



Clinical Safety & Effectiveness

Cohort # 23

Team 7: Decreasing Surgical Pathology
Specimen Discrepancies



Educating for Quality Improvement & Patient Safety

THE UNIVERSITY OF TEXAS
MD ANDERSON
CANCER CENTER
Making Cancer History®

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.**



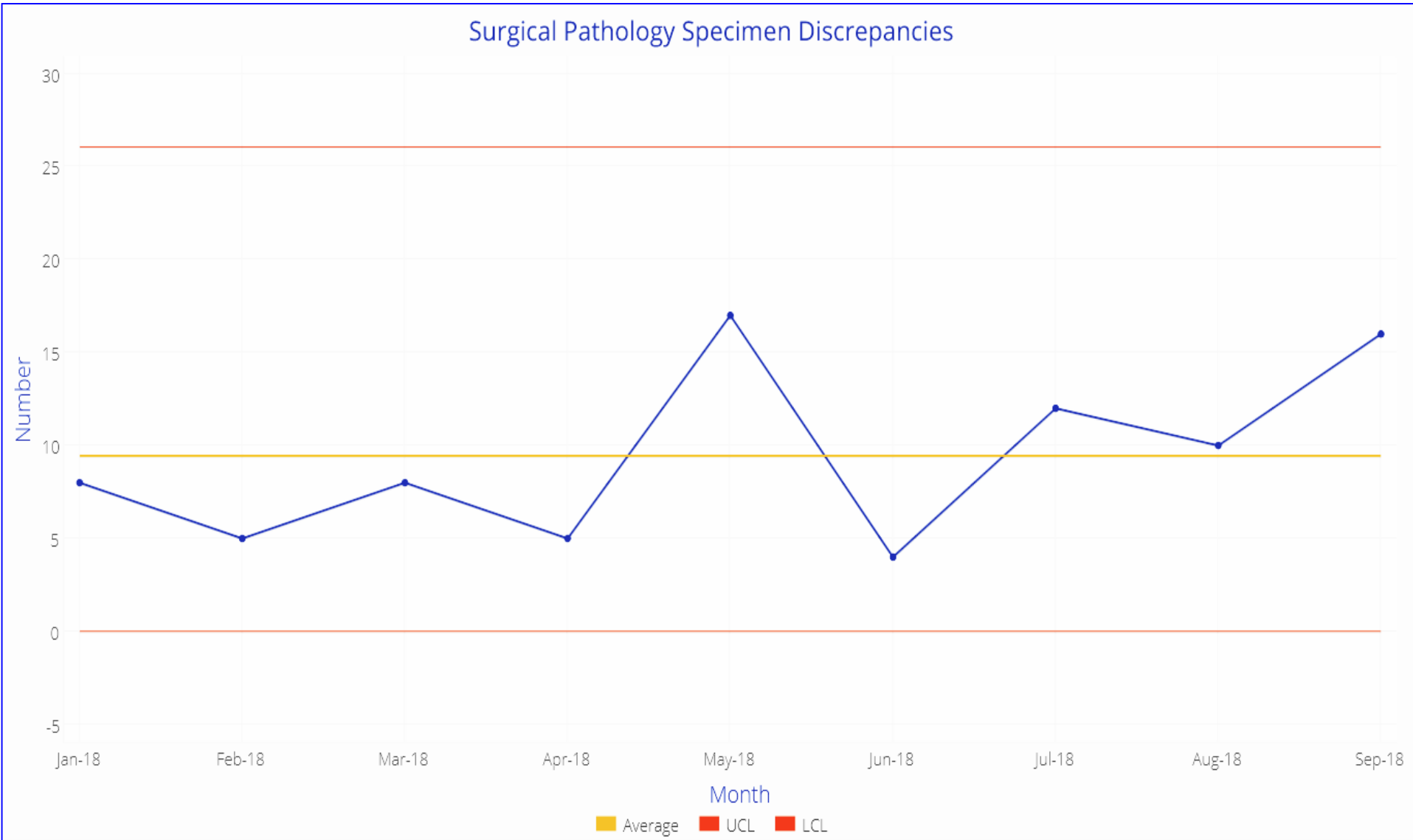
*Specimen labeling discrepancies are defined as 1) a container and requisition mismatch; 2) an unlabeled specimen container; 3) an incorrect request form 4) an order received without clinical information 5) a specimen site not matching the requisition and 5) a tissue source not on the requisition.

THE REASON

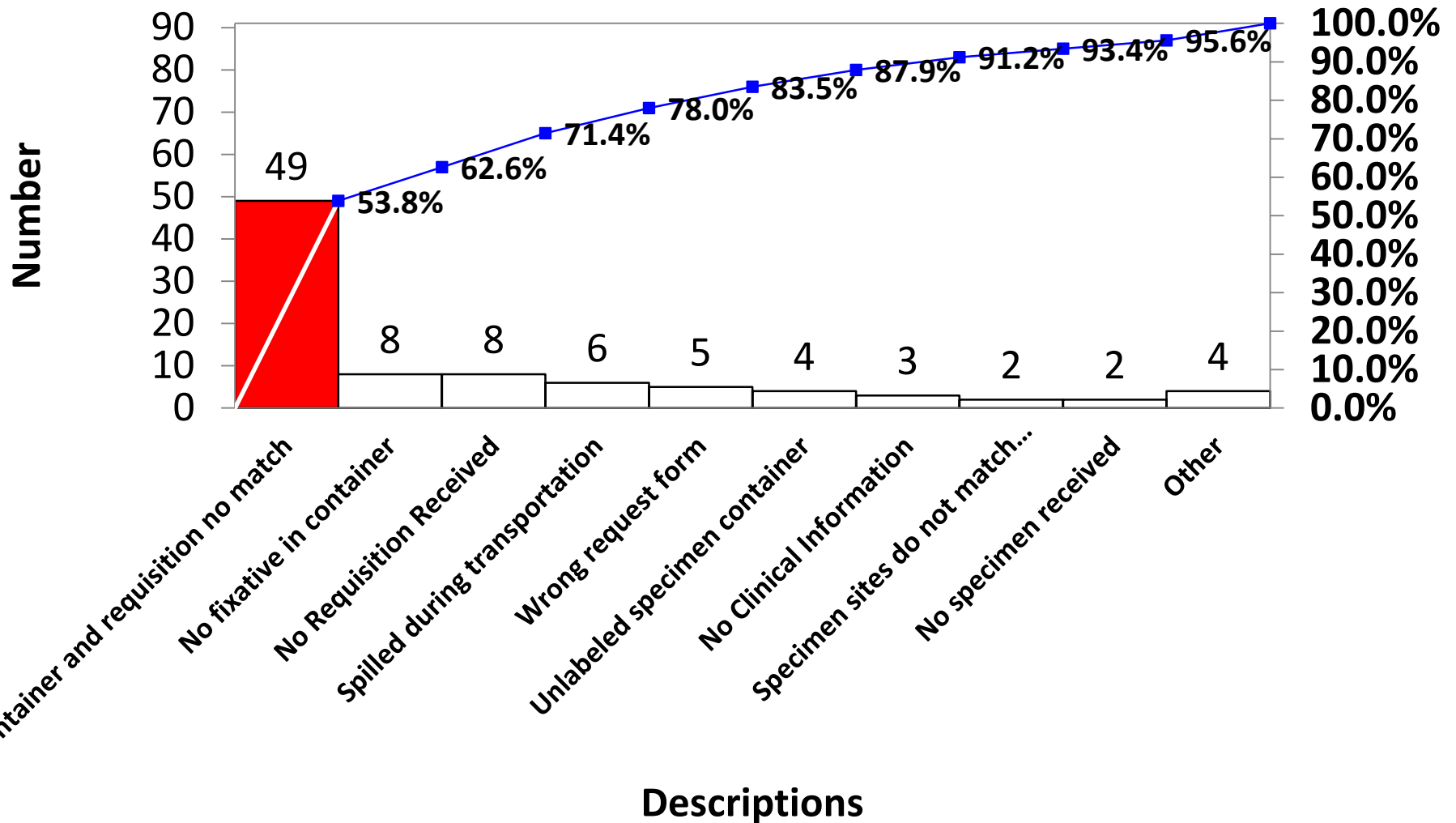


Baseline Data

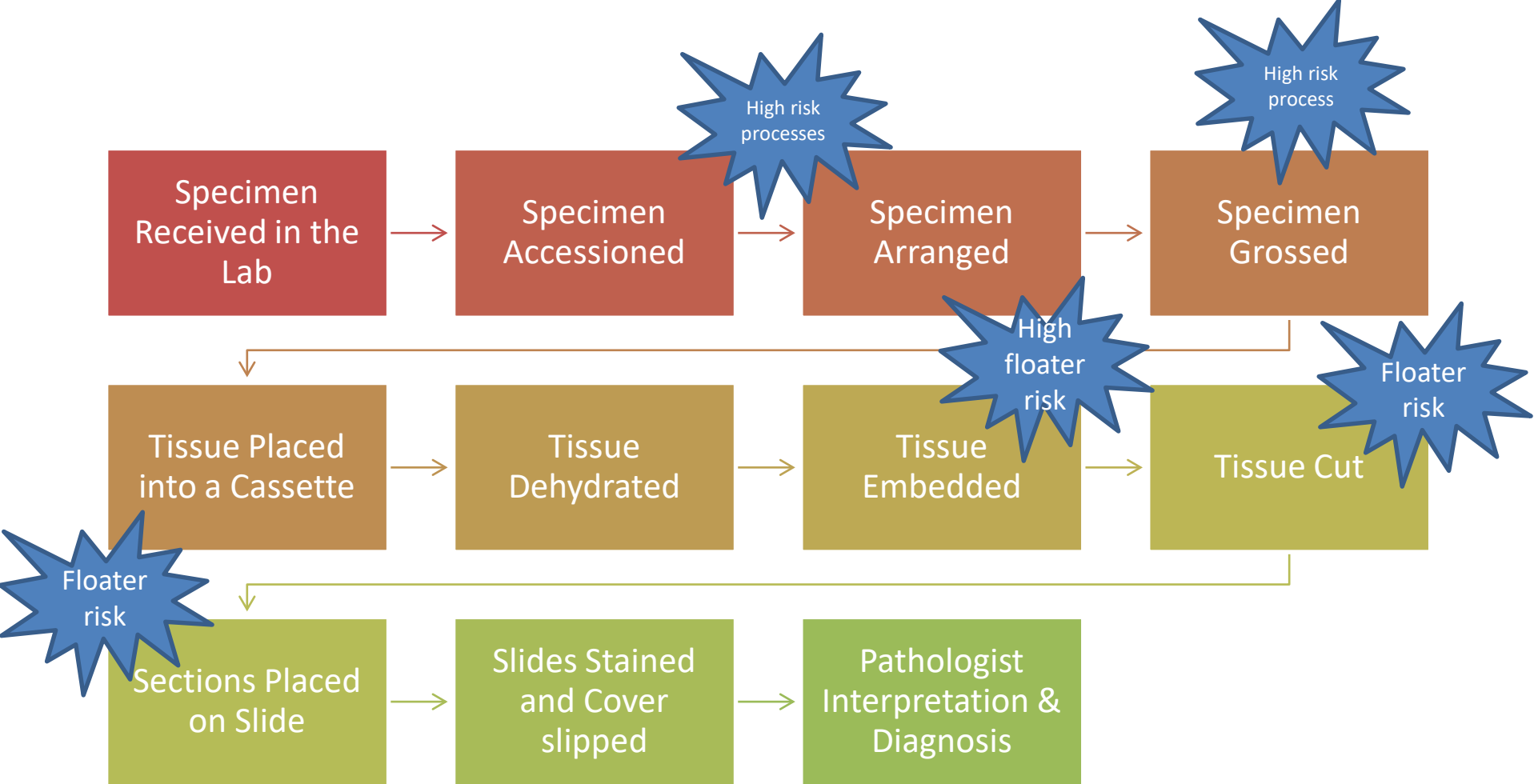
Surgical Pathology Specimen Discrepancies



Surgical Pathology Specimen Discrepancies

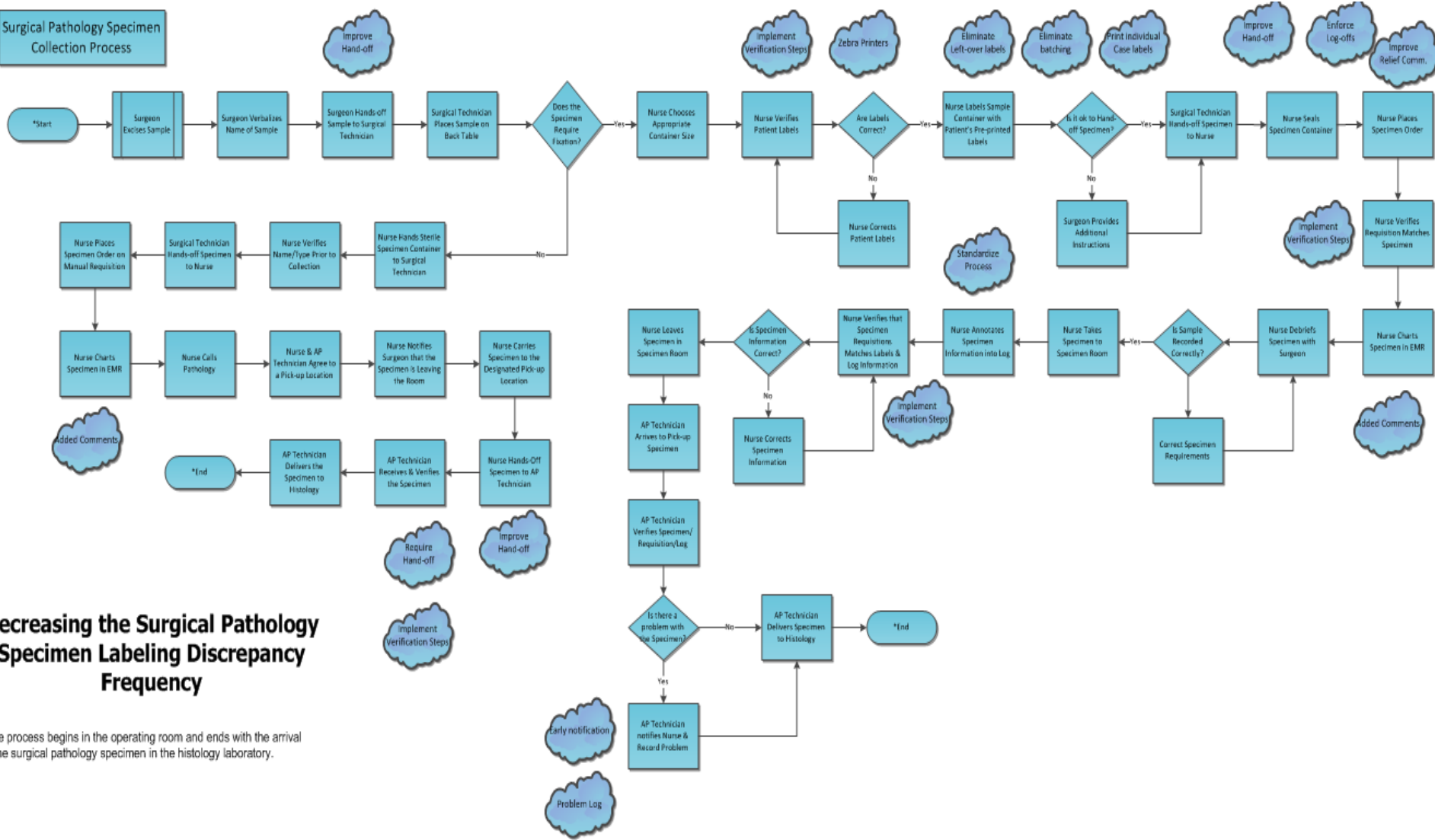


Surgical Pathology Specimen Process



Perioperative Services Surgical Specimen Flowchart

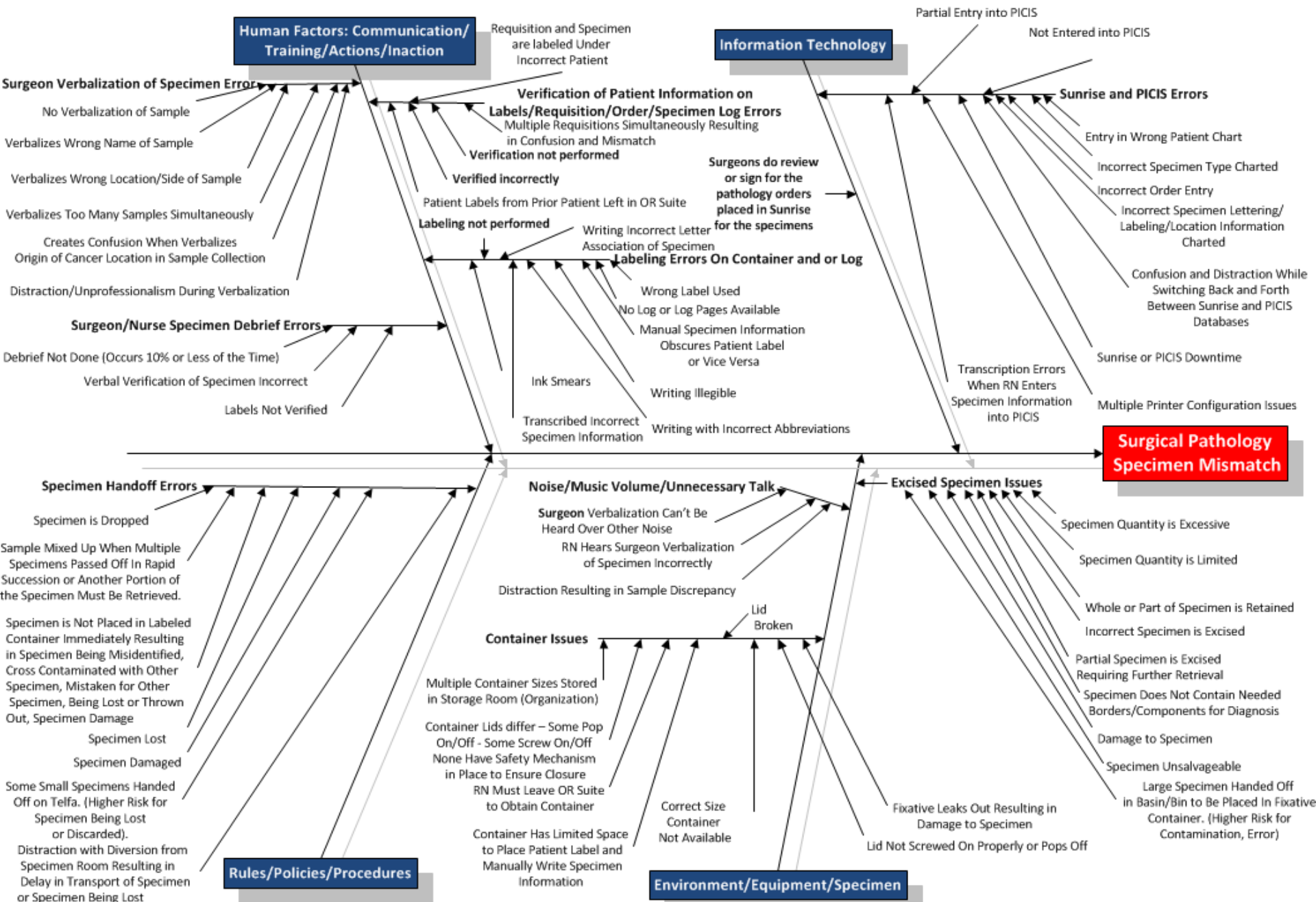
Surgical Pathology Specimen Collection Process



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.

Surgical Pathology Specimen Collection Process Ishikawa



Driver Diagram

Goal

Primary Drivers

Intervention

Measure

Reduce Specimen Labeling Discrepancies

Surgeon's Lack of Verbalization of Specimen(s)

No Surgeon / Nurse Specimen Debrief to Verify Correct Specimen, Specimen Location, and Order

Inconsistent Verification of Patient Information on Labels, Requisition, Order, Specimen Log

Sunrise and PICIS Order Entry Errors and Multiple Patient Labels Being Generated and Stored in the Same Location

Specimen Handoff Pause

Specimen Handoff Pause

Specimen Handoff Pause

Eliminate Batching of Patient Labels

Specimen Handoff Pause

Eliminate Batching of Patient Labels

Physician Signature on Pathology Orders

Number of Surgical Pathology Specimen Discrepancies

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**



Pathology Specimen Pause (PSP) Audit



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

FEEDBACK

- **Physician Champions:
John Myers, MD and
Donald Jenkins, MD**
- **RN Team Lead: Betsy
Shillito, RN**
- **OR Staff Survey and
Interviews**
- **Recommendations**

1. Out of the 20 process steps for fixative specimen collection, what step do you perceive as the most problematic? Why?

Answer:

2. What two process improvement implementations do you think would have the largest effect on reducing specimen mismatch?

- 1.
- 2.

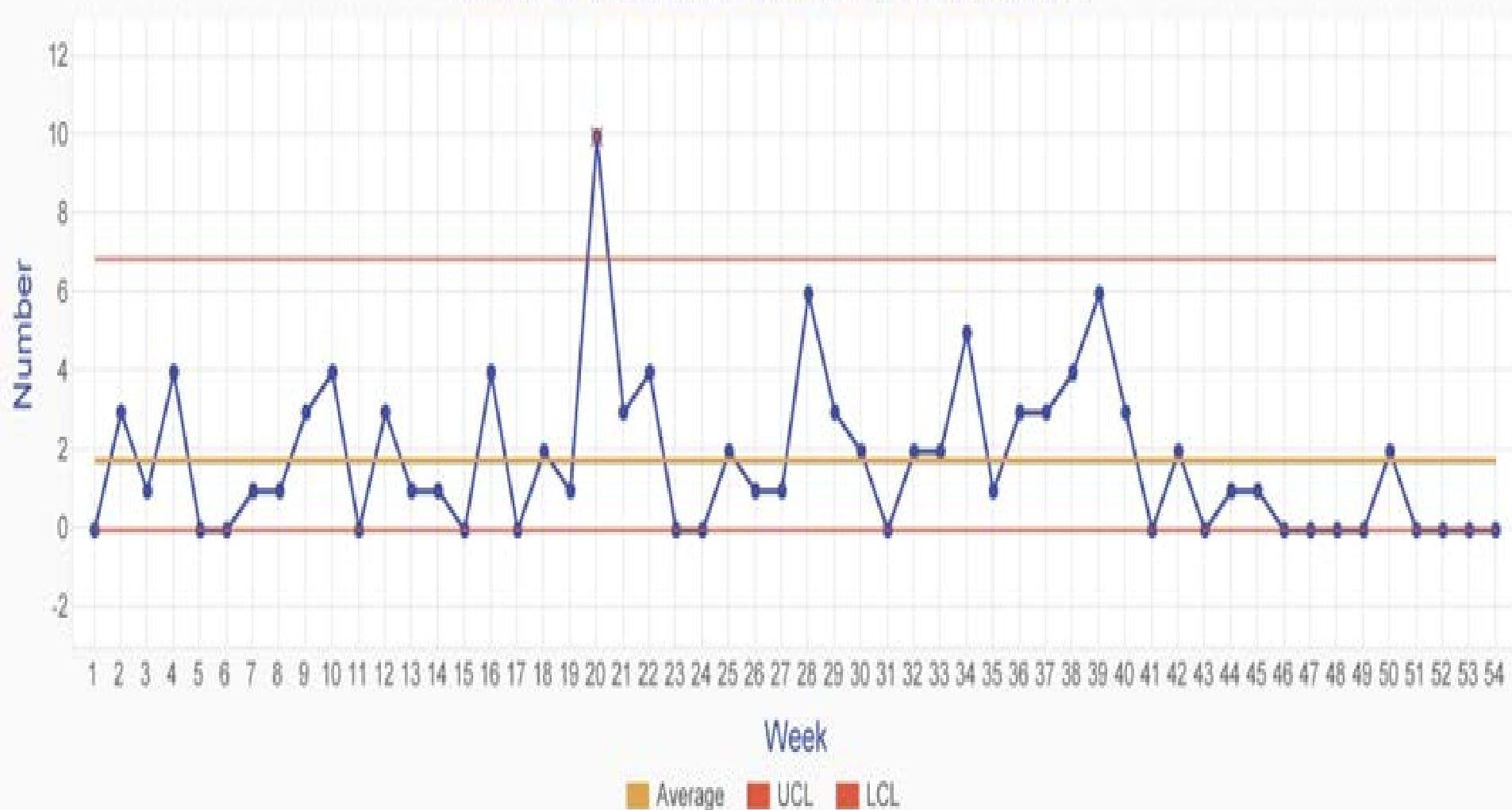
3. Do you feel comfortable speaking with a Provider or coworker when you identify a specimen issue? Circle Y or N. If No, why?

4. Do you think the majority of the specimen collection errors occur during the collection phase or once the specimen is taken to the specimen room? Circle Collection Phase or Specimen Room

5. Within the gaps that were identified on the gap analysis, which gap do you think should be fixed first?

Weekly Surgical Pathology Specimen Discrepancy Results

Weekly Surgical Pathology Labeling Discrepancies



Monthly Surgical Pathology Specimen Discrepancy Results

Monthly Surgical Pathology Labeling Discrepancies Chart



Return On Investment (ROI)

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

Therefore: If we eliminate one surgical pathology specimen discrepancy, we would have a cost avoidance of \$25, 687.00 per surgical case.

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

Crucial Learning

Project

- 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



- 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.?



UT Health

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