Service Priorities and Programmes

Electronic Presentations

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Submitting author: Mr Hoi Tik NGAN
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Modern surgical instrument counting using corporate cloud service- E-instrument

Ngan HT(1), Leung CW(1), Yip WY(1), Yeung LF(1), Fung CK(1), Ngai YY(1), Cheng HK(1)
(1)Department of Anaesthesia & Operating Theatre Services, Tseung Kwan O hospital

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Introduction

Retain surgical item after surgery is classified as sentinel events according to HA guideline. According to the data from the risk alert published by HA Q&S department, there are 10 cases of retain surgical items reported in the first half of 2017. Within the 10 cases, about half of them involve broken instrument parts and used implant. There is an urge to improve perioperative nurses counting procedure to improve patient safety.

Objectives

From the result of gap analysis done in 2016 in TKOH, there are number of area need to be improved in counting process. 1. Staffs used paper form checklist which may not be up-to-date when using 2. Paper form checklist did not have the photo of each instrument 3. Junior staffs may not familiar with instrument that they seldom encountered 4. Instrument counting often focus on quantity rather than quality 5. Unfamiliar of the implant used during orthopedic arthroscopic surgery

Methodology

A detail SWOT analysis was completed in the first quarter of year 2017, and the result show that with the help of PNIS, perioperative nurse can clearly document the consumable and material used during operation. However, there is no function related to instrument checking and counting. Although TKOH has installed surgical instrument tracking system (SITS) for instrument tracking and tracing, the system was not design for theater use. The design of SITS cannot facilitate counting activity during operation. Therefore, a new system is developed to enhance the service which is E-instrument. E-instrument aims to provide perioperative nurse with the following: 1. A up-to-date instrument checklist using in-built corporate cloud service which

synchronize all the time with the cloud server 2. Instrument checklist with photo embedded for easy visual management 3. Easy to find category to replace the difficulty of using instrument checklist book 4. Implant photo available for staff as reference

Result

Goal: The goal of the CQI project is to increase staff awareness of instrument counting with visual management. Hoping that with the increased awareness of the instrument counting, we can continue keeping the record of no RSI event in TKOH. The ultimate goal of the CQI project is to maintain high quality of patient care and patient safety The implementation of the E-instrument system is successful. Staffs show a great satisfaction with the system. Their comments to the E-instrument system are positive. They agree that the system is easily accessible, user friendly, the photo embedded checklist is clear. Moreover, they think that the system can enhance their counting quality. After the implementation of the E-instrument system, there is no RSI event reported. We hope that with the help of PNIS and E-instrument in TKOH, staff awareness to the counting activity can be increased. With the improved quality of counting activity, patient safety is ensured and the delivery of our service can be maintained in high quality.