Clinical Safety & Effectiveness
Cohort # 23
Team 7: Decreasing Surgical Pathology Specimen Discrepancies

Educating for Quality Improvement & Patient Safety
THE TEAM

• Division
  – CS&E Participant: Ernest Magallan
  – CS&E Participant: Martin Arenas
  – CS&E Participant: Lisa Devane
  – CS&E Participant: Trent Freeman
  – CS&E Participant: Marla Khalikov
  – Team Member: Rudy Lara
  – Team Member: Velma Resendez
  – Team Member: Dr. Sarah Hackman
  – Facilitator: Sherry Martin

• Sponsor Department
  – Perioperative Services/Pathology Services/Risk Management
THE AIM

• To reduce the number of specimen labeling discrepancies* in the perioperative area of University Hospital from an average of 9.44 per month to zero by January 17, 2019.

*Specimen labeling discrepancies are defined as 1) a container and requisition mismatch; 2) an unlabeled specimen container; 3) an incorrect request form 4) an order received without clinical information 5) a specimen site not matching the requisition and 5) a tissue source not on the requisition.
THE REASON
Baseline Data

Surgical Pathology Specimen Discrepancies

Number

Month


Average  UCL  LCL
Surgical Pathology Specimen Discrepancies

Number of descriptions:
- No fixative in container: 8
- No Requisition Received: 8
- Spilled during transportation: 6
- Wrong request form: 5
- Unlabeled specimen container: 4
- No Clinical Information: 3
- Specimen sites do not match...: 2
- No specimen received: 2
- Other: 4

Percentage:
- 53.8%
- 62.6%
- 71.4%
- 78.0%
- 83.5%
- 87.9%
- 91.2%
- 93.4%
- 95.6%
Surgical Pathology Specimen Process

Specimen Received in the Lab → Specimen Accessioned → Specimen Arranged → Specimen Grossed

- Tissue Placed into a Cassette → Tissue Dehydrated → Tissue Embedded → Tissue Cut
  - Floater risk
  - High floater risk

- Sections Placed on Slide → Slides Stained and Cover slipped → Pathologist Interpretation & Diagnosis
  - Floater risk
  - High risk processes
Perioperative Services Surgical Specimen Flowchart

Decreasing the Surgical Pathology Specimen Labeling Discrepancy Frequency

The process begins in the operating room and ends with the arrival of the surgical pathology specimen in the histology laboratory.
Process Improvement Initiatives

• Pathology Specimen Pause (PSP)
• Eliminate Patient Label Batching
• Physician Signature on Pathology Orders
Pathology Specimen Pause (PSP) Steps

1. Surgeon states “Specimen Pause” at time of specimen extraction

2. Staff reduces noise/distraction

3. Circulating RN and Scrub Technician stop duties to listen to surgeon

4. Surgeon clearly states all required information about specimen

5. Scrub Tech will write specimen information on the back table
5. Circulating RN verbally verifies the information back to surgeon and writes the information on the requisition.

6. Surgeon agrees to information or corrects information.

7. Specimen is handed off to the Scrub Technician to initiate container collection with RN.

8. All specimens are put through each step of the verification process.
<table>
<thead>
<tr>
<th>#</th>
<th>Specimen Handoff Time Out Process Steps:</th>
<th>Yield</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Surgeon states &quot;Specimen Handoff&quot; at time of specimen extraction?</td>
<td>82%</td>
<td>219</td>
<td>22</td>
</tr>
<tr>
<td>2</td>
<td>Staff reduces noise/distraction?</td>
<td>98%</td>
<td>240</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Circulating RN and Scrub Technician stop duties to listen to surgeon and write down specimen information?</td>
<td>98%</td>
<td>238</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Surgeon clearly states all required information about specimen?</td>
<td>98%</td>
<td>239</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Circulating RN verbally verifies the information back to surgeon?</td>
<td>100%</td>
<td>241</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>Surgeon agrees to information or corrects information?</td>
<td>99%</td>
<td>240</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>Specimen is handed off to Scrub Technician to initiate container collection with RN?</td>
<td>100%</td>
<td>236</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>All specimens are put through each step of the verification process?</td>
<td>98%</td>
<td>238</td>
<td>2</td>
</tr>
</tbody>
</table>
FEEDBACK

- Physician Champions: John Myers, MD and Donald Jenkins, MD
- RN Team Lead: Betsy Shillito, RN
- OR Staff Survey and Interviews
- Recommendations
Weekly Surgical Pathology Specimen Discrepancy Results
Monthly Surgical Pathology Specimen Discrepancy Results

Monthly Surgical Pathology Labeling Discrepancies Chart

Number

Month


Average UCL LCL
### Return On Investment (ROI)

<table>
<thead>
<tr>
<th>Patient</th>
<th>Pt Type</th>
<th>Case</th>
<th>Charges Per Case</th>
<th>OR Charges Per Case</th>
<th>Actual Payments Per Case</th>
<th>Expected Payment Per Case</th>
<th>Direct Costs Per Case</th>
<th>OR Direct Costs Per Case</th>
<th>Cont Margin Per Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Procedure</td>
<td>In</td>
<td>1</td>
<td>40,107</td>
<td>31,397</td>
<td>15,085</td>
<td>14,602</td>
<td>5,646</td>
<td>3,462</td>
<td>9,439</td>
</tr>
<tr>
<td>Subsequent Procedure</td>
<td>In</td>
<td>1</td>
<td>61,100</td>
<td>37,113</td>
<td>14,599</td>
<td>14,599</td>
<td>8,907</td>
<td>4,483</td>
<td>5,692</td>
</tr>
<tr>
<td></td>
<td>Out</td>
<td>2</td>
<td>33,132</td>
<td>17,161</td>
<td>637</td>
<td>703</td>
<td>5,138</td>
<td>1,893</td>
<td>(4,501)</td>
</tr>
<tr>
<td>Other Patients under the same 2 Procedures</td>
<td></td>
<td>4</td>
<td>33,585</td>
<td>21,418</td>
<td>7,580</td>
<td>7,476</td>
<td>4,923</td>
<td>2,459</td>
<td>2,657</td>
</tr>
<tr>
<td>Visit 14932XXXX</td>
<td>Out</td>
<td>1</td>
<td>59,271</td>
<td>39,071</td>
<td>6,961</td>
<td>6,959</td>
<td>8,363</td>
<td>4,307</td>
<td>(1,402)</td>
</tr>
<tr>
<td>Variance</td>
<td></td>
<td></td>
<td>25,687</td>
<td>17,653</td>
<td>(619)</td>
<td>(517)</td>
<td>3,440</td>
<td>1,847</td>
<td></td>
</tr>
</tbody>
</table>
Sustainment Tactics

• Present to OR Staff 2/1/19
• Continue data collection through CoPath and monitoring until Pathology Specimen Pause (PSP) has become engrained in the culture
• Produce Pathology Specimen Pause (PSP) Video 2/22/19
• Continue encouraging feedback and recommendations from surgeons & staff
Next Steps

• Abstract and professional journal submission
• Integration of Women’s Health Services Operative Area
• Integration of Pathology Specimen Pause (PSP) in all UHS areas where surgical pathology specimens are collected
• Our next process improvement initiative: Reduction in Microbiology Specimen Errors
Course

- Process Flow and Gap Analysis
- Data Collection and Interpretation
- History of PI
- Global Perspective vs. Silo
- LEAN
- Value of Team Collaboration
- The proper steps to initiate and affect change

Crucial Learning

Project

- Resource Identification and Utilization
- Identification of Specimen Process Gaps
- Value of a Great Team
- Value of Staff Feedback and Buy-In
- Contagiousness of Improving Patient Care
Thank you!

You Down With P.S.P.?