Every Person, Every Time

Standardizing Patient Flow from Nursing to Radiology at Kingsbrook Jewish Medical Center

A Labor Management Partnership for Patient Centered Care

Health Care Reform Learning Symposium
The Sheraton New York Hotel and Towers
January 19, 2012
Agenda

• Goals and Outcomes
  ▫ Goals
  ▫ Patient Experience
  ▫ Delays and Cancellations
  ▫ Other Outcomes

• What We Did
  ▫ Activities and Timeline
  ▫ Standardization
  ▫ Innovations
  ▫ Current Priorities

• Tools We Used
  ▫ Examples

• What’s Next
  ▫ Rollout
  ▫ Metrics on LOS
  ▫ Potential Revenue

• What We Learned
  ▫ Partnership Values
  ▫ Critical Elements
Goals and Outcomes
Improvement Metrics

Goal

- Reduce transport delays from 35% to 20% and cancellations from 25% to 15% between Briger 3 and Radiology by December 20.

Measure of Success

- Improve the HCAHPS scores on “would recommend” and “rate the hospital” by 10% in Briger 3.
Patient Experience

• Continue to work on HCAHPS

• In house survey, some improvement seen:
  ▫ nurses explaining the procedure
  ▫ perceived wait time for transport from radiology to bed.
**Briger 3 Trend Line Report - Would Recommend**

Would you recommend this hospital to your friends and family?

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Q1 2011</th>
<th>Q2 2011</th>
<th>Q3 2011</th>
<th>Q4 2011</th>
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<tbody>
<tr>
<td>Briger 3</td>
<td>60.8%</td>
<td>56.5%</td>
<td>59.5%</td>
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<tr>
<td>n-Size</td>
<td>41</td>
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<tr>
<td>NRC Average</td>
<td>70.3%</td>
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<td>59.3%</td>
<td>59.3%</td>
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<td>32,026</td>
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<td>56.4%</td>
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**Briger 3 Trend Line Report - Rate Hospital**

Using any number from 0 to 10, where 0 is the worst hospital possible and 10 is the best hospital possible, what number would you use to rate this hospital during your stay?

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Q1 2011</th>
<th>Q2 2011</th>
<th>Q3 2011</th>
<th>Q4 2011</th>
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<tbody>
<tr>
<td>Briger 3</td>
<td>58.0%</td>
<td>45.5%</td>
<td>54.5%</td>
<td>50.5%</td>
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<td>n-Size</td>
<td>36</td>
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<td>19</td>
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<tr>
<td>NRC Average</td>
<td>66.4%</td>
<td>66.4%</td>
<td>66.7%</td>
<td>66.7%</td>
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<td>NY Average</td>
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<td>32,521</td>
<td>34,106</td>
<td>33,918</td>
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<td>New York Metro Average</td>
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<td>50.2%</td>
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<td>16,026</td>
<td>17,462</td>
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</table>

**Notes:**
- Warning: n-Size is low.
Q1: Nurse took time to explain
Q2: Transporter treated me with courtesy
Q3: Radiology/tech treated me with courtesy
Q5: I was transported back without delay

Response to Each Survey Question (n=13)

Response to Each Survey Question (n=10)
Q4: I was transported back without delay to my hospital room after test.

**Perceived waiting time for transport from procedure to bed**

**PRE**
- <10 min: 3
- 10-30 min: 6
- 30-1 hr: 4

**POST**
- <10 min: 2
- 10-30 min: 6
- 30-1 hr: 1
- >1 hr: 1

(n=13)
Weekly Percentage of Transport Delays and Cancellations from Briger 3

<table>
<thead>
<tr>
<th>Performance week</th>
<th>2011 Delay</th>
<th>2011 Cancellation</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/5-10/5</td>
<td>34.9</td>
<td>25</td>
</tr>
<tr>
<td>10/6-10/12</td>
<td>32.5</td>
<td>27.8</td>
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<tr>
<td>10/13-10/19</td>
<td>29.4</td>
<td>23.7</td>
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<td>10/20-10/26</td>
<td>32.2</td>
<td>23.7</td>
</tr>
<tr>
<td>10/27-11/2</td>
<td>28.4</td>
<td>15.5</td>
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<tr>
<td>11/3-11/9</td>
<td>31</td>
<td>25.4</td>
</tr>
<tr>
<td>11/10-11/16</td>
<td>30.2</td>
<td>24.2</td>
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<tr>
<td>11/17-11/23</td>
<td>34.6</td>
<td>24.2</td>
</tr>
<tr>
<td>11/24-11/30</td>
<td>22.4</td>
<td>14.3</td>
</tr>
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<td>12/1-12/7</td>
<td>14.3</td>
<td>24.3</td>
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<td>12/8-12/14</td>
<td>24.3</td>
<td>10.5</td>
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<td>12/15-12/21</td>
<td>5.8</td>
<td>12.5</td>
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<tr>
<td>12/22-12/28</td>
<td>12.4</td>
<td>24.9</td>
</tr>
<tr>
<td>12/29-1/04</td>
<td>34.6</td>
<td>33.5</td>
</tr>
</tbody>
</table>

Legend:
- **Dry run week**
- **Performance week**

Percentage of Delays and Cancellations

X-axis: Weekly Percentage
Y-axis: Percentage of Transport Delays and Cancellations from Briger 3
Other Outcomes

1. Increased communication
2. Increased staff satisfaction
3. An educated Kaizen team
4. A different mindset
What We Did
Activities

- Launched the team
- Mapped the current workflow
- Defined the goal
- Established the timeline
- Began weekly team meetings
- Mapped out future workflow
- Identified obstacles and solutions
- Addressed low hanging fruit
- Communicated project goals with peers through 15 min huddles
- Met with managers to align project goals with daily operations
- Agreed on standardized workflow
- Held Sponsor’s Review
- Signed a Service Level Agreement
- Involved Physicians
- Presented at Dept Head and Dept of Medicine Meetings
- Trained Kaizen team on SLA
- In-serviced all staff, one on one
- Met round the clock with all Radiology, Nursing, Transport staff
- Put up the Kaizen boards
- Rolling out the standard flow
- Daily analysis of delays and cancellation reports
- Peer to peer coaching on group and staff performance
- Continuous tracking of macro and micro data
- Continuous process improvement
- Effective utilization of information technology
- Expansion to other units and departments
- Regular meetings with Sponsors
Identified Common Barriers

1. Timely notification to nursing staff
2. Communication to patients
3. Physician’s checklist
4. Equipment not available
5. Batched schedules in Teletracking
6. Waiting for charts
7. No assistance for transporters
8. Lack of knowledge and access on information systems
## Standardized the Work

<table>
<thead>
<tr>
<th>Nursing</th>
<th>Radiology</th>
<th>Transport</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Communication tree between physicians,</td>
<td>• Protocol for entering appointments to avoid batching and scheduling errors</td>
<td>• Delays &amp; cancellation procedures</td>
</tr>
<tr>
<td>nursing, radiology and transport staff</td>
<td>• Mode of patient travel</td>
<td>• Use of Teletracking board for staff assignment</td>
</tr>
<tr>
<td>• Nursing clerk use of Patient Tracking Portal to monitor transport status</td>
<td>• Feedback to physicians regarding orders</td>
<td>• Script</td>
</tr>
<tr>
<td>• Timely entry of shift assignment</td>
<td>• Access to Clinician’s View (EMR)</td>
<td>• Close monitoring of transport analysis report, timely feedback</td>
</tr>
<tr>
<td>• Active involvement of clerks on</td>
<td>• Access and use of Patient Tracking Portal to monitor transport status</td>
<td></td>
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<tr>
<td>communicating job request from appointment</td>
<td>• facilitate scheduling of appointments</td>
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<tr>
<td>to actual dispatched</td>
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<tr>
<td>• Close monitoring of delay reasons</td>
<td></td>
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</tbody>
</table>
Making Innovations

Nursing
- Increasing contrast par level
- RN Beepers per district
- Cleaned up patient tracking portal

Radiology
- Access to Clinician’s View on patient tracking portal for Radiology Techs
- Fax informed consents/eliminate written consents

Transport
- Delay codes revised
- Peer coaching on performance
- Kaizen team access to Teletracking reports
- Upgraded codes on return

Physicians
- New resident orientation will include a Radiology tech tour of the facility
Current Priorities

• Monitoring the impact of upgrading the job requests on patient return from radiology and other clinical modalities to nursing units

• Gathering data on one of the main causes of delays, “equipment availability,” to recommend solutions

• Making an impact on patient satisfaction (HCAHPS)

• Expanding the project to other units
Tools We Used
Flow of Patient Transport from Nursing to Radiology

- A map of the process “as it should be.”

- It clarifies the work and communication tree between physicians, nurses, patient care techs, clerks, radiology and transport staff.
The Service Level Agreement (SLA)

- A binding contract between the Executive sponsors, stakeholders and frontline staff.

- Articulates the standard flow of patient transport from nursing to radiology.

- Can continuously evolve and rewritten as processes improve.

<table>
<thead>
<tr>
<th>Approver</th>
<th>Title</th>
<th>Signature</th>
<th>Date</th>
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</thead>
<tbody>
<tr>
<td>DR. JANE LEDERER</td>
<td>VP AND CNO, NURSING</td>
<td></td>
<td></td>
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<tr>
<td>ALBERT BELARO</td>
<td>AVP, NURSING</td>
<td></td>
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<tr>
<td>DOROTHY GRAHAM HANNAH</td>
<td>AVP, NURSING</td>
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<tr>
<td>JOHN MCKEON</td>
<td>VP OF HUMAN RESOURCES</td>
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<tr>
<td>PETER SCAMINACI</td>
<td>AVP OF CLINICAL OPERATIONS</td>
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<tr>
<td>DR. KURT KODROFF</td>
<td>VP OF QUALITY MANAGEMENT</td>
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<td>BRUCE RICHARDS</td>
<td>EVP 1199 SEIU</td>
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<td>JOSEPH SIMEON</td>
<td>KAIZEN LEAD</td>
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<tr>
<td>JACINDA BROWNE</td>
<td>KAIZEN CO LEAD</td>
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</table>

Overview

This document represents a Service Level Agreement ("SLA") between the Patient Transport Department, Department of Nursing and Department of Radiology for the provision of an efficient transport services required to move patients between Briger 3 and Radiology Service Areas for procedures and tests.

This agreement remains valid until superseded by a revised agreement mutually endorsed by the stakeholders. Changes will be recorded in the Amendment section of this Agreement and will take into effect upon mutual endorsement by the primary stakeholders. The document will outline the expectations from each department and supersedes current processes and procedures unless explicitly stated therein to achieve the goal of reducing the percentage of delays and cancellations from 33% to less than 20%.
A Stakeholder Analysis

- A tool for mapping who the stakeholders are, how they view the initiative and what team members need to do to win their commitment to change.

<table>
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<tr>
<th></th>
<th>Key Stakeholder</th>
<th>Role in Organization</th>
<th>Power/Influence Category</th>
<th>Impact of Project on Stakeholder (H, M, L)</th>
<th>Strongly Opposed</th>
<th>Opposed</th>
<th>Neutral</th>
<th>Supportive</th>
<th>Strongly Supportive</th>
<th>Reasons for Resistance or Support</th>
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</table>
Communication Tools for 15 Minute Huddles

- Some examples of messages to cover
- Used with an attendance sheet to track outreach on all staff
Messenger Script

- Guidelines for communicating to patients and to nursing and medical staff

- Can be individualized where the transporters can use their own words to communicate the same messages
Kaizen Boards

• A tool for communicating goals, progress, performance metrics and any information related to the project in every department or unit.

• Has been utilized during peer in-services/huddles.
What’s Next

EXPANDING THE LABOR-MANAGEMENT PARTNERSHIP
Delays are significantly reduced but overall hospital delays are unmoved

### Average Delays on Briger 3

### Hospital Std Dev for Response & Completion

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>Response Time</th>
<th>Std Dev</th>
<th>Ave Completion</th>
<th>Std Dev</th>
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<td>32</td>
<td>21.29</td>
<td>38</td>
<td>20.38</td>
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<tr>
<td>Nov</td>
<td>27</td>
<td>19.2</td>
<td>35</td>
<td>20.42</td>
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<tr>
<td>Dec</td>
<td>22</td>
<td>19.68</td>
<td>31</td>
<td>18.23</td>
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</table>
• Standardize the flow of patient transport throughout nursing
• Improve patient experience
  ▫ 2 to 3 units at a time
  ▫ 6 weeks to prepare
  ▫ 3 cycles
  ▫ 4 months
Revenue Potential
Quality Outcomes

• With other ongoing hospital initiatives to reduce LOS, standardizing transport flow has also contributed to reducing LOS in Briger 3 in December.

• If implemented and controlled unit by unit throughout the hospital, the potential for increasing bed capacity and revenue is substantial.

• Efficient flow also results in faster patient disposition, better clinical outcomes and a positive patient experience.
Summary for LOS, Briger 3, 10/1/11-11/30/11
Phase = 1

Anderson-Darling Normality Test
A-Squared  0.65
P-Value    0.084

Mean       7.1049
StDev      1.1374
Variance   1.2938
Skewness   0.379794
Kurtosis   0.315322
N          61

Minimum    4.8200
1st Quartile 6.5550
Median     6.9800
3rd Quartile 7.7050
Maximum    10.2700

95% Confidence Interval for Mean
6.8136    7.3962
95% Confidence Interval for Median
6.7741    7.2219
95% Confidence Interval for StDev
0.9654    1.3848
Panel variable: Phase
A Reduction in LOS

- Narrower standard deviation
- Lower mean
- LOS decreased by one day in Briger 3

Reducing LOS = Better Financial and Patient Outcomes
What We Learned
Partnership Values

Invest in the workforce
• Staff engagement
• Staff leadership development

Deliver excellence together
• Joint union and management leadership
  ▫ Management accountability
  ▫ Union accountability

Focus on patients and the community

Focus on innovation and results
Critical Elements

1. A team of frontline staff and supervisors
2. Results-oriented goal based on strategic priorities
3. Data-driven change
4. Experimentation and learning
5. Use of technology
6. Delegate and Executive sponsorship
7. Communication at all levels
8. Time and commitment
"Yes, you need the water. Yes, you need the sun. But that alone won't give you the plant. You need the working hands to give it life."

- Adrian Alvarez
From Bottom Right:

Jacinda Browne
Marva Fyall
Bernadine Phipps
Reba Thomas, RN
Shakira Ladejobi, RN
Anne Marie Williams
Bernard Utendhal
Nnandi Waldron
Eddy Gay
David Agho
Simeon Joseph
Courtney Richards
Patricia Tayag, RN
Georgina Angeles
It's QUESTION TIME!!
Miscellaneous
Two-Sample T-Test and CI: LOS, Phase
(Phase 1: Oct 1-Nov 31; Phase 2: Dec 1-31)

Two-sample T for LOS

<table>
<thead>
<tr>
<th>Phase</th>
<th>N</th>
<th>Mean</th>
<th>StDev</th>
<th>SE Mean</th>
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<td>1</td>
<td>61</td>
<td>7.10</td>
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<td>0.15</td>
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<td>2</td>
<td>31</td>
<td>5.95</td>
<td>0.51</td>
<td>0.092</td>
</tr>
</tbody>
</table>

Difference = mu (1) - mu (2)

Estimate for difference: 1.154

95% lower bound for difference: 0.868

T-Test of difference = 0 (vs >): T-Value = 6.71  P-Value = 0.000  DF = 89
Labor-Management Sponsors and Team

**SENIOR LEADERSHIP**
- Bruce Richard
- Coraminita Mahr
- John McKeon
- Peter Scaminaci
- Dr. Jane Lederer
- Barry Kriesberg
- Dr. Kurt Kodroff

**MANAGERS**
- Ann Marie Edwards
- Juliet Samuda
- Wayne Jordan
- Dorothy Graham-Hannah
- Albert Belaro
- Ella Houston
- Keith Stokum
- Sharon Smith

**TEAM**
- Transport
- Radiology
- Nursing
- Managers & Frontline Staff

**FACILITATORS**
- Patricia Tayag
- Georgina Angeles
This survey consists of questions that are related to your experience before, during, and after having a test or procedure in our radiology department. The results would assist us to provide you a better patient experience. Please be assured that your identity will be kept confidential. Check off the box that best represents your response.

1. Before going to the test or procedure, the nurse took time to explain what the test or procedure I will undergo
   - □ STRONGLY AGREE  □ AGREE  □ DISAGREE  □ STRONGLY DISAGREE

2. The transporter who took me to the test or procedure treated me with courtesy and respect
   - □ STRONGLY AGREE  □ AGREE  □ DISAGREE  □ STRONGLY DISAGREE

3. Upon arrival to the radiology department, the technician who did the test or procedure treated me with courtesy and respect
   - □ STRONGLY AGREE  □ AGREE  □ DISAGREE  □ STRONGLY DISAGREE

4. As far as you could recall, how long did it take for a transporter to bring you back to your room after the test or procedure was completed?
   - □ < 10 minutes  □ 10 – 30 minutes  □ 30 minutes – 1 hour  □ > 1 hour

5. I was transported back without delay to my hospital room after the test or procedure was completed
   - □ STRONGLY AGREE  □ DISAGREE  □ AGREE  □ STRONGLY AGREE

6. We like to recognize employees. Would you be able to identify an employee or employees who did an excellent job?

7. Would you have any recommendations on how we can serve you better?