Streamlining Surgical Instrument Use

Operating rooms are one of the **highest energy consumers** in the hospital due to their sterilization, high-powered medical equipment, and HVAC requirements.

Single-use items, sterilization wraps, and discarded instruments result in substantial medical waste. Manufacturing surgical instruments involves mining metals, energy-intensive processes, and transportation.

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**INVENTORY CHECK**
A straightforward audit of existing instruments to identify duplicates, rarely used, or outdated instruments. This can be done using current hospital inventory systems or manually, depending on the facility's capacity, all of which **may be time-consuming initially**.

**REGULAR MAINTENANCE**
Schedule regular cleaning and maintenance to ensure instruments have a longer lifespan and reduce the need for replacements. This may require **culture change**.

**TRAINING SESSIONS**
Hold short awareness sessions for surgical staff to emphasize the importance of reusing and proper handling of instruments to prolong their life, which may require **staff buy-in**.

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**1 GREEN: EASIEST TO IMPLEMENT**

A straightforward audit of existing instruments to identify duplicates, rarely used, or outdated instruments. This can be done using current hospital inventory systems or manually, depending on the facility's capacity, all of which may be time-consuming initially.

**2 AMBER: MODERATE DIFFICULTY**

Despite individual surgeon preferences, it is beneficial to create standardized sets, which may require negotiation and agreement among surgical staff.

**INVEST IN QUALITY INSTRUMENTS**

Instead of opting for cheaper instruments that may wear out faster, invest in high-quality instruments that last longer. This might mean a **higher upfront cost** but will result in savings in the long run.

**INSTRUMENT TRACKING SYSTEMS**

Implement new systems to track instrument usage. This can help in identifying patterns and ensuring that instruments are not misplaced, reducing the need for replacements.

**3 RED: HARDEST TO IMPLEMENT**

Some procedures might be modified to use fewer instruments or more multi-functional instruments, but this requires significant research, training, and acceptance among surgeons.

**REDESIGN SURGICAL PROCEDURES**

While modern sterilization techniques can be more efficient, transitioning from traditional methods can be a significant undertaking in terms of investment and training.

**ADOPT NEW STERILIZATION TECHNIQUES**

While modern sterilization techniques can be more efficient, transitioning from traditional methods can be a significant undertaking in terms of investment and training.

**CHANGE SUPPLIERS**

Switching to eco-friendly suppliers if a hospital's current suppliers are not sustainable can be a long and challenging process. It involves re-negotiating contracts, ensuring the quality of new instruments, and potentially adjusting to new tools.

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Streamlining surgical instrument usage is not just an operational efficiency measure. It is a pivotal step towards building a sustainable healthcare system that values patient safety, cost-efficiency, and planetary health. By taking proactive measures in the OR, the medical community can actively contribute to global efforts to address climate change.