Modernising the Business Support Services - Electronic Screening System for Access Control

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Introduction
Castle Peak Hospital is a psychiatric hospital where visiting to gazetted areas is restricted to the authorised visitors. A visitor of in-patient would have a visitor card issued from the respective ward/unit and is required to undergo registration and identity verification at Main Entrance of the hospital before entry. From time to time wards would notify Foreman Office of the names of unwelcomed visitors, who may affect the rehabilitation of patients or operation of wards, to suspend or prohibit their entry. Since the list would gradually become long, it would be impracticable for the guard to check it during the busy visiting hours. In March 2015, the hospital implemented an Electronic Screening System (ESS) with the use of barcode technology and EXCEL application to strengthen access control.

Objectives
The ESS aims at facilitating instant and accurate checking on unwelcomed visitors to ensure that only authorised person could get into the hospital. Access record could be easily made and retrieved by electronic means.

Methodology
A unique QR-code with serial number was pre-printed on each visitor card, which would be issued by ward/unit to the visitor for in-patient visit. Barcode reader was installed at the registration counter of Main Entrance for scanning the visitor card. A data base of unwelcomed visitors (blacklist) was established according to information provided by wards/units and a self-developed template for data entry and analysis was installed in the computer at Registration Counter. Upon arrival at Main Entrance, the visitor was required to fill in a registration form and present the visitor card with a photo identity document for verification by the guard as usual. However, the guard would scan the QR-code on the visitor card and should it match with information in the blacklist, a signal will show on the computer screen to alert the guard instantly. The guard would deny access of the visitor or notify the ward concerned for further instruction.

Result
Implementation of ESS has increased efficiency on registration process to over 85% by minimising manual checking time. The electronic access record becomes more reliable and environmentally-friendly. Unauthorised entry could be avoided, thereby achieving a strengthened access control.