醫健通
eHealth
香港特別行政區政府 HKSARGOVT

Developers' Quick Guide
For
eHealth System PMI Query Service

[Gxxx]
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The Government of the Hong Kong Special Administrative Region

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1 Purpose

This document is intended for Information Technology personnel involved in developing programmes to retrieve the eHR number and store to their electronic Medical Record System (eMRS) from the eHealth System (eHealth) to facilitate data upload.

The technical interface requirements for implementing Health Level Seven (HL7) Fast Healthcare Interoperability Resources (FHIR) Release 4 (R4)[1] for retrieve eHR number from eHealth to the Healthcare Provider's local eMRS are provided below. Readers could refer to more in-depth information of the HL7 FHIR (R4) standards at formal 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 description of the eHR Healthcare Recipient Index.

2 Administrative and Technical Requirements for Data Download from eHealth

PMI Query service is a special form of retrieving data from eHealth, and it requires approval by the eHR Office upon satisfying all specified system and privacy requirements fulfilled by the registered Healthcare Provider (HCP) and its IT systems.

The authorised person in a registered HCP should apply to download the eHR number, and its IT system vendors (or in-house IT Teams) should work together and ensure the fulfilment of the system requirements for the RCHs to connect with eHealth.

4 Steps for data download preparation:

1. HCP needs to work with the IT Vendor (or in-house IT teams) to submit requests from eHealth
2. HCP needs to register eHR registration as a healthcare provider
3. HCP IT Vendors (or in-house IT teams) need to fulfil specified technical requirements for interfacing with eHealth for obtaining eHR number
4. HCP and IT Vendors need to undergo security and privacy assessment and complete technical and data testing for setting up connectivity with eHealth

3 Conditions for eHR number Download

Healthcare Provider (HCP) can only download its client's/patient's eHR number from eHealth if:

- The client has joined eHealth as a Healthcare Recipient (HCR); and
- for old consent model, HCR also gives sharing consent to HCP; and
- HCR is not in suspension status

[1] HL7 FHIR R4 https://hl7.org/fhir/R4/patient.html

4 Data Download Standards

Message Standards

- HL7 FHIR R4 message standards in JSON format are adopted for eHR number returned from eHealth.

Query Requests

- One API (Application Programming Interfaces) is provided by eHealth for HCPs to make requests for retrieving eHR number.

Encoding

- UTF-8[2] encoding is used.

5 General Data Flow

HCP can enquire the eHR number for an HCR. The general flow is summarised below.

1. HCP's eMRS shall connect to eHealth and use FHIR APIs to request data download from eHealth according to the specified protocols;
   - HCP's eMRS submits PMIQueryRequest to request for eHR number from eHealth;
   - For old consent model, eHR number will return when HCR registered for eHealth System and gives sharing consent to HCP
   - For new consent model, eHR number will return when HCR registered for eHealth System

2. HCP's eMRS shall check and verify returned data from eHealth and process returned errors, if any, according to predefined protocols.

6 Notations

M/O column	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
Constants	**Bolded** values are constants or fixed values
E.g.	Example values for illustration.
[…]	Data variables
"…"	Data values
N/A	Not Applicable
YYYYMMDD	YearMonthDay in the prescribed format, e.g. 20231231
hh:mm:ss.sss	Hour(24-Hour):Minute:Second:Millisecond in the prescribed format, e.g. 13:05:01:065
Thh:mm:ss+zz:zz	Time with time zone offset, e.g. T13:05:01+08:00 for Hong Kong time zone or T13:05:01Z

[2] https://www.charset.org/utf-8

7 Connection to eHealth

7.1 Open Authorization (OAuth)

The PMI Query service is implemented with OAuth[3] that authorizing the right of data download to HCP. To implement the OAuth, HCP's eMRS is required to be registered in token service.

HCP is required to provide the below information to eHR team for OAuth Registration.

HCP ID	System Name	System Description	Client Name	Client Description	Version	Version	Public Certificate
e.g. 9907819043	e.g. ZZZ System	e.g. ZZZ System	e.g ZZZ System	e.g ZZZ System	e.g 1.0.0	e.g. 1.0.0	X.509 digital certificate in Privacy Enhanced Mail (PEM) using RSAWithSHA256 algorithm

After the registration, HCP could get the access token by calling the [api-server]/get-token. The detail of authorization can be referred to Interface specification – "**ehr_interface_specification_for_API_service_authorization**" which will be provided by the eHR team. The access token is required for calling PMI Query service, the usage is included in **Section 8 PMI Query Requests and Parameters.**

[api-server] will be provided by the eHR team on the Environment Setup Form.

[client id] is a unique id for each HCP's eMRS and it will be provided by the eHR team.

Request Parameters

Header	
Content-Type	application/x-www-form-urlencoded
Body	**Value**
scope	Fixed value: **apim-xs-ehrss-eif-drugds**
client_assertion_type	Fixed value: **urn:ietf:params:oauth:client-assertion-type:jwt-bearer**
grant_type	Fixed value: **client_credentials**

client_assertion	Value of Signed JWT Claims (JWS).
	
	JWT Claims:
	{
	"iss": "[client id]",
	"sub": "[client id]",
	"aud": "https://api.core.ehr.gov.hk/realms/ehrss",
	"exp": [1703747468],
	"jti": "[81e1f275-3301-43ba-8c8f-34bd32756e48]"
	}

7.1.1 Request Sample for [api-server]/token/get-token

```
curl --location '[api server]/token/get-token' \
--header 'Content-Type: application/x-www-form-urlencoded' \
```

[3] Open Authorisation is an open standard for access delegation, commonly used as a way for internet users to grant websites or applications access to their information on other websites but without giving them the passwords

```
--data-urlencode 'scope=apim-xs-ehrss-eif-drugds' \
--data-urlencode 'client_assertion_type=urn:ietf:params:oauth:client-
assertion-type:jwt-bearer' \
--data-urlencode 'grant_type=client_credentials' \
--data-urlencode
'client_assertion=eyJ0eXAiOiJKV1QiLCJhbGciOiJSUzI1NiJ9.eyJpc3MiOiIxMDAwMDAxODM
wLTI3MjgxODg0MDQiLCJzdWIiOiIxMDAwMDAxODMwLTI3MjgxODg0MDQiLCJhdWQiOiJodHRwczovL
2FwaS51YXQuZWhyLmdvdi5oay9yZWFsbXMvZWhyc3MiLCJleHAiOjE3Mjc5NDI3NDMsImp0aSI6IjV
lYzBkNjcyLTE1ZWUtNGQ0NC05YzhiLWRiMTc1OTgyMGE4MCJ9.kO8YMKXW_dLAhYakNKNJGcJtXCbQ
6yL0i4i5576-_J8VAz9CpNju8R-FfvJEY4TvNvSMUp0igCC8kBaBQ0l-
8jJDRIMsMEfL7SjkSjQsJ7itMbkONQ_gRJ-JPYyTKL_sOevcQ_QZttRBGlMe2Yp8WAbB49d-
rnuEBdwqYhjzjM7y3RxZuFjPz9KHBR5zasQmQZdEAlN6rQfUKe56M-
15x8nKK_IFDIyKzTsw_vPA2ub28q765SQLR8xQsqr-6RcjOB4kLdFwMTlAG6_4NhTa0YS2bh9Kgn-
Lq5zmfj3WJrr11OdF17UtUfXyd8DKPAiRMcL2iI4TZrOPFq0MEbzr8A'
```

7.1.2 Response Sample for [api-server]/token/get-token

```
{
  "access_token":
"eyJhbGciOiJSUzI1NiIsInR5cCIgOiAiSldUIiwia2lkIiA6ICI5b292enEwY1dYU0lGW
khTZjNmQUsxOE5VQ056RWlkZ1N6RjBrcmVUUXBnIn0.eyJleHAiOjE3MjMxNzU0NTEsIml
hdCI6MTcyMzE3NTM5MSwianRpIjoiYWQwOTQ0NGQtMmE1Mi00ZjBkLWExMTctOGI3ZWE0N
WQ0OWE2IiwiaXNzIjoiaHR0cHM6Ly9hcGkuZGV2LmVoci5nb3YuaGsvcmVhbG1zL2VocnN
zIiwiYXVkIjoiYXBpbS14cy1laHJzcy1laWYtZHJ1Z2RzIiwic3ViIjoiNTkzZTEwYzgtN
jllNS00NmQxLWI3YzctNjhhMzllMzY5MWQyIiwidHlwIjoiQmVhcmVyIiwiYXpwIjoiYW5
pLXN5c3RlbSIsInNjb3BlIjoiYXBpbS14cy1laHJzcy1laWYtZHJ1Z2RzIiwiY2xpZW50S
WQiOiJhbmktc3lzdGVtIiwiY2xpZW50SG9zdCI6IjE3Mi4yMS4zMi4yNDAiLCJoY3AiOiI
5OTA3ODE5MDQzIiwiY2xpZW50QWRkcmVzcyI6IjE3Mi4yMS4zMi4yNDAifQ.jiYvRcz79u
Ps0RcUz8P-
jtsdvyyHTZi_hLidX0K1s1KdNg1zBooVlACeFR0nH4Ie6oWOGFIJsm9P3N2NvBbLKKqgOR
DWHYqQQY9Y1J97gr4qrmWPUrpToSNrcvvFVeFZRv-byho1-
6I5WR7Hx2BxGhhWAqmB3u9NnYTDyHKfrqeQXK6z7U7cqZcGVRJOo9kM-
hZ7H6ZMAW3rNKxibWP6yBdyLv1NZmhxMXC8gG6Ay8af6fwuZnoP5uS2b4x-
RGViinR_ZZCpGfnsZA6HfxbkWwlQwzIOivqeBj5e9QB-
4v9XvoQZbsxd0iMeM8Sz6L2_Jy07_CJLud2b85CVynRing",
  "expires_in": 60,
  "refresh_expires_in": 0,
  "token_type": "Bearer",
  "scope": "apim-xs-ehrss-eif-pmiquery",
  "notBeforePolicy": "0"
}
```

8 PMI Query Requests and Parameters

8.1 PMI Query Request Types

There is one API provided by eHealth for returning eHR number.

1. PMIQuery API
   This API requests eHealth for returning eHR number to indicate that the clinical data for that HCR is required to upload to eHealth.

8.2 Request Header

The POST request **POST *[fhir-server]*/*[Request Type]*/_search** with header **Content-Type: application/x-www-form-urlencoded** is used to retrieve the eHR number where:

[fhir-server] will be provided by the eHR team on the Environment Setup Form; and

[Access token] retrieved from the API Server. Refer to "Interface Specification For API Service Authorization" for details; and

[Request Type] = "**PMIQueryRequest**" for eHR number query:

```
curl --location --request POST '[fhir-server]/gateway/ehrss-eif-pmi-query/v1.0/v3/baseR4/PMIQueryRequest /_search' \
--header 'Content-Type: application/x-www-form-urlencoded' \
--header 'Authorization: Bearer [Access token]'
```

8.3 Request Parameters

The following table specifies the input parameters of the PMI Query API:

Input Parameter Tag	Parameter Value	Maximum Length	Remarks	M/O
subject:Patient.name. family	English Surname of the HCR	40	Mandatory if [English Given Name] is not provided	M*
subject:Patient.name. given	English Given Name of the HCR	40	Mandatory if [English Surname] is not provided	M*
subject:Patient.gender	Gender of the HCR	7	Permissible values: • **"male"** • **"female"** • **"unknown"**	M
subject:Patient.birthDate	Date of Birth of the HCR	10	Format: YYYY-MM-DD e.g. 1974-12-25	M

Input Parameter Tag	Parameter Value	Maximum Length	Remarks	M/O
subject:Patient.identifier:of-type=**[eHR FHIR URL]**/typeofID-ext|**[*document type*]** (*Refer to "Type of identity document" code set provided in **Self-Service Kit** for **[document type)**. The latest code set can be found on the eHealth official website*)	Identify Document Number (of the type of document as specified in the parameter name) If [document type] ="**ID**" or "**CD**" or "**BC**" or "**ECID**", the Identity Document Number will comply with the HKID format (Refer to Remarks), else it will be of free text format. For Exemption Certificate (EC) with HKID number, use "**ECID"** as document type and the HKID as document number. For EC without HKID number, use "**EC**" as the document type and the EC number as the document number.	Document Type:6 Document no.: 30	If [document type] ="**ID**" or "**CD**" or "**BC**" or "**ECID**" [document number] Format: AANNNNNNC or ANNNNNNC or " " + ANNNNNNC where: • C = check digit; • A = A to Z; • N = 0, 1 to 9 • All Uppercase	M

Note: The prevailing value of [eHR FHIR URL] = "https://ehealth.gov.hk/FHIR"

8.4 Request API Templates and Samples

Templates for PMI Query request APIs with samples are provided below. Variables which must be specified with each request are highlighted in [Red]. All other text and values of the request must not be altered without consultation with the eHR teams. Values for system related variables maybe updated from time to time and should be confirmed with the eHR IT team. The prevailing values are as specified below:

[Request Type] = "PMIQueryRequest"
[eHR FHIR URL] = "https://ehealth.gov.hk/FHIR"
[fhir-server] = value of [fhir-server] varies depending on whether the connection is made with the eHealth system testing environment or production environment. It will be provided by the eHR IT team on the Environment Setup Form
[Access Token] = an unexpired Access Token retrieved from the API server.

8.4.1 API Template and Sample for PMI Query ('PMIQueryRequest')

8.4.1.1 Template for 'PMIQueryRequest' API

```
curl --location --request POST '[fhir-server]/gateway/ehrss-eif-pmi-query
/v1.0/v3/baseR4/[Request Type]/_search' \
--header 'Content-Type: application/x-www-form-urlencoded' \
--header 'Authorization: Bearer [Access token]' \
--data-urlencode 'subject:Patient.name.family=[English Surname]' \
--data-urlencode 'subject:Patient.name.given=[English Given name]' \
--data-urlencode 'subject:Patient.gender=[Gender]' \
--data-urlencode 'subject:Patient.birthDate=[Date of Birth]' \
--data-urlencode 'subject:Patient.identifier:of-type=[eHR FHIR URL]/typeofID-
ext|[Document Type]|[Document Number]'
```

8.4.1.2 Sample for 'PMIQueryRequest' API

```
curl --location --request POST 'https://api.core.ehr.gov.hk/gateway/ehrss-
eif-pmi-query/v1.0/v3/baseR4/PMIQueryRequest/_search' \
--header 'Content-Type: application/x-www-form-urlencoded' \
--header 'Authorization: Bearer
eyJhbGciOiJSUzI1NiIsInR5cCIgOiAiSldUIiwia2lkIiA6ICJSTVdpZENHNVVfSjJOTE11YkVGR
Tk0TXRTX0JpTDNJVUo1SEg0U2l3ZmRBIn0.eyJleHAiOjE3MTg3ODE4MjIsImlhdCI6MTcxODc4MT
c2MiwianRpIjoiNmVmNzk4ZTctODFiMy00ZjU2LWJmMmUtNDllMmIzYWRhYjYxIiwiaXNzIjoiaHR
0cHM6Ly9hcGkudWF0LmVoci5nb3YuaGsvcmVhbG1zL2VocnNzIiwiYXVkIjoiYXBpbS14cy1laHJz
cy1laWYtZHJ1Z2RzIiwic3ViIjoiNWI3OTVkYzItOWEwNC00ZjUwLWFhNzMtZDFkODYzZGM0MDU3I
iwidHlwIjoiQmVhcmVyIiwiYXpwIjoiMTAwMDAwMTQwMCIsInNjb3BlIjoiYXBpbS14cy1laHJzcy
1laWYtZHJ1Z2RzIiwiY2xpZW50SWQiOiIxMDAwMDAxNDAwIiwiY2xpZW50SG9zdCI6IjE3Mi4xOS4
xMi4yNDAiLCJoY3AiOiI5NTMyNzA2OTkyIiwiY2xpZW50QWRkcmVzcyI6IjE3Mi4xOS4xMi4yNDAi
fQ.NPVRz4srInQyS1f6NG-MCOxOfOFw0qJIQl6iCRmZy-
0oL6lg5Cx1YgB9FnSqpbx3LaHBNdeRmrZrBF5abr2bKaYCJguZExUthg_JBGVOC_EuuUhayM5Z52I
C82LT-
wVS8zoIqW1XHclRD7E08H6Kb012rAGvZP9FDjqAPQwIXBdhOHleLLmuE_sNQubstHa8Qc2hroZlPM
Bk4SWmkF1YJ03pO8pL_avqHZ3Gnh6sRHXyra059dq5XUzHiZC2bSVDJc94rC4YasNs9jUeJL2Ix36
kMZr5VgqePAmeChLyAPvnU8LzmwQ7PV6vjwATUtPccuEeR12s-2H3hQS0E6bVSQ' \
--data-urlencode 'subject:Patient.name.family=LEE' \
--data-urlencode 'subject:Patient.name.given=One' \
--data-urlencode 'subject:Patient.gender=male' \
--data-urlencode 'subject:Patient.birthDate=1991-01-01' \
--data-urlencode 'subject:Patient.identifier:of-
type=https://ehealth.gov.hk/FHIR/typeofID-ext|ID|A1234567'
```

9 Specification of Returned Data

The section describes the format and data returned based on criteria specified in the PMI query API. Un-used FHIR message items and those not requiring processing are not listed below. If required, readers may refer to the HL7 (HK) website for the full HL7 FHIR R4 message specifications if required.

9.1 Composition of Returned HL7 FHIR Message

9.1.1 HL7 FHIR components

The HL7 FHIR standard is adopted for PMI Query service. The returned data are structured with the HL7 FHIR components (Resources) and hierarchy as specified below.

Bundle Resource (Single occurrence in each FHIR message bundle)

- Identifies the beginning of the container for the collection of data returned. For eHR number retrieval, data returned from a request is contained in the following resources as a single bundle.

Patient Resource (Single occurrence for each bundle)

- Contains the eHR number of the healthcare recipient (HCR) / patient whose clinical record are eligible to upload to eHealth System.

9.2 Data Elements in the FHIR Resources

Each FHIR Resource returns resource ids, codes and data values related to the downloaded data. The url of the coding system adopted for each code is also provided. Since the actual coded value is also returned, the url provided needs not be accessed to obtain the coded value. However, as the same JSON name can be used for different data elements, the coding system provided must be parsed to distinguish the nature of the data value provided.

Detail data elements in each FHIR Resource are provided in the following sections. Data elements which are returned to complete the structure of the FHIR messages but do not provide specific information on the returned data do not require processing and parsing. These elements are not included in the following tables. Readers may refer to the Hong Kong HL7 FHIR website for further details if interested.

9.3 Data Elements in Bundle Resource

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

JSON Name	Data Value	FHIR Data Type (Max Length)	Remarks	M/O
resourceType	Resource Name	string (6)	Fixed value: **"Bundle"**	M
identifier.	Identifier of the Bundle			

JSON Name	Data Value	FHIR Data Type (Max Length)	Remarks	M/O
system	System urn	uri (255)	eHR provided value. For information only	M
value	System assigned unique id of the Bundle	string (45)	A UUID represented as a URI. e.g. **urn:uuid:**8c3f7617-5f2d-40fd-b227-16158ac1d04e	M
type	Bundle Type	string (8)	Fixed value: **"searchset"**	M
timestamp	Datetime when the bundle was assembled.	datetime (29)	Format: YYYY-MM-DD**T**hh:mm:ss.sss+zz:zz e.g. 2021-03-01**T**00:48:00.001**+08:00**	M
entry.resource	Resources included in this bundle are collected under 'entry'	Backbone Element	Resources collected in the returned Bundle include: • Patient	M

9.3.1 Data Elements in Patient Resource

The Patient Resource provides the patient identifier to identify the patient whose clinical data is required to upload to eHealth System.

JSON Name	Data Value	FHIR Data Type (Max Length)	Remarks	M/O
resourceType	Resource name	string (7)	Fixed value: **"Patient"**	M
id	System generated Patient Resource id for this download	string (32)	This id identifies the patient / HCR e.g. 7451cb92-3aea-46b3-8c19-2c395a8e1258	M
Identifier.	eHR number for this patient	identifier		
type.coding.system	Link to HCR ID coding system	uri (255)	Fixed value: "**[eHR FHIR URL]/typeofID-ext"**	M
type.coding.code	identifier type code	string (5)	Fixed value: **"EHRNO"**	M
value	eHR number of the HCR	integer (12)	Unique eHR HCR number. Fixed length: 12 e.g. 773024585457	M

10 Response to Request APIs from eHealth

10.1 Response message from eHealth

In response to a request for eHR number query, eHealth will return the eHR number as described in previous sections. If errors or exceptions are encountered by eHealth, only the "OperationOutcome" Resource will be returned and no eHR number will be

downloaded. HCPs are required to review and handle the returned issues, warnings and errors returned from eHealth. The request API must be re-submitted after correction to obtain the required data.

10.2 Data Elements in OperationOutcome Resource

JSON Name	Data Value	FHIR Data Type (Max Length)	Remarks	M/O
resourceType	Resource name	Resource (16)	Fixed value: **"OperationOutcome"**	M
text.	Narrative text summary of the issue			
status	The status of the narrative	string (9)	Fixed Value: "**generated"**	M
div	HTML content of the identified issue. The [Error Code] and [Error Description] will be included	xhtml (4000)		M
issue	An issue identified by eHealth in response to the data download request		Refer to Section 10.4 for list of Error Codes and Descriptions	
severity	Severity of the issue identified	code (11)		M
code	Error type, e.g. Error or warning	code (40)		M
details.text	Error Code and error description of the issue identified	string (255)	Format: **"["**+ [Error Code] + **"] :"** + [Error Description], e.g. [2000] : Participant Cannot be Found	M

10.3 HL7 FHIR – OperationOutcome Resource

10.3.1 Template for Error Response from eHealth

Error messages from eHealth for eHR number retrieval will be returned as below. Variables are highlighted in [Red].

```
{
	"resourceType": "OperationOutcome",
	"text": {
		"status": "generated",
		"div": "<div xmlns=\"http://www.w3.org/1999/xhtml\">
<h1>Operation Outcome</h1><table border=\"0\">
<tr><td style=\"font-weight: bold;\">
ERROR</td><td>[]</td><td>[[Error Code]]: [Error Description]
</td></tr></table></div>"
	},
	"issue": [{
		"severity": "[Severity]",
		"code": "[Code]",
		"details": {
			"text": "[[Error Code]]: [Error Description]"
		}
	}]
}
```

10.3.2 Sample for OperationOutCome

The following table shows an OperationOutcome Resource example when the HCR specified in the request API cannot be found.


```
{
    "resourceType": "OperationOutcome",
    "text": {
        "status": "generated",
        "div": "<div xmlns=\"http://www.w3.org/1999/xhtml\"><h1>Operation Outc
ome</h1><table border=\"0\"><tr><td style=\"font-
weight: bold;\">ERROR</td><td>[]</td><td>[2000]: Participant Cannot be Found
</td></tr></table></div>"
    },
    "issue": [
        {
            "severity": "error",
            "code": "invalid",
            "details": {
                "text": "[2000]: Participant Cannot be Found"
            }
        }
    ]
}
```


10.4 Error Codes and Messages (TBC)

The table below lists the prevailing error messages that may be returned in the [text.div] and [issue]" elements of the OperationOutcome Resource. Note the list of error messages maybe updated from time to time.

Error Code	Severity	Code	Error Description
1000	error	invalid	Missing input parameter: {%msg% is required}
1001	error	invalid	Invalid input parameter: {%msg%}
1002	error	invalid	Invalid input parameter format: {%msg%} e.g. Invalid input parameter format: {gender must male|female|unknown}
2000	error	invalid	Participant Cannot be Found
3000	error	invalid	Participant Consent Cannot be Found
-9999	error	invalid	Service unavailable

11 Message Example

11.1 PMI Query Request

If the Request is successful, the service will reply with an HTTP status code "**200**" and the retrieved results.

An example of returned FHIR resources from a successful request is provided below.

11.1.1 Returned FHIR Resources Example

{
"resourceType": "Bundle",
"meta": {
"lastUpdated": "2024-06-06T10:28:25.220+08:00"
},
"identifier": {
"system": "urn:ietf:rfc:3986",
"value": "urn:uuid:12345678-1234-1234-1234-123456789012"
},
"type": "searchset",
"total": 1,
"timestamp": "2024-06-06T10:28:25.220+08:00",
"entry": [
{
"fullUrl": "Patient/64b461b6-b44c-4017-a4e3-
b3e85d98cbbf",
"resource": {
"resourceType": "Patient",
"id": "64b461b6-b44c-4017-a4e3-b3e85d98cbbf",
"identifier": [
{
"type": {
"coding": [
{
"system":
"https://ehealth.gov.hk/FHIR/typeofID-ext",
"code": "EHRNO"
}
]
},
"value": "249752538377"
}
]
}
}
]
}
	Comment
	Bundle Resource
	
	Patient (HCR) Resource
	
	- EHR Number

12 REFERENCES

1. In Self-Service Kit (Download), the following material are available:
   - eHealth Code Set
   - Environment Setup Form (Testing/Production)

2. In eHealth Developer Portal, the following material are available:
   - General Guidelines for Clinical Data Upload to eHealth
   - Communication Protocol Specification for Connection to eHealth
   - BLS Technical Interface Specification (for details of data definitions)

3. Websites References:
   - eHR content and codex
     https://www.ehealth.gov.hk/en/healthcare-provider-andprofessional/resources/information-standards/information-standarddocument.html#appendices
   - HL7-HK Official Website
     https://hl7.org.hk

13 ANNEX

13.1 Document Types accepted in eHealth

The following code is used for the Document Type:

Code	Document Type (English)	Document Type (Chinese)	HKIC No.*	Doc No.*
DI	Document of Identity for Visa Purposes	香港特別行政區簽證身份書		M
RP	Re-entry Permit	香港特別行政區回港證		M
BC	Birth Certificate - HK	香港出生證明書	M	
ID	HKID Card	香港身份證	M	
OP	Travel document - overseas	其他國家/地區發出之旅遊証件		M
OC	Travel documents - PRC	中華人民共和國發出之其他旅遊証件		M
AR	Adoption Certificate	領養證明書		M
EC	Exemption Certificate	豁免證明書(或稱豁免登記證明書)	O ECID	M EC
OW	One-way Permit	單程証		M
TW	Two-way Permit	雙程証		M
ED	eHR document	電子健康紀錄文件		M
RE	Recognizance	擔保書(行街紙)		M
MD	Macao ID Card	澳門身份證		M
CD	Consular Corps Identity Card	領事團身份證	M	