Universal Patient Identifier Guidance Document

Version 1.2

This document provides guidance on the possible use of a universal patient identifier(s) within the NCPDP Standards.

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National Council for Prescription Drug Programs
9240 East Raintree Drive
Scottsdale, AZ 85260
Phone: (480) 477-1000
Fax: (480) 767-1042
E-mail: ncpdp@ncpdp.org
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The writers of this paper will review and possibly update their recommendations should any significant changes occur.

This document is for Education and Awareness Use Only.
1. Executive Summary

Proper identification of a patient is critical to many communications in healthcare. Today, stakeholders communicate the identity of the patient in a variety of ways that can result in record duplication and/or mistaken identity. Misidentification of a patient has been shown to lead to errors or inadequate care for the patient. NCPDP has identified the need for proper identification of the patient as a means to improve patient safety and ensure positive patient outcomes.

A universal patient identifier (UPI) uniquely identifies a person for purposes of healthcare operations. An ideal UPI would be assigned at birth, stay with a patient for their entire lifetime and never be used for any other patient. It enables providers and other stakeholders to act on behalf of a patient with assurance that relevant information about a patient is collected, and it enables healthcare providers to communicate about patients with greater certainty about the identity of each patient being served.

When trading partners communicate with a UPI, the receiver can more accurately identify the patient. Because the receiver is better able to accurately identify the patient, the occurrence of transactions being associated to the wrong patient is lowered, clinical outcomes are improved and transactions being rejected are reduced.

As a result of this initiative, many NCPDP standards have been updated to allow usage of a UPI so trading partners can more precisely communicate who each patient is.

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2. Purpose

The purpose of this document is to provide guidance on the possible use of UPIs (e.g., NCPDP UPI) within the NCPDP Standards.

This guidance includes an outline for standards that have been modified, a timeline for implementation of these standards that enable sharing of the UPI and descriptions of how trading partners may exchange one or more UPIs to communicate more precisely the identity of their patient. Multiple scenarios illustrate how conveying a UPI adds value, enabling the recipient to better understand patient identity.

If you have any questions regarding the availability or content of this document, see ncpdp.org or contact the Council office at 480-477-1000 or via email at ncpdp@ncpdp.org.
3. Definitions

Cardholder ID – Insurance ID assigned to the cardholder or identification number used by the plan.

Universal Patient Identifier (UPI) - The unique universal enumeration of a patient assigned by an entity. This document will use the term UPI to represent any universal patient identifier regardless of enumerator.

Enumerating Entity – An organization that creates and/or assigns UPIs.

Switch/Intermediary - An entity that accepts an electronic transaction from another organization and electronically routes the transaction to a receiving entity. A switch/intermediary may perform value added services including detailed editing/messaging of input/output data for validity and accuracy and translating data from one format to another. An intermediary/switch may be required to shield the participants from the uniqueness of the other parties.

Processor/Pharmacy Benefit Manager (PBM)/Adjudicator - Administers prescription drug programs, as well as managing costs for a plan sponsor to achieve the most effective utilization of prescription drug expenditures, such as benefit design, formulary management, rebate contracting, retrospective Drug Use Review (DUR), prospective DUR, network administration, disease state management and so forth. The PBM may also be a payer, a governmental department or any other entity that receives prescription drug claims, makes a decision regarding the level of reimbursement and sends the appropriate message or reject code back to the pharmacy/provider for action. An adjudicator may be an entity that receives reporting information, record keeping, auditing or authorizations of services, such as an entity performing drug utilization review reporting or reporting related to abusable products. A PBM or adjudicator may also be responsible for accumulating out of pocket and deductible dollars and may be required to exchange that information with medical and other health care processors.

Pharmacy/Provider - A licensed entity that dispenses prescription drugs and provides professional pharmacy services, such as clinical pharmacy services (consulting) respective to the dispensing function. A provider may also be an entity that collects and reports information about prescribing, dispensing and consumption of dangerous or abusable drugs or products such as a grocery store or convenience store. The entity may be a retail/chain, mail order or independent pharmacy, specialty, prescriber, hospital or long-term care facility. A ‘Provider’ may be a retail pharmacy, mail order pharmacy, doctor’s office, clinic, hospital, long-term care facility or any other entity which dispenses prescription drugs and submits those prescriptions to a payer for reimbursement.

Technology/System Vendor - An entity that provides software and perhaps hardware to pharmacies or prescribers that enables electronic processing of business functions such as electronic prescribing, electronic medical records, appointments and scheduling and billing functions.
4. High Level Flow

The flow chart below is intended to demonstrate how a UPI could be communicated using the NCPDP transactions from a submitter to a receiver. It assumes the submitter is communicating one UPI for its patient. The UPI may have been obtained through a third-party agreement with a UPI enumerating entity or from a prior transaction. The flow chart is not intended to indicate how a UPI may enhance patient matching or to dictate how transactions must be processed when a UPI is submitted/received.

**Possible Flow of Transaction with UPI between Two Healthcare Entities**

4.1 Actors

Submitters and Receivers may be:
- Processor/PBM/Adjudicator
- Pharmacy/Provider
- Technology/System Vendor
- Intermediary/Switch

Determining the actor role applicable to an entity is dependent on the context of the standard and the transaction being used. For instance, the pharmacy/provider is a receiver in the general context of the SCRIPT standard but is the submitter in the general context of the Telecommunication standard. Further, due to the
two-way data exchange that occurs with many of the NCPDP standard transactions, an entity can be the submitter of a transaction request and immediately reverse roles to become the receiver of a corresponding response.
5. NCPDP Standards

The Patient ID (332-CY) has been identified as the data element for communicating a UPI in NCPDP standards using an Electronic Data Interchange (EDI) syntax (e.g., Telecommunication). The Patient ID Qualifier (331-CX) is used to describe the ID populated in the Patient ID field.

For NCPDP standards using an Extensible Markup Language (XML) schema (e.g., SCRIPT), new identifier fields were added to all occurrences of Patient Identification. This applies to SCRIPT and Specialized versions 2019011 to 2021011 and RTPB version 11. For subsequent versions of these standards, the UniversalPatientIDsQualifier is used to describe the ID populated in the UniversalPatientIDsID element.

The UPI is one of many personally identifiable information (PII) data elements (e.g., name, address, insurance identifiers, date of birth) used throughout NCPDP transactions and as such should also be encrypted or exchanged using secured communication protocols.

NCPDP added the following data elements to the Data Dictionary and values to the External Code List (ECL) to support communication of a UPI.

<table>
<thead>
<tr>
<th>Data Dictionary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Data Element Name</strong></td>
</tr>
<tr>
<td>NCPDPUPU</td>
</tr>
<tr>
<td>LEXIDUPI</td>
</tr>
<tr>
<td>AHPID</td>
</tr>
<tr>
<td>UniversalPatientIDsQualifier</td>
</tr>
<tr>
<td>UniversalPatientIDsID</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ECL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patient ID Qualifier (331-CX) ECL Values (as of October 2020)</strong></td>
</tr>
<tr>
<td><strong>Value</strong></td>
</tr>
<tr>
<td>15</td>
</tr>
<tr>
<td>16</td>
</tr>
<tr>
<td>17</td>
</tr>
</tbody>
</table>
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UniversalPatientIDsQualifier ECL Values (as of July 2021 ECL Publication)
Code indicating the type of ID found in UniversalPatientIDsID

<table>
<thead>
<tr>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPRISS</td>
<td>The unique enumeration of a patient created by Appriss Health</td>
</tr>
<tr>
<td>LEXI</td>
<td>The unique universal enumerator of a patient created by LexisNexis</td>
</tr>
<tr>
<td>NCPDP</td>
<td>The unique universal enumeration of a patient created by NCPDP’s partner(s)</td>
</tr>
</tbody>
</table>

Note: Please refer to the NCPDP Data Dictionary and ECL for the most current list of values and data elements.

Additionally, NCPDP reviewed all their published standards to determine applicability for communication of a UPI. The following standards were subsequently modified and are available for use as indicated below.

Post Adjudication Standard

**Version 49**
- There is a single occurrence of Patient ID Qualifier (331-CX) and Patient ID (332-CY).
- These data elements are available for use and required if specified in trading partner agreement on the History Detail, Utilization Detail and Transition Fill Detail records. If used, the client or processor-specified value is sent.

**Version 50 (published July 2019) and higher**
- There may be up to nine occurrences of Patient ID Qualifier (331-CX) and Patient ID (332-CY).
- These data elements are available for use and required when agreed upon between trading partners in order to enhance the accuracy of patient data exchange and/or to improve care or benefit coordination in the History Detail, Utilization Detail and Transition Fill Detail records.

Prescription Drug Monitoring Program Reporting Standard

**Version 10 (published January 2019) and higher**
- There may be up to nine occurrences of Patient ID Qualifier (331-CX) and Patient ID (332-CY) in the PDMP Reporting Request.
- These elements are available for use and required if necessary, for state/federal/regulatory agency programs.

Prescription Transfer Standard

**Version 36**
- In the Fixed Length File, the Patient ID Qualifier (331-CX) and Patient ID (332-CY) are not present.
- In the Variable Length File, the Patient ID Qualifier (331-CX) and Patient ID (332-CY) may have up to nine occurrences with a recommendation to support four or less. There are no instructions for use of the fields within the implementation guide.

**Version 37 (published January 2019) and higher**
In the Fixed Length File,
- There may be up to nine occurrences of Patient ID Qualifier (331-CX) and Patient ID (332-CY).
• These fields are available for use and required when agreed upon between trading partners in order to enhance the accuracy of patient data exchange and/or to improve care or benefit coordination.

In the Variable Length File,
• There is a recommendation to support up to nine occurrences of the Patient ID Qualifier (331-CX) and Patient ID (332-CY).
• These fields are available for use and required when agreed upon between trading partners in order to enhance the accuracy of patient data exchange and/or to improve care or benefit coordination.

Prior Authorization Transfer Standard

Version 23
In the Detail Record,
• There is a single occurrence of Patient ID Qualifier (331-CX) and Patient ID (332-CY).
• There are no instructions for use of the data elements within the implementation guide.

Version 24 (published July 2019) and higher
In the Detail Record,
• There may be up to nine occurrences of Patient ID Qualifier (331-CX) and Patient ID (332-CY).
• These fields are available for use and required when agreed upon between trading partners in order to enhance the accuracy of patient data exchange and/or to improve care or benefit coordination.

Real-Time Prescription Benefit Standard

Version 11 (published January 2021)
Request and Response Transactions
EDI format
• There may be up to nine occurrences of Patient ID Qualifier (331-CX) and Patient ID (332-CY).
• These data elements are available for use and required when agreed upon between trading partners to enhance the accuracy of patient data exchange and/or to improve care or benefit coordination.

XML format
• NCPDPUPI and LEXIDUPI added to Identification (datatypes:PatientID)
• The <Patient><Identification> element supports multiple unique occurrences. At least one unique patient identifier is required to be provided by the sender to use as a unique identifier for communications related to the patient to enhance the accuracy of patient data exchange and/or to improve care or benefit coordination.

Version 12 (published October 2021)
EDI format
• No change from version 11
XML format
• Added new element <UniversalPatientIDsID> for universal patient ID. Qualified by UniversalPatientIDsQualifier
• Previous identifiers were sunset in this version
**SCRIPT Standard**

**Version 2019011**
- NCPDPUPU added to Identification (datatypes:PatientID)
- The `<Patient><Identification>` element supports multiple unique occurrences. At least one unique patient identifier is required to be provided by the sender to use as a unique identifier for communications related to the patient to enhance the accuracy of patient data exchange and/or to improve care or benefit coordination.

**Version 2019071**
- LEXIDUPI added to Identification (datatypes:PatientID)

**Version 2021011**
- AHPID added to Identification (datatypes:PatientID)

**Version 2021071**
- Added new element `<UniversalPatientIDsID>` for universal patient ID. Qualified by UniversalPatientIDsQualifier
- Previous identifiers were sunset in this version

**Specialized Standard**

**Version 2019011**
- NCPDPUPU added to Identification (datatypes:PatientID)
- The `<Patient><Identification>` element supports multiple unique occurrences. At least one unique patient identifier is required to be provided by the sender to use as a unique identifier for communications related to the patient to enhance the accuracy of patient data exchange and/or to improve care or benefit coordination.

**Version 2019071**
- LEXIDUPI added to Identification (datatypes:PatientID)

**Version 2021011**
- AHPID added to Identification (datatypes:PatientID)

**Version 2021071**
- Added new element `<UniversalPatientIDsID>` for universal patient ID. Qualified by UniversalPatientIDsQualifier
- Previous identifiers will be sunset in this version

**Specialty Pharmacy Data Reporting Standard**

**Version 11**
In the Detail Record,
- There is a single occurrence of Patient ID Qualifier (331-CX) and Patient ID (332-CY).
- These fields are available for use and required when contractually obligated to provide.
Version 12 (published July 2019) and higher
In the Detail Record,
- There may be up to nine occurrences of Patient ID Qualifier (331-CX) and Patient ID (332-CY).
- These fields are available for use and required when contractually obligated to provide or agreed upon between trading partners.

Telecommunication Standard

Version D.0
- There is a single occurrence of Patient ID Qualifier (331-CX) and Patient ID (332-CY).
- These data elements are available for use and required if necessary, for state/federal/regulatory agency programs to validate dual eligibility on the following request transactions:
  - Claim Billing/Encounter
  - Service Billing
  - Claim Rebill
  - Service Rebill
  - Prior Authorization Request And Billing (Claim/Service)
  - Prior Authorization Request Only (Claim/Service)
  - Information Reporting (Claim/Service)
  - Information Reporting Rebill (Claim/Service)

Version F4 (published January 2019) and higher
- There may be up to nine occurrences of Patient ID Qualifier (331-CX) and Patient ID (332-CY).
- These data elements are available for use and required when agreed upon between trading partners in order to enhance the accuracy of patient data exchange and/or to improve care or benefit coordination on the following request and response transactions:
  - Eligibility Verification
  - Claim Billing/Encounter
  - Service Billing
  - Claim Rebill
  - Service Rebill
  - Prior Authorization Request And Billing (Claim/Service)
  - Prior Authorization Inquiry
  - Prior Authorization Request Only (Claim/Service)
  - Information Reporting (Claim/Service)
  - Information Reporting Rebill (Claim/Service)

Uniform Healthcare Payer Data Standard

Version 26
In the Detail Record,
- Patient ID Qualifier (331-CX) is not present and there is a single occurrence of Patient ID (332-CY).
- The field is available for use with the following requirements:
  - Must contain the Social Security Number.
  - Required if specified in trading partner agreement.
  - If provided on the eligibility file, this field contains the information on the processor’s system.
If trading partner agreement requires an encrypted patient ID, this field will contain the encrypted data.

If trading partner agreement does not require an encrypted patient ID, this field will contain the unencrypted patient ID of the size supported, delimited by size.

When the patient is the cardholder, and if this field is sent, then this field and Encrypted Social Security Number (A89) must contain the same data.

**Version 27 (published July 2019) and higher**

In the Detail Record,

- There may be up to nine occurrences of Patient ID Qualifier (331-CX) and Patient ID (332-CY).
- The fields are available for use with the following requirements:
  - At least one occurrence must contain the Social Security Number.
  - Required if specified in trading partner agreement.
  - Required when agreed upon between trading partners in order to enhance the accuracy of patient data exchange and/or to improve care or benefit coordination.
  - If provided on the eligibility file, this field contains the information on the processor’s system.
  - If trading partner agreement requires an encrypted patient ID, this field will contain the encrypted data.
  - If trading partner agreement does not require an encrypted patient ID, this field will contain the unencrypted patient ID of the size supported, delimited by size.
  - When the patient is the cardholder, and if at least one occurrence of this field is sent, then at least one occurrence of this field and Encrypted Social Security Number (A89) must contain the same data.
6. Use Cases

Upon receipt of a transaction, the receiver should determine if there is sufficient certainty about patient identity in order to proceed with a transaction based on internal matching processes. The following use cases show the receiver could reasonably make these decisions using a UPI, not that a party receiving this transaction would or necessarily should make these decisions in that way.

The receiver may choose to utilize the UPI as indicated in the following scenarios to aid in patient matching or may choose to ignore the UPI based on internal processes. Receivers should not reject transactions based on either the absence or the presence of a UPI. NCPDP recommends the UPI be utilized as an optional aid in patient matching and interoperability.

Note: Not all fields indicated in the following scenarios have the same nomenclature in each standard, nor are all fields listed exchanged in every standard/transaction. The scenarios below are meant to be standard agnostic and serve as examples only. The column headers represent eligibility data, not NCPDP data element names.

6.1 Both Submitter and Receiver use the same Enumerating Entity for a UPI

SCENARIO #1: Match on name, address, Cardholder ID and UPI but mismatch on date of birth

In this example, there are multiple people in the same family with the same name.

The father, John Doe I (DOB 10/11/1978), has the following children:

John II (DOB 5/24/2001)
John III (DOB 1/15/2003)
John IV (DOB 2/22/2004)

<table>
<thead>
<tr>
<th>First Name</th>
<th>Last Name</th>
<th>Cardholder ID</th>
<th>Birth Date</th>
<th>UPI (Same Entity)</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submitter sends</td>
<td>John</td>
<td>Doe</td>
<td>345345345</td>
<td>2/22/2003</td>
<td>U8390790098</td>
</tr>
<tr>
<td>Receiver Has on File:</td>
<td>John</td>
<td>Doe</td>
<td>345345345</td>
<td>2/22/2004</td>
<td>U8390790098</td>
</tr>
<tr>
<td></td>
<td>John</td>
<td>Doe</td>
<td>345345345</td>
<td>1/15/2003</td>
<td>U6839878387</td>
</tr>
<tr>
<td></td>
<td>John</td>
<td>Doe</td>
<td>345345345</td>
<td>5/24/2001</td>
<td>U6823797832</td>
</tr>
<tr>
<td></td>
<td>John</td>
<td>Doe</td>
<td>345345345</td>
<td>10/11/1978</td>
<td>U9689738872</td>
</tr>
</tbody>
</table>

Without the UPI, it is inconclusive which patient is being identified. However, the UPI makes it clearer and the receiver may have confidence in the patient’s identity (based on internal matching rules). Normal processing may occur.

SCENARIO #2: Twins with similar names, same address and different spelling on first name; first name doesn’t match but other demographic information and UPI match.

In this example, twin siblings have similar names. The twins’ names are Angela and Angelo. Angela has a nickname of Angel.
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<table>
<thead>
<tr>
<th>First Name</th>
<th>Last Name</th>
<th>Cardholder ID</th>
<th>Birth Date</th>
<th>UPI (Same Entity)</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submitter sends</td>
<td>Angel</td>
<td>Doe</td>
<td>269873982</td>
<td>5/24/2010</td>
<td>U6839889882</td>
</tr>
<tr>
<td>Receiver Has on File:</td>
<td>Angelo</td>
<td>Doe</td>
<td>269873982</td>
<td>5/24/2010</td>
<td>U6590788111</td>
</tr>
<tr>
<td></td>
<td>Angela</td>
<td>Doe</td>
<td>269873982</td>
<td>5/24/2010</td>
<td>U6839889882</td>
</tr>
</tbody>
</table>

Without the UPI, it is not clear to which twin the submission refers. However, with the UPI, it is sufficiently clear and the receiver has confidence in the patient’s identity. Normal processing may occur.

**SCENARIO #3: Similar names/nicknames; mismatch on birthdate but match on UPI**
In this example, there are similar names and the submitted date of birth does not clearly point to either of the patients on the receiver’s file. The patient is named James and has a nickname of Jimmy.

<table>
<thead>
<tr>
<th>First Name</th>
<th>Last Name</th>
<th>Cardholder ID</th>
<th>Birth Date</th>
<th>UPI (Same Entity)</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submitter sends</td>
<td>Jimmy</td>
<td>Doe</td>
<td>069238989</td>
<td>8/1/1996</td>
<td>U5172382778</td>
</tr>
<tr>
<td>Receiver Has on File:</td>
<td>James</td>
<td>Doe</td>
<td>069238989</td>
<td>8/1/1997</td>
<td>U5172382778</td>
</tr>
<tr>
<td></td>
<td>Jimmy</td>
<td>Doe</td>
<td>069238987</td>
<td>9/1/1976</td>
<td>U2983098589</td>
</tr>
</tbody>
</table>

Without the UPI, it is inconclusive which patient is being identified. However, the UPI makes it clearer and the receiver may have confidence in the patient’s identity (based on internal matching rules). Normal processing may occur.

**SCENARIO #4: Patient not on file; demographic and UPI do not match**
In this example, there is a name and address match for the patient, but other demographic information does not match.

<table>
<thead>
<tr>
<th>First Name</th>
<th>Last Name</th>
<th>Cardholder ID</th>
<th>Birth Date</th>
<th>UPI (Same Entity)</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submitter Sends</td>
<td>John</td>
<td>Doe</td>
<td>069238989</td>
<td>3/20/1957</td>
<td>U12345678</td>
</tr>
<tr>
<td>Receiver Has on File</td>
<td>Jen</td>
<td>Doe</td>
<td>069234567</td>
<td>10/05/1978</td>
<td>U23467894</td>
</tr>
<tr>
<td></td>
<td>Juan</td>
<td>Doe</td>
<td>069045678</td>
<td>01/20/1980</td>
<td>U87123456</td>
</tr>
<tr>
<td></td>
<td>John</td>
<td>Doe</td>
<td>061932464</td>
<td>10/02/2012</td>
<td>U87625321</td>
</tr>
</tbody>
</table>

The UPI facilitates matching and instills confidence that the receiver does not know the patient and should
process accordingly.

**SCENARIO #5: Mismatch of patient demographic information or UPI**

*Example A: Match on UPI but mismatch of first name*

In this example, the patient’s actual name is Hermione Elizabeth Doe with a DOB of 4/23/1997. The submitter is sending the patient’s middle name as a first name and that name matches another family member’s first name.

Patient is Hermione Elizabeth Doe.
Other family member is Elizabeth Jane Doe.

<table>
<thead>
<tr>
<th>First Name</th>
<th>Last Name</th>
<th>Cardholder ID</th>
<th>Birth Date</th>
<th>UPI (Same Entity)</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submitter sends</td>
<td>Elizabeth</td>
<td>Doe</td>
<td>269873982</td>
<td>4/23/1997</td>
<td>U9689782922</td>
</tr>
<tr>
<td>Receiver Has on File:</td>
<td>Hermione</td>
<td>Doe</td>
<td>269873982</td>
<td>4/23/1997</td>
<td>U9689782922</td>
</tr>
<tr>
<td></td>
<td>Elizabeth</td>
<td>Doe</td>
<td>269873982</td>
<td>1/3/1970</td>
<td>U9678907662</td>
</tr>
<tr>
<td></td>
<td>Bernard</td>
<td>Doe</td>
<td>269873982</td>
<td>11/23/1971</td>
<td>U9689738872</td>
</tr>
</tbody>
</table>

Without the UPI, it is inconclusive which patient is being identified. However, the UPI matches which may provide the receiver confidence in the patient’s identity (based on internal matching rules). Normal processing may occur.

*Example B: Patient demographic information matches but UPI differs*

In this example, the father, John Doe I (DOB 10/11/1978), has the following children:
John II (DOB 5/24/2001)
John III (DOB 1/15/2003)
John IV (DOB 2/22/2004)

There is a match on the demographic information for the patient.

<table>
<thead>
<tr>
<th>First Name</th>
<th>Last Name</th>
<th>Cardholder ID</th>
<th>Birth Date</th>
<th>UPI (Same Entity)</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submitter sends</td>
<td>John</td>
<td>Doe</td>
<td>345345345</td>
<td>2/22/2004</td>
<td>U6839878387</td>
</tr>
<tr>
<td>Receiver Has on File:</td>
<td>John</td>
<td>Doe</td>
<td>345345345</td>
<td>2/22/2004</td>
<td>U8390790098</td>
</tr>
<tr>
<td></td>
<td>John</td>
<td>Doe</td>
<td>345345345</td>
<td>1/15/2003</td>
<td>U6839878389</td>
</tr>
<tr>
<td></td>
<td>John</td>
<td>Doe</td>
<td>345345345</td>
<td>5/24/2001</td>
<td>U6823797832</td>
</tr>
<tr>
<td></td>
<td>John</td>
<td>Doe</td>
<td>345345345</td>
<td>10/11/1978</td>
<td>U9689738872</td>
</tr>
</tbody>
</table>

Using internal matching rules, the receiver has confidence in the identity of the patient and may proceed with normal processing. If responding to the transaction, the receiver may choose to also communicate the different Patient ID from the same enumerator.

**6.2 Submitter and Receiver Use the Same Two Enumerating Entities**
SCENARIO #6:  Same name, same address, different dates of birth but match on both UPIs (Entity #1 and #2)
In this example, the father, John Doe I (DOB 10/11/1978), has the following children:
John II (DOB 5/24/2001)
John III (DOB 1/15/2003)
John IV (DOB 2/22/2004)
The date of birth for the patient does not match.

<table>
<thead>
<tr>
<th>First Name</th>
<th>Last Name</th>
<th>Cardholder ID</th>
<th>Birth Date</th>
<th>UPI Entity #1</th>
<th>UPI Entity #2</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submitter sends</td>
<td>John</td>
<td>Doe</td>
<td>345345345</td>
<td>2/22/2003</td>
<td>U8390790098</td>
<td>Q12638782</td>
</tr>
<tr>
<td>Receiver Has on File:</td>
<td>John</td>
<td>Doe</td>
<td>345345345</td>
<td>2/22/2004</td>
<td>U8390790098</td>
<td>Q12638782</td>
</tr>
<tr>
<td>John Doe</td>
<td>345345345</td>
<td>1/15/2003</td>
<td>U6839878387</td>
<td>Q68798323</td>
<td>123 Main</td>
<td></td>
</tr>
<tr>
<td>John Doe</td>
<td>345345345</td>
<td>5/24/2001</td>
<td>U6823797832</td>
<td>Q79844043</td>
<td>123 Main</td>
<td></td>
</tr>
<tr>
<td>John Doe</td>
<td>345345345</td>
<td>10/11/1978</td>
<td>U9689738872</td>
<td>Q79098998</td>
<td>123 Main</td>
<td></td>
</tr>
</tbody>
</table>

Both UPIs make it much clearer which patient is being identified – the outcome is no different from scenario #1. The multiple UPI match makes it very clear and the receiver may have confidence in the patient’s identity (based on internal matching rules). Normal processing may occur.

SCENARIO #7:  Same name, same address, different dates of birth; match on UPI Entity #1 but mismatch on UPI Entity #2
In this example, the father, John Doe I (DOB 10/11/1978), has the following children:
John II (DOB 5/24/2001)
John III (DOB 1/15/2003)
John IV (DOB 2/22/2004)
The date of birth for the patient does not match.

<table>
<thead>
<tr>
<th>First Name</th>
<th>Last Name</th>
<th>Cardholder ID</th>
<th>Birth Date</th>
<th>UPI Entity #1</th>
<th>UPI Entity #2</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submitter sends</td>
<td>John</td>
<td>Doe</td>
<td>345345345</td>
<td>2/22/2003</td>
<td>U8390790098</td>
<td>Q12638783</td>
</tr>
<tr>
<td>Receiver Has on File:</td>
<td>John</td>
<td>Doe</td>
<td>345345345</td>
<td>2/22/2004</td>
<td>U8390790098</td>
<td>Q12638782</td>
</tr>
<tr>
<td>John Doe</td>
<td>345345345</td>
<td>1/15/2003</td>
<td>U6839878387</td>
<td>Q68798323</td>
<td>123 Main</td>
<td></td>
</tr>
<tr>
<td>John Doe</td>
<td>345345345</td>
<td>5/24/2001</td>
<td>U6823797832</td>
<td>Q79844043</td>
<td>123 Main</td>
<td></td>
</tr>
<tr>
<td>John Doe</td>
<td>345345345</td>
<td>10/11/1978</td>
<td>U9689738872</td>
<td>Q79098998</td>
<td>123 Main</td>
<td></td>
</tr>
</tbody>
</table>
UPI Entity #1 makes it clearer which patient is being identified and the receiver may have confidence in the patient’s identity (based on internal matching rules). Normal processing may occur since the outcome is generally no different from scenarios #1 and #6. However, the receiver may decide to disclose that it has a different UPI from enumerating entity #2.

**SCENARIO #8: Same name, same address, different dates of birth and no match on either UPI**

In this example, the father, John Doe I (DOB 10/11/1978), has the following children:
- John II (DOB 5/24/2001)
- John III (DOB 1/15/2003)
- John IV (DOB 2/22/2004)
And a nephew John J Doe 3/22/2004

The date of birth for the patient does not match.

<table>
<thead>
<tr>
<th>First Name</th>
<th>Last Name</th>
<th>Cardholder ID</th>
<th>Birth Date</th>
<th>UPI Entity #1</th>
<th>UPI Entity #2</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submitter sends</td>
<td>John</td>
<td>Doe</td>
<td>345345345</td>
<td>2/22/2004</td>
<td>U8390790098</td>
<td>Q12638783</td>
</tr>
<tr>
<td>Receiver Has on File:</td>
<td>John</td>
<td>Doe</td>
<td>345345345</td>
<td>3/22/2004</td>
<td>U8390790092</td>
<td>Q12638782</td>
</tr>
<tr>
<td></td>
<td>John</td>
<td>Doe</td>
<td>345345345</td>
<td>1/15/2003</td>
<td>U6839878387</td>
<td>Q68798323</td>
</tr>
<tr>
<td></td>
<td>John</td>
<td>Doe</td>
<td>345345345</td>
<td>5/24/2001</td>
<td>U6823797832</td>
<td>Q79844043</td>
</tr>
<tr>
<td></td>
<td>John</td>
<td>Doe</td>
<td>345345345</td>
<td>10/11/1978</td>
<td>U9689738872</td>
<td>Q79098998</td>
</tr>
</tbody>
</table>

Neither UPI makes it sufficiently clear which patient is being identified. Even with the addition of UPIs, the receiver may not have enough confidence regarding the patient’s identity and should process accordingly.

**SCENARIO #9: Match on all demographic information but no match on either UPI**

In this example, the father, John Doe I (DOB 10/11/1978), has the following children:
- John II (DOB 5/24/2001)
- John III (DOB 1/15/2003)
- John IV (DOB 2/22/2004)

There is a match on the demographic information for the patient.

<table>
<thead>
<tr>
<th>First Name</th>
<th>Last Name</th>
<th>Cardholder ID</th>
<th>Birth Date</th>
<th>UPI #1</th>
<th>UPI #2</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submitter sends</td>
<td>John</td>
<td>Doe</td>
<td>345345345</td>
<td>2/22/2004</td>
<td>U8390790098</td>
<td>Q12638783</td>
</tr>
<tr>
<td>Receiver Has on File:</td>
<td>John</td>
<td>Doe</td>
<td>345345345</td>
<td>2/22/2004</td>
<td>U8390790092</td>
<td>Q12638782</td>
</tr>
</tbody>
</table>
There is sufficient demographic information provided without either UPI to identify the patient (based on internal matching rules). The receiver may proceed with the transaction. When responding to the transaction, the receiver may choose to also communicate the different UPI from the same enumerator(s).

6.3 The submitter and the receiver use two enumerating entities of which one is shared

SCENARIO #10: Same name, same address, different dates of birth but match on one UPI (Entity #1)
In this example, the submitter Uses Enumerating Entity #1 and #2
Receiver Uses Enumerating Entity #1 and #3
The father, John Doe I (DOB 10/11/1978), has the following children:
John II (DOB 5/24/2001)
John III (DOB 1/15/2003)
John IV (DOB 2/22/2004)
The date of birth for the patient does not match.

<table>
<thead>
<tr>
<th>First Name</th>
<th>Last Name</th>
<th>Cardholder ID</th>
<th>Birth Date</th>
<th>UPI #1 (same entity)</th>
<th>UPI #2 (different entity)</th>
<th>UPI #3 (different entity)</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>John</td>
<td>Doe</td>
<td>345345345</td>
<td>1/15/2003</td>
<td>U6839878387</td>
<td>Q68798323</td>
<td>123 Main</td>
<td></td>
</tr>
<tr>
<td>John</td>
<td>Doe</td>
<td>345345345</td>
<td>5/24/2001</td>
<td>U6823797832</td>
<td>Q79844043</td>
<td>123 Main</td>
<td></td>
</tr>
<tr>
<td>John</td>
<td>Doe</td>
<td>345345345</td>
<td>10/11/1978</td>
<td>U9689738872</td>
<td>Q79098998</td>
<td>123 Main</td>
<td></td>
</tr>
</tbody>
</table>

The UPI Entity #1 makes it clearer which patient is being identified. The UPI Entity #2 may be ignored by the receiver or retained for future matching. The receiver may have confidence in the patient’s identity (based on internal matching rules) and normal processing may occur.

6.4 Submitter and Receiver Use Two Different Enumerating Entities

SCENARIO #11: Match on all demographic information but no match on UPI since submitter and receiver
use different enumerating entities.
In this example, the father, John Doe I (DOB 10/11/1978), has the following children:
John II (DOB 5/24/2001)
John III (DOB 1/15/2003)
John IV (DOB 2/22/2004)
There is a match on the demographic information for the patient.

<table>
<thead>
<tr>
<th>First Name</th>
<th>Last Name</th>
<th>Cardholder ID</th>
<th>Birth Date</th>
<th>UPI Entity #1</th>
<th>UPI Entity #2 (different entity)</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submitter</td>
<td>John</td>
<td>Doe</td>
<td>345345345</td>
<td>2/22/2004</td>
<td>U8390790098</td>
<td>123 Main</td>
</tr>
<tr>
<td>Receiver</td>
<td>John</td>
<td>Doe</td>
<td>345345345</td>
<td>2/22/2004</td>
<td>Q68798323</td>
<td>123 Main</td>
</tr>
<tr>
<td>Has on</td>
<td>John</td>
<td>Doe</td>
<td>345345345</td>
<td>1/15/2003</td>
<td>Q79845612</td>
<td>123 Main</td>
</tr>
<tr>
<td>File:</td>
<td>John</td>
<td>Doe</td>
<td>345345345</td>
<td>5/24/2001</td>
<td>Q79844043</td>
<td>123 Main</td>
</tr>
<tr>
<td></td>
<td>John</td>
<td>Doe</td>
<td>345345345</td>
<td>10/11/1978</td>
<td>Q79098998</td>
<td>123 Main</td>
</tr>
</tbody>
</table>

There is sufficient demographic information provided without a UPI to identify the patient (based on internal matching rules). The receiver may proceed with the transaction. When responding to the transaction, the receiver may choose to also communicate the UPI from the different enumerator.
7. Recommendations

NCPDP recommends the UPI be utilized as an optional, additional aid to improve patient matching and interoperability.

Internal processes will dictate how receivers and submitters utilize the UPI. The receiver may choose to utilize the UPI as indicated in the use cases to aid in patient matching or may choose to ignore the UPI.

A UPI should not be the sole basis for the rejection of a claim or other transaction.

- If a received transaction does not include a UPI when it is known that one exists, processing should continue as though it is not known.
- If a received transaction includes a UPI that is unknown to the receiver, it can either be ignored or retained for future reference on an affirmatively matched patient demographic record.
- If a receiver gets a transaction with a UPI different from the one it has on file, and yet is confident about the identity of the patient, they may choose to communicate the different UPI to the submitter when supported by a response.
- If a receiver gets a transaction with a UPI different from the one it has on file and is insufficiently confident about the identity of the patient and needs to reject the transaction, it should respond using the already existing applicable eligibility related reject code(s) (e.g., “non-matched cardholder id”, “non-matched date of birth”).

Additionally, submitters may choose, consistent with trading partner agreements, to share the UPI with other trading partners to improve interoperability.
8. Conclusion

The Maintenance and Control Patient Identification Task Group developed eleven different use cases to demonstrate how a receiver *could reasonably* make decisions using a patient identifier. Certainty about a patient’s identity is based on internal processes, not dictated by NCPDP. Use of the UPI is optional and intended to enhance current processes.

Enhancements have been made to the impacted Standards (listed in Section 5) to support communication of a UPI.

- **Patient ID Qualifier (331-CX) and Patient ID (332-CY)** were identified as the data elements to use for communicating the UPI in the applicable non-XML Standards. Please refer to the NCPDP Data Dictionary for definitions of the data elements and to the External Code List for the applicable qualifier values for UPIs.

- New identifier tags were created in the **PatientIdentification** segment in XML Standards to represent UPIs. Please refer to the NCPDP Data Dictionary for definitions of the tags for the UPIs. This applies to SCRIPT and Specialized version 2019011 to 2021011 and RTPB version 11. For subsequent versions of these standards, the UniversalPatientIDsQualifier is used to describe the ID populated in the UniversalPatientIDsID element.
9. Frequently Asked Questions

9.1 Can a stakeholder be required to exchange a UPI, in absence of a governmental mandate?

No, a stakeholder cannot be required to exchange a UPI. It may only be required when agreed upon between trading partners.

9.2 Should restrictions of use be placed on any UPI to prevent unintended consequences?

This is out of scope for this guidance document as it relates to federal and state patient privacy rules.

9.3 Will the UPI be transmitted securely?

The UPI, like all private data (including names, addresses, insurance identifiers, dates of birth, etc.), is encrypted in NCPDP transactions.

9.4 Will the patient need to know their UPI?

No. This information is exchanged in the background between healthcare entities. The number is used to reference a person’s information behind other secure systems.
10. Appendix A. History of Changes

Version 1.0
- Original Publication

Version 1.1
- Added an Executive Summary
- Modified the Purpose
- Removed the Background
- Modified the flow chart and text in High Level Flow
- Modified the NCPDP Standards to provide more details on the timing of changes to the Standards to support communication of UPIs
- Added use case 11
- FAQ: Removed one question; modified two questions; added two questions

Version 1.2
- Updated section 5 and 8 to reflect the change in the method of communicating universal patient identifiers in the XML standards.
- Also updated section 5 to incorporate the RTPB standard.