



Service Priorities and Programmes Electronic Presentations

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Introduction of Wireless Electronic Handheld Device in Operating Room – a Modernization in Peri-operative Practice and Services

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Introduction

BACKGROUND Wireless electronic handheld device (e.g. tablet computer, i-Pad etc.) are commonly used today. In healthcare sector, some clinical information systems such as Clinical Management System (CMS), In-patient Medication Order Entry (IPMOE) also adopted the use of electronic handheld device. Operating Room (OR) of United Christian Hospital (UCH) has introduced the use of wireless electronic handheld device (i-Pad) to facilitate daily operation. Indeed, it has made a major improvement.

Objectives

OBJECTIVES This abstract aims to describe improvement for the peri-operative nursing practice and to review the effectiveness of such acts after the introduction of wireless electronic handheld device in OR.

Methodology

METHOD A wireless (Wi-Fi) hospital intranet network has been setup which cover the whole area of OR. On the other hand, instrument record books database has been set up and stored in the hospital intranet server. In addition, 13 sets of i-Pad have been allocated at each theatre room. In order to minimize the change of workflow in application of instrument record book, a self-designed instrument record web-based interface has been developed. It allows the user to access instrument record database through i-Pad. The user can follow the tray content to count instrument as usual practice using i-Pad. The prototype of interface has been developed and feedbacks from users were collected to modify and finalize the design. Further enhancement was done such as adding instrument free-text search, enlarging instrument picture, tracing on-loan instrument, and marking any warning indicator for high risk of broken instrument. Afterwards, training sessions and posters were prepared for teaching and guiding users. Audit for the use of electronic record is on-going conducted as a Continuous Quality Indicator (CQI) project. Further

improvement would be made, where possible, according to feedback from other users

Result

RESULT A satisfaction survey has been conducted. 80% of the users were satisfied with the improvement instrument record book, especially streamlining the updating procedure of instrument content. 100% users agreed that it can reduce the paper print out generation

CONCLUSION The new system using wireless electronic handheld device can streamline procedures of instrument record tracing and reduce the use of paper. The improved outcome in peri-operative services is also satisfied by both OR staff and patient. Those electronic handheld device and network system could be promoted to other clinical settings.