



Code of Practice for
Using Electronic Health Record for Healthcare

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1. INTRODUCTION

1.1. PRACTICAL GUIDELINES FOR USE OF eHRSS

This Code of Practice (COP) is an administrative document issued by the Commissioner for the Electronic Health Record (“the Commissioner” or “eHRC”) under section 52 of the Electronic Health Record Sharing System Ordinance (Cap 625) (“eHRSSO” or “the Ordinance”).

This COP provides good practice and recommendations while eHRSSO stipulates legal requirements in using Electronic Health Record Sharing System (“eHRSS” or “the System”).

This COP issued by eHRC is different from documents / codes with similar titles issued by other regulatory bodies for governing conduct and behaviour of healthcare professionals or by the Office of the Privacy Commissioner for Personal Data (PCPD) for overall protection of personal data under the Personal Data (Privacy) Ordinance (PD(P)O) (Cap 486).

This COP helps eHRSS users and participants (in particular healthcare provider’s executive, administrative, technical staff and healthcare professionals) to better understand the operation of and the requirements for using eHRSS. It sets out the major principles, standards and best practices for using eHRSS in a secure and proper manner and it should not be regarded as exhaustive.

This COP is for reference and it is not mandatory to comply with all the requirements and recommended best practices set out in it. Healthcare providers and healthcare professionals may find alternative ways other than those recommended in this COP which also enable them to meet the relevant requirements in eHRSSO. However, not otherwise engaging in appropriate practices may lead to security or privacy incidents and put the participants at risk of not able to continue to use the system.

Mere non-compliance with this COP by itself does not render the person to any criminal proceeding unless such action of breach in itself constitutes an offence under eHRSSO or other ordinances.

1.2. TARGET AUDIENCE

Section 2 - *COP for Management Executives, Administrative and Technical Staff using eHRSS* provides general and practical guidance for Management Executives, Administrative and Technical Staff working in Healthcare Providers (HCPs) who have participated in eHRSS.

Section 3 - *COP for Healthcare Professionals using eHRSS* provides general and practical guidance specific for Healthcare Professional using eHRSS for sharing health information for providing healthcare to Healthcare Recipients (HCRs).

1.3. USE OF COP

Reading this COP facilitates understanding and compliance with eHRSSO and other relevant ordinances to safeguard healthcare recipients' privacy and confidentiality for using eHRSS. In compiling this COP, reference has been made to similar guidelines issued by various authorities and renowned organisations in overseas countries where electronic medical or patient record systems have been implemented (see Annex 4.1).

Participants are recommended to read this COP in conjunction with eHRSSO, PD(P)O (Cap 486) and other references quoted throughout this document. Other useful references include guidelines, notices, newsletters and relevant updated information issued by the Electronic Health Record (eHR) Office (see Annex 4.8). Participants are also reminded to refer to the Code of Practice and Guidance issued by the Office of the Privacy Commissioner for Personal Data (PCPD) regarding protection of personal data privacy (see Annex 4.9).

eHRC may, from time to time revise the whole or any part of this COP and publish further guidelines and other requirements for operation of eHRSS. Latest version of the document can be accessed at the website of eHRSS: (www.ehealth.gov.hk).

1.4. DEFINITION OF TERMS

Authorised Person (AP)

Means a person who is authorised by the healthcare recipient to handle registration and consent matters on behalf of the healthcare recipient under the requirements of the Electronic Health Record Sharing System Ordinance (Cap 625).

Commissioner for the Electronic Health Record (eHRC)

Means the public officer appointed under the section 48 of eHRSSO (Cap 625) to operate and maintain eHRSS

Data Access Request (DAR)

Means a request under section 18 of PD(P)O (Cap 486)

Data Correction Request (DCR)

Means a request under section 22(1) of PD(P)O (Cap 486)

Electronic Health Record (eHR)

Means, in respect of any registered HCR, the record of data and information of the registered HCR (or any part of it) kept in eHRSS; and the record of data and information in relation to a HCR who was once registered, but is no longer registered, that was kept in eHRSS

Electronic Health Record Office (eHR Office)

Means the administrative office set up under the eHRC or engaged by the eHRC for operation and administration of the Electronic Health Record Sharing System

Electronic Health Record Sharing System (eHRSS)

Means the information infrastructure for keeping of records of registered HCRs and sharing and using of data and information contained in those records.

Electronic Health Record Sharing System Ordinance (Cap 625) (eHRSSO)

The Ordinance provided for the establishment of eHRSS, the sharing and using of data and information, and the protection of eHRSS, data and information; and to provide for incidental and related matters

Health Data

Means the data and information relating to the health condition of, or to the healthcare provided or to be provided to, the recipient

Healthcare Provider (HCP)

Means a person that provides healthcare

Healthcare Recipient (HCR)

Means an individual for whom healthcare has been performed, is performed, or is likely to be performed in Hong Kong

Healthcare Recipient Index (HRI) Data

Means the personal particulars of the recipient that identifies the recipient for the operation of the System

Identifiable

Means the identity of the healthcare recipient is ascertainable from the data and information

Joining Consent

Joining Consent given by the healthcare recipient or the substitute decision maker (if applicable) is for the eHRC to share data with prescribed healthcare provider which has obtained sharing consent from the healthcare recipient or which provides healthcare services by referral

Non-identifiable

Means identity of the healthcare recipient is unascertainable from the data and information

PD(P)O

Personal Data (Privacy) Ordinance (Cap 486) (PD(P)O)

Personal Data

Means any data, according to PD(P)O (Cap 486)

- a. relating directly or indirectly to a living individual;
- b. from which it is practicable for the identity of the individual to be directly or indirectly ascertained; and
- c. in a form in which access to or processing of the data is practicable

Prescribed Healthcare Providers

Means:

- a. the Department of Health;
- b. the Hospital Authority;
- c. a registered healthcare provider

Privacy Commissioner

Means the Privacy Commissioner for Personal Data established under section 5(1) of the PD(P)O

Sharable Data

Means both the index data and the health data of the healthcare recipient

Sharing

Means the act of providing or obtaining any sharable data of a registered healthcare recipient through the System

Sharing Consent

Means the consent for sharing given by registered HCR to registered HCP under section 12 of eHRSSO

Substitute Decision Maker (SDM) (see Annex 4.2)

Means an eligible person giving consent on behalf and in the name of the healthcare recipient under the requirements of eHRSSO

System

Means the Electronic Health Record Sharing System

System Data

Means the data generated and kept in the system under operation, including access logs, record transaction logs and audit logs

Use

In relation to data or information in an electronic health record, includes disclosure or transfer of the data or information

2. CODE OF PRACTICE FOR MANAGEMENT EXECUTIVES, ADMINISTRATIVE AND TECHNICAL STAFF USING eHRSS

2.1. REGISTRATION AS HEALTHCARE PROVIDERS IN eHRSS AND PROMULGATION OF eHRSS

2.1.1. Healthcare providers meeting the registration requirements set out in eHRSSO may apply to the eHRC for registration in eHRSS.

2.1.2. Healthcare providers should maintain an updated registration record, including their business registration, contact persons, details of participating hospital(s) or clinic(s) and service locations...etc. They should inform eHRC timely for changes in business nature and clinical services and provide all necessary supporting information for verification.

2.1.3. Healthcare providers should withdraw from eHRSS if they no longer fulfil the registration requirements e.g. change of nature of services or termination of business.

2.1.4. Healthcare providers should observe the conditions of registration of healthcare providers in eHRSS set by the eHRC (see Annex 4.8).

2.1.5. Healthcare providers should be aware that their registration may be suspended or cancelled by eHRC due to breaching of any specified requirement set out by eHRC. Any such suspension or cancellation in registration may affect access and use of their healthcare recipients' records in eHRSS.

2.1.6. Healthcare providers should follow recommendations by eHR Office for promulgation of eHRSS.

2.1.7. Healthcare providers should be aware that the eHR Office may from time to

time update the information of prescribed healthcare providers¹ through various platforms (e.g. on internet: www.ehealth.gov.hk) for public awareness.

2.2. HANDLING REGISTRATION OF HEALTHCARE RECIPIENT

- 2.2.1. Healthcare providers should observe the requirements set out by the eHRC for registering healthcare recipients in eHRSS (see Annex 4.8).
- 2.2.2. Healthcare providers should ensure accurate capture and verification of healthcare recipients information during registration.
- 2.2.3. Healthcare providers should submit a copy and retain appropriate original supporting documents of the healthcare recipients for verification.
- 2.2.4. Healthcare providers should observe the conditions (see Annex 4.2) which would allow a Substitute Decision Maker (SDM) to act for healthcare recipients who are incapable of giving consent in registration and related matters.
- 2.2.5. Healthcare providers should ensure their administrative staff handle healthcare recipients' and/or SDM's Hong Kong Identity Card with care and in accordance with the guideline issued by the PCPD for handling healthcare recipients registration and consent matters.
- 2.2.6. Healthcare providers should take reasonable steps to ensure healthcare recipients and their SDMs understand and agree with the purpose of using their personal data for:
 - (a) Giving consent to join eHRSS;
 - (b) Giving sharing consent to healthcare providers; and
 - (c) Updating registration information (e.g. healthcare recipient withdrawing from eHRSS or revoking consent to a healthcare provider) and related matters.
- 2.2.7. Healthcare providers should update registration information of their healthcare recipients and their SDMs if necessary and timely inform eHR Office (e.g. healthcare recipient's Names, Sex, Date of Birth, Hong Kong Identity Card number or other Travel Document Numbers).

¹ Information may include name, service location of healthcare provider and scope of data being shared to eHRSS

2.3. OBTAIN HEALTHCARE RECIPIENT'S CONSENT FOR eHR ACCESS

- 2.3.1. Healthcare providers should obtain explicit, informed consent from healthcare recipient or his/her SDM (if applicable) for:
 - (a) healthcare recipient registration in eHRSS and
 - (b) sharing of healthcare recipient's health information through eHRSS
- 2.3.2. Healthcare providers should take the following actions to ensure healthcare recipient's or his/her SDM's consent (if applicable) is valid and well-informed by:
 - (a) Providing sufficient, relevant and comprehensible information (e.g. Participant Information Notice, pamphlets, posters...etc.)
 - (b) Obtaining consent from SDM for healthcare recipients who are incapable of giving consent (see Annex 4.2); and
 - (c) Confirming with the healthcare recipient or their SDM that their consent is voluntary.
- 2.3.3. Healthcare providers should be aware of the general principles of handling consent by healthcare recipients:
 - (a) A healthcare recipient can give consent to register for or withdraw from eHRSS, and to give or revoke sharing consent unless he/she is a minor under age 16 or if he/she is an adult and there is evidence that he/she is incapable of giving consent.
For minors and healthcare recipient who are incapable of giving consent, consent should be given by their SDMs.
- 2.3.4. Healthcare providers should verify the identities of the HCR and AP, who handles registration and consent matters on behalf of the HCR.
- 2.3.5. Healthcare providers should verify the identity of the SDM and confirm with the SDM that he or she has read and understood the Participant Information Notice, in particular the Important Notes for SDM Handling Registration Matters On Behalf of an HCR.
- 2.3.6. Healthcare providers should be acquainted with the types of persons eligible to act as a SDM for a particular class of healthcare recipient as stipulated by eHRSSO (see Annex 4.2), who may give a substitute consent for that class of healthcare recipient to register or withdraw from eHRSS and to give sharing consent to healthcare provider(s).
- 2.3.7. Healthcare providers should always request the healthcare recipient's own expressed preference. If the healthcare recipient clearly express his/her intent, the healthcare providers should carefully assess whether his/her case indeed

require any SDM.

- 2.3.8. Healthcare providers should be aware that where there is no other eligible SDM available and the healthcare providers consider that it is in the best interest for the healthcare recipients, the healthcare providers can choose to give consent for registration and sharing in eHRSS (Healthcare providers should appoint designated person under their charges to assume the role and perform the tasks serving as the SDM of the healthcare recipients).
- 2.3.9. Healthcare providers should be aware that there are two types of Sharing Consent: “Indefinite Sharing Consent” & “One-year Sharing Consent”.
- 2.3.10. Healthcare providers should be aware that “Indefinite Sharing Consent” is in effect until it is revoked or the registration of the healthcare recipient is withdrawn or cancelled.
- 2.3.11. Healthcare providers should be aware that “One-Year Sharing Consent” to healthcare providers is valid for one year unless it is revoked or the registration of the healthcare recipient is withdrawn or cancelled.
- 2.3.12. Healthcare providers should not share health information of healthcare recipients who have withdrawn from registration or revoked their sharing consent through eHRSS.
- 2.3.13. It is advisable that healthcare providers should inform healthcare recipients, as far as practicable, before accessing their eHR and be aware that healthcare recipients will receive a notification from eHRSS for access to their eHR in the form chosen by the healthcare recipients including but not limited to the following:
 - (a) Electronic message [e.g. Short Message Service (SMS)];
 - (b) Postal mail; and
 - (c) email
- 2.3.14. Healthcare providers should provide healthcare recipients with access to their organisations’ privacy policy document(s) and information about the kinds of data from their health record system that will be shared and the purposes of sharing to eHRSS.

2.4. HEALTHCARE PROVIDERS TO MANAGE ANY AUTHORISED PERSON'S USER ACCOUNT

- 2.4.1. Healthcare providers should be responsible for creating and maintaining user accounts for any authorised users² in eHRSS including checking and updating their healthcare professionals' registration status for validation in a timely manner.
- 2.4.2. Healthcare providers should seek agreement from the authorised users, if necessary, for creation of their user accounts in eHRSS and verification of their professional registration status for access to eHRSS.
- 2.4.3. Healthcare providers should close the accounts of departed person in eHRSS in timely manner after their last day of service.
- 2.4.4. Healthcare providers should issue appropriate authentication means (e.g. security token), according to the guidelines issued by the eHR Office to their healthcare professionals to access eHRSS (see Annex 4.8).
- 2.4.5. Healthcare providers should ensure only authorized healthcare professionals with the need-to-know can assess eHR of particular healthcare recipients for providing healthcare to them.
- 2.4.6. Healthcare providers should take reasonable and practical steps to ensure that their authorised users respect and have adequate awareness and knowledge of personal privacy, information confidentiality and system security³.
- 2.4.7. Healthcare providers should ensure that their authorised users are aware that using healthcare recipients' information from eHRSS for direct marketing is forbidden.
- 2.4.8. Healthcare providers should take reasonable and practicable steps to ensure their healthcare professionals properly use security controls and devices (e.g. log-in password and security tokens).
- 2.4.9. Healthcare providers should appoint appropriate administrative and technical staff, as contact person(s) to communicate with the eHR Office for matters related to eHRSS operation.
- 2.4.10. Healthcare providers should supervise and monitor staff carrying out administrative and technical duties, including but not limited to:
 - (a) Registering and managing registration information of healthcare providers in eHRSS;

² Authorised user may include any person authorised by respective healthcare provider, who has clinical, administrative or technical duties and uses or supports operation of eHRSS

³ Reasonable and practical steps may include setting out confidentiality as an obligation under the terms of employment and human resource management policy and providing regular staff training and reminders and notice to staff

- (b) Registering and managing registration information of healthcare recipients in eHRSS;
- (c) Registering and managing registration information of healthcare professionals in eHRSS;
- (d) Performing regular reporting, exceptional reporting and cooperating with eHR Office in audit on eHRSS operations

2.5. MANAGE HEALTHCARE PROVIDERS' OWN CLINICAL RECORDS

- 2.5.1. Healthcare providers should maintain clear and updated clinical records for their healthcare recipients. eHR should not be taken as a replacement of a healthcare providers' own health records.
- 2.5.2. Healthcare providers should ensure the data in their medical record system is accurate for sharing.
- 2.5.3. Healthcare providers should share the health information of their healthcare recipients who have given consent for sharing of their health records in eHRSS if the information is readily and electronically available and within sharable scope (see Annex 4.5) after each episode of care as soon as possible.
- 2.5.4. Healthcare providers should be aware that any data obtained from eHRSS shall become part of their health records and they should define and follow their own data retention policy in accordance with PD(P)O (Cap 486).
- 2.5.5. Healthcare providers should ensure proper filing and record keeping of any printed or obtained health records of healthcare recipients from eHRSS according to healthcare provider's own record management policies and prevent them from unauthorised access.

2.6. ENSURE GENERAL SYSTEM SECURITY

- 2.6.1. Healthcare providers should implement and monitor proper use of security measures in eHRSS set out by the eHR Office from time to time:
 - (a) Keep and access enabled computers (i.e. with appropriate certification software) only in secured physical locations (e.g. access within secured workplace, clinic or office) and avoid access to eHRSS in public areas such as internet cafe or public library;
 - (b) Keep and maintain security in wired and wireless network for computers connecting to eHRSS
 - (c) Keep computer system and software updated with latest security

- patches applied;
- (d) Use only licensed / legal computer software and with latest security patches applied and avoid using peer-to-peer software (e.g. Foxy or Bit Torrent...etc.);
 - (e) Install appropriate anti-virus and anti-spyware software;
 - (f) Ensure authorised users logoff eHRSS and local Electronic Medical Record (eMR) systems after use;
 - (g) Enable automatic screen-lock or screen-saver with password protection on computer workstation and set up of a reasonable idle time;
 - (h) Ensure authorised users should observe password policies (e.g. use of strong password with regular updates, avoid writing down or sharing of password; change eHRSS assigned password immediately after successful login for the first time);
 - (i) Record and manage access rights assigned to each authorized users according to their roles in delivering healthcare to the patients and;
 - (j) Assign individual account for each user and ensure them use properly any means of security log-on measures or devices (e.g. log-in password and security token) and protect them against unauthorised use (e.g. sharing with others).
 - (k) Provide security and privacy awareness training to authorised users to ensure their proper use of eHRSS in accordance with appropriate security and privacy requirements.
- 2.6.2. Healthcare providers should cooperate with eHR Office for auditing or investigations in relation to the operation of eHRSS if necessary.
- 2.6.3. Healthcare providers should maintain relevant system audit logs about access to eHRSS through their eMR systems, if applicable (see Annex 4.8).
- 2.6.4. Healthcare providers should perform regular monitoring and audit on system behaviour for identification of abnormality, intrusion and potential system fault or user misbehaviour, if applicable.
- 2.6.5. Healthcare providers should report as soon as possible to eHR Office any suspected security incidents, privacy incidents and suspected security weakness related to assess and use of eHRSS.

2.7. MAKE DATA SHARING TO eHRSS SECURED⁴

- 2.7.1. Healthcare providers should endeavour to comply with standards, policies and requirements on security and data sharing issued by eHRC (see Annex 4.8).
- 2.7.2. Healthcare providers should perform self-assessment and tests with eHR Office for data readiness and interoperability before sharing information to eHRSS (see Annex 4.8).
- 2.7.3. Healthcare providers should perform system connection testing with the eHR Office for data sharing according to security requirements and other specifications (see Annex 4.8).
- 2.7.4. Healthcare providers should provide amended and updated records in their eMR to eHRSS if previous records have been shared to eHRSS.
- 2.7.5. Healthcare providers should perform periodic Security Risk Assessment and Audit (SRAA) of their own eMR systems, if applicable, or perform appropriate security assessment and fix any identified security loop holes according to the requirements specified by the eHR Office for system connection (see Annex 4.8). Any identified security risks or non-conformance with the security requirements should be rectified in a timely manner.

⁴ This section applies for sharing of data from local electronic medical record system to eHRSS

2.8. HANDLING DATA ACCESS REQUEST AND DATA CORRECTION REQUEST

- 2.8.1. Healthcare providers should advise healthcare recipients to approach eHR Office for Data Access Request for personal data contained in eHRSS.
- 2.8.2. Healthcare providers should handle Data Correction Request in accordance with the relevant provisions in PD(P)O (Cap 486) and eHRSSO.
- 2.8.3. Healthcare providers should be aware that Data Correction Request for *demographic* data (e.g. Name, Identity Number, Date of Birth or Sex) in eHRSS can be handled by both eHR Office or a prescribed healthcare provider
- 2.8.4. Healthcare providers should be aware that Data Correction Request for the healthcare recipients' *health data* in eHRSS should be reviewed by the healthcare providers who have contributed and shared that health information to eHRSS according to established workflow for handling of such requests by the eHR Office (see Annex 4.8).
- 2.8.5. Healthcare providers should update and provide corrected health records to eHRSS as soon as possible once an error of their healthcare recipient's health record is noted and rectified.
- 2.8.6. Healthcare providers should exercise careful judgement to handle the data correction request and to inform the healthcare recipients and eHR Office the result of such requests and the reason of refusal if the request is refused.
- 2.8.7. Healthcare providers should make a note and attach a note to the healthcare recipient's record and provide to eHRSS if the Data Correction Request is refused and the data to which it relates is an expression of opinion according to the PD(P)O (Cap 486).

3. CODE OF PRACTICE FOR HEALTHCARE PROFESSIONALS USING eHRSS

3.1. USER ACCOUNT

- 3.1.1. Healthcare professionals would require an user account in eHRSS created by the healthcare provider(s) they are working with for accessing and using of eHRSS. To access eHRSS via different healthcare providers, healthcare professionals need to maintain their separate user accounts under different providers.
- 3.1.2. Healthcare professionals should provide updated professional registration information to eHR Office for verification.

3.2. UPDATE RECORDS FOR eHR SHARING

- 3.2.1. Healthcare professionals should keep clear, accurate and updated clinical records of their healthcare recipient and share to eHRSS in a timely manner.
- 3.2.2. Healthcare professionals should comply with PD(P)O (Cap 486) while maintaining and sharing of the healthcare recipient's health records to eHRSS and make sure the information is accurate and not excessive.
- 3.2.3. Healthcare professionals should exercise reasonable care in handling personal information related to other individuals in their healthcare recipients' records. Personal information of individual(s) other than the healthcare recipient in their healthcare recipients' clinical records should not be collected and shared to eHRSS unless it is deemed necessary and consent from the concerned other individual has been obtained. Personal information may include name, contact information, date of birth and identity document number of other individuals (e.g. family members).
- 3.2.4. Healthcare professionals should advise healthcare recipients to approach the healthcare providers who provide the corresponding health information to eHRSS to consider data correction if they genuinely doubt the correctness of information in their eHR. It is advisable to document such observation in their healthcare recipients' records.
- 3.2.5. Healthcare professionals should have responsibility to assist their respective healthcare providers to deal with data correction request for alleged incorrect information in their healthcare recipients' clinical records in a manner and within a time frame as specified under PD(P)O (Cap 486) and to provide an updated record to eHRSS, if that information has previously been shared to eHRSS.
- 3.2.6. Healthcare professionals should exercise careful judgment for accepting or

refusing a data correction request from their healthcare recipients. If they are not satisfied that the information to which the request relates is inaccurate and they should inform healthcare recipients or the requesters the decision and reasons of refusal in accordance with PD(P)O (Cap 486).

- 3.2.7. Healthcare professionals should document the reasons for refusal for data correction request in their healthcare recipient's records in accordance with PD(P)O (Cap 486) and established Data Correction Request (DCR) procedures defined by eHR Office.

3.3. POINTS TO NOTE BEFORE ACCESSING A HEALTHCARE RECIPIENT'S eHR

- 3.3.1. Healthcare professionals should ensure their access to a healthcare recipient's eHR is authorised.
- 3.3.2. Healthcare professionals have the responsibility to exercise judgement on clinical grounds whether and how much information from a healthcare recipient's eHR should be accessed.
- 3.3.3. Healthcare professionals should have the autonomy and professional judgment to interpret the information in eHRSS.
- 3.3.4. Healthcare professionals should only access eHR of healthcare recipients with their expressed and informed sharing consent and there is a need-to-know about the healthcare recipients' health conditions according to their roles of providing healthcare to the healthcare recipient.
- 3.3.5. Healthcare professionals should be aware that the healthcare recipients will receive a notification from eHRSS for any access to their eHR.
- 3.3.6. Healthcare professionals should be aware that, for any healthcare recipient who is incapable of giving sharing consent to healthcare providers for eHR access, the healthcare professionals may make emergency access to the eHR of the healthcare recipient if that is of paramount importance for provisions of emergency treatment to the healthcare recipient and subject to the relevant healthcare provider's own internal rules, if applicable. Healthcare professionals are advised to document such access in their healthcare recipients' record and the justification in eHRSS and should be aware that such emergency access is subject to audit.

3.4. POINTS TO NOTE WHEN VIEWING AND USING eHR

- 3.4.1. Healthcare professionals should interpret information from eHRSS with care as it may not be updated and complete. They should judge the need to verify with other sources of information, and ideally, with the healthcare recipient, especially when in doubt or inconsistency is noted.
- 3.4.2. Healthcare professionals should not regard eHR as a substitute for personal communication with their healthcare recipients and other healthcare professionals.
- 3.4.3. Healthcare professionals should document relevant and important decisions and discussions, if applicable, with their healthcare recipients regarding the information from eHRSS (including date / time of information being created and accessed, significant findings and conclusion after discussion with the healthcare recipients).
- 3.4.4. Healthcare professionals should be aware that they have no obligation to copy all information from eHRSS into their own healthcare recipients' records.
- 3.4.5. Healthcare professionals should clearly indicate the source of information, date / time of the information being accessed when copying information from eHRSS in their own healthcare recipients' records.
- 3.4.6. In general, reports for third parties (e.g. insurance claims or health check report) should be based on the healthcare professionals' own clinical records and /or assessment of the healthcare recipients. Healthcare professionals should exercise care in case they have to use information from eHRSS for such reference.
- 3.4.7. Healthcare professionals should exercise diligence of care in explaining any information accessed through eHRSS to healthcare recipients and not to use them for alleging challenges or criticism in whatever means to disparage or depreciate the professional skills, knowledge, services or qualification of other healthcare professionals and/or healthcare providers. Healthcare professionals are however not prohibited from making fair and honest comments on a colleague if the professional conduct or competence may be called into question.

3.5. RESPECT CONFIDENTIALITY OF HEALTHCARE RECIPIENT'S INFORMATION

- 3.5.1. Healthcare professionals should respect confidentiality of information obtained from eHRSS.
- 3.5.2. Healthcare professionals should be aware that each access to healthcare recipient's eHR will be logged, monitored and audited.
- 3.5.3. Healthcare professionals should ensure prior and express consent is obtained from the healthcare recipients before disclosure of any information obtained from eHRSS to any third party.

3.6. ENQUIRIES AND ASSISTANCE

- 3.6.1. Staff designated by Healthcare Providers as contact points may approach eHR Registration Office for assistance via e-mail (ehr@ehealth.gov.hk) or telephone (3467 6230).

4. ANNEXES

4.1. REFERENCES FOR DEVELOPING THIS COP

1. Advisory Guidelines For The Healthcare Sector. Singapore. 2014.
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20. National Health Service. Confidentiality. NHS Code of Practice. UK. 2003.
21. National Health Service. Information Security Management - NHS Code of Practice. UK. 2007
22. Office of Privacy Commissioner. On the Record. A Practical Guide to Health Information Privacy. New Zealand. 2011.
23. Personal Data Protection Commission. A History and Theory of Informed Consent. New York: Oxford University Press. 1986
24. Principles of Biomedical Ethics. New York: Oxford University Press 1994.
25. Policies, guidelines & procedures and other relevant information released by eHR Office for participating in eHRSS (See Annex 4.8)
26. References from the Office of the Privacy Commissioner for Personal Data (PCPD) (See Annex 4.9)

4.2. SDM ARRANGEMENT FOR eHR SHARING

Healthcare recipient under 16, or aged 16 or above and who is of any of the following, an eligible SDM can act on the person’s behalf at the person’s best interest on the following relevant occasions: giving joining consent and sharing consent, renewal or revocation of a sharing consent and request for withdrawal of participation in eHRSS.

Persons incapable of giving consent	Persons who may act as SDM
(a) A minor (below 16 years old)	<ol style="list-style-type: none"> 1. Parents 2. Guardian⁵ 3. Persons appointed by court to manage the affairs of the healthcare recipient 4. Family members or person residing with the healthcare recipient 5. Healthcare provider
(b) Healthcare recipient who is 16 years old or above and is incapable of giving the person’s own consent ⁶	<ol style="list-style-type: none"> 1. Guardian⁷ 2. Director of Social Welfare or any other person under MHO⁸ 3. Persons appointed by court to manage the affairs of the healthcare recipient 4. Family members or person residing with the healthcare recipient 5. Healthcare provider

⁵ Appointed under Guardianship of Minors Ordinance (Cap 13) or appointed by court

⁶ Mentally incapacitated as defined by Mental Health Ordinance (Cap 136) s2(1);

Incapable of managing his or her own affairs;

Incapable of giving joining consent at relevant time;

Incapable of giving sharing consent at relevant time

⁷ Appointed under Mental Health Ordinance (Cap 136)

⁸ Under MHO s44A(1)(i), 44B(2A) or 59T(1) or 44B(2B) or 59T(2)

4.3. HEALTHCARE PROVIDERS IN eHRSS

Healthcare provider that provides healthcare at one service location in Hong Kong may apply to the Commissioner to be registered as a healthcare provider for the System for the location.

A person provides healthcare at one service location if the person –

- a. is registered under section 3(4) of the Hospitals, Nursing Homes and Maternity Homes Registration Ordinance (Cap 165) in respect of one hospital or one maternity home;
- b. is registered under section 5(2) of the Medical Clinics Ordinance (Cap 343) in respect of one clinic;
- c. carries on the business of dentistry under section 12 of the Dentists Registration Ordinance (Cap 156) at one place;
- d. holds a certificate of exemption issued under section 7(2), or a licence issued under section 8(2)(a), of the Residential Care Homes (Elderly Persons) Ordinance (Cap 459) in respect of one residential home and engages a healthcare professional
- e. holds a licence issued under section 7(2)(a), or a certificate of exemption issued under section 11(2)(a), of the Residential Care Homes (Persons with Disabilities) Ordinance (Cap 613) in respect of one residential home for persons with disabilities and engages a healthcare professional
- f. is a specified entity that engages a healthcare professional to perform healthcare at one premises

The Commissioner may register a Government department as a healthcare provider for the System if the Commissioner is satisfied that the department provides a healthcare professional to perform healthcare for any healthcare recipient.

4.4. ACCESS TO eHRSS BY HEALTHCARE PROFESSIONALS⁹

Access to eHRSS would be allowed for the following healthcare professionals:

1. Registered medical practitioner (Cap 161);
2. Registered nurse or enrolled nurse (Cap 164);
3. Registered midwife (Cap 162);
4. Registered dentist (Cap 156);
5. Registered pharmacist (Cap 138);
6. Registered medical laboratory technologist (Cap 359A);
7. Registered radiographer (Cap 359H);
8. Enrolled dental hygienist (Cap 156B);
9. Registered chiropractor (Cap 428);
10. Registered occupational therapist (Cap 359B);
11. Registered optometrist (Cap 359F);
12. Registered physiotherapist (Cap 359J); and
13. Registered and listed Chinese medical practitioner (Cap 549).

Sharing by different healthcare professionals at different phases will be reviewed from time to time and announced by eHR Office.

⁹ eHRSSO Cap 625, Schedule

4.5. SHARABLE CLINICAL DATA IN INITIAL PHASE OF eHRSS SHARING

This section is extracted from the *eHR Content Standards Guidebook*.

Healthcare professionals should be aware that the eHRC will review, decide and update the sharable scope from time to time.

eHR Content	Definition
1. Personal Identification and Demographic Data	All information that is required to accurately and uniquely identify a person, including: <ol style="list-style-type: none"> 1. eHR person identifier; 2. identity data; 3. demographic data; and 4. next-of-kin data
2. Encounters / Appointments	A list of booked appointments and attended healthcare encounters (contact between a person and the healthcare practitioner who will assess, evaluate and treat a person). An episode is composed of one or more encounter(s).
3. Healthcare Referrals	Information that is required when a healthcare practitioner transfers all or a portion of a person's care to another healthcare professional.
4. Clinical Note / Summary	The clinical note / summary contains information that summarise the following : <ol style="list-style-type: none"> 1. Reason originating the encounter / episode and the person's condition during the initial encounter; 2. Adverse drug reactions, allergies and clinical alerts found during the encounter / episode (this information should also be separately sent to the eHR at the appropriate section); 3. Major diagnostic findings during the course of the episode; 4. Problems identified; 5. Significant procedures performed and other related therapeutic treatment, e.g. medication; 6. The person's condition, therapeutic orders or

eHR Content	Definition
	<p>treatment plan while preparing a periodic episode summary or upon termination of an episode;</p> <p>7. Follow-up arrangement; and</p> <p>8. Education to the person / family</p>
5. Allergies and Adverse Drug Reactions	Information on the type of biological, physical or chemical agents that would result in / is proven to give rise to adverse health effects. Details of the adverse reactions, if occurred, should also be included.
6. Diagnosis	All active and inactive significant health and social problems. A problem can be a diagnosis, pathophysiological state, significant abnormal physical sign and examination finding, social problem, risk factor, allergy, reaction to drugs or foods, or health alert.
7. Procedures	Any significant procedures that are done for diagnosis, exploratory or treatment purposes.
8. Birth Records	The basic information about the eHR participant's birth, e.g. place of birth, birth weight, maturity. Part of the information relating to birth would fall under the other sharable scope, e.g. diagnosis, procedure, assessment.
9. Medication	This includes medication ordered and/or dispensed/administered during the healthcare process.
10. Immunisation Records	Vaccines administered to the person.
11. Laboratory Reports	Result of the laboratory tests which are sub-classified according to the nature of the test, namely anatomical pathology, biochemistry, haematology, microbiology, virology, and other laboratory test.
12. Other Investigation Reports	Other diagnostic test results could be of diverse range as discrete data element or a full report of the diagnostic test. Images, e.g. clinical photos, tracing, could also be included.

eHR Content	Definition
13. Radiology Reports	Radiology results would include radiology report and images. They are sub-classified according to modality, e.g. plain x-ray, fluoroscopy, ultrasound, computed tomography, magnetic resonance imaging, nuclear medicine, angiography and vascular interventional radiography, non-vascular interventional radiography, positive emission tomography and others.

4.6. CODE OF CONDUCT / PRACTICES OF HEALTHCARE PROFESSIONALS AND RELEVANT REGISTRATION ORDINANCES

	Registered Healthcare Professionals	Documents	Issuing Authority	Cap	Remarks
1	Medical Practitioner	<p>Code of Professionals Conduct for the Guidance of Registered Medical Practitioners</p> <p>English version : http://www.mchk.org.hk/english/code/files/Code_of_Professional_Conduct_2016.pdf</p> <p>Chinese version : http://www.mchk.org.hk/english/code/files/Code_of_Professional_Conduct_2016_c.pdf</p> <p>COP for Doctors (Private Hospital Association) http://www.privatehospitals.org.hk/doc/Appendix%201%20-%20PHA%20Code%20of%20Practice%20(June%202014).pdf</p>	<p>Medical Council of Hong Kong</p> <p>Private Hospital Association</p>	Cap 161	<p>Revised in Jan 2016</p> <p>Revised in June 2014</p>
2	Nurses (registered or enrolled)	<p>Code of Ethics and Professionals Conduct for Nurses in Hong Kong</p> <p>Bilingual version : http://www.nchk.org.hk/filemanager/en/pdf/conduct.pdf</p>	The Nursing Council of Hong Kong	Cap 164	Revised in Jan 2015
3	Dentist	Code of Professionals Discipline for the Guidance of Dental	The Dental	Cap 156	Revised in

	Registered Healthcare Professionals	Documents	Issuing Authority	Cap	Remarks
		Practitioners in Hong Kong English version: http://www.dchk.org.hk/docs/code.pdf Chinese version: http://www.dchk.org.hk/docs/code_c.pdf	Council of Hong Kong		July 2008
4	Dental Hygienists	No information found in the website of the Dental Council of Hong Kong and there is no COP for the Dental Hygienists		Cap 156B	
5	Chiropractors	Code of Practice English version: http://www.chiro-council.org.hk/file/pdf/practice_e.pdf Chinese version: http://www.chiro-council.org.hk/file/pdf/practice_c.pdf	Chiropractors Council of Hong Kong	Cap 428	Revised in Aug 2011
6	Midwife	Code of Professional Conduct and Practice for Midwives in Hong Kong English version : http://www.mwchk.org.hk/docs/conduct_practice_e.pdf Chinese version : http://www.mwchk.org.hk/docs/conduct_practice_c.pdf	Midwives Council of Hong Kong	Cap162	2016 version
7	Pharmacist	No COP has been developed yet		Cap 138	
8	Medical Laboratory	COP for Registered Medical Laboratory Technologists English version :	Medical Laboratory	Cap 359A	Revised in April 2012

	Registered Healthcare Professionals	Documents	Issuing Authority	Cap	Remarks
	Technologist	http://www.smp-council.org.hk/mlt/file/pdf/Code of Practice (Apr 2012).pdf Chinese version: http://www.smp-council.org.hk/mlt/file/pdf/mlt_practice_chin(Apr 2012).pdf	Technologists Board of Hong Kong		
9	Occupational Therapist	COP for Registered Occupational Therapists English version : http://www.smp-council.org.hk/ot/file/pdf/ot_practice_e.pdf Chinese version : http://www.smp-council.org.hk/ot/file/pdf/ot_practice_c.pdf	The Occupational Therapists Board of Hong Kong	Cap 359B	1998 Version
10	Optometrist	COP for Registered Optometrists English version : http://www.smp-council.org.hk/op/file/pdf/op_practice_e.pdf Chinese version : http://www.smp-council.org.hk/op/file/pdf/op_practice_c.pdf	Optometrists Board of Hong Kong	Cap 359F	Revised in Sept 2008
11	Radiographer	COP for Registered Radiographers English version : http://www.smp-council.org.hk/rg/file/pdf/rg_practice_e.pdf Chinese version : http://www.smp-council.org.hk/rg/file/pdf/rg_practice_c.pdf	The Radiographers Board of Hong Kong	Cap 359H	1998 Version

	Registered Healthcare Professionals	Documents	Issuing Authority	Cap	Remarks
12	Physiotherapist	<p>COP for Registered Physiotherapists</p> <p>English version : http://www.smp-council.org.hk/pt/file/pdf/pt_practice_e.pdf</p> <p>Chinese version : http://www.smp-council.org.hk/pt/file/pdf/pt_practice_c.pdf</p>	The Physiotherapists Board of Hong Kong	Cap 359J	1998 Version
13	Chinese Medicine Practitioner a) Registered b) Listed	<p>Code of Professionals Conduct for Registered Chinese Medicine Practitioners in Hong Kong</p> <p>English version : http://www.cmchk.org.hk/cmp/pdf/COP_Reg_e.pdf</p> <p>Chinese version : http://www.cmchk.org.hk/cmp/pdf/COP_Reg_c.pdf</p> <p>Code of Conduct for Listed Chinese Medicine Practitioners in Hong Kong</p> <p>English version : http://www.cmchk.org.hk/cmp/pdf/COP_Listed_e.pdf</p> <p>Chinese version : http://www.cmchk.org.hk/cmp/pdf/COP_Listed_c.pdf</p>	Chinese Medicine Council of Hong Kong	Cap 549	Revised in 2011

4.7. COP OF HEALTHCARE ORGANISATIONS IN HONG KONG

<p>Clinics registered under the Medical Clinics Ordinance under Medical Clinics Ordinance (Cap 343)</p>	<p>COP for Clinics Registered Under The Medical Clinics Ordinance (Cap 343)</p> <p>English version : http://www.dh.gov.hk/english/main/main_orphf/files/Code%20of%20Practice%20for%20Clinics%20Registered%20Under%20the%20Medical%20Clinics%20Ordinance%20(Cap.%20343).pdf</p> <p>Chinese version: http://www.dh.gov.hk/tc_chi/main/main_orphf/files/Code%20of%20Practice%20for%20Clinics%20Registered%20Under%20the%20Medical%20Clinics%20Ordinance%20(Cap.%20343).pdf</p>	<p>Department of Health</p>	<p>Cap 343</p>	<p>2010 Version</p>
<p>Private Hospitals, Nursing Homes and Maternity Home registered under the Hospital, Nursing and Maternity Homes Registration Ordinance (Cap 165)</p>	<p>Code of Practice For Private Hospitals, Nursing Homes and Maternity Homes</p> <p>English version : http://www.dh.gov.hk/english/main/main_orphf/files/code_english.pdf</p> <p>Chinese version:</p>	<p>Department of Health</p>	<p>Cap 165</p>	<p>2016 Version</p>

	http://www.dh.gov.hk/tc_chi/main/main_orphf/files/code_chinese.pdf			
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4.8. POLICIES, GUIDELINES & PROCEDURES AND OTHER RELEVANT INFORMATION RELEASED BY eHR OFFICE FOR PARTICIPATING IN eHRSS*

General Policies and Guidelines

1. Participant Information Notice
2. Conditions of Registration of Healthcare Providers (Private Hospitals) in eHRSS/ Conditions of Registration of Healthcare Providers (other than Private Hospitals) in eHRSS
3. eHRSS Privacy Policy Statement
4. eHRSS Personal Information Collection Statements
5. Important Note For Healthcare Providers Who Perform Healthcare Recipient Registration And / Or Obtaining Joining And Sharing Consent In Electronic Health Record Sharing System
6. Training materials for the operation of registration centres
7. Management of Healthcare Recipient Index
8. eHRSS Data Retention Policy
9. Policy and Guidelines for Handling Data Access Request (DAR) and Data Correction Request (DCR) in eHRSS
10. Guidelines and procedures for using Hong Kong Identity (HKID) Card for eHR
11. Frequently Asked Questions for eHRSS

eHR Data Standards

12. eHR Content Standards Guidebook.
13. Editorial Guide on Hong Kong Clinical Terminology Table – Overview
14. Guide on Implementation & Maintenance of the Hong Kong Clinical Terminology Table

eHR Security and System Connection Guidelines

15. IT Security Policies for eHRSS
16. Security Assessment Checklist for Participating in the eHRSS
17. Data Interoperability Guide
18. Communication Protocol (Data Interface) Specification
19. ELSA Installation Guide
20. Token Inventory Management User Guide
21. eHR Adaptor Interface Specification
22. Process Report and Exceptional Reporting Requirement

*The policies, guidelines & procedures and other relevant information released

maybe updated from time to time. Please access www.ehealth.gov.hk or contact eHR Office for most updated information.

4.9. REFERENCE FROM THE OFFICE OF THE PRIVACY COMMISSIONER FOR PERSONAL DATA (PCPD)¹⁰

Office of the Privacy Commissioner for Personal Data

(<http://www.pcpd.org.hk/index.html>)

Personal Data (Privacy) Ordinance (Cap 486)

(http://www.pcpd.org.hk/english/data_privacy_law/ordinance_at_a_Glance/ordinance.html)

Data Protection Principles

(http://www.pcpd.org.hk/english/data_privacy_law/6_data_protection_principles/principles.html)

Code of Practice and Guidelines

(http://www.pcpd.org.hk/english/data_privacy_law/code_of_practices/code.html)

Guidance Note

(http://www.pcpd.org.hk/english/resources_centre/publications/guidance/guidance.html)

Information Leaflets

(http://www.pcpd.org.hk/english/resources_centre/publications/information_leaflet/information_leaflet.html)

Proper Handling of Data Access Request and Charging of Data Access Request Fee by Data Users

(http://www.pcpd.org.hk/english/resources_centre/publications/files/DAR_e.pdf)

Guidance on the Proper Handling of Data Correction Request by Data Users

(http://www.pcpd.org.hk/english/resources_centre/publications/files/dcr_e.pdf)

Code of Practice on the Identity Card Number and other Personal Identifiers - Compliance Guide for Data Users (July 2016)

(https://www.pcpd.org.hk/english/data_privacy_law/code_of_practices/files/compliance_guide_e.pdf)

¹⁰ The references from PCPD listed in this COP are not exhaustive. PCPD may issue more Code of Practice or Guideline Note or other material or update any existing documents from time to time. Readers of this COP are advised to access to the internet website of the Office of the Privacy Commissioner for Personal Data for the most updated information (<http://www.pcpd.org.hk/index.html>).

4.10. COMMON TERMS ABOUT USES OF eHR IN eHRSS

