



香港特別行政區政府 HKSARGOVT

**Developers' Quick Guide
eHealth Chinese Medicines Prescribing Records Upload
(FHIR)**

1 Contents

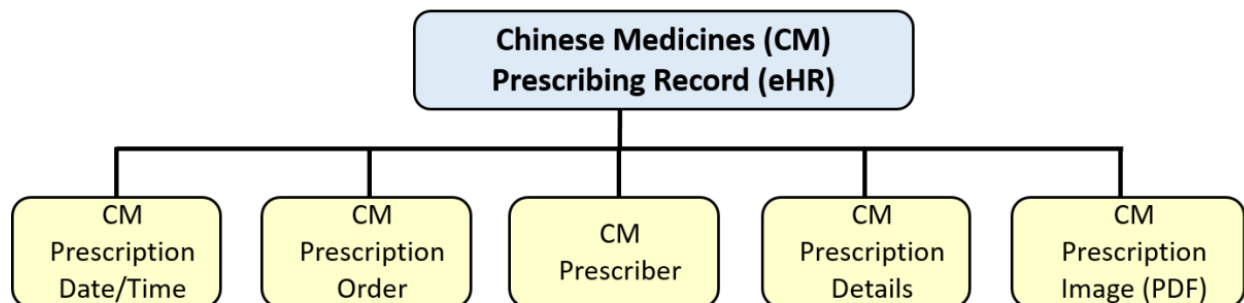
1. Purpose	3
2. Data Components	3
3. Upload Standards.....	4
4. Artifacts Summary.....	6
5. Specification of Data uploaded	7
5.1 Composition of HL7 FHIR Message.....	7
5.2 Data Elements in the Bundle Resource.....	8
5.3 Data Elements in the Composition Resource	9
5.4 Data Elements in the Patient Resource	14
5.5 Data Elements in the Organization resource	16
5.6 Data Elements in the MedicationRequest resource	17
5.7 Data Elements in the Medication resource	21
5.8 Data Elements in the DocumentReference resource.....	23
5.9 Data Elements in the PractitionerRole resource.....	24
5.9.1 Data Elements in Practitioner resource	25
5.10 Data Elements for the Encounter resource	26
6. Image File (PDF)	28
7. Examples	29
8. Mapping Tables	40
8.1 FHIR Administrative Gender	40
9. Code Tables	40
10. Data variable	40
11. Appendix.....	41

1. Purpose

This document is intended for Information Technology personnel involved in the development of programmes to upload data from their Electronic Medical Record (EMR) system to the electronic Health Record Sharing System (eHRSS).

The technical interface requirements for implementing Health Level Seven (HL7) Fast Healthcare Interoperability Resources (FHIR) Release 4 (R4) for uploading the Chinese Medicines Prescribing Records to eHRSS are provided below. Readers who prefer more in-depth study of the HL7 FHIR (R4B) standards and content standards may refer to the HL7 FHIR website <https://www.hl7.org/fhir/> and the **eHR Content Standards Guidebook** on the eHealth official website <https://www.ehealth.gov.hk/> for more detail.

2. Data Components



CM Prescription Date/Time

The date and time when the Chinese medicines prescription was issued.

CM Prescription Order

The information of the healthcare institution where the Chinese medicines prescription order was issued.

CM Prescriber

The name of the healthcare professional who issued the Chinese medicines prescription.

CM Prescribing Details

The information of Chinese medicines details and administration methods of the prescription.

CM Prescription Image (PDF)

The PDF format of the Chinese medicines prescription order.

3. Upload Standards

Supported Data Standards Level

The Chinese Medicines Prescribing data domain (CMRXO) supports Level 2 (including text / PDF report) or Level 3 data standards only.

Examples of Chinese Medicines Prescribing Scenarios

Below are the examples depicting the different details in Level 2 and Level 3 Chinese Medicines Prescribing records:

Data field	Level 2 data	Level 3 data
Chinese medicines prescription datetime	2009-11-11T00:00:00.000+08:00	2009-11-11T00:00:00.000+08:00
Chinese medicines prescribing institution identifier	1000000000	1000000000
Chinese medicines prescribing institution long name	中醫堂中醫診所	中醫堂中醫診所
Chinese medicines prescribing institution local name	中醫堂	中醫堂
Chinese medicines prescription order number	PX01162001570	PX01162001570
Chinese medicine disease local description	腰痛	咳嗽病
Chinese medicines prescriber's English full name	Chan Tai Man	Chan Tai Man
Chinese medicines prescriber's Chinese full name	陳大文	陳大文
Prescribed Chinese medicines dose group number	1	1
Chinese medicines type code	DP	DG
Prescribed Chinese medicines sequence number	1	1
Prescribed Chinese medicines - recognised terminology name		HKCTT
Prescribed Chinese medicines identifier - recognised terminology		9812009
Prescribed Chinese medicines description - recognised terminology		製半夏(薑半夏) - 顆粒劑 (冲劑)
Prescribed Chinese medicines code - local terminology		5ZBX501
Prescribed Chinese medicines description - local terminology	黨參	薑半夏
Prescribed Chinese medicines dose value	10	2
Prescribed Chinese medicines dose unit code		1

Data field	Level 2 data	Level 3 data
Prescribed Chinese medicines dose unit description		克
Prescribed Chinese medicines dose unit local description	克	克(濃)
Prescribed Chinese medicines dose unit remarks		9050671
Prescribed Chinese medicines dose instruction	服用 2 日，每日服用 1 劑。清水三碗煎至一碗，飯後服。	服用 2 日，每日服用 2 次，每次 1 包，共 4 包。
Prescribed Chinese medicines route of medication administration code		ORL
Prescribed Chinese medicines route of medication administration description		口服
Prescribed Chinese medicines route of medication administration local description	口服	口服

Modes of Data Upload

HCP can upload clinical data in TWO upload modes according to needs. Please refer to the relevant sections in the General Guide.

- **Data materialization (DM)** mode is to upload all of an HCR's clinical data of a specific sharable dataset (data domain) that exists in the EMR system to eHRSS. DM aims for the first data upload for an HCR who newly given sharing consent to the HCP; and
- **Incremental Load (INC)** mode is for HCP to upload all newly created, amended and cancelled clinical data of a specific sharable data from all HCRs in the EMR system to eHRSS in ONE batch since the last data upload.

Recognised Terminology

- The recognised terminology sets adopted for the eHR Chinese Medicines Prescribing Records includes:
 - HKCTT
 - pCM
- The clinical terminology and code sets used are provided in the **self-service kit**. For the latest codes used, please refer the eHR code sets published on the eHealth official website.

Message Standards

- FHIR R4 message standards in JSON format are adopted for CM Prescribing Records upload to eHealth.
- Resource and Element names are case-sensitive

Encoding

- UTF-8 encoding is used for eHR Clinical data exchange.

4. Artifacts Summary

This section provides a list of the FHIR artifact defined as part of this implementation guide:

Resource used	Definition	Cardinality
eHRSS Bundle	This profile represents the constraints and localization applied to the Bundle resource by eHRSS	1..1
eHRSS Composition	This profile represents the constraints and localization applied to the Composition resource by eHRSS	1..1
eHRSS Patient	This profile represents the constraints and localization applied to the Patient resource by eHRSS.	1..1
eHRSS Author Organization	This profile represents the constraints and localization applied to the Organization Resource referenced by Composition Resource.	1..1
eHRSS Organization	This profile represents the constraints and localization applied to the Organization Resource referenced by MedicationRequest Resource.	0..*
eHRSS MedicationRequest	This profile defines a MedicationRequest structure which includes eHR Chinese Medicines Prescribing data	1..*
eHRSS Medication	This profile defines a Medication structure which includes eHR Chinese Medicines item	1..*
eHRSS DocumentReference	This profile defines a DocumentReference structure which includes eHR Chinese Medicines Prescribing data	1..1
eHRSS Encounter	This profile defines an Encounter structure which related to the prescribing order	0..*

Notes:

The following conventions are used for the specifications described in this document:

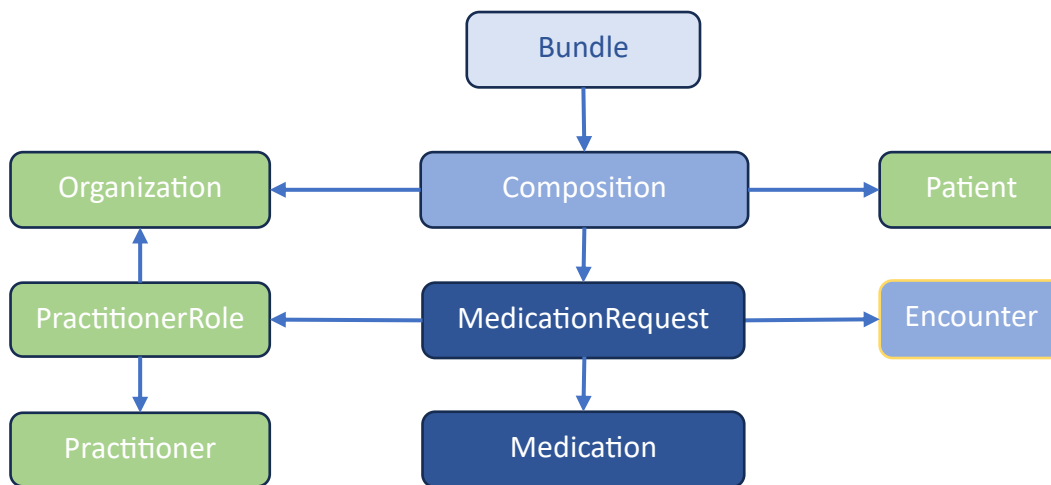
<i>Constants:</i>	Bolded values are constants or fixed values.
<i>E.g.:</i>	Example values for illustration.
<i>[...]:</i>	Data variables
<i>"...":</i>	Data values.
<i>"M/O"</i>	Indicates if the data field is Mandatory (M) or Optional (O). M* or O* denotes conditional Mandatory or Optional, please refer to Remarks for rules
<i>NA:</i>	Data Field in concern is not used.
<i>[S]:</i>	Must Support

5. Specification of Data uploaded

The section describes the format and data required for the data contributed to eHealth. Unused FHIR message items and those not processed by eHRSS are not listed below. Readers may refer to the HL7 (HK) website for the full HL7 FHIR R4 message specifications if required.

5.1 Composition of HL7 FHIR Message

The CM Prescribing Records are structured with the HL7 FHIR components (Resources) and hierarchy as specified below.



Bundle Resource (Single occurrence in each FHIR message bundle)

- Identify the container type for the collection of data included in the bundle. The resource composition and data contents are determined by the Bundle Type. For CM Prescribing Records data upload, the following resources are included in the bundle.

Composition Resource (Single occurrence for each bundle)

- Indicate a composition of data or document are collected in the message bundle. For “document” type of bundle, the “Composition Resource” must be the first resource to be included.

MedicationRequest Resource (Multiple occurrences are allowed in a bundle)

- Contains the list of CM Prescribing records based on the mode of upload.

Medication Resource (Single occurrences are allowed for each MedicationRequest)

- Contains the list of CM Prescribing records based on the mode of upload.

PractitionerRole Resource (Single occurrence for each MedicationRequest)

- Contains the reference to Prescribing institution and prescriber

Practitioner Resource (Single occurrence for each **PractitionerRole**)

- Contains the prescriber 's information

Organization Resource (Multiple occurrence for each **Bundle**)

- Institution(s) (HCP) authored the upload CM prescribing records
- Contains the prescribing institution information

Patient Resource (Single occurrence for each **Bundle**)

- Contains the demographics data of the healthcare recipient (HCR) who has the CM Prescribing record.

Encounter Resource (Single occurrence for each **Medication Order**)

- Contains the encounter information for each CM Prescribing record.

5.2 Data Elements in the Bundle Resource

A bundle is a collection of resources. For the type of “document” bundle, the following rules should be fulfilled.

+ Rule: A document must have an identifier with a system and a value

The below table listed data elements in the Bundle Resource which identifies the beginning of the container and the collection of data resources are all included under [resource.entry] in the bundle.

JSON Name	Data Value	FHIR Data Type (Max Length)	Remarks	M/O
resourceType	Name of the current resource	string(6)	<u>Fixed value:</u> "resourceType": " Bundle "	M
id	Resource id which is a logic id to identify the artifact A UUID represented as a URI (RFC 4122) Please see reference website in appendix	uuid	<i>E.g.</i> c757873d-ec9a-4326-a141-556f43239520	M
identifier	Persistent identifier for the resource UUID/OID for Bundle	Identifier	<i>E.g.</i> "identifier" : { "system" : "urn:ietf:rfc:3986", "value" : "urn:uuid:0c3151bd-1cbf-4d64-b04d-cd9187a4c6e0" }	M
type	The type is always “document”	code	<u>Fixed value:</u> "type": " document "	M

JSON Name	Data Value	FHIR Data Type (Max Length)	Remarks	M/O
timestamp	When the bundle was assembled [current time]	instant	In format: YYYY-MM-DDThh:mm:ss+zz:zz E.g. "timestamp": "2024-03-01T15:04:48.865+08:00"	M
entry fullUrl	Resources included in this bundle are collected under 'entry' Each resource is identified by a uri A UUID represented as a URI (RFC 4122)	BackboneElement uri	URI for UUID/OID HL7 FHIR Resources that collected in the CM Prescribing record upload Bundle include: <ul style="list-style-type: none"> • Composition • Patient • MedicationRequest • Medication • PractitionerRole • Organization • Practitioner • Encounter E.g. "fullUrl": "urn:uuid:21c6828c-b175-4a3b-b6de-6eaf69335021"	M
resource	A document must have a Composition as the first resource. Please refer to Composition resource requirements	BackboneElement .Resource	The 1st resource must be "Composition" resource.	M

5.3 Data Elements in the Composition Resource

The Composition Resource identifies whether the upload package includes list of CM Prescribing records in this bundle.

JSON Name	Data Value	FHIR Data Type (Max Length)	Remarks	M /O	Delete scenarios
resourceType	Resource name	string (11)	Fixed value: "resourceType": "Composition"	M	
id	Resource id which is a logic id to identify the artifact A UUID represented as a URI (RFC 4122) Please see reference website in appendix	uuid	E.g. urn:uuid: 30551ce1-5a28-4356-b684-1e639094ad4d	M	M

JSON Name	Data Value	FHIR Data Type (Max Length)	Remarks	M / O	Delete scenarios
99999999-ComplianceLevel	[Compliance Level]	url string(1)	<u>Permissible Values:</u> 2,3 <i>E.g.</i> <pre>"extension": [{ "url": "[eHR FHIR URL]/99999999-ComplianceLevel", "valueString": "[Compliance Level]" }]</pre>	M	M
extension 99999999-DomainVersion	[Domain version] The version of this interface	url string(11)	<u>Fixed value:</u> "eHRSS-1.1.0" <i>E.g.</i> { "url": "[eHR FHIR URL]/99999999-DomainVersion", "valueString": "eHRSS-1.1.0"}	M	M
extension 99999999-UploadMode	[Upload Mode]	extension url string(5)	<u>Permissible values:</u> NBL: Non Bulk load <i>E.g.</i> { "url": "[eHR FHIR URL]/99999999-UploadMode", "valueString": "NBL"}	M	M
99999999-SendingLocation	[Sending Location Code] A code agreed between eHRSS and the HCP which indicates the location where the data is sending from	extension url string(20)	Use [HCP ID] if sending location cannot be provided. <i>E.g.</i> { "url": "[eHR FHIR URL]/99999999-SendingLocation", "valueString": "[Sending Location Code]"}	O	O
status	The status is always "final". Other codes are not accepted by eHRSS.	string(5)	<u>Fixed value:</u> "final"	M	M
type.coding.system type.coding.display	Composition type A coding object is required.	CodeableConcept coding.system coding.display	<u>Fixed value:</u> <pre>"type": { "coding": [{ "system": "[eHR FHIR URL]", "display": "Hong Kong eHR Healthcare Document" }] }</pre>	M	M

JSON Name	Data Value	FHIR Data Type (Max Length)	Remarks	M/O	Delete scenarios
subject.reference	[resource.id] of Patient Resource included in the same bundle HCR has been prescribed in this bundle	Reference(Patient)	<u>In format:</u> Patient/<resource id> <i>E.g.</i> "subject": { "reference": "Patient/6e480262-978c-49f0-a793-468293932fc2" } • This resource id is the same value of the Patient resource id • The Patient Resource contains data of the HCR	M	M
date	Message generation time <i>eHRSS will use this value and [record key] for overriding records uploaded in eHRSS</i>	dateTime(25)	<u>In format:</u> YYYY-MM-DDThh:mm:ss.sss+zz:zz <i>E.g.</i> "date": "2022-12-01T15:04:48.000+08:00"	M	M
author	Author of this composition Name of healthcare institution who created/update the record <i>eHRSS will not interpret this value</i>	Reference(Organization)	<u>Fixed value:</u> Organization/author <i>E.g.</i> "author": [{ "reference": "Organization/3b3703a9-7a26-427c-9352-4e41f046d85e"}] • This resource id is the same value of the Organization resource id	M	M
title	Title of this composition <i>eHR will not interpret this value</i>	string(33)	<u>Fixed value:</u> title: "Hong Kong eHR Healthcare Document"	M	M
section	Composition is broken into sections	BackboneElement	-	M	M
title	A human readable label for this section	string(255)	<u>Fixed value:</u> title: "Chinese Medicines Prescribing Records"	M	M
code	A code identifying the kind of content contained within the section. This must be consistent with the section title.	CodeableConcept coding.system coding.code	<u>Fixed value:</u> "code": { "coding": [{ "system": "[eHR FHIR URL]/datadomain", "code": "CMRXO" }] } }}	M	M
MedicationRequest					

JSON Name	Data Value	FHIR Data Type (Max Length)	Remarks	M / O	Delete scenarios
99999999-TransactionType	[Transaction Type] Insert / Update / Delete	BackboneElement.Extension string(1)	<u>Permissible Values:</u> I: Insert U: Update D: Delete <i>E.g.:</i> "extension": [{ "url": "[eHR FHIR URL]/99999999-TransactionType", "valueString": "[Transaction Type]" }]	M	M
99999999-LastUpdateDateTime	[Last Update Date Time]	BackboneElement.Extension dateTime(29)	<u>In format:</u> YYYY-MM-DDThh:mm:ss.sss+zz:zz <i>E.g.:</i> "2019-05-31T08:30:00.000+08:00" <i>E.g.:</i> "extension": [{ "url": "[eHR FHIR URL]/99999999-LastUpdateDateTime", "valueDateTime": "[Last Update Date Time]" }]	M	M
99999999-TransactionDateTime	[Transaction Date Time]	BackboneElement.Extension dateTime(29)	<u>In format:</u> YYYY-MM-DDThh:mm:ss.sss+zz:zz <i>E.g.:</i> "2019-05-31T08:30:00.000+08:00" <i>E.g.:</i> "extension": [{ "url": "[eHR FHIR URL]/99999999-TransactionDateTime", "valueDateTime": "[Transaction Date Time]" }]	M	M
99999999-RecordCreateDatetime	[Record Create Datetime]	BackboneElement.Extension dateTime(29)	<u>In format:</u> YYYY-MM-DDThh:mm:ss.sss+zz:zz <i>E.g.:</i> "2021-01-25T08:30:00.000+08:00" <i>E.g.:</i> "extension": [{ "url": "[eHR FHIR URL]/99999999-RecordCreateDatetime", "valueDateTime": "[Record Create Datetime]" }]	O	O
extension 99999999-RecordCreateInstitutionIdentifier	[Record Create Institution Identifier]	BackboneElement.Extension string(10)	<i>E.g.:</i> "extension": [{ "url": "[eHR FHIR URL]/99999999-RecordCreateInstitutionIdentifier", "valueString": "[Record Create Institution Identifier]" }]	O	O

JSON Name	Data Value	FHIR Data Type (Max Length)	Remarks	M/O	Delete scenarios
extension 99999999-RecordCreateInstName	[Record Create Institution Name]	BackboneElement.Reference.Extension string(255)	E.g.: "extension": [{ "url": "[eHR FHIR URL]/99999999-RecordCreateInstName", "valueString": "[Record Create Institution Name]" }]	O	O
extension 99999999-RecordLastUpdateDatetime	[Record Last Update Datetime]	BackboneElement.Reference.Extension dateTime(29)	In format: YYYY-MM-DDThh:mm:ss.sss+zz:zz E.g. 2017-03-04T08:30:00.000+08:00 E.g. "extension": [{ "url": "[eHR FHIR URL]/99999999-RecordLastUpdateDatetime", "valueDateTime": "[Record Last Update Datetime]" }]	O	O
extension 99999999-RecordUpdateInstIdentifier	[Record Update Institution Identifier]	BackboneElement.Reference.Extension string(10)	E.g. "extension": [{ "url": "[eHR FHIR URL]/99999999-RecordUpdateInstIdentifier", "valueString": "[Record Update Institution Identifier]" }]	O	O
extension 99999999-RecordUpdateInstName	[Record Update Institution Name]	BackboneElement.Reference.Extension string(255)	E.g. "extension": [{ "url": "[eHR FHIR URL]/99999999-RecordUpdateInstName", "valueString": "[Record Update Institution Name]" }]	O	O
identifier	[Record key]	string(40)	E.g. "identifier": { "system": "[HCP FHIR URL]/Recordkey", "value": "[Record key]" }	M	M
entry	A reference to data that supports this section **Each entry represents each MedicationRequest record	Reference(MedicationRequest)	Reference Format: MedicationRequest/<resource id> <ul style="list-style-type: none"> This resource id is the same value of the MedicationRequest resource id The MedicationRequest Resource contains data of the HCR 's list of CM Prescribing records are included in this bundle. 	M	M
DocumentReference					

JSON Name	Data Value	FHIR Data Type (Max Length)	Remarks	M /O	Delete scenarios
identifier	[Record key]	string(40)	E.g. "identifier": { "system": "[HCP FHIR URL]/Recordkey", "value": "[Record key]" }	M	M
entry	A reference to data that supports this section **Each entry represents each CMRXO PDF record	Reference(100)	Reference Format: DocumentReference/<resource id> • This resource id is the same value of the DocumentReference resource id	M	M

5.4 Data Elements in the Patient Resource

The Patient Resource provides the patient identifier referenced in the other Resources to identify the patient whom these CMRXO data belong to. This resource also contains the basic demographic data (major keys) used for the validation of the HCR's identity.

JSON Name	Data Field	FHIR Data Type (Max Length)	Remarks	M/O	delete
resourceType	Resource name	string(7)	<u>Fixed value:</u> "Patient"	M	M
id	[resource id] reference by Composition resource A UUID represented as a URI (RFC 4122) Please see reference website in appendix	string(45)	This id identifies the patient / HCR whose records are included in the current bundle. It is used in [subject.reference] in the Composition Resources to identify the concerned patient.	M	M
identifier	eHR number for this patient	identifier	There are always 2 entries for Patient Resource [identifier.] One for eHR number and one for document number/ID.		
type.coding.system	Link to document type coding system	string(255)	<u>Fixed value:</u> "[eHR FHIR URL]/typeofID-ext"	M	M
type.coding.code	identifier type code	string(5)	<u>Fixed value:</u> "EHRNO"	M	M
value	[eHR number] A unique HCR identifier assigned by eHRSS.	integer(12)	<u>Fixed length:</u> 12 e.g. 201000000001	M	M
identifier	Document type and HKIC for this patient	identifier			
type.coding.system	Link to document type coding system	string(255)	<u>Fixed value:</u> "[eHR FHIR URL]/typeofID-ext"	M	M
type.coding.code	[Type of identity document] eHRSS document type code which is used for registration	string(5)	Refer to the document type code set provided in the self-service kit or the eHRSS official website for the most updated code set.	M	M

JSON Name	Data Field	FHIR Data Type (Max Length)	Remarks	M/O	delete
value	<p>Identity Document number of the type of document as specified above</p> <p>If document type = "ID" or "CD" or "BC" or "ECID", the Identity Document Number will comply with the HKID format, else it will be of free text format</p>	string(12)	<p><u>In Format:</u> If [document type] is ID, BC, CD, ECID,</p> <p>format of the document number is: AANNNNNNNC or ANNNNNNNC where:</p> <ul style="list-style-type: none"> C is the check digit All Uppercase 	M	M
name	Patient's name	At least [name.family] or [name.given] will be provided			
family	<p>[English surname] Patient's surname in English</p> <p>For single name cases, the single name can be specified in either [English surname] or [English given Name]</p>	string(40)	<p><u>Mandatory</u> if [name.text] and [name.give] are blank; else Optional</p> <ul style="list-style-type: none"> All Uppercase letters 	M*	M*
given	<p>[English given name] Patient's given name in English</p>	string(40)	<p><u>Mandatory</u> if [name.text] and [name.family] are blank; else Optional</p> <ul style="list-style-type: none"> All Uppercase letters 	M*	M*
text	<p>[English full name] Patient's full name in English</p>	string(100)	<p><u>Mandatory</u> if [name.family] and [name.given] are blank; else Optional</p> <p><u>In format:</u> [name.family] + [,] + 1 white space + [name.given]</p> <ul style="list-style-type: none"> All Uppercase letters If HCR has either English surname or given name stored in local EMR system, full name should be filled. 	M*	M*
gender	<p>[sex] Gender of the patient</p> <p>eHR will convert the FHIR gender to eHR [Sex] according to the Section 8 Mapping table</p>	code(7)	<p><u>Permissible Values:</u></p> <ul style="list-style-type: none"> male female unknown <p>E.g.: "gender": "[Sex]"</p>	M	M
birthdate	<p>[Date of birth] Date of birth of the patient as indicated on the patient's identity document</p>	date(10)	<p><u>In format:</u> YYYY-MM-DD</p> <p>E.g.: "birthDate": "[Date of birth]"</p> <p>If date is exact to 'Year' (e.g. 2010), the unknown month and day should be filled with '01-01'. Example: "2010-01-01".</p> <p>If date is exact to 'Month' (e.g. 2011-12), the unknown day should be filled with '01'. Example: "2011-12-01".</p>	M	M

5.5 Data Elements in the Organization resource

This Organization Resource entry identifies HCP as the source of data uploading and contains only constant values.

JSON Name	Data Value	FHIR Data Type	Remarks	M/O	Delete Scenario
resourceType	Resource name	string (12)	<u>Fixed value</u> : “ Organization ”	M	M
id	[resource id] reference by Composition resource A UUID represented as a URI (RFC 4122) Please see reference website in appendix	string (45)	The resource id identifies the Healthcare Institution relevant to the Composition resource.	M	M
name	[Healthcare institution long name] <i>eHRSS will not interpret the value</i>	string (255)		M	M

This Organization Resource entry identifies HCP which has the role to prescribe the medication order.

JSON Name	Data Value	FHIR Data Type	Remarks	L2 M/O	L3 M/O	Delete Scenario
resourceType	Resource name	string (12)	<u>Fixed value</u> : “ Organization ”	M	M	M
id	[resource id] reference by PractitionerRole resource A UUID represented as a URI (RFC 4122) Please see reference website in appendix	string (45)	The resource id identifies the Healthcare Institution relevant to the medication order	M	M	M
identifier.value	[Chinese medicines prescribing institution identifier] [Healthcare institution displayed English long name] or the [Healthcare institution displayed Chinese long name] in the eHR Healthcare Provider Index for the healthcare institution which issued the Chinese medicines prescription order	numeric(10)	<u>Mandatory</u> if [Chinese medicines prescription institution local name] is blank. <u>Fixed length</u> : 10 e.g. 1000000000 E.g. "identifier": [{ "system": "[EHR FHIR URL]/pvdr", "value": "[Chinese medicines prescribing institution identifier]" }]	M*	M*	NA

JSON Name	Data Value	FHIR Data Type	Remarks	L2 M/O	L3 M/O	Delete Scenario
name	[Chinese medicines prescribing institution long name] [Healthcare institution displayed English long name] or the [Healthcare institution displayed Chinese long name] in the eHR Healthcare Provider Index for the healthcare institution which issued the Chinese medicines prescription order	string(255)	<u>Mandatory</u> if [Chinese medicines prescription institution identifier] is given.	M*	M*	NA
alias	[Chinese medicines prescribing institution local name] Local description of the healthcare provider by which the Chinese medicines prescription order was made	string(100)	<u>Mandatory</u> if [Chinese medicines prescribing institution identifier] is given	M*	M*	NA

5.6 Data Elements in the MedicationRequest resource

The information about an individual who has medication orders

JSON Name	Data Value	FHIR Data Type (Max Length)	Remarks	L2 M/O	L3 M/O	Delete Scenario
resourceType	MedicationRequest	string(17)	<u>Fixed Value:</u> "resourceType": " MedicationRequest "	M	M	M
id	Resource id Logical id of this artifact A UUID represented as a URI (RFC 4122);	uuid	E.g. c7781f44-6df8-4a8b-9e06-0b34263a47c5	M	M	M
identifier	[Record key] A unique identifier for each Chinese Medicine Prescribing record	string(40)	This [Record Key] is reference to the same [Record Key] in Composite Resource entry E.g. "identifier": { "system": "[HCP FHIR URL]/Recordkey", "value": "[Record key]"}	M	M	M
identifier	[Chinese medicines prescription order number] A unique number assigned for each Chinese medicines prescription order issued by individual healthcare institution. One prescription order may include multiple Chinese medicines.	string(20)	E.g. "identifier": { "system": "[HCP FHIR URL]/OrderNum", "value": "[Chinese medicines prescription order number]"}	M	M	O

JSON Name	Data Value	FHIR Data Type (Max Length)	Remarks	L2 M/O	L3 M/O	Delete Scenario
status	Current state of the order. <i>eHRSS will not interpret this value</i>	string(9)	Fixed value : "completed"	M	M	M
intent	Indicator this request is an order. <i>eHRSS will not interpret this value</i>	string(5)	Fixed value : "order"	M	M	M
medication.reference	[resource.id] of Medication Resource	reference(100)	Reference Format: Medication/<resource id> • This resource id is the same value of the Medication resource id	M	M	NA
subject.reference	[resource.id] of Patient Resource in the same bundle HCR has the Prescribing records in this bundle	reference(100)	Reference Format: Patient/<resource id> <i>E.g.</i> "subject": { "reference": "Patient/6e480262-978c-49f0-a793-468293932fc2" } • This resource id is the same value of the Patient resource id	M	M	NA
requester.reference	[resource.id] of PractitionerRole Resource for the requester PractitionerRole	reference(100)	Reference Format: PractitionerRole/<resource id>	O	O	NA
encounter.reference	[resource.id] of Encounter Resource in which the prescription is related to	reference(100)	Reference Format: Encounter/<resource id>	O	O	NA
dosageInstruction	How the medication should be taken					
extension 1006978-CMDoseGpNum	[Prescribed Chinese medicines dose group number] The group number of the prescribed Chinese medicines dose	numeric(3)	<u>Permissible value</u> : 1-999 e.g. "url": "[EHR FHIR URL]/1006978-CMDoseGpNum", "valueInteger": [Prescribed Chinese medicines dose group number]	M	M	NA
extension 1006996-CMDoseRemarks	[Prescribed Chinese medicines dose remarks] Additional information relating to the prescribed Chinese medicines dose	string(300)	e.g. "url": "[EHR FHIR URL]/1006996-CMDoseRemarks", "valueString": "[Prescribed Chinese medicines dose remarks]"	O	O	NA

JSON Name	Data Value	FHIR Data Type (Max Length)	Remarks	L2 M/O	L3 M/O	Delete Scenario
text	[Prescribed Chinese medicines dose instruction] The entire combined instruction information of one Chinese medicines dose; the syntax may contain the decoction method and/or method of administration which includes: dose, frequency, duration of treatment or treatment start and end date	string(350)		M	M	NA
route						
coding.system	Link to coding system of "Chinese medicines route of administration"	uri	Fixed value: [EHR FHIR URL] /CMroute	O	O	NA
coding.code	[Prescribed Chinese medicines route of administration code] [eHR value] of the "Chinese medicines route of administration" code table for identifying the prescribed Chinese medicines route of administration.	string(20)	<u>Mandatory</u> if [Prescribed Chinese medicines route of administration description] is given, else <u>N/A</u> . Refer to the code set "Chinese medicines route of administration" in Self-Service kit. The latest code set in eHealth website shall prevail.	NA	M*	NA
coding.display	[Prescribed Chinese medicines route of administration description] [eHR description] of the "Chinese medicines route of administration" code table for identifying the prescribed Chinese medicines route of administration.	string(20)	<u>Mandatory</u> if [Prescribed Chinese medicines route of administration code] is given, else <u>N/A</u> . Refer to the code set "Chinese medicines route of administration" in Self-Service kit. The latest code set in eHealth website shall prevail.	NA	M*	NA
text	[Prescribed Chinese medicines route of administration local description] Local description of the prescribed Chinese medicines route of administration developed by the healthcare provider.	string(100)		O	O	NA
doseAndRate	Amount of medication administered					
doseQuantity	Amount of medication per dose					
value	[Prescribed Chinese medicines dose value] The numeric value of the corresponding prescribed Chinese medicines dose unit.	decimal(12)	<u>Permissible values:</u> 0.01-999.99	M	M	NA

JSON Name	Data Value	FHIR Data Type (Max Length)	Remarks	L2 M/O	L3 M/O	Delete Scenario
unit	[Prescribed Chinese medicines dose unit description] [Chinese description] of the "Chinese Medicines dose unit" code table for the dose unit of the prescribed Chinese medicines. It is the corresponding description of the selected [Chinese medicines dose unit - code].	string(20)	<u>Mandatory</u> if [Chinese medicines type code] is "DG", else N/A if [Chinese medicines type code] is "DP" or "pCm"	M*	M	NA
system	Link to the coding system of "Prescribed Chinese medicines dose unit"	uri	<u>Fixed value:</u> [EHR FHIR URL]/CMdoseUnitcd	M*	M*	NA
code	[Prescribed Chinese medicines dose unit code] [eHR value] of the "Chinese Medicines dose unit" code table for identifying the dose unit of the prescribed Chinese medicines.	string(10)	<p><u>Mandatory</u> if [Chinese medicines type code] is "DG" and dose value must be "1".</p> <p><u>Mandatory</u> in 'Insert' and 'Update' scenarios for Level 2 if [Chinese medicines type code] is "DG" and value must be "1", else N/A if [Chinese medicines type code] is "DP" or "pCm".</p> <p>e.g. "system": "[EHR FHIR URL]/CMdoseUnitcd", "code": "[Prescribed Chinese medicines dose unit code]"</p>	M*	M*	NA
extension 1006989-DoseUnitLocalDesc	[Prescribed Chinese medicines dose unit local description] Local description created by the healthcare provider for the dose unit of the prescribed Chinese medicines	extension url string(20)	<p><u>Fixed value :</u> [EHR FHIR URL]/1006989-DoseUnitLocalDesc</p> <p>e.g. { "url": "[EHR FHIR URL]/1006989-DoseUnitLocalDesc", "valueString": "[Prescribed Chinese medicines dose unit local description]" }</p>	M	M	NA

JSON Name	Data Value	FHIR Data Type (Max Length)	Remarks	L2 M/O	L3 M/O	Delete Scenario
extension 1006990-CMDoseUnitRemarks	[Prescribed Chinese medicines dose unit remarks] [eHR value] of the "Chinese medicines dose unit remarks" code table for the dose additional information of the prescribed Chinese medicines. It is the supplementary information on the dose unit of the prescribed dispensing granules	extension url string(20)	<p><u>Mandatory</u> if [Chinese medicines type code] is "DG", else N/A if [Chinese medicines type code] is "DP" or "pCm".</p> <p><u>Fixed value</u> : [EHR FHIR URL]/ 1006990-CMDoseUnitRemarks</p> <p>E.g. "url": "[EHR FHIR URL]/1006990-CMDoseUnitRemarks"</p>	M*	M*	NA

5.7 Data Elements in the Medication resource

The FHIR Medication resource represents information about a specific medication. It is used to define what medicine is being prescribed, dispensed, or administered.

JSON Name	Data Value	FHIR Data Type (Max Length)	Remarks	L2 M/O	L3 M/O	Delete Scenario
resourceType	Medication	string(10)	<p><u>Fixed Value</u>: "resourceType": "Medication"</p>	M	M	NA
id	Resource id Logical id of this artifact A UUID represented as a URI (RFC 4122);	uuid	<p>E.g. c7781f44-6df8-4a8b-9e06-0b34263a47c5</p>	M	M	NA
extension 1006978-CMdoseGpNum	[Prescribed Chinese medicines dose group number] The group number of the prescribed dose.	numeric(3)	<p><u>Permissible values</u>: 1-999</p> <p>e.g. "url": "[EHR FHIR URL]/1006978-CMdoseGpNum", "valueInteger": "[Prescribed Chinese medicines dose group number]"</p>	M	M	NA
code	A code (or set of codes) that specify this medication					
extension 1006979-CMtype	[Chinese medicines type code] [eHR value] of the "Chinese medicines type" code table for identifying the type of the prescribed Chinese medicines.	string(10)	<p>Refer to the code set "Chinese medicines type" in Self-Service Kit. The latest code set in eHealth website shall prevail.</p> <p>E.g. "url": "[EHR FHIR URL]/1006979-CMtype", "valueString": "[Chinese medicines type code]"</p>	M	M	NA

JSON Name	Data Value	FHIR Data Type (Max Length)	Remarks	L2 M/O	L3 M/O	Delete Scenario
extension 1006991-CMAdditionalInfo	[Prescribed Chinese medicines additional information] The decoction method of the corresponding prescribed Chinese medicines or the ingredients of the corresponding prescribed proprietary Chinese medicines.	string(500)	E.g "url": "[EHR FHIR URL]/1006991-CMAdditionalInfo", "valueString": "[Prescribed Chinese medicines additional information]"	O	O	NA
extension 1006980-DrugSequenceNum	[Prescribed Chinese medicines sequence number] The sequence number of the prescribed Chinese medicines.	numeric(3)	Permissible values: 1-999 It must be unique as per particular prescribed Chinese medicines dose. "url": "[EHR FHIR URL]/1006980-DrugSequenceNum", "valueInteger": [Prescribed Chinese medicines sequence number]	M	M	NA
Prescribed Chinese medicines - recognised terminology						
coding.system	[Prescribed Chinese medicines - recognised terminology name] Name of the recognised terminology for the prescribed Chinese medicines. If eHR value = HKCTT, allowable nature is "中藥產品" ; if eHR value = pCm, all record is allowed	uri	<u>Mandatory</u> if [Prescribed Chinese Medicines identifier - recognised terminology] is given, else N/A. <u>For HKCTT, fixed uri:</u> [EHR FHIR URL]/HKCTT <u>For GB95, fixed uri:</u> [EHR FHIR URL]/pCM Refer to the code set "Recognised terminology name - Chinese medicines" in Self-Service Kit. The latest code set in eHealth website shall prevail.	NA	M	NA
coding.code	[Prescribed Chinese medicines identifier - recognised terminology] Unique identifier of the prescribed Chinese medicines in the recognised terminology.	string(20)	e.g. 9812009 (for HKCTT) Refer to the code set "Recognised terminology name - Chinese medicines" in Self-Service Kit. The latest code set in eHealth website shall prevail.	NA	M	NA

JSON Name	Data Value	FHIR Data Type (Max Length)	Remarks	L2 M/O	L3 M/O	Delete Scenario
coding.display	[Prescribed Chinese medicines description - recognised terminology] Description of the prescribed Chinese medicines in recognised terminology. It should be the corresponding description of the selected [Prescribed Chinese medicines identifier - recognised terminology].	string (100)	e.g. 製半夏(薑半夏) - 顆粒劑(沖劑) (for HKCTT) Refer to the code set "Recognised terminology name - Chinese medicines" in Self-Service Kit. The latest code set in eHealth website shall prevail. E.g. "system": "[EHR FHIR URL]/HKCTT", "code": "[Prescribed Chinese medicines identifier - recognised terminology]", "display": "[Prescribed Chinese medicines description - recognised terminology]"	NA	M	NA
Prescribed Chinese medicines - local terminology						
coding.system	Link to local terminology coding system	uri	Fixed Value: "[HCP FHIR URL]/CM "	O	M	NA
coding.code	[Prescribed Chinese medicines code -local terminology] Local code of the prescribed Chinese medicines developed by the healthcare provider.	string (20)	"code": "[Prescribed Chinese medicines code -local terminology]"	O	O	NA
coding.display	[Prescribed Chinese medicines description - local terminology] Local description of the prescribed Chinese medicines developed by the healthcare provider.	string (100)	Mandatory if [Prescribed Chinese medicines approach identifier - recognised terminology] is given, else <u>Optional</u> . "display": "[Prescribed Chinese medicines description - local terminology]"	M	M	NA

5.8 Data Elements in the DocumentReference resource

The information about the details for the Medication Order record.

JSON Name	Data Value	FHIR Data Type (Max Length)	Remarks	L2 M/O	L3 M/O	Delete Scenario
resourceType	Resource name	string(17)	Fixed Value: "DocumentReference"	M	M	NA

JSON Name	Data Value	FHIR Data Type (Max Length)	Remarks	L2 M/O	L3 M/O	Delete Scenario
id	[resource id] reference by Composition resource A UUID represented as a URI (RFC 4122) Please see reference website in appendix	string (45)		M	M	NA
status	This is FHIR Code to identify the status of the CM prescribing records current superseded entered-in-error	string(7)	<u>Fixed value:</u> current	M	M	NA
content	Chinese Medicines Prescribing Record in PDF					
attachment.contentType	Type of PDF	string(10)	Fixed value: "contentType": "application/pdf",	M	M	NA
attachment.data	[Chinese medicines prescription image (PDF)] Chinese medicines prescription order in PDF format	base64Binary		M	M	NA
attachment.url	[PDF file name] File name of PDF of the corresponding file.	string(255)	<u>In format:</u> Please refer the Section 6 Image file (PDF) name standard	M	M	NA

5.9 Data Elements in the PractitionerRole resource

The information about the details for the Prescriber role for the Medication record.

JSON Name	Data Value	FHIR Data Type	Remarks	L2 M/O	L3 M/O	Delete Scenario
resourceType	Resource name	string (12)	<u>Fixed value:</u> "PractitionerRole"	M	M	NA
id	[resource id] reference by MedicationRequest A UUID represented as a URI (RFC 4122) Please see reference website in appendix	string (45)	The resource id identifies the Roles for Organization and Practitioner	M	M	NA

JSON Name	Data Value	FHIR Data Type	Remarks	L2 M/O	L3 M/O	Delete Scenario
practitioner.reference	Links the practitioner to a specific role	reference(100)	<u>In format:</u> Practitioner/<resource id> E.g: <pre>"practitioner": { "reference": "Practitioner/8d46812c-4345-45ca-b9ff-ec325816c416" }</pre> <u>Prescribing Role</u> <ul style="list-style-type: none"> [Chinese medicines prescriber's English full name] [Chinese medicines prescriber's Chinese full name] 	O	O	NA
organization.reference	Links the organization to a specific role	reference(100)	<u>In format:</u> Organization/<resource id> E.g. "organization": { "reference": "Organization/c3cdb0dd-9b20-4a14-82bc-3facb3da18f7" } <u>Prescribing Role</u> <ul style="list-style-type: none"> [Chinese medicines prescribing institution identifier] [Chinese medicines prescribing institution long name] [Chinese medicines prescribing institution local name] 	O	O	NA

5.9.1 Data Elements in Practitioner resource

The Practitioner Resources is referenced by the PractitionerRole Resource to identify the practitioner who prescribed the medication order

JSON Name	Data Value	FHIR Data Type	Remarks	L2 M/O	L3 M/O	Delete Scenario
resourceType	Resource name	string (12)	<u>Fixed value:</u> “Practitioner”	M	M	M
id	[resource id] reference by PractitionerRole A UUID represented as a URI (RFC 4122) Please see reference website in appendix	string (45)	The resource id identifies the Healthcare staff who prescribed the Chinese Medicines	M	M	M
Chinese medicines prescriber						

JSON Name	Data Value	FHIR Data Type	Remarks	L2 M/O	L3 M/O	Delete Scenario
1006956-PrescriberChineseFullName	[Chinese medicines prescriber's Chinese full name] Full Chinese name (with title) of the healthcare professional who prescribed the Chinese medicines	extension url string(20)	<u>Mandatory</u> if [Chinese medicines prescriber's English full name] is blank. Eg. "extension": [{ "url": "[EHR FHIR URL]/1006956-PrescriberChineseFullName", "valueString": "[Chinese medicines prescriber's Chinese full name]" }]	M*	M*	NA
name.text	[Chinese medicines prescriber's English full name] Full English name (with title) of the healthcare professional who prescribed the Chinese medicines	string(100)	<u>Mandatory</u> if [Chinese medicines prescriber's Chinese full name] is blank. E.g. "name": [{ "text": "[Chinese medicines prescriber's English full name]" }]	M*	M*	NA

5.10 Data Elements for the Encounter resource

The information about an encounter which related to medication order.

JSON Name	Data Value	Data Definition	FHIR Data Type (Max Length)	Remarks	L2 M/O	L3 M/O	Delete Scenario
resourceType	Resource name	Encounter information about the service provided to HCR	string(9)	<u>Fixed Value:</u> "resourceType": " Encounter "	M	M	NA
id	Resource id reference by Condition resource	Logical id of this artifact A UUID represented as a URI (RFC 4122);	uuid	E.g. 169281c8-fb76-4e9c-b30f-3dfb3a7f53f2	O	O	NA

JSON Name	Data Value	Data Definition	FHIR Data Type (Max Length)	Remarks	L2 M/O	L3 M/O	Delete Scenario
99999999 - AttendanceInstIdentifier	[Attendance institution identifier]	eHRSS assigned [Healthcare Institution Identifier] (HCI ID) of the healthcare institution where the HCR receives the service.	string(10)	E.g. "extension": [{ "url": "[eHR FHIR URL]/99999999-AttendanceInstIdentifier", "valueString": "[Attendance institution identifier]" }]	O	O	NA
identifier	[Episode number]	A unique reference number assigned by the healthcare institution to an episode of care. The episode of care can be of inpatient or outpatient nature	string(20)	E.g. { "system": "[HCP FHIR URL]/EpisodeNum", "value": "[Episode number]" }	O	O	NA
status	Encounter Status <i>eHRSS will not interpret the value.</i>	--	code	Fixed Value : "finished"	M	M	M
Class	Classification of patient encounter <i>eHRSS will not interpret the value.</i>	--	Coding	Fixed Value: "class": { "system": "[eHR FHIR URL]/class", "code": "UNKNOWN", "display": "Unknown status"}	M	M	M

6. Image File (PDF)

The details of PDF naming convention

File Name	<HCP ID>.<Sending Location Code>.<Record Type>.<Record Key>.<Original File Name>.<File Extension>.<eHR Number>.<Generation Date> where the <Record Type> for the Chinese Medicines Prescribing Domain is “CMRXO”
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E.g.

8088450656.BRANCHA.CMRXO.CMRXO-001.123.pdf.201000000001

1. The file name must be in capital letters except pdf extension.
2. Dot “.” is used as file name delimiters and hence the value of each file name component must not contain dot “.”

The table below listed the file name components and their respective definitions:

Seq	File name Component	Definition	Length	Remarks	M/O
1	HCP ID	A unique identifier assigned to an eHealth Healthcare Provider by eHRSS	string(10)	<u>Fixed Length:</u> 10 e.g. 8088450656	M
2	Sending Location Code	A code agreed between eHRSS and the HCP which indicates the location where the data is sending from.	string(20)	Use [HCP ID] if sending location cannot be provided. <u>Format:</u> Any combination of the following alphanumeric characters: [A-Z][0-9][-_]	M
3	Record Type	A standardised code to identify the data domain	string(5)	Refer to defined Dataset Code e.g. CMRXO	M
4	Record Key	A unique identifier for a record within the HCP's EMR system	string(50)	e.g. CMRXO-0001	M
5	Original File Name	The file name used in source institution	string(100)	e.g. 123	M
6	File Extension	pdf (Portable Document Format File)	string(3)	Fixed value: pdf	M
7	eHR Number	A unique HCR identifier assigned by eHRSS	string(12)	<u>Fixed length:</u> 12 e.g. 201000000001	M
8	Generation Date	File generation date. It should be the same value of the [composition.date]	string(14)	<u>In format:</u> YYYYMMDDhhmmss	M

7. Examples

In the following samples, data variables that have to be generated with each specific upload are quoted in square brackets and highlighted in *[Red]*. The definitions and expected values of these variables are listed in the previous section. All other parts including data values should not be altered without confirmation with the eHRSS project teams.

A sample in JSON format are included in the eHealth Data Upload Self Service Kit. Developers may use it as a template for incorporation with their data uploads after modification.

Chinese Medicines Prescribing Record template:

	Comment
<pre>{ "resourceType": "Bundle", "id": "[Resource id for Bundle]", "identifier": { "system": "urn:ietf:rfc:4122", "value": "d2f9f649-5555-4826-868b-84e015c1f1be" }, "type": "document", "timestamp": "[current time]", "entry": [{ "fullUrl": "Composition/[resource id for Composition]", "resource": { "resourceType": "Composition", "id": "30551ce1-5a28-4356-b684-1e639094ad4d", "extension": [{ "url": "https://ehealth.gov.hk/FHIR/99999999-SendingLocation", "valueString": "[Sending location]" }, { "url": "https://ehealth.gov.hk/FHIR/99999999-ComplianceLevel", "valueString": "[Compliance level]" }, { "url": "https://ehealth.gov.hk/FHIR/99999999-DomainVersion", "valueString": "[Domain version]" }] } }] }</pre>	<p>Bundle Resource -[Resource id for Bundle]</p> <p>-[current time]</p> <p>-[fullUrl for Composition] [resource id for Composition]</p> <p>- [Sending location]</p> <p>- [Compliance level]</p> <p>- [Domain version]</p>

<pre> "url": "https://ehealth.gov.hk/FHIR/99999999-UploadMode", "valueString": "[Upload mode]" }], "status": "final", "type": { "coding": [{ "system": "https://ehealth.gov.hk/FHIR", "display": "Hong Kong eHR Healthcare Document" }] }, "subject": [{ "reference": "Patient/[resource id for Patient]" }], "date": "[Message generation time]", "author": [{ "reference": "Organization/3b3703a9-7a26-427c-9352-4e41f046d85e" }], "title": "Hong Kong eHR Healthcare Document", "section": [{ "title": "Chinese Medicine Prescribing Records", "code": { "coding": [{ "system": "https://ehealth.gov.hk/FHIR/datadomain", "code": "CMRXO" }] }, "entry": [{ "extension": [{ "url": "https://ehealth.gov.hk/FHIR/99999999-RecordCreateDatetime", "valueDateTime": "[Record creation datetime]" }] }] }] } </pre>	<p>- [Upload mode]</p> <p>Link to Patient Resource</p> <p>- [Message generation time]</p> <p>- [Record creation datetime]</p>
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RecordCreateInstIdentifier",	<pre> }, { "url": "https://ehealth.gov.hk/FHIR/999999999- "valueString": "[Record creation institution </pre>	- [Record creation institution identifier]
RecordCreateInstName",	<pre> }, { "url": "https://ehealth.gov.hk/FHIR/999999999- "valueString": "[Record creation institution </pre>	- [Record creation institution name]
RecordLastUpdateDatetime",	<pre> }, { "url": "https://ehealth.gov.hk/FHIR/999999999- "valueDateTime": "[Record last update datetime]" </pre>	- [Record last update datetime]
RecordUpdateInstIdentifier",	<pre> }, { "url": "https://ehealth.gov.hk/FHIR/999999999- "valueString": "[Record update institution </pre>	- [Record update institution Identifier]
RecordUpdateInstName",	<pre> }, { "url": "https://ehealth.gov.hk/FHIR/999999999- "valueString": "[Record update institution </pre>	- [Record update institution name]
TransactionDateTime",	<pre> }, { "url": "https://ehealth.gov.hk/FHIR/999999999- "valueDateTime": "[Transaction datetime]" </pre>	- [Transaction datetime]
TransactonType",	<pre> }, { "url": "https://ehealth.gov.hk/FHIR/999999999- "valueString": "[Transaction </pre>	- [Transaction type]
LastUpdateDateTime",	<pre> }, { "url": "https://ehealth.gov.hk/FHIR/999999999- </pre>	- [Last Update datetime]

<pre> "valueDateTime": "[Last Update datetime]" }], "reference": "MedicationRequest/534922e6-1e05-4b08-b0b3- 068773c12658", "identifier": { "system": "https://ehealth.gov.hk/FHIR/HCP/local/Recordkey", "value": "[Record Key]" } }, { "reference": "DocumentReference/[Resource id of DocumentReference]", "identifier": { "system": "https://ehealth.gov.hk/FHIR/HCP/local/Recordkey", "value": "[Record key]" } }] } }, { "fullUrl": "DocumentReference/0a9ead62-692d-4f6a-884b-9f456e0cdad6", "resource": { "resourceType": "DocumentReference", "status": "current", "content": [{ "attachment": { "contentType": "application/pdf", "data": "Base64 of [Chinese medicines prescription image (PDF)]", "url": "[Chinese medicines prescription image file name]" } }] } }, </pre>	<p>Link to MedicationRequest Resource</p> <p>-[Record key]</p> <p>Link to DocumentReference Resource</p> <p>-[Record key]</p> <p>-[fullUrl for Composition] [resource id for Composition]</p> <p>-[Chinese medicines prescription image (PDF)]</p> <p>- [Chinese medicines prescription image file name]</p>
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<pre> { "fullUrl": "Organization/3b3703a9-7a26-427c-9352-4e41f046d85e", "resource": { "resourceType": "Organization", "id": "3b3703a9-7a26-427c-9352-4e41f046d85e", "name": "[Healthcare institution long name]" } }, { "fullUrl": "MedicationRequest/[Resource id for MedicationRequest]", "resource": { "resourceType": "MedicationRequest", "id": "[Resource id for MedicationRequest]", "identifier": [{ "system": "http://www.ehealth.gov.hk/FHIR/HCP/local/OrderNum", "value": "PX 0116 2001 574" }], "status": "completed", "intent": "order", "subject": { "reference": "Patient/[resource id for Patient resource]" }, "authoredOn": "[Chinese medicines prescription date/time]", "requester": { "reference": "PractitionerRole/[Resource id for Requester PractitionerRole]" }, "encounter": { "reference": "Encounter/[Resource id for Encounter]" }, "dosageInstruction": [{ "extension": [{ "url": "https://ehealth.gov.hk/FHIR/1006978-CMdoseGpNum", "valueInteger": [Prescribed Chinese medicines dose group number] }, { "url": "https://ehealth.gov.hk/FHIR/1006996-CMDoseRemarks", </pre>	<pre> [fullUrl for Organization] Organization Resource - [Resource id for Organization resource] - [Healthcare institution long name] [fullUrl for MedicationRequest] MedicationRequest Resource - [Resource id for MedicationRequest resource] -[Chinese medicines prescription order number] Link to Patient Resource -[Chinese medicines prescription date/time] Link to PractitionerRole Resource Link to Encounter resource -[Prescribed Chinese medicines dose group number] </pre>
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<pre> remarks]" "valueString": "[Prescribed Chinese medicines dose }], "text": "[Prescribed Chinese medicines dose instruction]", "route": { "coding": [{ "system": "https://ehealth.org.hk/FHIR/CMroute", "code": "[Prescribed Chinese medicines route of administration code]", "display": "[Prescribed Chinese medicines route of administration description]" }], "text": "[Prescribed Chinese medicines route of administration local description]" }, "doseAndRate": [{ "doseQuantity": { "extension": [{ "url": "https://ehealth.gov.hk/FHIR/1006989- DoseUnitLocalDesc", "valueString": "[Prescribed Chinese medicines dose unit local description]" }, { "url": "https://ehealth.gov.hk/FHIR/1006990- CMDoseUnitRemarks", "valueString": "[Prescribed Chinese medicines dose unit remarks]" }], "value": [Prescribed Chinese medicines dose value], "unit": "[Prescribed Chinese medicines dose unit description]", "system": "https://www.ehealth.gov.hk/FHIR/CMdoseUnitcd", "code": "[Prescribed Chinese medicines dose unit code]" </pre>	<pre> -[Prescribed Chinese medicines dose remarks] -[Prescribed Chinese medicines dose instruction] -[Prescribed Chinese medicines route of administration code] -[Prescribed Chinese medicines route of administration description] -[Prescribed Chinese medicines route of administration local description] -[Prescribed Chinese medicines dose unit local description] -[Prescribed Chinese medicines dose unit local description] -[Prescribed Chinese medicines dose unit remarks] -[Prescribed Chinese medicines dose value] -[Prescribed Chinese medicines dose unit description] -[Prescribed Chinese medicines dose unit code] </pre>
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<pre> }, { "fullUrl": "Patient/[Resource id for Patient]", "resource": { "resourceType": "Patient", "id": "[Resource id for Patient]", "identifier": [{ "type": { "coding": [{ "system": "https://ehealth.gov.hk/FHIR/typeofID-ext", "code": "EHRNO" }] }, "value": "[eHR Number]" }, { "type": { "coding": [{ "system": "https://ehealth.gov.hk/FHIR/typeofID-ext", "code": "[Type of identity document]" }] }, "value": "[Document number]" }], "name": [{ "text": "[English full name]", "family": "[English surname]", "given": ["[English given name]"] }] } }] } </pre>	<p>[fullUrl for Patient] Patient (HCR) Resource - Resource id for Patient resource]</p> <p>- Fixed value</p> <p>- [eHR Number]</p> <p>- [Type of identity document]</p> <p>- [Document number]</p> <p>- [English full name] - [English surname] - [English given name]</p>
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<pre>], "gender": "[Sex]", "birthDate": "[Date of Birth]" } }, { "fullUrl": "PractitionerRole/[Resource id for Requester PractitionerRole]", "resource": { "resourceType": "PractitionerRole", "id": "[Resource id for Requester PractitionerRole]", "practitioner": { "reference": "Practitioner/[Resource id for Prescriber Practitioner]" }, "organization": { "reference": "Organization/[Resource id for Prescriber Organization]" } } }, { "fullUrl": "Practitioner/[Resource id for Prescriber Practitioner]", "resource": { "resourceType": "Practitioner", "id": "[Resource id for Prescriber Practitioner]", "extension": [{ "url": "https://ehealth.gov.hk/FHIR/1006956- PrescriberChineseFullName", "valueString": "[Chinese medicines prescriber's Chinese full name]" }], "name": [{ "text": "[Chinese medicines prescriber's English full name]" }] } }, { "fullUrl": "Organization/[Resource id for Prescriber Organization]", "resource": { "resourceType": "Organization", </pre>	<pre> - [Sex] - [Date of Birth] [fullUrl for PractitionerRole] - Resource id for PractitionerRole resource] Link to Practitioner resource Link to Organization resource [fullUrl for Practitioner] - Resource id for Practitioner resource] -[Chinese medicines prescriber's Chinese full name] -[Chinese medicines prescriber's English full name] [fullUrl for Organization] - Resource id for Organization resource] </pre>
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<pre> "id": "[Resource id for Prescriber Organization]", "identifier": [{ "system": "https://ehealth.gov.hk/FHIR/pvdr", "value": "[Chinese medicines prescribing institution identifier]" }], "name": "[Chinese medicines prescribing institution long name]", "alias": ["[Chinese medicines prescribing institution local name]"] }, { "fullUrl": "Encounter/[Resource id for Encounter]", "resource": { "resourceType": "Encounter", "id": "[Resource id for Encounter]", "extension": [{ "url": "https://ehealth.gov.hk/FHIR/99999999-AttendanceInstIdentifier", "valueString": "[Attendance institution identifier]" }], "identifier": [{ "system": "https://ehealth.gov.hk/FHIR/HCP/local/EpisodeNum", "value": "[Episode number]" }], "status": "finished", "class": { "system": "https://ehealth.gov.hk/FHIR/class", "code": "UNKNOWN", "display": "Unknown status" } } }, { "fullUrl": "Medication/[Resource id for Medication]", "resource": { "resourceType": "Medication", "id": "[Resource id for Medication]", </pre>	<pre> - [Chinese medicines prescribing institution identifier] - [Chinese medicines prescribing institution long name] - [Chinese medicines prescribing institution local name] [fullUrl for Encounter] Encounter Resource - [Resource id for Encounter resource] - [Attendance institution identifier] - [Episode number] [fullUrl for Medication] Medication Resource </pre>
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<pre> "extension": [{ "url": "https://ehealth.gov.hk/FHIR/1006978-CMdoseGpNum", "valueInteger": [Prescribed Chinese medicines dose group number] }], "code": { "extension": [{ "url": "https://ehealth.gov.hk/FHIR/1006979-CMtype", "valueString": "[Prescribed Chinese medicines type code]" }, { "url": "https://ehealth.gov.hk/FHIR/1006991-CMAdditionalInfo", "valueString": "[Prescribed Chinese medicines additional information]" }, { "url": "https://ehealth.gov.hk/FHIR/1006980-DrugSequenceNum", "valueInteger": [Prescribed Chinese medicines sequence number] }], "coding": [{ "system": "https://www.ehealth.gov.hk/FHIR/HKCTT", "code": "[Prescribed Chinese medicines - recognised terminology name]", "display": "[Prescribed Chinese medicines identifier - recognised terminology]" }, { "system": "https://www.ehealth.gov.hk/FHIR/HCP/local/CM", "code": "[Prescribed Chinese medicines code -local terminology]", "display": "[Prescribed Chinese medicines description - local terminology]" }] }] } } } } </pre>	<pre> - [Resource id for Encounter resource] -[Prescribed Chinese medicines dose group number] -[Prescribed Chinese medicines type code] -[Prescribed Chinese medicines additional information] -[Prescribed Chinese medicines sequence number] -[Prescribed Chinese medicines - recognised terminology name] -[Prescribed Chinese medicines identifier - recognised terminology] -[Prescribed Chinese medicines code -local terminology] -[Prescribed Chinese medicines description - local terminology] </pre>
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8. Mapping Tables

8.1 FHIR Administrative Gender

FHIR Administrative Gender	eHR Value of [Sex]
male	M
female	F
unknown	U

9. Code Tables

Type of identity document

eHR Value	eHR Description	Chinese Description	Full Description
AR	Adoption Certificate	領養證明書	Adopted Children Register (include those issued by HKSAR and non-HKSAR government authorities)
BC	Birth Certificate - HK	香港出生證明書	Hong Kong Birth Certificate
CD	Consular Corps ID Card	領事團身份證	Consular Corps Identity Card
DI	Document of Identity for Visa Purposes	香港特別行政區簽證身份書	HKSAR Document of Identity for Visa Purposes
EC	Exemption Certificate	豁免證明書(或稱豁免登記證明書)	Certificate of Exemption
ED	eHR document	電子健康紀錄文件	Document issued by eHRC for newborn registration
ID	HKID Card	香港身份證	Hong Kong Identity Card
MD	Macao ID Card	澳門身份證	Macao Identity Card
OC	Travel documents - PRC	中華人民共和國發出之其他旅遊證件	Other travel documents issued by the People Republic of China government / authorising agent, exclude One-way Permit and Two-way Permit
OP	Travel document - overseas	其他國家/地區發出之旅遊證件	Travel documents issued by other countries / regions
OW	One-way Permit	單程証	One-way Permit
RE	Recognizance Form	擔保書(行街紙)	Recognizance Form
RP	Re-entry Permit	香港特別行政區回港證	HKSAR Re-entry Permit
TW	Two-way Permit	雙程証	Two-way Permit

Diagnosis Status

eHR Value	eHR Description
P	Provisional
A	Active
I	Inactive
R	Resolved
C	Cancelled

10. Data variable

Variable	Variable Value	Remark
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eHR FHIR URL	https://ehealth.gov.hk/FHIR	
HCP FHIR URL	https://ehealth.gov.hk/FHIR/HCP/local	

11. Appendix

Reference to generate the UUD URI

Online UUID generator : <https://www.uuidgenerator.net/>

Python uuid module documentation: <https://docs.python.org/3/library/uuid.html>

Java UUID Class Documentation:

<https://docs.oracle.com/en/java/javase/14/docs/api/java.base/java/util/UUID.html>

FHIR Reference

Bundle Resource: <https://hl7.org/fhir/R4/bundle.html>

Composition Resource: <https://hl7.org/fhir/R4/composition.html>

Patient Resource: <https://hl7.org/fhir/R4/patient.html>

MedicationRequest : <https://hl7.org/fhir/R4/medicationrequest.html>

Medication : <https://hl7.org/fhir/R4/medication.html>

DocumentReference : <https://hl7.org/fhir/R4/documentreference.html>

Encounter Resource : <https://hl7.org/fhir/R4/encounter.html>