

**eClaimLink**

# e-Prescription (eRx) Initiative

## Technical Specifications

Version 1.1

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## Overview

### Scope

As eClaimLink is evolving to include the full billing cycle of healthcare claims, the Dubai Health Authority is proud to introduce the e-Prescription initiative (eRx Initiative).

e-Prescription initiative is the computer-based electronic generation, transmission and filling of a medication prescription, taking the place of paper prescriptions. In Dubai, e-prescribing would allow a Provider\Clinician to electronically transmit a prescription to the DHPO\eRx Hub (located at DHA's DHPO system), getting coverage feedback from insurance companies real-time before the patient leaves their office. Later when the patient visits the Provider\Pharmacy, the pharmacist downloads the prescription electronically and obtains coverage authorization from the payer at time of dispensing the medication real time.

Dubai is the first to implement such comprehensive e-Prescription solution including Provider\Clinician, Provider\Pharmacy and the Payer transactions all through the DHA systems.

This document will discuss and outline the business and processing aspects of the e-Prescription initiative to help all involved parties configure the technical connections and establish the business requirements through the involved transactions' schemas.

### Why e-Prescription

Medications are anticipated to relieve patient's pain and sufferings, and aid them in maintaining good health. Nonetheless, if used inappropriately they can cause serious harm.

E-prescription enhances the process of prescribing medicines by replacing the outdated paper-based methods with a more accurate and efficient tools. It outlines the ability to send error-free, accurate, and comprehensible prescriptions electronically from the Provider\Clinician to the Provider\Pharmacy. e-Prescription is meant to reduce the risks associated with traditional prescription script writing. Moreover, it is being a supportive decision-making tool by making patient medical records and eligibility available at the moment of prescribing and dispensing the medication.

The e-Prescription Initiative allows electronic transfer and sharing of medical prescriptions among different medical entities across the Emirate swiftly and in few clicks.

By providing interactive, medical tips and clinical notifications, e-Prescription significantly helps reduce medical errors and maximizes patient health and safety. By linking it to insurance coverage checks at time of prescribing and dispensing, e-Prescription vastly improves efficiency of the healthcare system, as well as assists health insurance companies in managing their drug expenditure costs. Moreover, patient waiting at time of dispensing will be reduced significantly, eliminating faxes for authorization from insurance companies and Provider\Pharmacy – Provider\Clinician call backs.

e-Prescription will play an important role in enabling the DHA to achieve the goals mentioned below:

- Minimize medical mistakes in prescribing and dispensing.
- Reduce fraud, abuse and waste.
- Monitor drugs utilization more efficiently in Dubai.

- Reduce patients’ wait time at Provider\Pharmacy significantly.
- Inform patients about insurance coverage at Provider\Clinician office and Provider\Pharmacy real time.

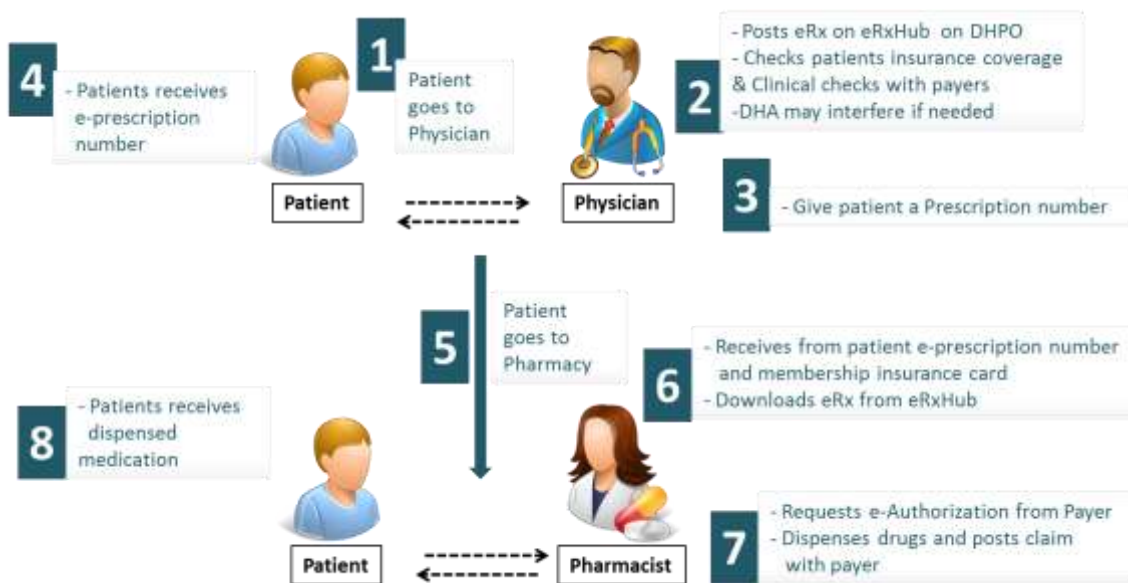
### Abbreviations

Below is a list of the abbreviations that may be used within the document body:

Abbreviation	Description
<b>DHA</b>	Dubai Health Authority
<b>eRx</b>	e-Prescription
<b>DHPO</b>	Dubai Health Post Office
<b>eRx Hub</b>	Component of the DHPO managing the e-Prescription transactions
<b>Payer</b>	Healthcare Service Payer
<b>Provider</b>	Healthcare Service Provider
<b>Receiver</b>	Transaction receiver

### e-Prescription Initiative Cycle

Below is a diagram representing the high level cycle covered within the e-Prescription initiative.



### Involved Transaction

#### e-Prescription Transactions

e-Prescription cycle consists of two transactions as shown below:

Transaction	Description
<b>e-Prescription Submission</b>	transaction of submitting an e-Prescription from the Healthcare Provider\Clinician to the DHPO\eRx Hub
<b>e-Prescription Processing</b>	transaction of fetching and processing an e-Prescription from the DHPO\eRx Hub to the Provider\Pharmacy

### eClaims Cycle (with the e-Prescription)

Full eClaimLink Cycle with the new e-Prescription transactions:

No.	Transaction	From	To
→	<b>Transaction submitted by the Provider\Clinician with the patient information and the prescription details. Transaction validity is defined by the business rules.</b>		
1	eRx Request	Provider\Clinician	DHPO\eRx Hub
1.1	eRx Request	DHPO\eRx Hub	Payer\TPA
→	<b>Transaction submitted by the payer in response to the e-Prescription</b>		
2	Prior Authorization	Payer\TPA	DHPO\eRx Hub
2.1	Prior Authorization	DHPO\eRx Hub	Provider\Clinician
→	<b>Transaction to pull the e-Prescription details by the Provider\Pharmacy from the DHPO\eRx Hub.</b>		
3	eRx Request	DHPO\eRx Hub	Provider\Pharmacy
→	<b>Transaction submitted by the Provider\Pharmacy requesting authorization for the e-Prescription.</b>		
4	Prior Request	Provider\Pharmacy	DHPO
4.1	Prior Request	DHPO	Payer\TPA
→	<b>Transaction submitted by the payer in response to the Provider\Pharmacy request</b>		
5	Prior Authorization	Payer\TPA	DHPO
5.1	Prior Authorization	DHPO	Provider\Pharmacy
→	<b>Transaction submitted by the Provider\Pharmacy after dispensing the prescription</b>		
6	Claim Submission	Provider\Pharmacy	DHPO
6.1	Claim Submission	DHPO	Payer\TPA
→	<b>Transaction submitted by the payer in response to the Provider\Pharmacy's claim submission</b>		
7	Remittance Advice	Payer\TPA	DHPO
7.1	Remittance Advice	DHPO	Provider\Pharmacy

## e-Prescription Access

As DHPO\eRx Hub will be managing the e-Prescription transactions, certain access and rules need to be set to manage the cycle.

### Connecting to DHPO\eRx Hub

eClaimLink solution provides two channels for connecting to the DHPO\eRx Hub:

- An online portal for all the licensed Provider\Clinicians in the emirates of Dubai to submit electronic prescriptions and receive authorizations through the regulatory DHPO.
- A direct link to the DHPO\eRx Hub through web services.

### Credentials to utilize DHPO\eRx Hub

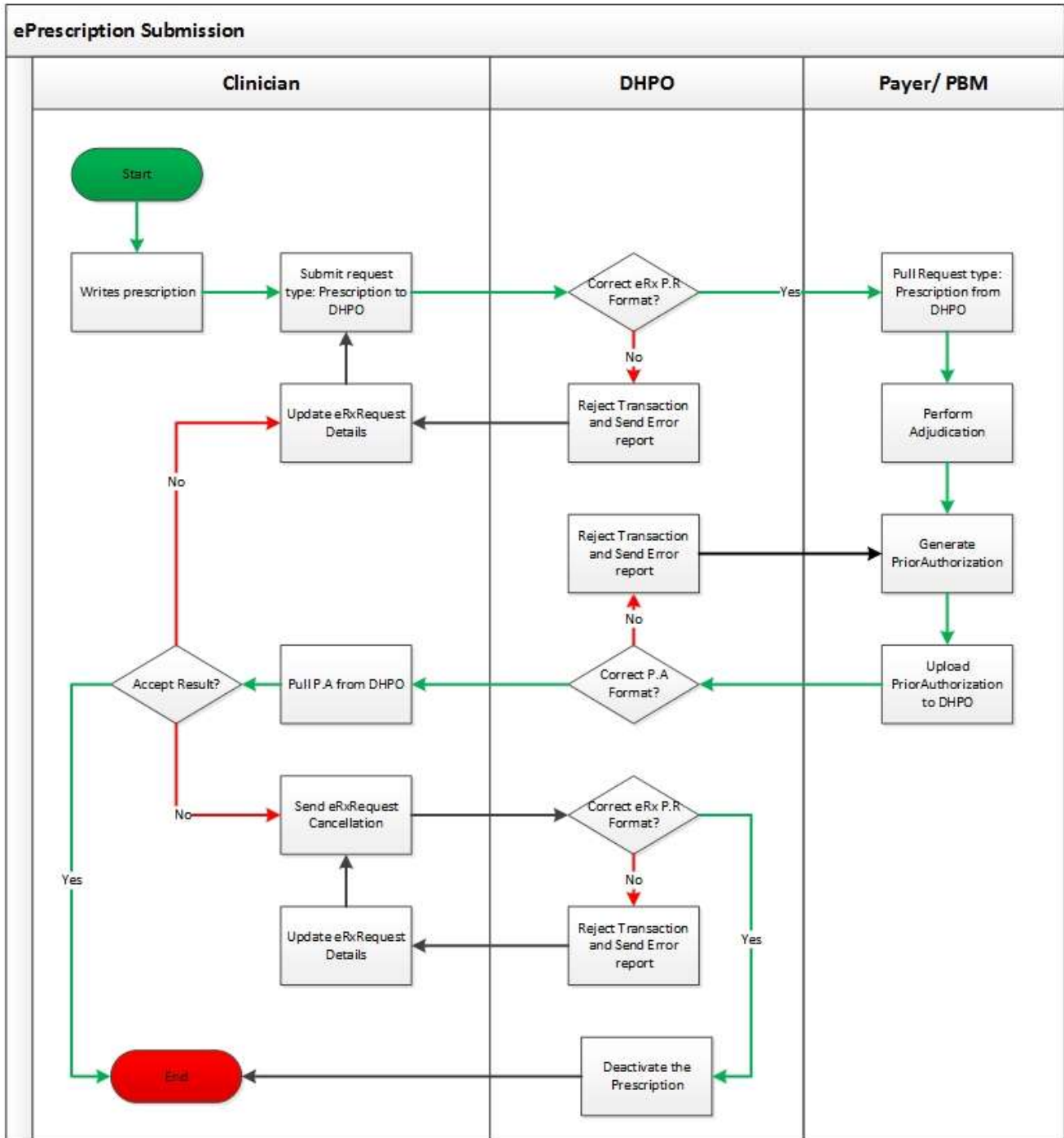
DHPO\eRx Hub will manage e-Prescriptions based on the combination between the Facility and Clinician IDs.

- Access will be granted only for registered and licensed clinicians.
- Provider (Hospital\Center\Clinic) needs to create a user for its clinicians using the eClaimLink Portal under the main Facility ID if using the online portal to access it, else they submit the clinician ID in addition to Facility ID if using web services to get access.

### e-Prescription Submission

Below is the data flow diagram of the eRx submission transaction:

Figure 2.2: e-Prescription Submission High Level Diagram





### Workflow steps:

Below is a more detailed description of the steps taken during the submission process of the e-Prescription transaction by the Provider\Clinician to the DHPO\eRx Hub.

1. Provider\Clinician fills in the prescription data. A minimum set of mandatory fields is requested to complete the transaction (defined the table below). Providing additional information will facilitate higher quality services and record keeping for the patient.

*Provider\Clinician has the option to utilize their internal HIS systems to communicate directly to the DHPO through web services, or to utilize the free of charge eRx Physician provided by the DHA through the eClaimLink system.*

**Table 2.2 eRx Request - Required Fields**

No.	Element	Description	Mandatory
<b>1</b>	<b>Header</b>	<b>Header element of the PriorRequest transaction</b>	<b>Yes</b>
1.1	SenderID	ID of the facility sending the eRxRequest	Yes
1.2	ReceiverID	ID of the facility receiving the eRxRequest	Yes
1.3	TransactionDate	Date of the transaction <b>Possible values:</b> DD/MM/YYYY	Yes
1.4	RecordCount	Number of claims within the eRxRequest	Yes
1.5	DispositionFlag	To indicate the file type (TEST or PRODUCTION)	Yes
<b>2</b>	<b>Prescription</b>	<b>Prescription element of the eRx.Request transaction</b>	<b>Yes</b>
2.1	ID	Unique Identifier to track the eRx.Request	Yes
2.2	Type	Type of the eRx.Request being submitted <b>Possible values:</b> eRxRequest, eRxCancellation	Yes
2.3	PayerID	Represents the ID of the eRx.Request payer <b>Possible values:</b> Insurance License, SelfPay (cash patient)	Yes
2.4	Clinician	eClaimLink ID of the clinician sending the PriorRequest	Yes
<b>2.5</b>	<b>Patient</b>	<b>Patient element of the eRx.Request transaction</b>	<b>No</b>
2.5.1	MemberID	Unique reference ID of the patient receiving the e-Prescription. <b>Possible Values:</b> Insurance Member ID, or other unique identifier of the member.	Yes
2.5.2	EmiratesIDNumber	Number of the patient's Emirates ID <b>Possible values:</b> Emirates ID Number, or Default values for members that do not have an ID.	Yes
2.5.3	DateOfBirth	Birth Date of the patient <b>Possible values:</b> DD/MM/YYYY	Yes
2.5.4	PatientWeight	Integer representing the weight of the patient in Kilograms	Yes
2.5.5	Email	Valid patient email account	No

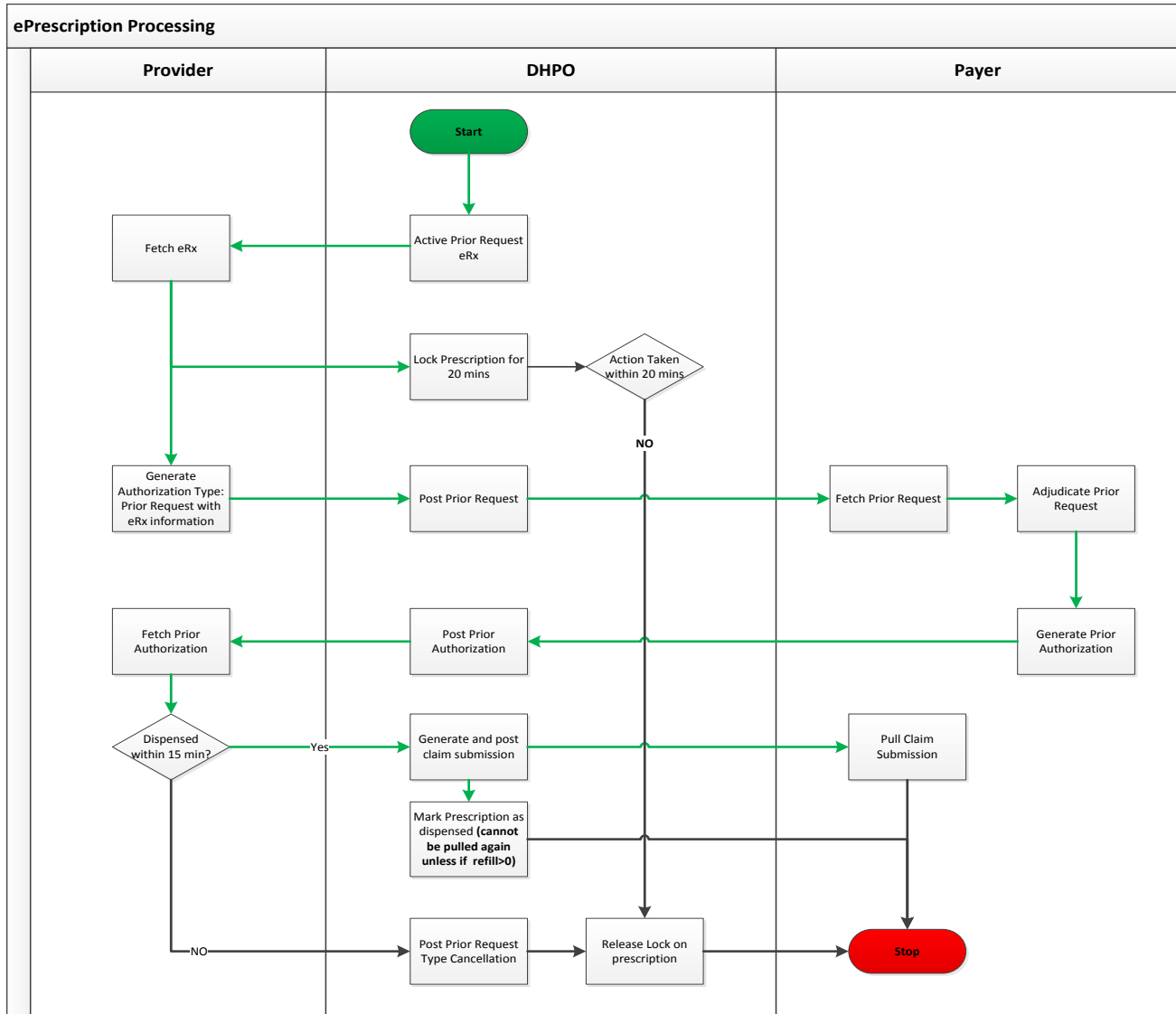
<b>2.6</b>	<b>Encounter</b>	<b>Encounter element of the Authorization</b>	<b>No</b>
2.6.1	FacilityID	ID of the facility sending the PriorRequest	No
2.6.2	Type	Type of the Encounter	No
<b>2.7</b>	<b>Diagnosis</b>	<b>Diagnosis element of the Authorization</b>	<b>Yes</b>
2.7.1	Type	Principal, Secondary, Admitting	Yes
2.7.2	Code	ICD code of the diagnosis (Predefined list)	Yes
<b>2.8</b>	<b>Activity</b>	<b>Activity element of the Authorization</b>	<b>Yes</b>
2.8.1	ID	Unique Identifier to track the activity within the eRxRequest	Yes
2.8.2	Start	Activity start date and time <b>Possible values:</b> dd/mm/yyyy HH:MM	Yes
2.8.3	Type	Type of the activity <b>Possible values:</b> Predefined list found in common types	Yes
2.8.4	Code	Code of the activity <b>Possible values:</b> code from the standard coding lists	Yes
2.8.5	Quantity	Quantity of the activity in granular units	Yes
2.8.6	Duration	Duration of the prescribed activity in days.	Yes
2.8.7	Refills	Number of refills for a given activity	Yes
2.8.8	RouteOfAdmin	Rout of activity administration <b>Possible values:</b> predefined list	Yes
<b>2.8.9</b>	<b>Frequency</b>	<b>Frequency element under the activity</b>	<b>Yes</b>
2.8.9.1	UnitPerFrequency	Granular unit of the frequency	Yes
2.8.9.2	FrequencyValue	Number of repetitions for a given frequency	Yes
2.8.9.3	FrequencyType	Frequency time unit. <b>Possible values:</b> Hour, Day, Week, Once	Yes
2.8.10	Instructions	Instructions for a given activity	Yes
<b>2.8.10</b>	<b>Observation</b>	<b>Observation element within the Activity</b>	<b>No</b>
2.8.10.1	Type	Type of the observation <b>Possible values:</b> Predefined list	Yes
2.8.10.2	Code	Code of the observation <b>Possible values:</b> Predefined list	Yes
2.8.10.3	Value	Value of the observation	Yes
2.8.10.4	ValueType	Type of the detail entered in the value field	Yes

2. Provider\Clinician generates and uploads the eRxRequest to the DHPO\eRx Hub using the web-services method **UploadRxTransaction**. *(documentation provided in a separate section below)*
3. Payer downloads the eRxRequest from the DHPO\eRx Hub using the web-service method **DownloadRxTransaction**. *(documentation provided in a separate section below)*
4. Payer marks the successfully downloaded transactions as downloaded using the web-service method **SeteRxTransactionDownloaded**. *(documentation provided in a separate section below)*
5. Payer adjudicates the **eRXRequest** based on their internal rules.  
*Drugs reported using generic codes may result in a reply without adjudication from the payer systems (ex: Benefit related coverage depending on the trade price will need to know the exact item)*
6. Payer generates and uploads the **PriorAuthorization** on the DHPO\eRx Hub to reply on the **eRxRequest**.
7. Provider\Clinician downloads the **PriorAuthorization** from the DHPO\eRx Hub.  
Based on the discussion between the Provider\Clinician and the patient, the eRx transaction can be:
  - **Posted:** Provider\Clinician leaves the transaction on the DHPO\eRx Hub without taking any further action.
    - Provider\Clinician will share the eRX ID with the patient to be able to locate the prescription at a pharmacy.
  - **Cancelled:** Provider\Clinician generates and uploads a cancellation request (eRxRequest of type “Cancellation”) to the DHPO\eRx Hub. Transaction file shall follow the schema, business and validation rules published on the eClaimLink website.
  - **Modified:** Provider\Clinician generates and uploads a cancellation request sends a cancellation request (prior Request of type “Cancellation”) to the DHPO\eRx Hub, as mentioned above. Then proceeds with generating and uploading a new eRx transaction with the modified details.
    - e-Prescription has to be treated as one full transaction and cannot be partially modified.
8. e-Prescription transactions available on the post office will be ready to be downloaded by the Providers\Pharmacy using the needed credentials and codes.
  - e-Prescription transactions will follow the technical business and validation rules mentioned in the DHPO, as well as the clinical and medical rules set by the DHA and MOH (ex: prescription expiry period)
9. Cancellation requests will mark the needed eRxRequest transactions as cancelled and will not allow the Provider\Pharmacy to download them anymore.
  - Cancellation can be done through setting the eRxRequest type=cancellation.
  - Provider\Clinician has to utilize the same eRxRequest.ID from the eRxRequest intended to be cancelled.

### e-Prescription Processing (Dispensing)

Below is the data flow diagram of the e-Prescription processing transaction:

Figure 2.3: e-Prescription Processing High level Diagram



#### Workflow steps:

Below is a more detailed description of the steps taken during the processing of the e-Prescription transaction from the Provider\Pharmacy:

10. Patient provides the pharmacist with the needed information to download a given prescription
  - Information should be: eRx reference number, Member ID
  - Minimum required information will be clarified though the business and validation rules.
11. Provider\Pharmacy utilizes the provided information to download the needed eRxRequest from the DHPO\eRx Hub using the web service method **GeteRxTransaction**. (documentation provided in a separate section below)

12. Provider\Pharmacy uses the eRxRequest details and adds\modify the required information to generate and submit a PriorRequest (type = authorization) transaction to the DHPO using the web service method **UploadTransaction**. (*documentation provided in a separate section below*)
  - Pharmacist needs to ensure that all the drugs sent within the prior request are reported using the trade names. Items reported with generic names will not be allowed to be uploaded on the DHPO (activity type must = 5).
13. Payer downloads the PriorRequest transaction from the DHPO based on the Sender\Receiver ID reported within the request file using the web service method **DownloadTransaction**.
14. Payer sets the PriorRequest that is successfully retrieved as downloaded using the web service method **SetTransactionDownloaded**.
15. Payer adjudicates the PriorRequest based on the:
  - Member eligibility and benefits coverage such as: member expiry, policy limits, policy coverage and exclusions ... etc.
  - Clinical checks such as: drug interactions, age\gender appropriateness, indications, contraindications, duplicate therapy, refill too soon ... etc.
  - Internal rules: network coverage physician & pharmacy ... etc.
16. Payer generates and uploads the PriorAuthorization to the DHPO using the web service method **UploadTransaction**.
17. Provider\Pharmacy downloads the PriorAuthorization reply from the DHPO using the web service method **DownloadTransaction**.

Based on the agreement between the pharmacist and the patient, the PriorAuthorization transaction can be:

- **Dispensed:** Provider\Pharmacy generates and uploads a real time ClaimSubmission containing the PriorAuthorization details and ID to the DHPO for confirming the dispensing.
  - DHPO will utilize the Claim\PriorAuthorization\e-Prescription ID's to mark the eRxRequest as inactive (dispensed) unless there is a refill then one prescription count is reduced.
- **Cancelled:** Provider\Pharmacy generates and uploads a cancellation request (prior Request of type "Cancellation") to the DHPO\eRx Hub.
  - eRxRequest will be unlocked by the DHPO after the cancellation request is received on the PriorRequest transaction posted by the Provider\Pharmacy.
  - eRxRequest will be marked as available to be downloaded by the same or a different Provider\Pharmacy.
  - Authorization is granted for 15 min by Payer so if no dispensing occurs and a claim is not submitted within that period, then the authorization is considered cancelled and no guarantee for payment is granted.
  - Business and validation rules will clarify the ability and timelines of cancelling a given prescription (ex: cancellation after dispensing)
- **Modified:** Provider\Pharmacy generates and uploads a cancellation request (prior Request of type "Cancellation") to the DHPO as mentioned above. Then restarts eRx processing transaction another time with the modified details.

- PriorRequest transaction has to be treated as one full transaction and can't be partially modified or cancelled.
18. Provider\Pharmacy not dispensing an eRxRequest transaction are requested to send a cancellation PriorRequest to release the eRxRequest transaction and make it available to be downloaded at the DHPO\eRx Hub.
- eRxRequest\s that are not released by the Provider\Pharmacists will remain blocked only for the period decided by the business and validation rules (20 min).

## Possible e-Prescription Scenarios

### Prescriptions from Facilities inside Dubai, to be dispensed at Facilities outside Dubai

- Provider\Clinician has to upload the eRxRequest details to the DHPO\eRx Hub.
- Dubai Provider\Clinician can print out the **Electronic Prescription Reference** document containing a list of the prescribed items along with the following details:
  - This document can't be used for dispensing inside the emirate of Dubai.
  - This document can be used for dispensing outside the emirate of Dubai with the proper stamps and signatures.
- e-Prescription on the DHPO\eRx Hub will be removed or deactivated through two options:
  - **Dispensing** at a Dubai facility: Provider\Pharmacy will enter the eRx reference number within the ClaimSubmission which will trigger the deactivation of the prescription.
  - **Expiry**: if the prescription downloading validity period (2 weeks) is exceeded.
- In case a prescription was not closed by the Provider\Pharmacy outside Dubai, and a case of double dispensing was attempted: Payers systems should be able to detect the double dispensing of an item for a given patient location (Inside or outside Dubai).

### Prescriptions from Facilities outside Dubai, to be dispensed at Facilities inside Dubai

- Provider\Clinician outside Dubai will provide patients with paper prescriptions.
- Provider\Pharmacy inside Dubai process the prescription by entering its details manually into the system in order to generate and send a PriorRequest to the DHPO with the needed format.
  - Provider\Pharmacy is requested to input the paper prescription details manually into the system. The code "OOD" + the prescription number if available can be used in the eRxReferenceNo field to indicate that the prescription is "Out of Dubai"
- Provider\Pharmacy proceeds with the normal Authorization & Claiming cycle as mentioned in the e-Prescription Processing section above.

### Prescriptions from Facilities inside Dubai, to be dispensed by cash patients

- Dubai Provider\Clinician has to upload eRxRequest to the DHPO\eRx Hub for all insured members in compliance with the mandated transaction. Prescriptions for cash patients, as well as prescriptions rejected by the Payer will be treated as any other e-Prescription and are posted to the DHPO\eRx Hub.
- Provider\Pharmacy downloads the e-Prescription from the DHPO\eRx Hub, and dispenses it as mentioned in the e-Prescription Processing section above.
- Provider\Pharmacy sends a ClaimSubmission (Receiver.ID= SelfPay) with the eRxReferenceNo to enable the system from closing the corresponding eRxRequest in the DHPO\eRx Hub.

## e-Prescription Processing Exceptions

Provider\Pharmacy entering prescriptions using the exceptional codes (OOD or 000 explained below) within the eRx reference number field are expected to maintain the paper prescription documentation for audit purposes.

### Prescriptions from Facilities inside Dubai, with a missing eRx reference Number

- Provider\Pharmacy enters the prescription details into the PriorRequest (Type=Authorization) or ClaimSubmission using the code “000” into the eRx reference number. Used mostly for transactions not downloaded from the DHPO\ eRx Hub.

### Prescriptions from Facilities outside Dubai, that do not have an eRx reference Number

- Provider\Pharmacy enters the prescription details into the PriorRequest (Type=Authorization) or ClaimSubmission using the code “OOD + Prescription Number” into the eRx reference number, using the code “000” into the eRx reference number if no prescription number exist.

## e-Prescription Transaction Linking

Below is a brief demonstration of the logic and IDs utilized within the ePrescribing, eAuthorization and eClaim process to link the transactions.

No	Source	Destination	Transaction File	Link ID
1	Provider\Clinician	DHPO\ eRx Hub	eRxRequest	eRxRequest.ID (ex: ID=123) eRxReferenceNo (ex: ID=AB1)
2	DHPO\ eRx Hub	Payer	eRxRequest	eRxRequest.ID (ex: ID=123) eRxReferenceNo (ex: ID=AB1)
3	Payer	DHPO\ eRx Hub	PriorAuthorization	PriorAuthorization.ID (ex: ID=123)
4	DHPO\ eRx Hub	Provider\Clinician	PriorAuthorization	PriorAuthorization.ID (ex: ID=123)
5	DHPO\ eRx Hub	Provider\Pharmacy	eRxRequest	eRxRequest.ID (ex: ID=123) eRxReferenceNo (ex: ID=AB1)
6	Provider\Pharmacy	DHPO	PriorRequest	PriorRequest.ID (ex: ID=456) eRxReferenceNo (ex: ID=AB1)
7	DHPO	Payer	PriorRequest	PriorRequest.ID (ex: ID=456) eRxReferenceNo (ex: ID=AB1)
8	Payer	DHPO	PriorAuthorization	PriorAuthorization.ID (ex: ID=456)
9	DHPO	Provider\Pharmacy	PriorAuthorization	PriorAuthorization.ID (ex: ID=456)
10	Provider\Pharmacy	DHPO	ClaimSubmission	ClaimSubmission.ID (ex: ID=456) PriorAuthorization.ID (ex: ID=456) eRxReferenceNo (ex: ID=AB1)
11	DHPO	Payer	ClaimSubmission	ClaimSubmission.ID (ex: ID=456) PriorAuthorization.ID (ex: ID=456) eRxReferenceNo (ex: ID=AB1)
12	Payer	DHPO	RemittanceAdvice	RemittanceAdvice.ID (ex: ID=456)
13	DHPO	Provider\Pharmacy	RemittanceAdvice	RemittanceAdvice.ID (ex: ID=456)

## Web Service Documentation

### Upload eRxRequest

- **Web service method:** UploadERxRequest
- **Description:** Web service method used to upload transaction content in xml format to post office. Validation rules will be applied to make sure that uploaded files are in good shape.
- **Signature:**

```
int UploadERxRequest (
    string facilityLogin,
    string facilityPwd,
    string clinicianLogin,
    string clinicianPwd,
    byte[] fileContent,
    string fileName,
    out int eRxReferenceNo,
    out string errorMessage,
    out byte[] errorReport)
```

Element	Description
facilityLogin	Facility user login name to connect to the DHPO\eRx Hub
facilityPwd	Facility user password to connect to the DHPO\eRx Hub
clinicianLogin	Clinician user login name to connect to the DHPO\eRx Hub
clinicianPwd	Clinician user password to connect to the DHPO\eRx Hub
fileContent	content of the file to upload
filename	original file name; this file name will be used later to show users the available files for download
eRxReferenceNo	Unique Reference Number for the eRxRequest Generated by the DHPO\eRxHub for tracking purposes.
errorMessage	output parameter that contains the transaction status: <b>Error:</b> error message if something goes wrong; web service can also send warnings using this parameter; the parameter may be null or empty string if the web service returns zero, otherwise the error message is expected <b>Successful:</b> empty
errorReport	output parameter that contains byte array with the content of error report eventually generated by DHPO\eRx Hub Validation during file upload; the parameter may be null

- **Return value:** The web service may return values described in the section *Web Services Returned Values*.



### Upload eRxAuthorization

- **Web service method:** UploadERxAuthorization
- **Description:** Web service method used to upload transaction content in xml format to post office. Validation rules will be applied to make sure that uploaded files are in good shape.

- **Signature:**

```
int UploadERxAuthorization (
    string payerLogin,
    string payerPwd,
    byte[] fileContent,
    string fileName,
    out string errorMessage,
    out byte[] errorReport)
```

Element	Description
<b>payerLogin</b>	Payer user login name to connect to the DHPO\eRx Hub
<b>facilityPwd</b>	Payer user password to connect to the DHPO\eRx Hub
<b>fileContent</b>	content of the file to upload
<b>filename</b>	original file name; this file name will be used later to show users the available files for download
<b>errorMessage</b>	output parameter that contains the transaction status: <b>Error:</b> error message if something goes wrong; web service can also send warnings using this parameter; the parameter may be null or empty string if the web service returns zero, otherwise the error message is expected <b>Successful:</b> empty
<b>errorReport</b>	output parameter that contains byte array with the content of error report eventually generated by DHPO\eRx Hub Validation during file upload; the parameter may be null

- **Return value:** The web service may return values described in the section *Web Services Returned Values*.

## Get New e-Prescriptions

- **Web service method:** GetNeweRxTransaction
- **Description:** web service used to get a list of new eRxRequest transactions available on the DHPO\eRx Hub. The service returns back a list of transactions that haven't yet been flagged as downloaded.
- **Signature:**

```
int GetNewTransactions(    string login,
                          string pwd,
                          out string xmlTransactions,
                          out string errorMessage)
```

Element	Description
<b>login</b>	user login name to connect to the DHPO\eRx Hub
<b>Pwd</b>	user password to connect to the DHPO\eRx Hub
<b>xmlTransactions</b>	output parameter that contains xml with description of the new e-claim files
<b>errorMessage</b>	output parameter that contains eventual error message if something goes wrong; web service can also send warnings using this parameter; the parameter may be null or empty string if the web service returns zero, otherwise the error message is expected

- **Return value:** The web service may return values described in the section *Web Services Returned Values*.

### Get eRxTransaction

- **Web service method:** GeteRxTransaction
- **Description:** web service used to get a list of new eRxRequest transactions available on the DHPO\eRx Hub. The service returns back a list of transactions that haven't yet been flagged as downloaded.
- **Signature:**

```
int GeteRxTransaction (      string login,
                           string pwd,
                           string memberID,
                           int eRxReferenceNo,
                           out string xmlTransactions,
                           out string errorMessage)
```

Element	Description
<b>login</b>	user login name to connect to the DHPO\eRx Hub
<b>Pwd</b>	user password to connect to the DHPO\eRx Hub
<b>MemberID</b>	ID for a given member (member insurance card number) This can be empty.
<b>eRxReferenceNo</b>	eRxReferenceNo number of a given e-Prescription.
<b>xmlTransactions</b>	eRxRequest XML files description
<b>errorMessage</b>	output parameter that contains eventual error message if something goes wrong; web service can also send warnings using this parameter; the parameter may be null or empty string if the web service returns zero, otherwise the error message is expected

- **Return value:** The web service may return values described in the section *Web Services Returned Values*.

## Search e-Prescriptions Transactions

- **Web service method:** SearchRxTransactions
- **Description:** The web service performs advanced search for sent and received eRx transactions.
- **Signature:**

```
int SearchTransactions( string login,
                      string pwd,
                      int direction,
                      sting callerLicense,
                      sting clinicianLicense,
                      sting memberID,
                      int eRxReferenceNo,
                      int transactionStatus,
                      string transactionFromDate,
                      string transactionToDate,
                      int minRecordCount,
                      int maxRecordCount,
                      out string foundTransactions,
                      out string errorMessage)
```

Element	Description	Mandatory
login	user login name to connect to the DHPO\eRx Hub	Yes
Pwd	user password to connect to the DHPO\eRx Hub	Yes
direction	flag to indicate if function will search for sent or received transactions; the parameter may have values 1 (sent only) or 2 (received only);	Yes
callerLicense	<p>callerLicense – license of the caller; if the parameter is NULL, it is not used as search criteria; otherwise the parameter value must be in the list of licenses your Post Office login is associated with; caller license is used as follows:</p> <ul style="list-style-type: none"> <li>• if direction= 1 (sent only), then caller license is used to find transactions sent by the caller;</li> <li>• if direction = 2 (received only), then caller license is used to find transactions received by the caller;</li> </ul>	No
clinicianLicense	<p>License of the clinician on the e-Prescription; if the parameter is NULL, it is not used as search criteria; otherwise the parameter value must be in the list of licenses your DHPO login is associated with.</p> <p><b>Restrictions:</b></p> <ul style="list-style-type: none"> <li>• If Null: consider all</li> </ul>	Yes

<b>memberID</b>	<p>ID of the patient on the e-Prescription</p> <p><b>Restrictions:</b></p> <ul style="list-style-type: none"> <li>• Provider\Pharmacy → the field is mandatory</li> <li>• Provider\Clinician\Facility → the field is optional</li> <li>• Payer → the field is optional</li> <li>• If Null: consider all</li> </ul>	No
<b>eRxReferenceNo</b>	<p>Reference number generated for the eRxRequest by the DHPO\eRx Hub.</p> <ul style="list-style-type: none"> <li>• If Null: consider all</li> </ul>	No
<b>transactionStatus</b>	<p>flag to indicate if function will search for new transactions or transactions already downloaded from the DHPO\eRx Hub; the parameter may have values 1 (new only) or 2 (already downloaded only);</p>	Yes
<b>transactionFromDate</b>	<p>transaction date from which the e-claim files will be found; the parameter may not be in the future;</p> <ul style="list-style-type: none"> <li>• date must be provided as a string in a format 'dd/MM/yyyy HH:mm:ss';</li> <li>• if time is missed, the zero is used by default;</li> <li>• if the parameter is NULL, it is not used as search criteria</li> <li>• If Null: consider 3 months data up to current date</li> </ul>	No
<b>transactionToDate</b>	<p>transaction date until which the e-claim files will be found;</p> <ul style="list-style-type: none"> <li>• the parameter may not be in the future;</li> <li>• date must be provided as a string in a format 'dd/MM/yyyy HH:mm:ss';</li> <li>• if time is missed, the zero is used by default;</li> <li>• if the parameter is NULL, it is not used as search criteria</li> <li>• If Null: consider 3 months data up to current date</li> </ul>	No
<b>minRecordCount</b>	<p>minimum number of records in the transaction file to search for.</p> <ul style="list-style-type: none"> <li>• If the parameter is greater than zero, it must be less or equal to the value in the parameter maxRecordCount;</li> </ul> <p><b>Restrictions:</b></p> <ul style="list-style-type: none"> <li>• if the parameter is -1, it is not used as search criteria</li> <li>• If Null: consider 1</li> <li>• minRecordCount has to be &lt; maxRecordCount</li> </ul>	No
<b>maxRecordCount</b>	<p>maximum number of records in the transaction file to search for; if the parameter is greater than zero, it must be greater or equal to the value in the parameter minRecordCount;</p> <p><b>Restrictions:</b></p> <ul style="list-style-type: none"> <li>• if the parameter is -1, it is not used as search criteria</li> <li>• If Null: consider 50 latest records</li> <li>• maxRecordCount &lt; 500</li> </ul>	No
<b>foundTransactions</b>	<p>output parameter that contains xml with description of the found eRxRequest files;</p> <ul style="list-style-type: none"> <li>• note that this web service will return maximum 500 records</li> </ul>	

<p><b>errorMessage</b></p>	<p>output parameter that contains eventual error message if something goes wrong;</p> <ul style="list-style-type: none"> <li>web service can also send warnings using this parameter; the parameter may be null or empty string if the web service returns zero, otherwise the error message is expected.</li> </ul>	
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- **Return value:** The web service may return values described in the section *Web Services Returned Values*.

### Download New e-Prescriptions

- **Web service method:** DownloadeRxTransaction
- **Description:** web-service used to download the new eRx requests from the DHPO\eRx Hub.
- **Signature:**

```
int DownloadTransactionFile( string login,
                           string pwd,
                           string fileID,
                           out string fileName,
                           out byte[] file,
                           out string errorMessage)
```

Element	Description
<b>login</b>	user login name to connect to the DHPO\eRx Hub
<b>pwd</b>	user password to connect to the DHPO\eRx Hub
<b>fileID</b>	id of the file to receive the downloading link for; this id is received from xml file returned by <b>GetNeweRxTransactions</b> web services
<b>fileName</b>	XML file name that is being downloaded
<b>File</b>	file content as byte array returned by the web server to the caller
<b>errorMessage</b>	output parameter that contains eventual error message if something goes wrong; web service can also send warnings using this parameter; the parameter may be null or empty string if the web service returns zero, otherwise the error message is expected

- **Return value:** The web service may return values described in the section *Web Services Returned Values*.

### Set e-Prescriptions as Downloaded

- **Web service method:** SeteRxTransactionDownloaded
- **Description:** web service is used to report the eRxRequest file as downloaded. User is supposed to call this we service to avoid receiving the same eRxRequest file using GetNeweRxTransactions web service.
- **Signature:**

```
int SetTransactionDownloaded( string login,
                             string pwd,
                             string fileID,
                             out string errorMessage)
```

Element	Description
login	user login name to connect to the DHPO\eRx Hub
pwd	user password to connect to the DHPO\eRx Hub
fileID	id of the file to receive the downloading link for; this id is received from xml file returned by <b>GetNeweRxTransactions</b> web services
errorMessage	output parameter that contains eventual error message if something goes wrong; web service can also send warnings using this parameter; the parameter may be null or empty string if the web service returns zero, otherwise the error message is expected

- **Return value:** The web service may return values described in the section *Web Services Returned Values*.



### Web Services Returned Values

All DHPO\erx Hub web services share the return value, so that client application can implement one handler to process the result of web service execution and share it with all web service calls. The supported returned values are shown below:

Element	Description
login	user login name to connect to the DHPO\erx Hub
3	Member has no approved trade drugs, hence Prescription transaction is not returned.
2	No new prior authorization transactions are available for download.
1	E-claim transaction validation succeeded with warnings.
0	Operation is successful.
-1	Login failed for the user.
-2	E-claim transaction validation is failed with errors.
-3	Required input parameter for the web service is empty, or null, or contains invalid value.
-4	Unexpected error occurred.
-5	If difference between date from and date to parameters is longer than 100 days.
-6	The specified file is not found.
-7	Transaction is not supported.
-10	If no search criteria is found.

## ePrescription Web Services Address \ WSDL

e-Prescription web services are available on this Address:

<http://eclaimlink.ae/dhpo/eRxValidateTransaction.asmx>

## Web Services WSDL

e-Prescription web services WSDL are available on this Address:

<http://eclaimlink.ae/dhpo/eRxValidateTransaction.asmx?wsdl>

## e-Prescription Initiative Implementation

### Implementation in Dubai

Implementation is to go on three phases. Phases one and two will ensure that the mark has enough time to implement and pilot the solution prior to its mandate in the third phase as shown below:

#### Phase I (Voluntary – July 1, 2013)

- Functionality to be deployed: Pharmacy Real-Time e-Authorizations, and Claiming with Payers.

#### Phase II (Voluntary – October 1, 2013)

- Physician Real-Time e-Checks with Payers and posting eRx
- Pharmacy Real-Time Download eRx, request e-Authorization & claim

#### Phase III (Mandatory – January 1, 2014)

- Physician Real-Time e-Checks with Payers and posting eRx
- Pharmacy Real-Time Download eRx, request e-Authorization & claim

### e-Prescription Initiative Launching

e-Prescription Initiative was announced by the DHA during a meeting at Rashid Medical Library on May 5th, 2013. The presentation utilized within the meeting can be found:

- On eClaimLink website through: Logging in > DHD menu > Documentation > Presentations (last box) : eClaimLink Update 20130505 (e-Prescription)
- Or through the direct link, [click here](#)