, Vice President, Operations, Buffett Cancer Center
- Robbe Peetz, PA-C and Michelle Holmstrom, PA-C (APP supervisors)
Institutional Overview

Nebraska Medicine is a Health System affiliated with the University of Nebraska Medical Center

Cancer services moved to the new Fred & Pamela Buffett Cancer Center in 2017, combining clinical care, research and healing arts

- 108 inpatient beds (12 ICU) dedicated to hematology/oncology patients
- 24/7 infusion center with 32 private rooms
- 60 clinic rooms
- On-site Lab, Radiology and Radiation Oncology services
- 2 Satellite locations (Bellevue Medical Center and Village Pointe Cancer Center) with clinics and infusion centers available weekdays
- 28 Medical Oncologists on faculty
- 10 inpatient and 10 outpatient APPs
- 45 Nurse Case Managers (BMT, Gen Onc, Surg Onc)
Problem Statement

Case managers and clinic triage nurses take an average of 30 minutes to schedule a same-day appointment for an ill patient to be seen by a provider.

These metrics show that the lack of a standardized process and flow, in addition to the normal daily tasks of the case managers, may be contributing to team stress. This could potentially be contributing to burnout among team members.
Aim Statement

By December 2019, a streamlined/more standardized process will be in place that will improve efficiency of same day ill visits, reducing the time to a plan by 25%.
# Baseline Data Collection/Summary

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Measure:</td>
<td>Time to schedule an ill patient</td>
</tr>
<tr>
<td>Patient population:</td>
<td>Hematology/Oncology patients that needed to be seen by a provider for a same-day ill visit</td>
</tr>
</tbody>
</table>
| Calculation methodology:          | **Start time:** Initial call to schedule patient  
                                 | **End time:** Ill patient appointment scheduled                             |
| Data source:                      | Self-reported call logs from case managers and clinic triage nurses         |
| Data collection frequency:        | Daily (three weeks)                                                         |
| Data limitations:                 | Limited sample size, potential for reporting bias                           |
Baseline Data

Time to schedule appointment

Minutes

Patient #

AVG, 30

ASCO Quality Training Program
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary Measure:</td>
<td>Number of calls to schedule ill patient appointment</td>
</tr>
<tr>
<td>Patient population:</td>
<td>Patients needing same-day ill visit</td>
</tr>
<tr>
<td>Calculation methodology:</td>
<td>Absolute number of calls required to get a same-day ill visit scheduled</td>
</tr>
<tr>
<td>Data source/Collection Frequency:</td>
<td>Sequential patient calls taken over a three week period pre and post test-of-change</td>
</tr>
<tr>
<td>Data limitations:</td>
<td>Sample size</td>
</tr>
</tbody>
</table>
Process Measure

Diagnostic Data

# Calls to schedule appointment

Count

Patient #

AVG 3.57
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary Measure:</td>
<td>Staff Frustration</td>
</tr>
<tr>
<td>Population:</td>
<td>Case Managers, Lead staff nurses, midlevel providers</td>
</tr>
<tr>
<td>Calculation methodology:</td>
<td>Likert Scale-Rating 1- 5 (1 = least frustrated, 5 = most frustrated)</td>
</tr>
<tr>
<td>Data source:</td>
<td>Staff Survey</td>
</tr>
<tr>
<td>Data collection frequency:</td>
<td>Once</td>
</tr>
<tr>
<td>Data limitations:</td>
<td>Subjective by individual</td>
</tr>
</tbody>
</table>
Process Measure

Diagnostic Data

Frustration level for scheduling appointments

Score

Patient #

AVG 2.7
Extended time collecting data in areas not impacted by ultimate solution
Competing/unrelated factors contributing to ability to get a patient seen
Pre-conceived solutions prior to fully evaluating the payoff/priority matrix
Major frustrations by providers in scheduling an ill visit

- Tx center availability
- Tx center lead callback
- Poor communication
- Number of calls
- App pushback
- Lead RN pushback
- Which campus
- Order issues
- New admission process
- False urgency
- Lead RN in staffing

Number of providers who reported frustration

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

ASCO Quality Training Program
Under-appreciation of number of steps and variability in the process
Complex one-to-one feedback loops inefficient and lengthy
All calls needing same day visits direct to Clinic Triage Nurse for scheduling

Clinic Triage Nurses use Voalte texts rather than pager to contact lead RN and APP

Group communication (text? PerfectServe?) to all leads and APPs when seeking appointment time.

Add SAME DAY ONLY ill visits to electronic template

Expand provider hours

Urgent care type team in treatment center, dedicated provider and rooms.

Dedicated ill visit clinic team

Get all involved personnel on PerfectServe

Schedule (fast track) labs prior to visit

High

Impact

Low

Easy

Difficult

Ease of Implementation

Priority / Pay-off Matrix

Possible Countermeasures
## Test of Change

### PDSA Plan

<table>
<thead>
<tr>
<th>PDSA Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Created a triage “group text” on 6 Voalte phones (for 3 Lead RN’s and 3 APP’s) for our three clinical locations</td>
</tr>
<tr>
<td>Trained all providers on use of phone</td>
</tr>
<tr>
<td>Constructed and implemented ideal process map, route same-day ill visit calls to clinic triage nurse</td>
</tr>
<tr>
<td>Constructed and distributed a process/flow map for communication steps with examples based on the ideal process map</td>
</tr>
</tbody>
</table>
Under-appreciation of number of steps and variability in the process
Complex one-to-one feedback loops inefficient and lengthy
More streamlined communication plan
Feedback loops are simultaneously inclusive to all sites
# Test of Change

## PDSA Plan

<table>
<thead>
<tr>
<th>Date</th>
<th>PDSA Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov 2019</td>
<td>1. If unable to schedule ill visit case manager will route same-day ill visit calls to Clinic Triage Nurse</td>
</tr>
<tr>
<td></td>
<td>2. Create a triage group text on Voalte phones to lead RN’s and APP’s</td>
</tr>
<tr>
<td></td>
<td>3. Create an ideal process map for flow of communication</td>
</tr>
<tr>
<td></td>
<td>4. Collect post test-of-change data for three weeks</td>
</tr>
</tbody>
</table>
Change Data

Time to schedule an appointment
(I Chart - 3 sigma)

PRE

POST

UCL, 83.82
UCL, 72.81
CL, 30.39
CL, 24.05
LCL, 0.00
LCL, 0.00

21% ↓

Minutes
Patient #
Change Data

# of calls to schedule an appointment
(C Chart - 3 sigma)

PRE

POST

59% ↓

Count

Patient #
Frustration levels for scheduling appointments
(C Chart - 3 sigma)

PRE

POST

41% ↓

Patient #

Count

UCL, 7.62

CL, 2.7

LCL, 0.00

UCL, 5.46

CL, 1.6

LCL, 0.00
# Sustainability Plan

<table>
<thead>
<tr>
<th>Item</th>
<th>Owner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review post test-of-change survey feedback from providers</td>
<td>Entire Group</td>
</tr>
<tr>
<td>Evaluate costs of additional Voalte phones</td>
<td>Greg Bociek</td>
</tr>
<tr>
<td>Educate staff to get/consider Voalte application on cell phone to</td>
<td>Teri Schuldt</td>
</tr>
<tr>
<td>improve ease of use (all or none)</td>
<td>Greg Bociek</td>
</tr>
<tr>
<td>Alter ideal process map further by routing all same-day ill calls to</td>
<td>Teri Schuldt</td>
</tr>
<tr>
<td>clinic triage nurse before attempting to schedule appointment in</td>
<td></td>
</tr>
<tr>
<td>Epic</td>
<td></td>
</tr>
</tbody>
</table>
Conclusions

• Inefficiency/lack of standardization in managing ill-call process led to frustration and delays

• Use of a prioritization/payoff matrix led us through a thorough evaluation of possible solutions

• Developing a standardized process (ideal process map) for handling ill calls in conjunction with a group texting tool (test of change; Voalte cell phones) led to improvements in the process, efficiency (time) of care, and improved frustration of providers

• Explore the expansion of Voalte messaging to apply to other aspects of communication, e.g. adding on blood/chemo visits