# Enhancing Transplant Outcomes: Leadership Strategies To Boost Nursing Compliance and Lab Accuracy in The Perioperative Setting

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## Background

The U.S. Public Health Service (PHS) guidelines require solid organ donors and transplant recipients to be tested for Hepatitis B, Hepatitis C, and HIV during the pre-transplant phase. These critical labs are drawn by preoperative nurses, yet frequent omissions were identified due to knowledge gaps and an unstandardized process, posing a risk to patient safety and transplant success.

## Objective

Objective: This project aimed to improve awareness, education, and compliance with PHS-mandated lab testing through standardized processes and enhanced staff training to enhance patient safety and transplant outcomes.

## Literature Review

Ensuring nursing compliance with clinical guidelines improves patient safety and lab accuracy. Bunting & De Klerk (2022) emphasize structured education and standardized processes as key strategies to enhance adherence. Heald-Sargent et al. (2024) highlight multidisciplinary collaboration and nurse-led screening protocols to mitigate infectious disease risks in transplant recipients. Jones et al. (2020) outline the U.S. Public Health Service (PHS) guidelines, stressing the need for nurse training in screening technologies and standardized communication to ensure transplant lab compliance. These studies reinforce the value of structured education, process standardization, and interdisciplinary teamwork in improving lab accuracy and transplant safety.

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References

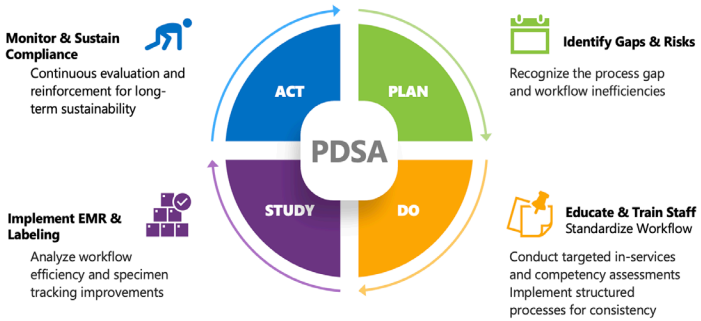
## Intervention

A structured quality improvement approach was implemented to enhance compliance with PHS-mandated lab testing in the perioperative setting. The intervention focused on three key strategies:

**Transplant Champion Engagement**
Recruited frontline champion who leds the targeted team education, real-time guidance, and oversight. Developed quick-reference signage detailing lab requirements to reduce errors.

**Interdisciplinary collaboration**
To review the process gaps and close the gaps, standardize the process.

**Standardized Process & Workflow Optimization**
Implemented EMR modifications for automated prompts and alerts. Developed a streamlined labeling system to ensure accurate specimen tracking.




## Outcomes

This quality improvement initiative enhanced compliance with PHS-mandated transplant lab testing. Continuous monitoring confirms sustained improvements with minimal safety events.

**Improved Compliance & Lab Accuracy:**
100% compliance in PHS-mandated lab orders following intervention /Reduction in lab omissions and mislabeling errors.

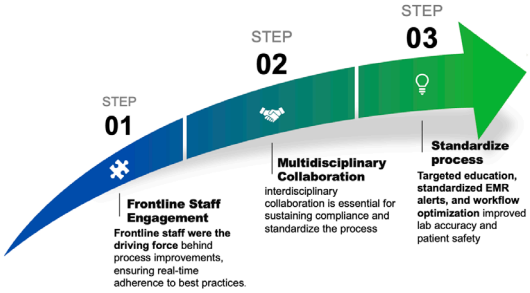
**Enhanced Staff Confidence & Process Adherence:**
Increased nursing engagement in preoperative lab collection protocols.
Standardized workflows, EMR alerts, and labeling system improved efficiency.


## Discussion

This project demonstrated that frontline team engagement and interdisciplinary collaboration is essential for sustaining compliance with PHS-mandated lab testing in the perioperative setting.

**Key Takeaways:**

- Frontline staff were the driving force behind process improvements, ensuring real-time adherence to best practices.
- Transplant Champions played a critical role in reinforcing protocols, answering questions, and guiding their peers.
- Targeted education, standardized EMR alerts, and workflow optimization improved lab accuracy and patient safety.




Sustained Impact: By empowering frontline staff, this initiative eliminated lab omissions, achieved **100% compliance**, and strengthened transplant safety.

Key Lesson: Sustainable change starts with frontline champions. Without their leadership, adherence to new protocols would not have been possible.

## Implications for Practice

**Frontline team engagement** is essential for sustaining compliance and driving process improvements.
**Standardized workflows** and transplant champions enhance lab accuracy and patient safety.
**Ongoing education and EMR optimizations** ensure long-term adherence to PHS-mandated testing.