Facility: Lincoln Medical and Mental Health Center
Presented By: Doctors Council Member: Menachem Gold, MD
Administration: Hashimu Larry and Eddy Vicente Associate Radiology Supervisors
Project Title: Improving Patient Wait Time Satisfaction in Radiology
Aim Statement (time –specific, measurable, define patients affected):
3 Questions of the IHI Model of Improvement:

AIM/ What are we trying to accomplish:
• Communicate with 90% of patients waiting for more than 40 minutes within 3 months of implementation

MEASURES/ How will we know a change is an improvement:
• One of the 3 measures Press Ganey used for Radiology assessment is a Waiting Time Score of 0-100.
• Historically, our outpatient scores range between 65 and 75, ED between 60 and 70.
• Goal is to improve the Radiology Press Ganey mean wait time scores to consistently 80% or higher by July 2017 (6 months after implementation)
Press Ganey Score for Waiting Time

May-16: 71.00%
Jun-16: 74.60%
Jul-16: 60.50%
Aug-16: 62.50%
Sep-16: 65.10%
Oct-16: 71.20%
Nov-16: 70.30%
Dec-16: 73.70%
Jan-17: 76.50%
CHANGE/ What change can we make that will result in an improvement?

- Goal is to improve communication between radiology staff and patients waiting for radiological exam after registration
- Provide patients upon arrival with an expected wait time
  - Patient does not feel obligated to stay in radiology department
  - Patient can get something to eat or feed the parking meter
  - Patient will be notified of free hospital WiFi
- Apologize to patients who have been waiting for more than 40 minutes and offer an updated estimated wait time
• CHANGE/ What change can we make that will result in an improvement?
  • Project began on February 1\textsuperscript{st} 2017
  • At first the clerks were asked to keep a log of patient arrival time and how long patients had been waiting

<table>
<thead>
<tr>
<th>CAT / X-RAY</th>
<th>Accession Time</th>
<th>Approx. Wait Time (Min)</th>
<th>Talk to Patient Time</th>
<th>Manager Initials</th>
<th>Tech call Time</th>
<th>Real Wait Time</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PATIENT NAME:</strong></td>
<td>Time pt. is registered</td>
<td>Previous RWT + 10 minutes</td>
<td>Acc. Time + 40 minutes</td>
<td>Filled by Tech</td>
<td>Tech Call - Acc. Time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jon Doe</td>
<td>8:00</td>
<td>10 Mins</td>
<td>8:40</td>
<td></td>
<td>8:06</td>
<td>6 Mins</td>
<td></td>
</tr>
<tr>
<td>Tim Doe</td>
<td>8:10</td>
<td>16 Mins</td>
<td>8:50</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
• PDSA 1:
  • We realized:
    • that the vast majority of our patients were not waiting for 40 minutes so an intervention at this time point would not lead to a significant improvement in our Press Ganey scores
    • It was a significant burden on the clerks to continually keep tabs on patients’ wait times
PDSA Cycle 2- March 1st

• We decided that a 30 minute time point would be more appropriate for intervention
• Simplified log sheet to the one below:

<table>
<thead>
<tr>
<th>DATE: ________________</th>
<th>#1</th>
<th>#2</th>
<th>#3</th>
<th>#4</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAT / X-RAY</td>
<td>Accession Time</td>
<td>Time Checked (every 30 Mins)</td>
<td>Speak to Pt. Roll Call</td>
<td>Wait Time (every 30 mins)</td>
</tr>
<tr>
<td>PATIENT NAME:</td>
<td>Time pt. is registered</td>
<td>On the Half-Hour</td>
<td>Manager Initials</td>
<td>1st Pt. Acc.-Current Time</td>
</tr>
<tr>
<td></td>
<td>8:30</td>
<td>10 Minutes</td>
<td>9:00</td>
<td>9:30</td>
</tr>
</tbody>
</table>
Leading Performance Indicator and Goal

MONTHLY TRACKING OF PATIENTS SPOKEN TO WHO WAITED OVER 40/30 MINUTES

- Feb-17: 37% of 49
- Mar-17: 68% of 92
- As of 03/20/17: 74%
- Goal: 90%
PDSA 3:

• The revised log sheet was still cumbersome for the clerks as they had to check every half hour which patients had been waiting for more than 30 min
• We have since introduced a new process
PDSA 3

• Upon arrival to the 1C3 waiting area, patients are now given the following paper:

<table>
<thead>
<tr>
<th>MR#_________ Arrival Time:_________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our goal is for you to be called within 30 minutes, if you have not been called by _________ please approach our clerical staff for an update.</td>
</tr>
<tr>
<td>Thank you</td>
</tr>
<tr>
<td>_________ Additional encounter.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MR#_________ Tiempo de Llegada:_________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nuestra meta es que usted sea atendido en los proximo 30 minutos, si usted no ha sido llamado a las _________ hable con nuestra secretaria para una actualizacion.</td>
</tr>
<tr>
<td>Thank you</td>
</tr>
<tr>
<td>_________ Aproximacion adicional.</td>
</tr>
</tbody>
</table>
PDSA 3

- Current log sheet:
Leading Indicator Performance and Goal

MONTHLY TRACKING OF PATIENTS SPOKEN TO WHO WAITED OVER 30 MINUTES

<table>
<thead>
<tr>
<th>Month</th>
<th>Goal</th>
<th>Feb-17</th>
<th>Mar-17</th>
<th>Apr-17</th>
<th>May-17</th>
<th>Jun-17</th>
<th>Jul-17</th>
<th>Aug-17</th>
<th>Sep-17</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>18 Of 92</td>
<td>68 Of 164</td>
<td>144 Of 166</td>
<td>141 Of 166</td>
<td>81 Of 85</td>
<td>69 Of 71</td>
<td>84 Of 92</td>
<td>72 Of 81</td>
</tr>
<tr>
<td></td>
<td></td>
<td>37%</td>
<td>74%</td>
<td>87%</td>
<td>85%</td>
<td>95%</td>
<td>97%</td>
<td>91%</td>
<td>89%</td>
</tr>
</tbody>
</table>
Emergency Dept. Wait Time Score

Red line- prior 7 month average
Medical Practice Wait Time

GOAL

77.4%
Summary

• Successes:
  • Improved communication between radiology staff and patients in waiting area with a simple effective intervention
  • Improved overall PG wait time scores for both medical practice and ED
  • Improved PG scores for patient comfort and courtesy
  • Decreased number of patient complaints to clerk
  • Improved engagement of radiology staff (clerks and technologists)

• Future:
  • Maintain increased engagement of radiology staff over time
  • See if other departments may be able to implement a similar process