Holistic Healthcare with eHRSS

“Private hospitals in Hong Kong welcome the Electronic Health Record Sharing System (eHRSS) and can contribute towards building comprehensive records for patients through eHRSS participation.”

Dr Anthony Lee,
Chief Hospital Manager and Medical Director of the Union Hospital, and Chairman of the Hong Kong Private Hospitals Association

With over two decades’ experience in heading a local private hospital, Dr Lee noted Hong Kong has a healthcare system in which the public and private sectors complement each other. While the majority of in-patient services are provided by public hospitals, the private sector is serving as a major provider for out-patient services.

“A lot of patients, especially those with chronic diseases requiring specialist care, are using both public and private healthcare services,” Dr Lee said.

He explained that as long-term specialist follow-up and medications in the public sector are more affordable, some patients of private hospitals, out of financial considerations, would request referrals to public hospitals. “This is patients’ choice and we respect it,” he said.

The public and private sectors collaborate to meet the demand for healthcare services
There are also patients who would come back to private hospitals for consultations with the specialists they are familiar with, he added. “This way, they have more confidence in the care they receive,” he remarked.

For example, about half of the specialist care patients at the Union Hospital are moving between the public and private sectors. “With patients’ consent, eHRSS has made possible the viewing and sharing of patients’ medical records among different doctors, be it public or private,” said Dr Lee.

“Doctors taking care of the patients are actually communicating through eHRSS, though in an indirect way. This is already a kind of public-private collaboration.”

**eHRSS at Private Hospitals**

At present, all of the 12 local private hospitals have already joined eHRSS. Dr Lee said patients are generally positive about the programme.

“Patients learn about eHRSS and can find relevant information from channels like promotion leaflets or TV broadcast. They understand that joining the system is for their own benefits. The registration process is also simple and fast,” he said.

As for private hospitals being healthcare providers (HCPs), Dr Lee observed that they are willing to share data but would progress at different paces.

“Some hospitals are more ready to fully take on the eHRSS modules for data sharing. Others that have long developed their own clinical management systems may need more time to resolve technical issues before data can be shared to the system.”

“For the latter, they can modify their systems to comply with the eHRSS configuration and this can be complemented with adaptation modules developed by the Government,” said Dr Lee.

Dr Lee observed that specialist doctors can also be a driving force for eHRSS usage at private hospitals.

“A lot of private specialists in Hong Kong used to work for the Hospital Authority and are familiar with electronic health record (eHR) sharing and the interface. They find the system helpful and this would constitute a demand. They may naturally refer patients to hospitals where the system is used more,” he said.
Union Hospital’s eHR Experience

On developing eHR, Dr Lee said the Union Hospital has substantial experience and has put a great deal of resources into it.

“Our patient management system is able to capture a wide range of clinical information, including nurses’ observations, laboratory test results, imaging records, prescription and diagnoses,” he said.

“We have also built up case summaries of our patients. They are useful reference that can be shared through eHRSS when technically ready.

“To facilitate data entry by doctors, Dr Lee said the hospital has developed a mobile system whereby doctors can conveniently upload information or make changes by using mobile gadgets such as smart phones or tablets.

“For example, they can do it when reviewing patients’ conditions during an in-patient ward round,” he said, adding that plans have been made to scan all old paper records into digital records with automatic indexing.

Another eHR initiative is e-prescription. “We have been using e-prescription in our out-patient service. For in-patient, the service has just been rolled out at the children’s ward in July,” said Dr Lee.

Further Development and Challenges

Agreeing that eHRSS can help raise the quality and standard of healthcare in the long run, Dr Lee commented that the next step for eHRSS development should be the capability to upload radiological images.

“Specialist doctors prefer to view these images themselves. They have the specialised medical knowledge and do not want to solely rely on radiology reports in text format,” he explained.

Dr Lee admitted that promoting eHRSS participation among private doctors can be challenging, as they may have worries about sharing data.

“We need to educate doctors that for the well-being of patients, the more information the better. It helps doctors provide continuous and holistic care to their patients. At the end of the day, the ideal is to have an all-inclusive system of patient records,” he said.

“On the technical side, having more common modules can definitely help encourage doctors use the system,” he commented.
Public-Private Collaboration through eHRSS

Public-Private Partnership (PPP) programmes can benefit patients and private doctors are positive about them. These programmes could hardly be carried out without the Electronic Health Record Sharing System (eHRSS). Two participating private doctors shared their experiences.

The CRC Experience

Dr Chan Pui Kwong, a specialist in community medicine, has enrolled in the Colorectal Cancer Screening Pilot Programme (CRC), a PPP programme launched by the Department of Health to help prevent colorectal cancer.

eHR Sharing in CRC

Under CRC, both participating doctors and patients have to register with eHRSS. Riding on the electronic health record (eHR) sharing platform, the CRC information technology system allows case tracking, keeping of test results and outcome screening that follows the screening pathway, and eHRSS has facilitated CRC patients to be served by a team of multi-disciplinary healthcare providers (HCPs) based on the shared data.

“Once results of the screening have been uploaded by laboratories to the system, we will immediately know whether a patient needs further referral or not,” said Dr Chan.

So far, four of Dr Chan’s patients have been confirmed with colorectal cancer through the programme. “CRC has benefited many patients and eHRSS has played a part. Without the system, time will be wasted and extra cost incurred in transmitting the information. Collaboration between doctors and timely treatment to patients cannot be realised.”

Benefits of eHRSS

The benefits of eHRSS are not only manifested in PPP programmes, as illustrated in a case shared by Dr Chan.
A patient with severe chronic hepatitis came to Dr Chan for consultation after undergoing hernia surgery. He has lost half of his body weight after the surgery, and his liver cirrhosis has also worsened.

The patient’s family was deeply worried whether something has gone wrong with the surgery or the patient has developed cancer. As it would be some time before the patient’s next visit to the public hospital, they sought help from Dr Chan.

With eHRSS, Dr Chan was able to check the patient’s discharge summary for reference and assessed that the patient did not have cancer and there was not any complication with the surgery. “The records in eHRSS have assisted me in making the assessment and timely relaying the findings to the patient’s family, which I believe has given them great relief.” said Dr Chan.

The GOPC PPP Experience

Dr Douglas Chan, Council Member of the Hong Kong Medical Association, has joined for years as a participating doctor in several PPP programmes launched by the Hospital Authority (HA), including the General Outpatient Clinic Public-Private Partnership Programme (GOPC PPP).

eHR Sharing in GOPC PPP

The GOPC PPP provides a choice to selected HA patients to receive primary care services from the private sector. Like other PPP programmes, both participating patients and doctors are required to register with eHRSS so that patient-based information can be shared among private clinics and public hospitals.

Holding positions as the co-chairman of the Task Force on PPP and the Focus Group on GOPC PPP of the Hong Kong Medical Association, Dr Chan said GOPC PPP not only helps ease the pressure on primary care service in the public healthcare sector, it also benefits patients in many ways.

“It provides patients with more choice for receiving primary healthcare, greater convenience and flexibility. It also means more timely treatment as well as quality healthcare services to patients,” he commented.
Dr Chan said the more precise records shared through eHRSS, such as medication and drug allergy histories of patients, are particularly useful to doctors. To further improve the workflow of prescription record entry in GOPC PPP, Dr Chan suggested that templates of commonly used medication could be built in the GOPC module for doctors’ selection.

“Furthermore, adding a shortcut at the PPP prescription interface in the GOPC module will help doctors know at a glance if the patient has drug allergy or adverse reactions,” he added.

**Benefits of eHRSS**

Describing eHR sharing as a global trend, Dr Chan said the exchange of health information can help achieve seamless healthcare services for patients and better collaboration between the public and private healthcare sectors, benefiting both patients and HCPs. Dr Chan shared the following real case.

A patient was suffering from hoarseness which might be the symptom of nasopharyngeal cancer. While anxiously waiting for the next appointment at public hospital for medical test results, the patient consulted Dr Chan. Having joined eHRSS, Dr Chan was able to access the patient’s test reports at the system and give his advice.

“With eHRSS, laboratory or investigation results at public hospitals are accessible by private doctors, and at the patients’ choice, private doctors can diagnose and prepare treatment plans for them more efficiently. It can also help reduce the unnecessary anxiety of patients who otherwise would have to wait for a longer time to get the results,” said Dr Chan.
Fostering collaboration between the public and private sectors through Public-Private Partnership (PPP) programmes is a key strategy in meeting the healthcare needs of Hong Kong. The Electronic Health Record Sharing System (eHRSS) has a vital role to play in these programmes by making possible the sharing of patients’ health information across different healthcare providers (HCPs).

PPP programmes enable the delivery of efficient and integrated healthcare services to the public by leveraging the capacity of the private sector. Benefits of PPPs are many: easing the pressure on the public healthcare sector, optimising resource utilisation, encouraging the exchange of expertise, which boil down to enhancing the quality of healthcare services in Hong Kong.

There are a number of PPP programmes launched by the Hospital Authority (HA) and the Department of Health (DH) in Hong Kong. Patients are given the choice to use services of the private sector with Government subsidies so that they can receive consultation and treatment as early as possible.

Patients and HCPs participating in these programmes are required to join eHRSS, since the inter-flow of medical information under patients’ consent enabled by eHRSS is fundamental to the implementation of the programmes.
This article highlights three PPP programmes recently launched or expanded -

**General Outpatient Clinic Public-Private Partnership Programme (GOPC PPP)**

GOPC PPP was first launched by HA in mid-2014 in three pilot districts including Kwun Tong, Wong Tai Sin and Tuen Mun to provide patients the choice to receive primary care service from the private sector.

Under the programme, clinically stable patients having hypertension and/or diabetes mellitus taken care of by HA general outpatient clinics are invited to take part. Each patient can choose to receive healthcare from a participating private doctor at the HA GOPC fee each time when using consultation service of the doctor, up to 10 visits each year.

Commencing 2016/17, GOPC PPP is being rolled out to all of the 18 districts in three years -
As at mid-April 2017, over 12 000 patients have already participated in the programme. It is estimated that around 35 000 patients will benefit from the programme upon its full implementation.

**Colon Assessment Public-Private Partnership Programme (Colon PPP)**

Colon PPP was launched by HA in late 2016 to cater for the growing demand for colon assessment.

Eligible patients, including those on the waiting list for colonoscopy in public hospitals and classified as stable cases, will be invited to join the programme by batches. They can choose to receive colonoscopy and the appropriate treatment from enrolled specialists in the private sector. HA will offer a one-off fixed subsidy to each participating patient who will also need to make a co-payment.

It is estimated that around 1 800 patients will benefit from the Programme.

**Colorectal Cancer Screening Pilot Programme (CRC)**

CRC is a three-year pilot programme launched by DH in 2016 to provide subsidised screening tests for asymptomatic Hong Kong residents born in 1946 to 1955. The tests can help identify people who are more likely to develop cancer or who have colorectal cancer, so that treatment can start earlier to improve the chances of a cure.

Eligible persons are invited to join by phases:

- **Phase 1:** individuals born in 1946 to 1948; rolled out in September 2016
- **Phase 2:** individuals born in 1946 to 1951; rolled out in February 2017
- **Phase 3:** individuals born in 1946 to 1955; to be announced

Participants can make an appointment with enrolled primary care doctors to join the programme and receive the screening service. Referral to designated colonoscopy specialists will be made if required. Under the programme, subsidies are provided by the Government to participating doctors for consultation and colonoscopy services.

As at end-July 2017, about 33 400 eligible persons have already enrolled for the programme as participants.
eHR Sharing in PPP Programmes

In these PPP programmes, patients’ medical information and investigation results will be uploaded by participating private doctors to eHRSS. The information can then be shared among HCPs in both public and private sectors taking care of the patients to facilitate them in making clinical decisions. This is particularly useful for patients who may need to return to the public sector for follow-up.

The medical information contributed by private doctors of PPP programmes to eHRSS is also essential for building continuous records of the patients. In the long run, continuity of care can be further facilitated and enhanced as full profiles of patients’ medical history are gradually built up when more and more comprehensive and accurate patient information are gathered through various PPP programmes.

Apart from the above programmes, there are other PPP programmes currently operating on the eHRSS platform –

- Project on Enhancing Radiological Investigation Services through Collaboration with the Private Sector
- Cataract Surgeries Programme
- Haemodialysis Public-Private Partnership Programme
- Patient Empowerment Programme
- Provision of Infirmary Service through Public-Private Partnership

For details about the programmes, please visit http://www3.ha.org.hk/PPP/homepage.aspx?lang=eng
Engaging stakeholders is important to the success of the Electronic Health Record Sharing System (eHRSS). In the past few months, the Electronic Health Record Office (eHR Office) continued to organise activities to reach out to stakeholders and promote eHRSS to the general public.

Onsite Registration Campaign

A new round of onsite registration was rolled out in July 2017. Mobile registration teams are being sent to different locations including hospitals and clinics of the Hospital Authority (HA) and the Department of Health, elderly homes, and shopping centres managed by the Housing Authority to help members of the public register with eHRSS.

A registration counter at a Housing Authority’s shopping mall

Expansion of HA’s eHR Registration Centres

With effect from April 2017, the network of eHR Registration Centres has been expanded to cover all 41 medical record offices located at HA hospitals. Patients can now visit the centres to register with eHRSS or activate their records after submitting applications online, by fax or postal mail.
eHRSS Promotion Booth

An eHRSS booth was set up at the carnival organised by Yan Chai Hospital on 11 June 2017 in celebration of 20th Anniversary of the establishment of the HKSAR cum golden jubilee of the hospital. Mobile registration teams were deployed to promote eHRSS and carry out onsite registration for participants. More than 100 participants enrolled for eHRSS at the booth.

Workshop on Dental Clinic Management System (DCMS) 2.0 and eHRSS

The workshop was organised for the Hong Kong Dental Association and took place on 9 May 2017. Tailored for dentists who are users of DCMS 2.0, the workshop aimed to enhance participants’ understanding on the operations of DCMS 2.0 and demonstrate features of eHRSS integration to encourage adoption of eHRSS. The workshop was attended by over 20 dentists.

Seminar on Cyber Security, Data Privacy and IT Security Incident Management in eHRSS

The training session, conducted on 31 July 2017, was attended by about 270 frontline personnel and healthcare professionals of eHRSS registered healthcare providers (HCPs), eHR Office and HA. In addition to representatives of eHR Office and HA, speakers from the Hong Kong Police Force and the Office of the Privacy Commissioner for Personal Data were invited to share with participants knowledge on eHRSS security policy and monitoring, latest cyber security situation in Hong Kong and data protection principles.
eHRSS Training for eHR Service Providers (SP) and Interns

A full day training course was held on 27 July 2017 to provide 4 potential eHR SPs and interns of the eHR Internship Programme with updated information about eHRSS and technical knowledge about the Clinical Management System (CMS) On-ramp for providing end-user support services. About 20 participants attended the course. Upon completion of the course and passing of an assessment, eligible SPs will be listed at the eHRSS website for reference.
The Electronic Health Record Sharing System (eHRSS) is a major advancement in health informatics in Hong Kong. It has gained increasing attention in the technology sector since its launch in March last year.

**Best Business Solution (Application) Award (Gold Award) in ICT Awards 2017**

eHRSS has won the Best Business Solution (Application) Award (Gold Award) in the Hong Kong Information, Communications and Technology (ICT) Awards 2017. The Best Business Solution (Application) Award honours and promotes examples of successful and effective applications of ICT, and commends organisations that have successfully incorporated IT into existing business operations.

Ms Ida Lee, Head (Electronic Health Record) of the Electronic Health Record Office (eHR Office) and Dr Cheung Ngai-tseung, Consultant (eHealth) of eHR Office, received the award on behalf of the Food and Health Bureau (FHB) and the Hospital Authority (HA) at the ceremony held at the Hong Kong Club Building on 31 March 2017.

eHRSS was recognised as a ground-breaking concept introducing multi-way sharing of patients’ health data and linking healthcare providers in Hong Kong including HA, the Department of Health (DH), private hospitals/clinics and other healthcare providing institutions. The judging panel commented that the standardisation of format in eHRSS is challenging and its implementation can benefit Hong Kong by...
promoting continuity of patient care across healthcare providers from both public and private sectors.

Ms Ida Lee said, “The introduction of eHRSS helps enhance continuity of care and facilitate better integration of healthcare services. It also provides the infrastructure to support the healthcare reform and the development of new healthcare service models such as public-private partnership. We are indeed honoured to have been given this prestigious award”.

**Gerontech and Innovation Expo cum Summit 2017**

eHRSS was showcased in the Gerontech and Innovation Expo cum Summit (GIES) held at the Hong Kong Convention and Exhibition Centre on 16-18 June 2017. GIES was one of the activities in celebration of 20th anniversary of the establishment of the HKSAR co-hosted by the HKSAR Government and the Hong Kong Council of Social Service, and co-organised by the Hong Kong Science and Technology Parks.

eHRSS was among the innovative technologies and products presented by more than 100 local and international exhibitors at GIES to promote community awareness and the use of gerontechnology in improving the quality of life for the elderly.

An exhibition booth was set up by eHR Office in collaboration with DH to introduce eHRSS and various Public-Private Partnership (PPP) programmes run by HA and DH including the General Outpatient Clinic PPP Programme, the Elderly Health Care Voucher Scheme (EHCVS) and the Vaccination Subsidy Scheme (VSS).

Through multimedia means such as interactive game and videos, the concepts, development and vision of the electronic health record programme were illustrated. Participants were further introduced on how the use of information technology has transformed healthcare delivery through health information sharing and cross-sector collaboration, and the benefits brought by eHRSS and PPP Programmes to the healthcare setting and the community, especially for the elderly. The exhibition booth attracted visitors of different age groups and from diverse background such as the IT, non-governmental and the healthcare sectors.
Registration counters were set up at the booth to carry out onsite registrations for members of the public. During the three-day event, close to 900 participants registered with eHRSS and near 60 elders also joined EHCVS/VSS.
The Frequently Asked Questions (FAQs) section at the Electronic Health Record Sharing System (eHRSS) website has been updated to provide users with more handy information about the system. In this issue, topics relating to eHRSS participation for Public-Private Partnership (PPP) programmes and Public-Private Interface – Electronic Patient Record Sharing Pilot Project (PPI-ePR) participants are highlighted.

Update of Online FAQs

Having questions in mind about eHRSS participation? Interested in learning more about the operations of the system? The FAQs section at the eHRSS Website has been updated to address common concerns and enquiries of patients and healthcare providers (HCPs) in a more user-friendly way.

Expanded contents are now provided in English, traditional Chinese and simplified Chinese covering the following:

- About Electronic Health Record (eHR): objectives and benefits of eHRSS, data protection, system security and operating principles
- eHRSS Ordinance: purpose of the ordinance, offences and penalties
- Code of Practice for Using eHR for Healthcare (COP): purpose of COP, its nature and compliance
- Patient: registration, data privacy protection, benefits and rights
- HCP and Professional: registration, sharing of eHR, system operations and security
- System Requirements: technical aspects of eHRSS

Tips for PPP / PPI-ePR Participants

Considering joining a new PPP programme or migrating from PPI-ePR to eHRSS? Here are some tips for you.
Q1: I am a PPI-ePR participant and have previously joined a PPP programme. What are the implications of not registering with eHRSS?

If you have previously joined a PPP programme but not yet migrated from PPI-ePR to eHRSS, you can still participate in that PPP programme. However, you will not be able to join any new PPP programmes (e.g. the Colorectal Cancer Screening Pilot Programme). After registering with eHRSS, you can apply to join any existing or upcoming PPP programmes where eligible.

Q2: What are the differences between PPI-ePR and eHRSS?

PPI-ePR is a one-way sharing pilot project. Under this pilot project, participating private healthcare professionals could only view relevant patient records shared by the Hospital Authority (HA) subject to patients’ consent. On the other hand, eHRSS allows two-way sharing of participating patients’ health data by authorised HCPs in both the public and private sectors. It facilitates the building up of more comprehensive patient records conducive to the continuity of care of patients. Existing participants of PPI-ePR are therefore encouraged to join eHRSS so as to enjoy the greater benefits brought by the two-way sharing of eHRSS.

Q3: I have just migrated from PPI-ePR to eHRSS. Will my doctor joining PPP programme / PPI-ePR still be able to access my PPI-ePR record?

If you have joined eHRSS, your existing PPP / PPI-ePR healthcare providers who have not joined eHRSS can still access your health record shared by HA; whereas those who have also joined eHRSS can access your health records shared by HA, the Department of Health and other private healthcare providers with your sharing consent through eHRSS.
Q4: Is it a pre-requisite for a private clinic to use electronic medical record (eMR) systems in order to join eHRSS and PPP programmes (e.g. the Colorectal Cancer Screening Pilot Programme)?

There is no absolute pre-requisite for using any eMR system to join eHRSS or PPP. Data required to be collected for certain PPP programmes (e.g. the Colorectal Cancer Screening Pilot Programme) will be directly captured in the PPP platform and not from any local eMRs.

Minimal IT requirements for connecting with eHRSS are set out by eHR Office.

Q5: I am a PPI-ePR doctor but have yet to join eHRSS. Can I still access PPI-ePR and look after my existing PPP / PPI-ePR patients?

If you have not joined eHRSS, you can still access the health record of existing PPP / PPI-ePR patients no matter the patients have joined eHRSS or not. However, you will not be able to access health records of new patients who have joined eHRSS only (who have not joined PPI-ePR before). With the launch of eHRSS, PPI-ePR would eventually be decommissioned after having fulfilled its mission as a pilot.

Previous batches of “eHRSS Made Easy”:

- Registration, legal aspect, data privacy and system security
- Learn more about eHR Sharing
Fun Quiz - Chance to Win a Prize

Ghost Leg

More fun with eHRSS! See if you can pair items on the top with those at the bottom in this Ghost Leg puzzle. Fill in the letter of the correct answer at the bottom. The first answer has been done for you. Winners will receive a prize, while stock lasts.

(How to play? For each of the lines on the top, start by following the line downwards. When you come across a horizontal line, take it to get to another vertical line and continue downwards. Repeat this until you reach the bottom.)
Join the quiz

To join the quiz, please print out this page, mark your answers and fill out the required information. Completed entries should be returned by fax at 2300 7921 or email to enquiry@ehealth.gov.hk on or before 20 October 2017.

Name: 
Tel. no.: 
Email: 
Address: 

After the closing date on 20 October 2017, you can check the correct answers in the newsletter posted at the eHRSS website. Personal particulars and contact information collected in this fun quiz will only be used to notify winners and send prizes. All personal data collected in this fun quiz will not be disclosed to any third parties and will be deleted by the Electronic Health Record Office two weeks after all prizes have been sent.