

Project Overview: Supply Storage Standardization Using 5S Methodology

Problem Statement

The current arrangement of medical supplies in the supply carts at each theatre room lacks standardization and organization. This inefficiency leads to staff spending valuable time searching for items, impacting work efficiency. Additionally, the placement of supplies at high levels poses a safety hazard, increasing the risk of workplace injuries.

Project Goals

- **Minimize workplace hazards** associated with improper storage of medical supplies.
- **Ensure compliance** with occupational health and safety guidelines in the arrangement of medical supplies across theatre rooms.
- **Enhance work efficiency and effectiveness** through systematic organization.
- **Implement the 5S workplace organization methodology** to achieve these goals.

Methodology

To address these issues, we implemented the 5S methodology to reorganize and standardize the medical supplies stock arrangement:

1. **Sort (Seiri):**
 - Conducted thorough inventory assessments to eliminate unnecessary supplies and reduce clutter.
 - Identified and removed expired items to optimize storage space and efficiency.
 - Determined essential items required for each room's specific procedures.
2. **Set in Order (Seiton):**
 - Organized supplies at accessible heights, ensuring ergonomic and safety guidelines were followed.
 - Designated specific locations and storage areas for each category of medical supplies.
 - Ensured commonly used items are easily accessible at waist level to minimize reaching and bending.
 - Utilized drawers and shelves effectively to reduce clutter and improve visibility.
 - Clearly labeled each storage area and drawer with the names of supplies and quantity limits.
3. **Shine (Seiso):**
 - Implemented regular cleaning protocols to maintain cleanliness and hygiene in storage areas.
 - Conducted inspections to ensure all supplies were in good condition and properly stored.
 - Established a cleaning schedule to sustain cleanliness standards and prevent contamination.

4. **Standardize (Seiketsu):**

- Established standardized procedures and labeling systems to streamline inventory management.
- Placed labels at the back of drawers indicating required items and quantities, promoting compliance and consistency in stocking.
- Created a uniform layout for the arrangement of medical supplies based on procedural frequency and specialty needs.
- Customized additional supplies based on the specific requirements of each theatre room.

5. **Sustain (Shitsuke):**

- Piloted the new supply arrangement in three theatre rooms initially to evaluate effectiveness and gather feedback.
- Provided comprehensive training to staff on new procedures and expectations.
- Conducted regular audits and inspections to sustain improvements and promptly address any issues.
- Encouraged a culture of continuous improvement by involving staff in ongoing evaluations and adjustments.

Implementation

- **Phase 1 (July 2022 - September 2022):** Pilot testing in 3 operating rooms handling elective surgical cases.
 - Implemented new supply arrangement and procedures.
 - Monitored efficiency and safety impacts.
- **Phase 2 (October 2022 – December 2022):** Full implementation across all 13 theatre rooms.
 - Rolled out standardized supply arrangement and procedures hospital-wide.
 - Conducted training sessions for all staff involved in stocking and using supply carts.
 - Established a timeline for completing implementation across all rooms.

Key Achievements

1. **Led Project Implementation:**

- Initiated and oversaw the reorganization of medical supply storage using the 5S methodology.
- Addressed hazards related to improper storage heights and accessibility.

2. **Formulated Standardized Inventory Management Protocol:**

- Developed a protocol ensuring consistent practices across all supply storage areas.
- Defined guidelines for sorting, setting in order, shining, standardizing, and sustaining practices.

3. **Operational Consistency Improvement:**

- Achieved significant operational improvements through standardized storage practices.
- Enhanced ease of access to medical supplies, reducing time wastage during procedures.

4. **Compliance Maintenance:**

- Conducted regular audits every 6 months to ensure compliance with newly established standards.
- Maintained a 100% compliance rate throughout audit cycles.

Future Recommendations

- **Monitor and Evaluate:** Continuously assess the effectiveness of the implemented system.
- **Refresher Training:** Conduct periodic training sessions to reinforce 5S principles among staff.
- **Expand Application:** Consider extending 5S methodology to other hospital departments for broader operational enhancements.

Conclusion

The implementation of the 5S methodology for supply storage standardization at United Christian Hospital has resulted in tangible improvements in workplace safety, operational efficiency, and compliance with regulatory guidelines. By maintaining a structured approach to inventory management and storage organization, the hospital has set a benchmark for excellence in healthcare facility management.