Safeguard eHealth Record Sharing with Legislation
Editor’s Note

Time flies and it has been a year since the publication of eHealth News last spring! At this commemorative moment, we would like to convey our heartfelt thanks to our readers for their constructive feedbacks and active participation in our Game Zone. We are pleased to see that there has been remarkable progress in the development of the eHealth Record Sharing System (eHRSS) for the betterment of healthcare delivery in Hong Kong.

Safeguard eHR Sharing with Legislation

While the preparation for eHRSS is now in full swing, the enactment of eHR-specific legislation will be forthcoming later this year. We have selected “Safeguard eHealth Record Sharing with Legislation” as the theme of this issue. In this issue, two legislative councillors will be sharing with us their views on the development of eHRSS and the legal protection of patient’s privacy and system security by eHR-specific legislation. Moreover, we also have a feature article on the scope, framework and key features of eHR legislation to give you an overview of the eHRSS Bill.

Instilling eHR Know-how

To equip the IT practitioners with appropriate technical know-how for supporting the operation of eHRSS, the eHR Service Provider Training Scheme and eHR Internship Programme are underway. In the Professional Corners, we will introduce the details of these programmes. To test your knowledge about eHR, a simple and interesting “Match the Pairs!” is available in the Game Zone. Don’t miss this great chance to win a prize.

We hope you will enjoy reading the fourth issue of eHealth News! We look forward to your continuous support to the eHRSS!

Your Views

We value your feedback on this subject or any matters related to the eHRSS. Articles related to health record issues are most welcome for sharing in the upcoming eHealth News. Please send us your views by email to eHR@fhb.gov.hk.
Practicality-
The Essence of eHealth Record Sharing System

Dr Hon Leung Ka-lau
Legislative Councillor (Medical)

What aspects of the new Electronic Health Record Sharing System (eHRSS) do you think are of critical importance to healthcare providers? Advanced technology? Accurate health data? These are certainly needed, but what else? To further analyse this problem have more inspiration, we have interviewed Dr Leung Ka-lau, Legislative Councillor (Medical), to learn his views on the important elements for the development of eHRSS and preparation of eHR-specific legislation.

Role of the eHRSS
One of the government’s healthcare reform proposals is to develop a territory-wide eHRSS. Dr Leung shared his thoughts regarding the role that eHRSS will play in the reform process, “The eHRSS will be taking an auxiliary role in the healthcare system reform process,” he said, “for example, with the consent of patients, the results of laboratory tests could be shared between the public and private healthcare providers. As a result, duplicated laboratory tests could be avoided. This does not only save time and money, but also improves the efficiency and quality of healthcare services.”

Providing an essential infrastructure of Hong Kong for participating healthcare service providers to access and share the health data of registered patients, the proposed eHRSS has been viewed by some stakeholders as a visionary project that is vital to the future sustainability of local healthcare system. From a practical point of view, Dr Leung remarked, “Apart from adopting a forward-looking vision, it is most important that the System is beneficial to the medical services for the public, and we should move forward to develop it.”
Encourage Patient Registration
Recognising the potential benefits to be delivered by the eHRSS, Dr Leung would encourage his patients to participate in the eHRSS. “If the patients already have their medical records stored at the Hospital Authority, I would advise them to register in the eHRSS. Afterwards, whenever the patients visit private doctors, they could be benefitted from the sharing capabilities of the eHRSS that allow the private doctors to access their past medical records in a timely manner, thus speeding up the diagnosis and medical process.”

eHR-specific Legislation Safeguards Privacy and Security
With the launching of eHRSS at the end of this year, patients’ health data can be shared among public and private healthcare service providers. The Government is now preparing the eHR legislation to provide specific and additional safeguard on data privacy and system security for the eHRSS. Does the healthcare sector have any concerns over the legislation? In his opinion, Dr Leung responded, “As the bill is still being drafted and the details are not yet available, doctors may not have any particular concerns.” Referring to the Public-Private Interface – Electronic Patient Record (PPI-ePR) Pilot Project which has been operating in the past few years, Dr Leung recalled, “Even without any specific legislation in relation to the electronic health records sharing at this moment, it seems that no major controversial issues have emerged so far.”

Keys to Gain User Acceptance
For successful implementation of eHRSS, support from healthcare service providers is one of the most critical factors. Based on his hands-on experience with the Clinical Management System (CMS) of Hospital Authority and the PPI-ePR Pilot Project, Dr Leung advised on the keys to gain users’ acceptance. “Ease of use, flexibility and user-friendliness factors will be crucial to the success of the upcoming eHRSS. If the healthcare service providers find the technology helpful in boosting their work efficiency while streamlining the operations, they will accept and use the system without reservation. In fact, a poorly-designed system does not only lead to a decline in the usage, but also discourages the adoption of eHRSS among professionals,” Dr Leung indicated. “It is very important that computer systems are designed to assist and serve humans, not to complicate matters.”

Coming to the end of the interview, Dr Leung suggested providing more means to support the connection to eHRSS. “The higher the flexibility for private healthcare service providers to connect to the eHRSS with minimal change to their existing electronic medical record systems, the more active their participation will be in the eHR Programme, and the more benefits the patients will gain.”
Legislation Protects Privacy and Security

Hon Charles Mok
Legislative Councillor (Information Technology)

“Will my health data be securely kept in the Electronic Health Record Sharing System (eHRSS)? I don’t want others to snoop into my medical record other than my doctor.” This might be the concern raised by many patients who consider participating in the upcoming eHRSS. In our interview with Mr Charles Mok, Legislative Councillor (Information Technology), Charles talked about the development of eHRSS as well as how technology and legislation can protect data privacy and system security.

Focus on Stakeholders’ Needs

From witnessing the computerisation of clinical management and health records in his past experience at the Hospital Authority, Charles affirmed the benefits brought about by electronic health records, “Computerisation helps improve the recording of health data, enhances healthcare service quality and minimises medical errors.”

Nevertheless, Charles also raised a few noteworthy points when developing the eHRSS that involves stakeholders such as medical practitioners and patients. “In order to convince medical professionals to use the System in future, it is important to get them involved in the system development process, such as the design of system features and operations, so as to ensure that the System meets their needs,” he noted. “As patients generally
consider their health data sensitive, stringent system security is therefore imperative to underpin the public confidence in storing their health data in the eHRSS,” he further emphasized. For the protection of privacy against infringement, Charles suggested, “We cannot solely count on technology to close the possible loophole of unauthorised access. It is also necessary to promote good practice in using the health data through education and guidelines.”

**eHR-specific Legislation Underway**

While there are Telecommunications Ordinance and Crimes Ordinance to regulate the access to and use of computers and data, the Government is drafting a bill specifically for the protection of data privacy and system security of the eHRSS. Are these existing ordinances sufficient to prevent the health records from being illegally accessed on the electronic platform? “I believe there will be a lot of discussions when the Bill is introduced to the Legislative Council. It may be difficult to say if the existing ordinances and their penalties are sufficient to curtail violations related to the misuse of the eHRSS because there could be a great variety of possible scenarios,” Charles said, “but it is certain that the goal of having an eHR-specific Bill is to complement the existing ordinances in order to strengthen the penalty or optimise the level of deterrence of privacy infringement in the use of eHRSS.”

With the eHR-specific legislation being in place, Charles believed that the patients will be the biggest beneficiaries. “While the legislation may reinforce strict privacy protection and system security, it may also provide guidance for urgent access to health data in emergency and life-saving situations. Thus, patients will be protected under such legislation specifically for the use of this territory-wide application system,” he anticipated. “However, under the new legislation, all users of health data, such as medical professionals, will have to bear more responsibilities when using the health data.”

**Technology for People’s Well-being**

To wrap up the interview, Charles shared with us his vision of applying technology to the healthcare services. “It is very rare for Hong Kong to launch a territory-wide IT project like the eHRSS that concerns every resident. Through this project, I hope the public will perceive that IT is more than just applications in entertainment and business. Technology is indeed beneficial to their well-being from the healthcare perspective, and could even save their lives.”

Charles also believes the eHRSS will help enhance the positive image of Hong Kong. “With our advanced healthcare information technology, this is an excellent opportunity for Hong Kong to showcase an important IT system on the world stage.”
eHR Legislation
Scope, Framework and Key Features

Law is sometimes a complicated topic to the people. With the following series of questions and answers, readers can learn the scope, framework and key features of the eHR legislation at ease.

Q: Why is specific legislation necessary for the eHR Sharing System (eHRSS)?
   • Provides a legal basis for collecting, sharing, using and safe-keeping data under the eHRSS.
   • Protects the privacy and security of patients’ health records when sharing data amongst healthcare providers.

Q: Who will be responsible for managing the eHRSS?
   • The eHR Commissioner will manage and operate eHRSS:
     - Establishes, operates, maintains and develops eHRSS
     - Regulates and supervises the collection, sharing, use and safe keeping of eHR data
     - Registers healthcare recipients and healthcare providers to the eHRSS
Q: Who can register?

- Participants can register as healthcare recipients or healthcare providers.

![Registration in eHRSS Diagram]

Q: Who can give consent on behalf of persons incapable of giving informed consent on their own?

- Substitute decision makers (SDM) can grant consents on behalf of those individuals unable to make an informed decision, such as minors under 16 and mentally incapacitated persons.
- SDMs may include parents, immediate family members, legal guardians and healthcare providers of the patients.

Q: How does the legislation safeguard eHR sharing?

- The legislation will safeguard eHR sharing through the following means:
  - Requires healthcare provider to ensure that its electronic medical record system would not impair the security or compromise the integrity of the System.
  - Introduces criminal offences relating to protection of patient privacy and system security.
  - Code of Practice regulates data sharing by healthcare providers.
  - Information or data collected by eHRSS protected by Personal Data (Privacy) Ordinance.
Q: How will the eHR data be used?

1. **Primary Use**
   - Improve efficiency, quality, continuity or integration of the healthcare provided to the healthcare recipients

2. **Secondary Use**
   - Public health research, disease surveillance, prevention and control of disease

Q: Any provision of offences and penalties under eHRSS legislation?

- Appropriate level of penalties is required to provide stronger deterrent against unauthorised access to the eHRSS with malicious intent.
- Examples of offences are “knowingly” obtain unauthorised access, “knowingly” damage eHR data or “knowingly” make untrue statements to give consent.

Q: What is the scope covered by the eHR guidelines, regulations and code of practice?

- The eHR Commissioner may publish code of practice, operating guidelines, best practices, procedural standards or other forms of guidelines in using the eHRSS.

- The guidelines and code of practice will set out rules and regulations on operation, internal access procedures and control of the use of eHRSS. Healthcare providers are required to comply with the respective security standards and requirements.
eHR Service Provider Training Scheme

eHR Service Provider (SP) Training Scheme is designed to equip information technology (IT) vendors and in-house technical staff of private healthcare providers (HCPs) with necessary IT knowledge to provide end-user support services to HCPs on the installation and maintenance of Clinical Management System (CMS) On-ramp, which is a clinic management software that enables clinics to smoothly connect to the eHRSS for sharing of patients’ clinical data.

Deploy CMS On-ramp through eHR SP Scheme

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<th>Government</th>
<th>IT Sector</th>
<th>Private Healthcare Provider</th>
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<td>Training</td>
<td>Installation services, on-going support and maintenance</td>
<td>CMS On-ramp in Clinic</td>
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<td>Technical Guidelines</td>
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Equipping SPs with CMS On-ramp Expertise

- **eHR SPs**
  - Provide installation services, technical support and training to HCPs to facilitate their adoption of CMS On-ramp
  - Provide add-on and innovative services of CMS On-ramp that suits the operational needs of individual HCPs

- **In-house Technical Staff**
  - Apply their expertise to facilitate HCPs’ adoption of CMS On-ramp

- **HCPs**
  - Can acquire eHR SP services for deployment and implementation of CMS On-ramp

With the assistance of the SPs, the eHR knowledge and expertise will be further cultivated in the private sector. It will create more opportunities and promote wider adoption of eHR in the territory.

Next Steps

eHR SP Training Programme will be conducted in March/April 2014. Final version of CMS On-ramp will be made available in early 2014 for deployment to private healthcare providers. Please learn more about the eHR SP Training Scheme at the eHR Office website.
eHR Internship Programme

Hong Kong is underway to kick off the adoption of eHRSS, while the running of the System must be carried on by next generations. Following the successful experience of the pilot Internship Programme in 2013, full Internship Programme will be launched in 2014-2017.

Who can join?
• Graduates who possessed higher diploma or above (for job placement) and students (for training programme) in healthcare or IT related disciplines in local universities or tertiary institutions

What to do in job placement?
• Take part in subsidised job placements at participating organisations for 12 months
• Learn practical experience to deploy electronic medical record systems and take part in eHR-related activities

What to learn in training programme?
• Acquire health informatics knowledge by attending seminars, knowledge-based events and company visits

When to start recruitment?
• First round: 2Q in 2014
• Second round: 1Q-2Q in 2015
• Third round: 1Q-2Q in 2016
eHR ePromotional Tools

Is eHR too difficult to understand? With the presence of “eHR Explorer” and “How to ‘e’ my Health Records?”, you can understand eHR more easily and joyfully.

**eHR Explorer**

To facilitate the implementation of eHR Sharing System (eHRSS), it is vital to raise the awareness of the healthcare stakeholders and the public towards the eHR development. Hence, the eHR Explorer is developed.

The eHR Explorer is an interactive web application. It will lead you through the 5 key concepts in the eHRSS:

- What is eHR Sharing
- eHR Benefits
- Scope of eHR Sharable Data
- Privacy and Security Measures
- eHR Sharing Principles

With the vivid pictures and animations, the Explorer brings lives to the presentation of the five concepts. Readers can gain a clear picture on the topic in an easy and convenient way. It has been launched in November 2013 and is available at the eHR Office website.
How to ‘e’ my Health Records?

A partner of the eHR Explorer is on the way to let you get closer to eHRSS. It is an amazing online quiz - How to ‘e’ my Health Records?

The electronic tool will allow readers to experience the common concerns in the areas of operation and participation in eHRSS from the angles of healthcare recipients, healthcare providers and healthcare professionals. Answers are available to provide more comprehensive information in respect of the key concerns.

The ePromotional tool “How to ‘e’ my Health Records?” will be brought to you in April 2014. To know more about the quiz, stay tuned to the eHR Office website and try out the questions once it is launched.
Game Zone, Chance to Win a Prize!

Test your knowledge about the eHR development with the following match-up game. You can find clues in this Newsletter. Draw 4 straight lines to pair up the wordings and their related pictures. Readers who got all match-ups correct can win a prize, while stock lasts. Enjoy the fun of exploring eHR!

Join the game and fax the completed form to 2300 7921 or email to eHR@fhb.gov.hk on or before 11 April 2014. The deadline for submission is over. The correct answers are indicated as below.

MATCH THE PAIRS!!

Please provide your name, contact information, and postal address. Winners will be notified through email and the prize will be mailed to the postal address provided below.

Name: 
Tel No.:  Email: 
Postal Address: 

After the closing date on 11 April 2014, you can check the correct answers in the newsletter posted at the eHR Office website. The personal particulars and contact information collected in this game zone will only be used to notify and send prizes to the winners. All personal data collected from this game zone will not be disclosed to any third parties and will be deleted by the eHR Office two weeks after all prizes have been sent.