

Data Compliance Test (DCT) Test Cases for Encounter Record

<HCP Name>

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1 Testing Instructions to HCPs

1.1 Self-Service Testing Phase

- After development of the data upload programmes, you can use the **Self-Service test accounts and test HCRs** provided by eHealth for connection to the eHealth testing environment and proceed with the self-service testing.
- You can proceed with the Self-service test at your own pace by following this Self-Service Testing Guide and using the test cases provided in section 2.
- You can verify the **correctness** and **completeness** of the data upload by:
 - checking the interface files / messages generated in your system against the sample expected results of interface files /messages for all test cases as provided;
 - checking the results on eHR Viewer (EVE) by logging into the testing eHRSS with the provided test account; and
 - checking the upload status through Process Summary and Exception Report in eHR Inbox by logging into the testing eHRSS.
- For data fields requiring eHR Codex values, you can refer the Code Sets provided with the Self-Service Kit.
- For the details of data requirements (e.g. mandatory / optional fields), please refers to below reference provided in Self-Service Kit:
 - Quick Guide for Encounter Data Upload.docx
 - BLS Technical Interface Specification for eHR Encounter Record v1.4.4.pdf
- You are required to perform the first batch of data upload by **Data Materialization (DM)** mode. **DM mode** is denoted in the interface by a fixed value **BL-M** in *HL7 OBX.4*
- You should use **Incremental Load (INC)** mode for the second batch of data upload to update the previously uploaded records. **INC mode** is denoted in the interface by a fixed value **BL** in *HL7 OBX.4*.
- Since the **DM** mode would replace the corresponding records previously uploaded to eHRSS, you may repeat your testing unlimited number of times by uploading the first batch by **DM** mode.
- When all required test cases can be completed smoothly and correctly in this phase, you can proceed to the Final Testing Phase and submit **production environment setup form** to eHR-IT for preparation.

1.2 Final Testing Phase

- You can start the Final Testing Phase once all test cases in the Self-Service Testing phase are passed.
- You should start Final Test by executing the test cases provided in section 2 with Final Testing HCRs provided by eHR-IT.
- You can verify the correctness and completeness of testing results by checking results in eHR Viewer (EVE) and the upload status through Process Summary and Exception Report in eHR Inbox.
- For Encounter DCT test cases, there are TWO batches of data files / transactions to be uploaded to the testing eHRSS. The required records must be correctly uploaded from these 2 consecutive batches respectively.
- The Final Test will be considered PASSED if all the following criteria are met:
 - The TWO batches of test data files are uploaded consecutively in the correct sequence. The second batch of data files/transactions must be submitted after completion of processing of the first batch by eHRSS.
 - No additional data files / transactions are uploaded in between or after the uploads of the above two batches of data files / transactions to amend any records.

- No exception records are reported from the uploads.
- No manual interventions have been made to the data files / transactions.
- If the Final Test failed, you can re-attempt the Self-Service Test and Final Test until a successful run can be completed.

1.3 Preparation of DCT Test Report

- Once you have successfully passed the Final Test based on the above criteria, you should complete this document by attaching the below items to this document at the appropriate space provided:
 - Actual data files uploaded
 - Screen-shot of each test case
- You are required to submit this completed 'DCT Test Cases' document to eHR-IT for further processing. eHR-IT will provide feedback **within 10 working days**.

2 Test Case Details

1	Test Case ID	ENCTR-001 [Outpatient]	
	Function Description	HCP has received the sharing consents from testing HCRs, then perform first data upload of HCRs' clinical records to eHRSS by DM Mode.	
	Subsequent case of	N/A	
	Testing Assumption	<ul style="list-style-type: none"> HCR1-HCR6 have already given sharing to sharing consent to your outpatient clinic. The eMR system will upload Batch 1 data files to eHRSS with all appointment and attendance records of <HCR1> - <HCR6> created by DM mode. 	
	Test Actions	HCP creates below encounter records in eMR system:	
		1a	Mark attendance of a booked appointment in the eMR system for <HCR1> e.g. Visit date time = '1-Sep-2023 10:30' Visit clinic identifier = 9907819043 Visit clinic long name = 'Clinic A' Visit clinic local name = 'Clinic A' Visit attendance indicator = 'A' Encounter type = 'O'
		1b	Create a general future appointment in the eMR system for <HCR2> e.g. Visit date time = '20-Oct-2023 09:10' Visit clinic identifier = 9907819043 Visit clinic long name = 'Clinic A' Visit clinic local name = 'Clinic A' Visit attendance indicator = 'N' Encounter type = 'O'
		1c	Create a general future appointment in the eMR system for <HCR3> e.g. Visit date time = '20-Oct-2023 09:20' Visit clinic identifier = 9907819043 Visit clinic long name = 'Clinic A' Visit clinic local name = 'Clinic A' Visit attendance indicator = 'N' Encounter type = 'O'
		1d	Create a general future appointment in the eMR system for <HCR4> e.g. Visit date time = '20-Oct-2023 09:30' Visit clinic identifier = 9907819043 Visit clinic long name = 'Clinic A' Visit clinic local name = 'Clinic A' Visit attendance indicator = 'N' Encounter type = 'O'

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1	Test Case ID	ENCTR-001 [Outpatient]	
		1e	<p>Create a specialist future appointment in the eMR system for <HCR5> with <Specialty 1> e.g. Visit specialty = 'FM' Visit specialty remark = 'FM remark' Visit date time = '20-Oct-2023 10:00' Visit clinic identifier = 9907819043 Visit clinic long name = 'Clinic A' Visit clinic local name = 'Clinic A' Visit attendance indicator = 'N' Encounter type = 'O'</p> <p><i>* HCP can provide any specialty applicable to its clinic</i></p>
		1f	<p>Created a specialist future appointment in the eMR system for <HCR6> with <Specialty 2> e.g. Visit specialty = 'ENT' Visit specialty remark = 'ENT remark' Visit date time = 20-Oct-2023 10:15' Visit clinic identifier = 9907819043 Visit clinic long name = 'Clinic A' Visit clinic local name = 'Clinic A' Visit attendance indicator = 'N' Encounter type = 'O'</p> <p><i>* HCP can provide any specialty applicable to its clinic</i></p>
	Expected eMR System Behavior	<ol style="list-style-type: none"> HCP's eMR system will upload Batch 1 data files with all appointment and attendance records of created in 1a-1f by DM mode. Batch 1 data files should include below files: <sample> <ol style="list-style-type: none"> Participant List (PL) Data File (DF) HL7 message with signature Zip File (embedded PL, DF and HL7 message files) Control File (contains the filenames of PL, DF and HL7 message) eMR system uploads Batch 1 data files ('Zip File' and 'Zip Control File') to eHR. HCP verifies the data upload status by reviewing the 'Process Summary Report' and 'Exception Report' in eHR Inbox. HCP verifies the completeness and correctness of data uploaded in eHR Viewer. 	
	Results Verification	<ul style="list-style-type: none"> HCP verifies if the uploaded records can be properly viewed in eHR Viewer (EVE) and reviews if the data batches uploaded can be processed successfully or rejected through 'Process Summary' and 'Exception Report' in eHR Inbox. 	

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1	Test Case ID	ENCTR-001 [Outpatient]
	Actual Result (Screenshot / Attachment)	Data Files Uploaded: <i><Attached the Zip file and Control file; password to unzip the file></i>
		Attachment/Screenshot: <i><Attached the screen shots of records uploaded in eHR Viewers></i>
	Remark	
	Testing Date	
	Verified By	













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2	Test Case ID	ENCTR-002 [Outpatient]
	Function Description	There are subsequent changes in HCRs' clinical records in Batch 1 data upload. HCP uploads increment changes to eHRSS by INC Mode.
	Subsequent case of	ENCTR-001
	Testing Assumption	<ul style="list-style-type: none"> HCP has already verified Batch 1 data are completed successfully.
	Test Actions	<p>HCP updates below encounter records in eMR system:</p> <p>2a <HCR2> requested to cancel the appointment by updating the attendance status of the existing record in the eMR system. e.g. Visit date time = '20-Oct-2023 09:10' Visit clinic identifier = 9907819043 Visit clinic long name = 'Clinic A' Visit clinic local name = 'Clinic A' Visit attendance indicator = 'C' Encounter type = 'O'</p> <p>Notes: <i>If 'Visit attendance indicator' is not applicable in your eMR system, HCP may use 'Delete' transaction to remove the unexpected appointment record.</i></p> <p>2b <HCR3> marked attendance by updating the attendance status of existing appointment in the eMR system. e.g. Visit date time = '20-Oct-2023 09:20' Visit clinic identifier = 9907819043 Visit clinic long name = 'Clinic A' Visit clinic local name = 'Clinic A' Visit attendance indicator = 'A' Encounter type = 'O'</p> <p>Notes: <i>If 'Visit attendance indicator' is not applicable in your eMR system, HCP may upload an 'Attendance' record and remove the corresponding attended appointment record.</i></p> <p>2c <HCR5> requested to change the appointment date e.g. Visit date time = '22-Oct-2023 09:20' Visit clinic identifier = 9907819043 Visit clinic long name = 'Clinic A' Visit clinic local name = 'Clinic A' Visit attendance indicator = 'A' Encounter type = 'O'</p> <p>2d <HCR6> requested to change the specialty e.g. Visit specialty = 'FM' Visit specialty remark = 'Change from ENT to FM remark' Visit date time = 20-Oct-2023 10:15' Visit clinic identifier = 9907819043 Visit clinic long name = 'Clinic A' Visit clinic local name = 'Clinic A' Visit attendance indicator = 'N' Encounter type = 'O'</p>


DCT Test Cases of Encounter Record

2	Test Case ID	ENCTR-002 [Outpatient]	
	Expected eMR System Behavior	2e	The incorrect appointment of <HCR4> was uploaded in Batch 1, user has deleted the record in eMR system.
		1.	HCP's eMR system generated Batch 2 data file with items 2a-2e transactions to eHRSS.
		2.	Batch 2 data files should include below files: <sample> <ol style="list-style-type: none"> Participant List (PL) Data File (DF) HL7 message with signature Zip File (embedded PL, DF and HL7 message files) Control File (contains the filenames of PL, DF and HL7 message)
		3.	eMR system uploads Batch 2 data files ('Zip File' and 'Zip Control File') to eHR.
	Results Verification	4.	HCP verifies the data upload status by reviewing the 'Process Summary Report' and 'Exception Report' in eHR Inbox.
		5.	HCP verifies the completeness and correctness of data uploaded in eHR Viewer.
	Actual Result (Screenshot / Attachment)	•	HCP verifies if the uploaded records can be properly viewed in eHR Viewer (EVE) and reviews if the data batches uploaded can be processed successfully or rejected through 'Process Summary' and 'Exception Report' in eHR Inbox.
		Data Files Uploaded: <Attached the Zip file and Control file; password to unzip the file>	
	Remark	Attachment/Screenshot: <Attached the screen shots of records uploaded in eHR Viewers>	
	Testing Date		
	Verified By		

3 Appendix – Sample Messages

Test Case ID	File Type	Bulk Load Format	SOAP Format (by LAAM)
ENCTR-001	Participant List (PL)	 9907819043.9907 819043.ENCTR.PL	 SOAP_request.txt
	Data File (DF)	 9907819043.9907 819043.ENCTR.DF	
	HL7 Message	 9907819043.9907 819043.ENCTR.HL	
	Zip File	 9907819043.9907819043.ENCTR.HL7.20231102123801.zip (Password: Abcd1234)	
	Control File	 9907819043.9907 819043.ENCTR.HL	
ENCTR-002	Participant List (PL)	 9907819043.9907 819043.ENCTR.PL	 SOAP_request.txt
	Data File (DF)	 9907819043.9907 819043.ENCTR.DF	
	HL7 Message	 9907819043.9907 819043.ENCTR.HL	
	Zip File	 9907819043.9907819043.ENCTR.HL7.20231102135001.zip (Password: Abcd1234)	
	Control File	 9907819043.9907 819043.ENCTR.HL	

4 Appendix – Testing HCP and HCRs Information

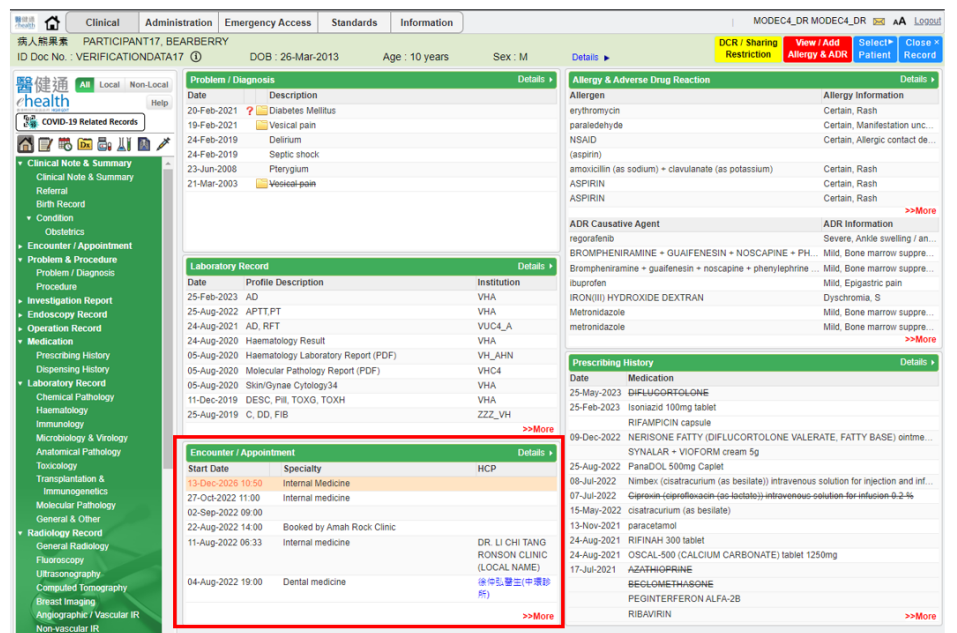
Sample Message	 Sample - Testing HCP & HCR Info.xl
Self-Service Testing	To be provided by eHR-IT later
Final Testing	To be provided by eHR-IT later

- eHR-IT will provide other sets of testing HCRs for HCP to perform Self-Service testing and Final testing respectively.

5 Appendix – Sample Results in eHR Viewer (EVE)

Encounter Summary View

- Locate on the middle bottom side
- Display Start Date, Specialty, Institution
- Click Detail / More / Tree node to Detail View



Start Date	Specialty	Institution
13-Dec-2026 10:59	Internal Medicine	HCP
27-Oct-2022 11:00	Internal medicine	
03-Sep-2022 09:00		
22-Aug-2022 14:00	Booked by Amah Rock Clinic	
11-Aug-2022 06:33	Internal medicine	DR. LI CHI TANG RONSON CLINIC (LOCAL NAME)
04-Aug-2022 19:00	Dental medicine	德中弘豐堂(中環診所)

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2 醫健通 (Health) Clinical eHealth+ Administration Emergency Access Standards Information | MODEC4_DR MODEC4_DR 20 AA Login

3 病人熊果素 PARTICIPANT17, BEARBERRY

4 ID Doc No.: VERIFICATIONDATA17 DOB: 26-Mar-2013 Age: 10 years Sex: M Details

5 DCR / Sharing Restriction View / Add Allergy & ADR Select Patient Close Record

6 醫健通 health

7 All Local Non-Local Help

8 COVID-19 Related Records

9

10 Encounter / Appointment

11 Problem & Procedure

12 Procedure

13 Investigation Report

14 Endoscopy Record

15 Operation Record

16 Medication

17 Prescribing History

18 Dispensing History

19 Laboratory Record

20 Chemical Pathology

21 Haematology

22 Immunology

23 Microbiology & Virology

24 Anatomical Pathology

25 Toxicology

Encounter / Appointment

All record HCP record Patient input

Start Date End Date Specialty Healthcare Provider Type Status

30-Nov-2026 10:50 Internal Medicine Visit attendance status Outpatient Attended

14-Oct-2022 11:00 Internal medicine Booked by Tai Mo Shan Medical Centre Outpatient Attended

20-Aug-2022 09:03 Family Medicine The appointment was booked by Clinic A Outpatient Attended

09-Aug-2022 14:00 Booked by Aman Rock Clinic Consultation without patient's physical presence Attended

29-Jul-2022 06:33 Internal medicine DR. LI CHI TANG RONSON CLINIC (LOCAL NAME) Consultation without patient's physical presence Attended

22-Jul-2022 19:00 Dental medicine 大橋山門診 Other encounter type Cancelled

26-Jun-2022 11:25 Dental medicine VHA THE MEDICAL DOCTORS (QB) Outpatient Attended

Visit date time

Visit specialty

Visit clinic

Encounter type