Accessing and Reading the NCPDP SCRIPT Standard in HTML
NCPDP acknowledges and thanks Surescripts for providing the content of this presentation.
Accessing and Reading NCPDP SCRIPT Standard in HTML

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Overview

• This presentation is intended to provide a basic understanding on how to access and interpret standards in HTML.
• The intended audience of this presentation is anyone that needs to understand schema requirements for the NCPDP SCRIPT transactions.
HTML Standards View of NCPDP Schemas

• This presentation references the SCRIPT Standard Version 2017071
• Choose Schema
  – Determine the version needed.
    • Look for version number in the transport:
      <xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema" elementFormDefault="qualified" attributeFormDefault="unqualified" version="2017071">
        <xsd:include schemaLocation="datatypes.xsd"/>
        <xsd:include schemaLocation="ecl.xsd"/>
        <xsd:include schemaLocation="structures.xsd"/>
        <xsd:include schemaLocation="script.xsd"/>
        <xsd:include schemaLocation="specialized.xsd"/>
      </xsd:schema>
  – Select the schema version you wish to use. If your default browser is not the one you wish to use, then copy and paste the contents of the search bar into the browser of your choice.
HTML Standards View of NCPDP Schemas

• Open Schema
  – Select NCPDP SCRIPT XML 2017071
  – The transport.dws allows you to look at a specific message (e.g., NewRx, PAREquest), Message header, or response transactions like Error, Status, etc.
    • On older versions of the schema, click on BodyType to quickly find the transaction or click on the exact data element if already known. For newer versions, you will see the transport.xsd:
HTML Standards View of NCPDP Schemas

- **Open Schema**
  - To access the header, open MessageType, then open Header.
The **Header** consists of important routing, trace, and identifier elements. Header elements include:

- To
- From
- MessageID
- RelatestoMessageID
- SentTime
- Security
- SenderSoftware
- Mailbox
- TestMessage
- MessageIndicatorFlag
- RXReferenceNumber
- TertiaryIdentifier
- PrescriberOrderNumber
- DigitalSignature
- PrescriberOrderGroup
- RxReferenceOrderGroup
- ReturnReceipt
- Extension
HTML Standards View of NCPDP Schemas

- To access the schema for a specific message type (e.g., RxHistoryRequest), follow the steps below:
  1. Select BodyType

![Schema transport.xsd](image-url)
HTML Standards View of NCPDP Schemas

To access the schema for a specific message type (e.g., RxHistoryRequest), follow the steps below:

2. Select the message type
Understanding Requirements

• Requirements Designation
  Schemas denote requirements by use of crossed out fields, bold solid lines, and dashed lines.

  Crossed out means not used

  Bold / solid means at least one of the data items are required

  Dotted means situational – the situation when it might be required will be explained on each data element. If no situation is defined the sender is advised to send if known.
Understanding Requirements

• Diagram Conventions

In the figure below, the horizontal dotted line indicates a sequence. This diagram says the Security element consists of the sequence of Username Token, Sender, and Receiver elements. In this example all three elements are optional. One, two, or all three elements can be sent.
Understanding Requirements

• Diagram Conventions
  The switch-like symbol in the next figure indicates a choice; in this case, a choice between Approved, Denied, or ApprovedWithChanges. The solid line around the elements shows that one is required.
Understanding Requirements

• Determining Data Type

There are three types of data representation: alphabetic, numeric, and alphanumeric. These are designated by “a”, “n”, and “an”, respectively. If a number follows this designation (i.e., an3), this means the data value must be that length (i.e., the data value must be 3 alphanumeric bytes). If the designation is followed by “..” (i.e., an..3), this means the data value can be up to that length (i.e., up to 3 alphanumeric bytes) or an1..1 – is alphanumeric field, minimum of 1 character, maximum of 1 character.
Understanding Requirements

• Determining Data Type

Data Type can be found by clicking on the data element. This is how to determine the data type for Last Name:
  • Use “Find” “CTRL-F” and type in lastname
Understanding Requirements

• Determining Data Type
  Data Type can be found by clicking on the data element. This is how to determine the data type for Last Name:
  • Search will lead you to the element level and you can see the data type for last name is an1..35. This means alphanumeric minimum 1 character maximum 35.
Understanding Requirements

• **Determining Data Type**
  Data Type can be found by clicking on the data element.
  • Another example is DaysSupply. The data type is numeric and minimum 1 digit and maximum 3
Understanding Requirements

• Determining Data Type

Data Type can be found by clicking on the data element.

• The properties indicate how many occurrences may be used for that element. DaysSupply has a minimum of zero and a maximum occurrence of 1. That means it is optional and can only be sent once.
Understanding Requirements

• Determining Data Type
  
  Data Type can be found by clicking on the data element.
  - The properties indicate how many occurrences may be used for that element. DaysSupply has a minimum of zero and a maximum occurrence of 1. That means it is optional and can only be sent once.

<table>
<thead>
<tr>
<th>diagram</th>
<th>Days Supply</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>See Medication for Definition and Usage</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>type</th>
<th>n1..3</th>
</tr>
</thead>
<tbody>
<tr>
<td>properties</td>
<td>minOcc: 0</td>
</tr>
<tr>
<td></td>
<td>content: simple</td>
</tr>
<tr>
<td>facets</td>
<td>Kind</td>
</tr>
<tr>
<td></td>
<td>maxLength</td>
</tr>
<tr>
<td></td>
<td>pattern</td>
</tr>
</tbody>
</table>
Understanding Requirements

- Determining Data Type

  Data Type can be found by clicking on the data element.

  - Occurrences of a group of data or looping can be seen in the schema. Here is an example of the medication loops for the RxHistoryResponse. It can occur up to 300 times meaning each response can contain up to 300 drugs for that patient.
Understanding Requirements

• Date/Time
  – In XML, the Date fields contain the format of date and time, with hyphens to separate the subsets of the date. When time is used, a “T” separates the fields; and colons separate the subsets of the date and time.
    • Date is represented as YYYY-MM-DD
    • DateTime is represented as YYYY-MM-DDTHH:MM:SS
Understanding Requirements

Determining Possible Code Values

- There are two types of code values. Codes that are internal to NCPDP and codes that are external to NCPDP. All of these codes are referenced in the ECL (external code list) even though some are maintained “internally” by NCPDP and others are maintained “externally” to NCPDP.
  - Example of internal code list to NCPDP is Gender.
Understanding Requirements

Select Gender to see the data element description and other data attributes including the code values appropriate to send in that field.

```
<xs:element name="Gender" type="ect:GenderCode">
    <xs:annotation>
        <xs:documentation>See PatientFull for Definition and Usage</xs:documentation>
    </xs:annotation>
</xs:element>
```
Understanding Requirements

Another example of an NCPDP internal code list for PAClosedReasonCode

Possible Code Values

- CC: Prior Authorization not required for patient/medication
- CD: Cannot find matching patient
- CR: Patient not eligible (does not have coverage with this payer)
- CP: Prior Authorization duplicate/approved
- CG: Prior Authorization duplicate/in process
- CH: Closed by health plan/payer processor/PBM
- CJ: Closed by Provider
- CK: Closed by Member
- BV: Other
- BX: Electronic Prior Authorization not supported. Submit via other methods.
- CL: Attachment type (miniatype) not supported.
- CM: Prescriber not allowed to submit PA request.
- CN: Response cannot be inconsistent with the question.
- CO: The receiver is not the PA processor for this PA request.

Code indicating the reason for the prior authorization closure.
Example of external code list is the QuantityUnitOfMeasure. It is an NCICode and the second arrow shows where to find the available list (http://www.cancer.gov/cancertopics/terminologyresources/page7). In addition, it says you should see the External Code List Introduction for information on NCI Thesaurus Code Lists.
Understanding Requirements

• Annotations in element diagrams provide instructional usage to help the implementer with rules of usage.
  – For example, in RxHistoryRequest, the Pharmacy segment is optional, but the annotation explains that it is required if the requestor or recipient is a pharmacy.
Other Education

• Webinar - [SCRIPT: What is XML and How is it Used in ePrescribing?]