

Post-Surgery Report

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Comprehensive Post-Surgery Report

Date of Surgery: February 15, 2025

Patient ID: sample_patient_001

Summary of Surgical Checklist Performance

The surgical process, as outlined by the WHO Surgical Safety Checklist, included several crucial steps that ensure patient safety and enhance surgical outcomes. The expected stages of checklist compliance—"Sign In", "Time Out", and "Sign Out"—are designed to prevent errors and enhance communication among the surgical team. However, during the reviewed surgery, the checklist completion was notably deficient:

- **Before Induction of Anesthesia (Sign In):** - None of the ten checklist items, such as confirming patient identity, consent, or verifying the site of surgery, were recorded as completed. This raises significant concerns about initial preparation deficiencies.
- **Before Skin Incision (Time Out):** - None of the eight items, including team member introductions and patient-specific concerns such as allergy review, were documented as completed.
- **Before Patient Leaves Operating Room (Sign Out):** - None of the critical steps including the verification of procedure, instrument, and needle counts were taken.

Vision Data Interpretation

Upon analyzing the visual data provided from various batches of video frames during the procedure, the following observations were noted:

- **Batch Insights:** - Interactive communication among surgical teams was observed indicating an attempt at procedural compliance, though not conclusively indicative of physical action on all critical checklist items. - Several tasks were seen documented in a structured manner, particularly related to patient identification and site confirmation. - Critical compliance aspects, such as patient consent and specific procedural verifications, were displayed as checklist text rather than actions. - No explicit deviation from the standard was visually noted; however, documentation could not confirm that actions

matched the intended protocols.

- **Equipment and Environment:** - Scenes depicted a prepared surgical environment with sterile instruments, though visibility of personal protective equipment (PPE) was limited.

Live Surgeon Metrics

The live physiological data for the patient indicated several instances of low vital signs, transiently improving with a high-severity temperature reading towards the conclusion of recorded metrics:

- **Temperature:** - Oscillations between low (35.8°C) and high (37.6°C) indicating potential hypothermia followed by transient feverish spikes.
- **Oxygen Saturation:** - Consistently low, dipping to 90% during the procedure, which is below optimal levels for patient respiratory function.
- **Heart Rate:** - Generally low throughout, with minimum values at 40 bpm, rising to a non-critical but below-normal rate of 59 bpm.

These vital signs suggest potential inadequate monitoring or response to physiological stressors during surgery.

Performance Assessment

Performance Score: 2/10

The performance score reflects an overall assessment of the procedure based on checklist compliance, the visual review of safety measures, and live metrics:

- **Checklist Non-Compliance:** The failure to complete any checklist items indicates significant procedural and safety oversights.
- **Visual Observations Alignment:** While the frames show typical institutional setup and documentation processes, the lack of direct action verification on all critical procedures suggests gaps in compliance.
- **Patient Monitoring Indices:** Recorded vital signs reveal an acute need for improved patient monitoring and potential physiological intervention during surgery.

Recommendations

1. ****Immediate Process Review:**** Assess and update compliance protocols, ensuring completion and documentation of all checklist items are mandatory and verified before proceeding with surgical operations.
2. ****Enhanced Monitoring Protocols:**** Incorporate real-time monitoring checks and responses for maintaining physiological stability in critical surgical phases.
3. ****Training and Evaluation:**** Reinforce team training focused on checklists and patient safety, incorporating visual audits as part of ongoing evaluations.

This report is intended for internal review and improvement of surgical practices, ensuring enhanced patient care and outcomes in future procedures.