



**Service Priorities and Programmes**  
**Electronic Presentations**

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**Strategies for prevention of Retained Surgical Items (RSI) in laparoscopic surgery**

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**Introduction**

Laparoscopic surgery is a modern and advanced surgical technique in which operations in the abdomen are performed through small incisions. Even though small wounds are made, retained surgical items (RSI) in a patient after laparoscopic surgery likely occurs and also to be reported as a Sentinel Event (SE) in HAHO as one of the most common category. In all these reported series, retained tiny dislodged fragment or broken part were the main surgical items left in patients in laparoscopic surgery. Since demand for operations that can be performed in minimal access approach in different specialties is surging, the ways to engage a multidisciplinary team approach and work out a standardized counting practice for prevention of retained surgical items should be highly considered.

**Objectives**

1. To engage a multidisciplinary team to work out the standardized counting procedure in laparoscopic surgery 2. To strengthen a "Collaborative Practice" between various stakeholders to enhance patient safety

**Methodology**

By the concepts of Project Life Cycle 1. Concept Phase Conduct gap analysis, review professional organization guidelines and get approval from top management; 2. Planning Phase Work with stakeholders to establish a "4P" strategies and develop a standardized counting practice in laparoscopic surgery; Adopted 4P's strategies:  
- enhancing "Practical utilization of laparoscopic instruments" -reinforcing "Partition of used instruments and unused laparoscopic instruments"  
-introducing "Partial Count" -establishing "Pause for surgical counting" when closure of cavity and wound 3. Execution Phase - Execute a standardized counting process in laparoscopic surgery under phase 1 and 2 pilot in Colorectal & urology

surgical team respectively between September and November 2012. 4. Closing phase - Evaluate by measuring the project deliverables

### **Result**

Totally 14 cases were collected and analyzed. The finding indicated that 100% of the stakeholders agreed the standardized counting procedure in 4P's strategies was in precise, safe, efficient & effective way. The data reflected increased efficiency in mean closing counting time around 2 minutes 32 seconds when using Partial Count compared with that in 4 minutes 30 seconds in full count. This achieved through collaboration among surgeons with high compliance rate in 86% on Pause for surgical counting. 95% of the stakeholders strongly agreed the risk of retained surgical items reduced after these pilot strategies.