



Service Priorities and Programmes Electronic Presentations

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Modernising the Business Support Services - Electronic Key Management System

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Introduction

Hospital Foreman Office (HFO) keeps all the keys of the hospital for operational and emergency use. All along, keys of the restricted areas are kept in the electronic key cabinet for emergency use by Duty Hospital Foreman, however, most keys for daily operations, i.e. offices, wards, etc., were kept in a conventional key cabinet for lending to frontline workers previously. Before implementation of electronic key cabinet and barcode system, transactions of keys required a lot of handwritten record. It was time consuming and sometimes chaotic when many workers did the registration of keys at the same time.

Objectives

The use of electronic key cabinets and barcode technology aim at enhancing security control on keys by ensuring only the authorised people to lend and to borrow and all the transactions are recorded electronically.

Methodology

Electronic key cabinets with access control function are installed at HFO to keep all the keys. Each key or each set of keys is affixed with a QR-code label, securely chained and sealed to an electronic key tag, which is housed at a designated terminal in the cabinet. To borrow/take out a designated key, the staff's identity must be verified by the key cabinet, which has stored the pre-registered authorised staff numbers. The same procedure is required for returning the key to the terminal. Each transaction of key is recorded and stored in the hard disc of the cabinet. Non-registered key users, i.e. workers of domestic service contractor, staff using self-driving hospital vehicle, etc., could borrow the keys through the SSU supervisory staff, who have access right to the electronic key cabinets. The respective supervisory staff would take and lend the key to the user by the same process mentioned above. Moreover, the supervisory staff needs to scan the barcode on his/her staff identity card, the borrower's identity card and the QR-code on the key to complete the on-loan registration. Same procedures are applied to the returning of key by the user.

Result

The use of electronic key cabinet greatly enhanced security on key management as only authorised personnel could gain access to the key cabinet and get the key assigned. Besides, after adopting barcode technology and electronic registration, the processing time on borrowing/returning of key could be cut around one minute for each transaction. Any loss or misplacement of keys could be identified as early as possible.