

Decreasing Surgical Specimen-Handling Errors: A Network Quality Improvement Journey



Preventing Specimen-Handling Errors

Surgical specimen-handling was identified as a problem-prone process due to its complex and multidisciplinary nature following **two serious events** at a healthcare network.



Quality Improvement Approach

A failure mode and effects analysis (FMEA) was performed and the 10 failure codes with the highest risk scores were used to create an action plan.



Updates included:

- Education
- Standardized procedures
- Barcode scanning
- Double-check processes
- Auditing



Results and Impact

- 82 failure modes were identified through 28 steps in the specimen-handling process.
- 20 of the 23 departments demonstrated compliance with the new workflow within six months of implementation, and barcode scanning improved to 83%.
- **In the year following implementation of the project, zero serious events were reported.**



Change Facilitators

- Frontline staff engagement and empowerment in designing the specimen-handling procedure and evidence-based process changes
- Leadership support
- Physician support
- Project reporting in multiple communication channels