Improving New Patient Access by Decreasing Missed Appointments to First Visit

Sirisha Karri MD
Valorie Harvey, Service Line Administrator
Susanne Evans, Manager
Tiffany Williams, Quality Manager
Parkland’s Mission is Dedicated to the health and well-being of individuals and communities entrusted to our care for the growing population of Dallas County.

- 862 private Bed Hospital
- 2,355 new cancer cases; 2,057 analytic cases
- 58.8% uninsured population
- Stage at presentation: stage I at 21.6%, stage II at 16.5%, stage III at 14.3%, and at stage IV at 22.9%

Top 5 Disease Sites

<table>
<thead>
<tr>
<th>Disease Site</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast</td>
<td>394</td>
</tr>
<tr>
<td>Colorectal</td>
<td>197</td>
</tr>
<tr>
<td>Lung</td>
<td>183</td>
</tr>
<tr>
<td>Prostate and Liver</td>
<td>126</td>
</tr>
<tr>
<td>Non Hodgkin Lymphoma</td>
<td>120</td>
</tr>
</tbody>
</table>
Team Members

Dr. S. Karri, MD (Core)
V. Harvey, MBA, SLA (Core)
Tiffany Williams, MSN, Quality (Core)
Susanne Evans, BSN, Manager (Core)
Dr. John Cox, DO
Arif Kamal, MD Physician - QTP Coach
Steve Power, MBA – QTP Coach

Susan Lamb, MS,NP GYN ONC Manager
Joanna Figueroa, RN Navigator, GYN ONC
Kristina Longo, NP GYN ONC
Lila Martinez, Surgery RN Navigator
Dianne James, GYN ONC IP
John Porro NP, Director of Hospitalist Service
Shirly Koduvathu, RN Manager, IP Hem Onc
Sudarshan Pathak, RN, HEM ONC IP
Sarita KC, RN, Nurse Educator
Marcie Crymes, Case Manager
Elizabeth Laney, Care Coordinator
Winnifred Simon, RN, Oncology Clinic
Alisha Hill-McElroy, Care Coordinator

Gratitude to Flor Florido, Joanne Figueroa, Jessica Torres and Adrian Orozco for conducting patient surveys.
Analysis of the new appointments scheduled for newly diagnosed cancer patients had a 39% incomplete rate for the first scheduled appointment.

- 61% Completion
- 27% Cancelled
- 13% No Show

• Analysis includes medical/surgical oncology and GYN oncology clinics
• Evaluation period May 01 – Jul 31, 2016
Baseline Diagnostic Data: 1,301 New Patient Appointments Sched btw May – Jul 2016

Total of 1,301 New Patient Appointment Scheduled Between May 2016 – Jul 2016

<table>
<thead>
<tr>
<th></th>
<th>Total # of Apts.</th>
</tr>
</thead>
<tbody>
<tr>
<td>May</td>
<td>472</td>
</tr>
<tr>
<td>Jun</td>
<td>422</td>
</tr>
<tr>
<td>Jul</td>
<td>407</td>
</tr>
</tbody>
</table>

**Schedule Apts. Per Month**

- May: 472
- Jun: 422
- Jul: 407

**Total Appointments**

- 789 Completed
- 345 Cancelled
- 166 No Showed
Baseline Diagnostic Data

Unique Pts. to Appoints.

Ratio of 1:1.5

Number of Appointments Scheduled to Completed Visit

12% of the total appoints has more than 1 scheduled
Process Map (Pre-intervention)

Medical Oncology

Start:
- Referral Placed
- Routes to Clerical Review Pool

Assess Referral Status
- Funding?
- Demographics Correct?
- Medical Record Available?
- Patient meets scheduling criteria?

Schedule patient and FC Appointment
- Document change in Telephone Encounter

Contact referring external office/pathology department for the records (fax or scan)
- Route to Physician for Review

Schedule Appointment
- Appointments kept?

New Patient Appointment Scheduling
- Appointment kept?

Care Established
- Reschedules/Notifies Patients via Phone or Mail
- Sends in-basket message regarding No Show to referring provider

Financial Counselor (FC)
- Screen for funding +
- Updates Patient Demographics
- Funding Available?
- Communicates to CC

Forward for administrative review
- Admin Approves

Review Referral +
- Physician final disposition +

Red highlights indicate opportunities for improvement
Cause & Effect Diagram

First Scheduled Appointments With a 39% incomplete Rate

32% (11/34) of the reasons correlated with the EHR documentation and survey results

- MDT Brainstorming session
- Red Bold Italics = current interventions
- Red Highlights = To be addressed in the project
“Other” status code used 109 times with 65 blank reasons, remaining 44 inconsistent and unquantifiable

No shows reason are not captured in the EHR, therefore not included in this analysis; however assessed as part of the patient survey.
Data Validation Survey
Voice of the Patient

Survey of Missed Appointments

<table>
<thead>
<tr>
<th>Reason for Missed Apts.</th>
<th># of Patients</th>
<th>Cumulative Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancelled by clinic</td>
<td>38</td>
<td>0.00</td>
</tr>
<tr>
<td>Appt moved to other location</td>
<td>37</td>
<td>5.00</td>
</tr>
<tr>
<td>Transportation</td>
<td>13</td>
<td>10.00</td>
</tr>
<tr>
<td>Personal/other</td>
<td>13</td>
<td>20.00</td>
</tr>
<tr>
<td>In hospital on day of</td>
<td>10</td>
<td>30.00</td>
</tr>
<tr>
<td>No reason documented</td>
<td>10</td>
<td>40.00</td>
</tr>
<tr>
<td>Palliative/hospice care</td>
<td>7</td>
<td>50.00</td>
</tr>
<tr>
<td>Financial</td>
<td>6</td>
<td>60.00</td>
</tr>
<tr>
<td>Seeing outside</td>
<td>6</td>
<td>70.00</td>
</tr>
<tr>
<td>Health/ill on day of</td>
<td>3</td>
<td>80.00</td>
</tr>
<tr>
<td>Pt out of town</td>
<td>3</td>
<td>90.00</td>
</tr>
<tr>
<td>Pt in jail</td>
<td>2</td>
<td>100.00</td>
</tr>
<tr>
<td>Pt unaware of appt</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Referral cancelled</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Pt moved out of town</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Sample size = 154
Contact = 92
Chart audit = 62
<table>
<thead>
<tr>
<th>Reason</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>No reason documented-other/blank/personal</td>
<td>132</td>
</tr>
<tr>
<td>Appointment moved to sooner date</td>
<td>37</td>
</tr>
<tr>
<td><strong>Process Related</strong></td>
<td></td>
</tr>
<tr>
<td>Reassign</td>
<td>46</td>
</tr>
<tr>
<td>Scheduling errors</td>
<td>46</td>
</tr>
<tr>
<td>Cancelled by clinic</td>
<td>38</td>
</tr>
<tr>
<td>Provider determined</td>
<td>21</td>
</tr>
<tr>
<td>Provider unavailable</td>
<td>16</td>
</tr>
<tr>
<td>Workup needed</td>
<td>15</td>
</tr>
<tr>
<td><strong>Patient Related</strong></td>
<td></td>
</tr>
<tr>
<td>Hospital admission</td>
<td>33</td>
</tr>
<tr>
<td>Pt unavailable</td>
<td>30</td>
</tr>
<tr>
<td>Transportation</td>
<td>15</td>
</tr>
<tr>
<td>Financial</td>
<td>7</td>
</tr>
<tr>
<td>Palliative/hospice care</td>
<td>6</td>
</tr>
<tr>
<td>Pt refused</td>
<td>6</td>
</tr>
</tbody>
</table>
Baseline Diagnostic Data
XmR Chart
May – July 2016

Pre-interventions

Number of Missed Apts.

Appointment Days

Pre-interventions

Appt.
Mean
Lower Control
Upper Control
To reduce missed appointments for new patients in the PHHS Oncology clinics from 39% to 20% within 6 months
Jan. 31, 2017
Measures

- **Measure**: All new appointments with missed visit status
- **Patient Population**: All scheduled new appointments
- **Calculation Methodology**: 
  
  # of new appointments with a status of cancel or no show/ Total scheduled new appointments

- **Data Source**: EPIC (electronic health record) Patient Surveys
- **Data Collection Frequency**: Weekly Monthly Annually
- **Data Quality (limitations)**:
  - Inconsistent/inaccurate documentation
  - Variation in workflows
Baseline Data Summary

- 39% Missed Appointment rate for “New Patients”
- 70% avoidable
- 7% Unavoidable
- 23% Undefined
- Top 6 status codes utilized, point to process issues
Prioritized List of Changes (Priority/Pay –Off Matrix)

<table>
<thead>
<tr>
<th>High Impact</th>
<th>Easy</th>
<th>Item</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Developed New Patient Orientation Booklet</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Trained all nursing staff in oncology clinics and on IP units most commonly admitting cancer patients</td>
<td>December 18, 2016</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Low Impact</th>
<th>Ease of Implementation</th>
<th>Item</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Reduced appointment status codes</td>
<td>January 18, 2017</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Standardize Workflows</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Transportation Flyer</td>
<td></td>
</tr>
</tbody>
</table>

|                   | Difficult              | Item | Date |
|                   |                        | Tools developed and trained OP and IP staff in identifying barriers to care, w/ actionable’s at point of service (tools = IP&OP discharge checklist, Oncology critical numbers) | December 18, 2016 |

Hardwiring performance:
- assign nurse liaison to IP unit
- Implement and integrate missed appointment report
- Retrospective chart review of new patient visits per check list
- Implement IP order as part of the care plan

|                   |                      | Date |
|                   |                      | January 18, 2017 |

PDSA#1 Nov 9, 2016

PDSA#2 Dec 18, 2016

PDSA #3 Jan 18, 2017
Materials Developed

New Patient Booklets

Table of Contents

- Parkland Cancer Services
- What Is Cancer
- Multidisciplinary Care
- Multidisciplinary Team
- Diagnosing Cancer
- Staging Cancer
- Treating Cancer
- Chemotherapy
- IV Access
- Difference Between Cure and Remission
- Common Symptoms
- Medication Refills
- Clinical Trials
- Language Interpretation
- Mychart Enrollment
- Parkland Essentials (Clinic Information)

Transportation Flyer

TRANSPORTATION OPTIONS

Parking Options:

- Valet Parking Services
- Emergency Parking Lot
- Transportation Benefits through Insurance Coverage
- American Cancer Society (ACS)
- DART

Map provided on the back page
Materials Developed

Discharge Check List / Cancer Contacts (Inpatient and Outpatient)

**Oncology Inpatient Check List Prior to Discharge**

**Top Priorities**

- Assess Barriers for Interventions
  - Language
  - Transportation
  - Sensory Impairment
  - Cognitive Impairment
  - Needs
  - Home Health Needs
  - Support Network
  - Adult/Child care Needs
  - Financial
  - Release of Information Request Form

- Ensure correct Demographics
  - Verify correct phone number and address
  - Verify emergency contact information

- Establish Follow up Care
  - Ensure established oncology patients have a return clinic appointment
  - Ensure newly diagnosed patients have an active referral to the appropriate oncology clinic
  - Ensure all patients discharge with pending path has an appointment with the referring provider or to the oncology clinic
  - Schedule follow up or new PC appointment as required

**Financial Screening**

- Check coverage status
- Unfunded Dillist County request
- Review of funded programs
- Review of insurance status
- Unfunded
- Over-income
- Review of funding opportunities
- Review of resources

**Tools Available**

- List of Transportation options
- New Patient Brochure
- PPA required document
- List of funding approved
- County resource list

**Aims**

- To provide a multidisciplinary check list for all IP units to ensure maximum transition of care for the oncology patients from IP to OP
- Purpose: To provide a guide to the new oncology units to assist with the discharge process to prevent missed opportunities or unnecessary delays in care

**Book Markers**

**Oncology Check List**

- Access Barriers
- Ensure Correct Demographics
- Establish Financial Counseling
- Establish follow up care
- Educate Oncology Contacts Oncology Clinic

**Case Management**

- 214-590-3808
- RN HIV Case Mgmt
- 469-419-6334
- RN Cancer Mgmt

**Nutritionist**

- 214-590-4024 office

**Financial Counseling**

- 214-590-4000
- Main OPF
- 469-418-2032
- Main NPH

**Language Services**

- 214-590-5846 NPHEL
- 214-590-6081 WIEHS

**American Cancer Society (ACS)**

- 214-590-5388 office

**Oncology GYN Oncology**

- Manager: Susanne Evans, Oncology Clinic (214) 590-8608
- FEMALE Green Infusion Center (214) 590-6597
- Susan Lamb GYN Onc Outpatient (469) 1375
- Donna James, GYN ONC Specialist, (469) 429-6744

**GYN Oncology**

- Scheduling 214-590-3500
- GYN ONC Navigator 469-419-1300
# PDSA Plan (Test of Change)

<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>Nov 9, 2016</td>
<td>Aligned workflows between oncology clinics (med/surgery/GYN oncology, established expectations for scheduling new pts)</td>
<td>Positive reduction in variability</td>
<td>1. Clean up of EHR status codes 2. Defined IP &amp; OP prescheduling task and expectations for scheduling new appt. 3. Staff training</td>
</tr>
<tr>
<td>Dec. 18, 2016</td>
<td>Educate targeted staff on workflow; placing reference tools at finger tip</td>
<td>A decreased in control chart variations</td>
<td>1. Developed written reference and educational materials outlining expectations for staff and patients</td>
</tr>
<tr>
<td>Jan. 18, 2017</td>
<td>Real time interaction with IP staff, weekly reports for feedback and F/U for accountability</td>
<td>TBD</td>
<td>1. Nurse Liaison 2. Weekly audits of missed appts. 3. Feedback reporting F/U</td>
</tr>
</tbody>
</table>
Change Data PDSA #2
Appointment Status Post Intervention

Nov 9- Dec 30, 2016

- Completed: 404
- Cancel: 189
- No Show: 89

Total Sched. New Apts. = 682
Missed Appoints = 287 (41%)
Change Data PDSA #3
Jan 19, 2017 – ongoing

- **1/19/2017**: Establish a Liaison/Navigator for new patient access
- **1/23/2017**: Track all missed appoints for new visits daily/wkly/monthly
- **2/6/2017**: Interactive Patient Scheduling
- **2/15/2017**: Balancing Templates to New Pt. Demand
- **3/15/2017**: Establish Metrics/Dashboard Reporting
- **7/31/2017**: Hard wire Performance

**Proactive** | **Retroactive** | **Interactive** | **Balancing** | **Transparencies** | **Standardization**
## Conclusions

### Assessment

- Missed appointments essentially demonstrates no change
- A 50% reduction in baseline volume is required to reach goal; logically appears obtainable
- Control charts indicate common cause variations; improving process stability
- Time lines for achieving goal was unrealistic
- Pre-intervention variable changes; questionable Hawthorne effect V.s impact of sample size?

### Lessons Learned

- Consider other influencing factors with high probability to impact outcomes
- Training on other analytic tools
- A more scientific analysis to determine the true capability
- Longitudinal analysis & study required
- Importance of mapping project phases, mapping to time lines
- People know better; They do better
- A need to identify and isolate common causes for proper intervention planning
### Next Steps/Plan for Sustainability

1. Continue to reinforce standard expectations, definitions, and standard processes.

2. Re-evaluate set of controls (financial reviews, pt. orientation, barrier assessment & applied actions, and reason trends)

3. Design and implement small scale studies for key critical process parameters to identify impact and acceptable performance range.

4. Integrate monthly reporting to establish a monitoring and control systems, and transparencies.

### Simplifying New Patient Access to Care

Providing:

1. Simple and Easy
2. Smooth transitions
3. Coordinated care