



Enhancing Accuracy & Team Collaboration in Surgical Specimen Management

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Aims

Introduction

Background:

The surgical services department has experienced significant operational changes impacting specimen handling accuracy and workflow efficiency. One of the most notable transitions was migration from one Electronic Health System to another. This shift in technology introduced new documentation processes and tracking mechanisms. While the new system enhanced integration and specimen tracking, we also experienced workflow disruptions, requiring additional training for proper documentation and adherence to updated protocols.

This knowledge deficit contributed to increased specimen misplacement and mislabeling, posing risks to patient safety, missed diagnoses, financial burden, and procedural inefficiency.

Furthermore, gaps in surgical procedure knowledge and anatomy comprehension have made it difficult for new Perioperative nurses to accurately articulate specimen names based on procedural locations. Despite the name of the specimen being noted by the surgeon, the need for clarification was not being articulated to assist with proper documentation and labeling.

Methods

Plan the Change

An interdisciplinary team was convened to address and build each specimen name and source as they were identified by the Pathology department, the EHR team, and Operating Room Educators.

- **Identify the Problem:** Significant increase in the number of mislabeled specimen for names and specimen source.
- **Set Objectives:** Update the specimen database with the nomenclature to eliminate/decrease the amount of mislabeled specimen as it relates to specimen source.
- **Develop a Plan:** Create standardize meeting with pathology team to review reports of incorrectly named specimen and build in the system

Do the Change

- **Implementation:** Made necessary additions to Specimen nomenclature and specimen source.
- **Tiered Huddles:** Implemented Read back and Verified for every specimen.
- Shared communication of the addition of specimen names and specimen sources with the OR team.
- 1:1 individualized meetings with staff to provide support.
- **Checklists:** Developed and distributed specimen reference logs in each Operating Room and update as more names/sources are created.

Check / Study the Change

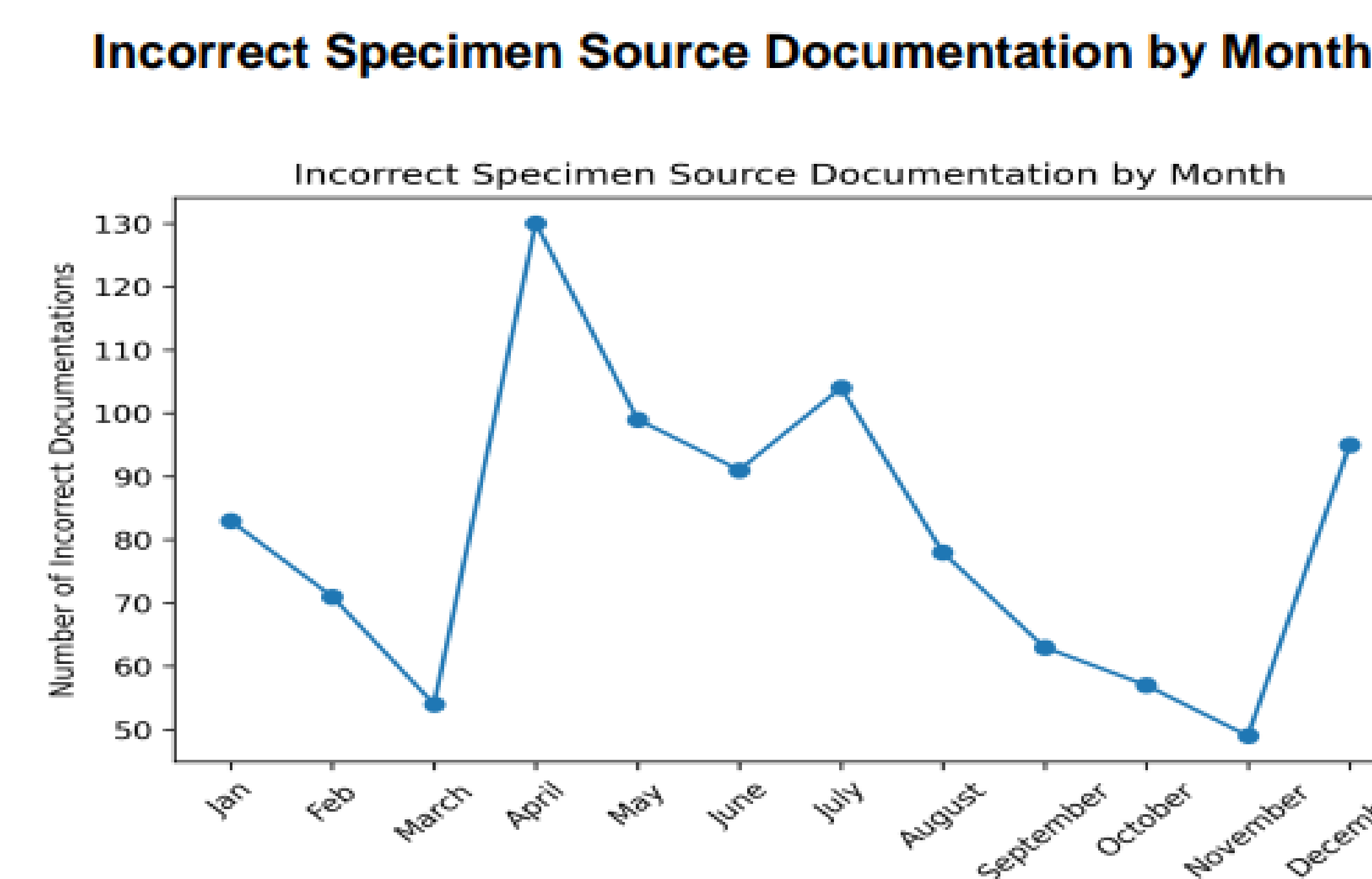
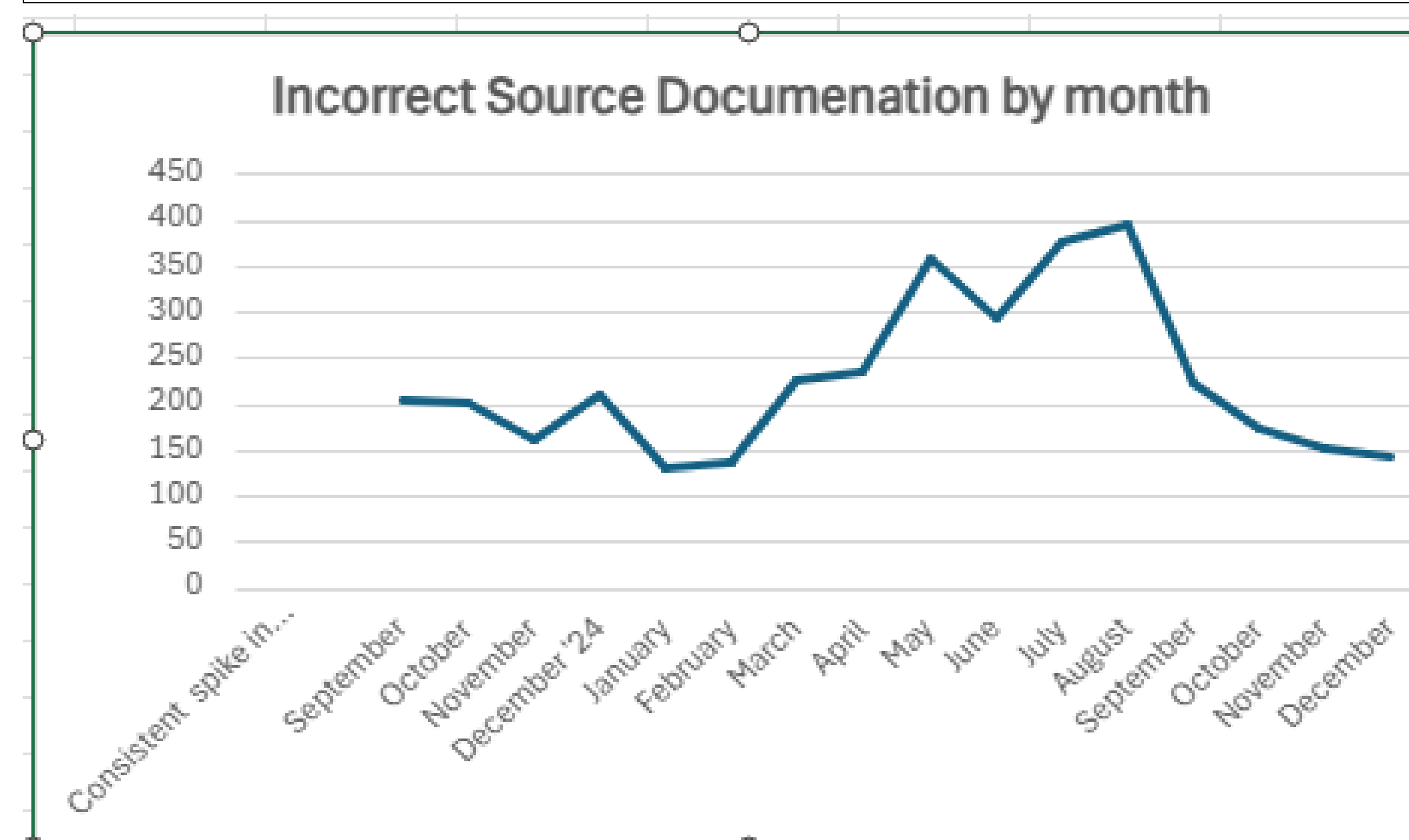
- **Data Collection:** Collected data on incident reports to track incorrect specimen source/names, compliance with protocols to utilize two persons to validate specimen and source
- **Analysis:** Analyzed data to identify deviations, and areas for improvement.
- **Feedback:** Gathered feedback from staff on continued lack of correct specimen source in database.

Act on the Change

- **Adjustments:** Made necessary adjustments Specimen resource book based on feedback and data analysis of new incidents
- **Implementation:** Rolled out the new processes and specimen resource books
- **Sustainability Measures:** Established quarterly competency assessments on specimen handling as well as continued monthly reviews with Pathology.
- Established an Annual Pathology competency for the staff.

Results

- **Decreased events:** Since implementing the changes and updating specimen naming in real time and access to a Specimen resource, the team achieved a consistent decrease in specimen naming errors.
- **Sustained Success:** We have seen a sustained decrease in errors with an increase in December 2025.
- **Enhanced Compliance:** Staff adherence to using the read back and verify, calling our Educators for assistance, and using the specimen resource book is consistent and led to the decrease in errors.
- **Improved Efficiency:** Streamlined process for onboarding new staff and providing familiarity to the resource book, optimizing the collaboration with the Pathology team has sustained the results



Reflection/Future Direction

Conclusion: Preventing specimen mishandling in surgical settings requires a structured, interdisciplinary approach. Integrating technology, reinforcing communication protocols, and adhering to the institution's policy and procedures can enhance patient safety and reduce liability risks.

Incorrectly named specimen has an impact on patient care and wellbeing as a result of delayed test results and/or treatment. By establishing an interdisciplinary team, we were able to enhance patient safety by ensuring the reliability and accuracy of our specimen naming nomenclature. Our major goal was to improve patient outcomes and satisfaction by reducing the potential for delayed, incorrect medical treatment, repeat procedure and increased cost to the patient and organization related to specimen errors.

Lastly, we were able to enhance operational efficiency by promoting a culture of safety and adherence to best practices in specimen naming convention.

Acknowledgements

The authors would like to thank Marsha Jones, Amber Crumley, Carla Shoffeitt, and Vanessa Stillings for their support throughout the process.