



Service Priorities and Programmes
Electronic Presentations

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Specialist Outpatient Clinics Go “Paperless” by Development of Electronic Platform

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Introduction

Most of outpatient medical records were kept as episodic medical record folders and stored in medical record stores. Physical record management is therefore a manual task; retrieval of information from record folder cannot be done immediately; record misplacement is also an inevitable risk. On the other hand, the corporate Clinical Management System has been developed by our HAIT for many years and already supports input and storage of health information to this electronic platform. Can we go for “paperless” in outpatient clinics and store all medical records in digital format? In order to start a “dream” in Kwong Wah Hospital (KWH) to become total paperless for all outpatient clinics, the Health Information and Records Management Department, the Outpatient Department, the Department of Surgery and the IT Unit of Kwong Wah Hospital had launched a “Paperless Medical Records Pilot Program” in Urology Clinic since 1 June 2015. The first paperless clinic in KWH was successfully operated from November 2015. Under this program, an electronic platform was developed by KWH IT Unit for storage of scanned clinical documents such as referral letters from private doctors. Other clinical documents were input to CMS system for record and future review. This successful experience has been shared to other clinical departments in KWH and more clinics were expected to join the program in near future.

Objectives

To create a totally paperless outpatient clinic with no physical medical record generated.

Methodology

1. Evaluate workflow and medical record composition of Urology Clinic of Department of Surgery 2. Identify gap between paper and electronic medical record 3. Redesign workflow for of doctors, nurses and medical record staff for paperless consultation 4.

Identify resources for implementation 5. Develop an electronic platform in intranet for storage of medical records 6. Convert paper records unable to retrieve from CMS/ePR system to electronic records by scanning 7. Trial run with contingency plan prepared 8. Live run in November 2015 for a 100% paperless clinic 9. User evaluation in November 2017 for the effectiveness of program

Result

1. An electronic E-report platform for record storage was developed by hospital IT Unit and used in partnering with CMS/ePR. 2. Health information such as Bladder Diary, CMG, Frequency Volume Chart, VCMG and Uroflow, referral letters and consent forms were identified as essential medical record for storage. They were converted to electronic format and stored in E-report platform. As at August 2017, over 7,500 sets of health information were already converted to E-format for storage. 3. The annual attendances in Urology Clinic were around 11,500. This meant 23,000 times of physical medical record handling was prevented per year after implementation of program. 4. The E-report platform was developed under hospital intranet and strict access control was imposed and limited to clinic staff only. Therefore data security of health information was enhanced and misplacement of physical record could be prevented. 5. A staff survey was conducted in November 2017 after program implementation for 24-month. 47 questionnaires were collected with 19 doctors and 28 nurses in Urology Clinic. 100% interviewees agreed that paperless clinic will be suitable for other KWH outpatient clinics and satisfied with current clinic workflow. 6. Workflows of doctors and nurses for patient consultation have been revamped, not limited to pre, during and post consultation. The paper records were screened before conversion to E-format. Therefore only essential health information was maintained in system and easy for future review by clinic staff.