Universal Patient Identifier Guidance Document

Version 1.0

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

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Disclaimer

1. Purpose

The purpose of this document is to provide guidance on the possible use of a universal patient identifier(s) (e.g. NCPDP UPI) within the NCPDP Standards.

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.

2. Background

NCPDP and other entities have recognized the need for improved patient matching amongst multiple healthcare trading partners and are enumerating patient identifiers to support this effort. The Patient ID (332-CY) has been identified as the data element for communicating these identifiers in NCPDP standards using an Electronic Data Interchange (EDI) syntax (e.g. Telecommunication). For NCPDP standards using an Extensible Markup Language (XML) schema (e.g. SCRIPT), a new identifier value was added to all occurrences of Patient Identification.

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 universal patient identifiers (UPI's).

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
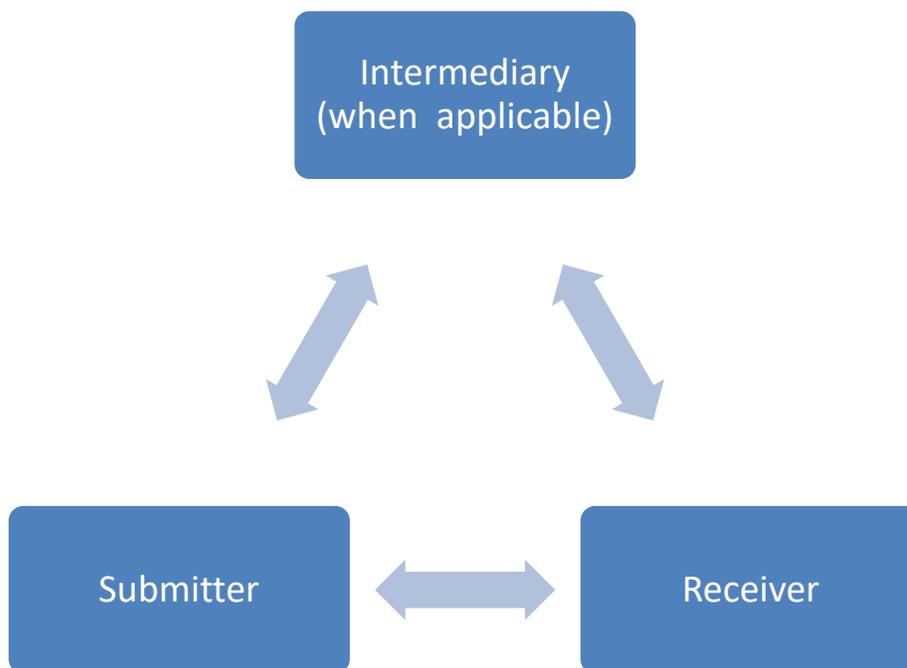
4.1 Actors

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

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. Impacted NCPDP Standards

The following standards were identified as being applicable for communicating the universal patient identifier:

- Post Adjudication Standard (A)
- Prescription Drug Monitoring Programs (PDMP) Reporting Standard (D)
- Prescription Transfer Standard (V)
- Prior Authorization Transfer Standard (X)
- SCRIPT Standard (S)
- Specialized Standard (Q)
- Specialty Data Reporting Standard (C)
- Telecommunication Standard (T)
- Uniform Healthcare Payer Data Standard (Y)

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 an UPI; not that a party receiving this transaction would necessarily 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 absence/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 sent/received 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 Universal Patient ID (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)

	First Name	Last Name	Cardholder ID	Birth Date	Universal Patient ID (Same Entity)	Address
Submitter sends	John	Doe	345345345	2/22/2003	U8390790098	123 Main St

Receiver Has on File:	John	Doe	345345345	2/22/2004	==U8390790098==	123 Main St
	John	Doe	345345345	1/15/2003	U6839878387	123 Main St
	John	Doe	345345345	5/24/2001	U6823797832	123 Main St
	John	Doe	345345345	10/11/1978	U9689738872	123 Main St

Without the universal patient identifier, it is inconclusive which patient is being identified. However, the universal patient ID makes it clear 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; 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.

	First Name	Last Name	Cardholder ID	Birth Date	Universal Patient ID (Same Entity)	Address
Submitter sends	Angel	Doe	269873982	5/24/2010	==U6839889882==	123 Main St
Receiver Has on File:	Angelo	Doe	269873982	5/24/2010	U6590788111	123 Main St
	Angela	Doe	269873982	5/24/2010	==U6839889882==	123 Main St

Without the universal patient identifier, it is not clear to which twin the submission refers. However, with the universal patient identifier, it is sufficiently clear, and the receiver has confidence in the patient's identity and normal processing may occur.

SCENARIO #3: **Similar names/nicknames: mismatch on birthdate; 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.

	First Name	Last Name	Cardholder ID	Birth Date	Universal Patient ID (Same Entity)	Address
Submitter sends	Jimmy	Doe	069238989	8/1/1996	==U5172382778==	123 Main St
Receiver Has on File:	James	Doe	069238989	8/1/1997	==U5172382778==	123 Main St
	Jimmy	Doe	069238987	9/1/1976	U2983098589	123 Main St

Without the universal patient identifier, it is inconclusive which patient is being identified. However, the universal patient ID makes it clear 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.

	First Name	Last Name	Cardholder ID	Birth Date	Universal Patient ID (Same Entity)	Address
Submitter Sends	John	Doe	069238989	3/20/1957	U12345678	123 Main
Receiver Has on File	Jen	Doe	069234567	10/05/1978	U23467894	123 Main
	Juan	Doe	069045678	01/20/1980	U87123456	123 Main
	John	Doe	061932464	10/02/2012	U87625321	123 Main

The universal patient identifier 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 universal patient ID 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.

	First Name	Last Name	Cardholder ID	Birth Date	Universal Patient ID (Same Entity)	Address
Submitter sends	Elizabeth	Doe	269873982	4/23/1997	U9689782922	123 Main
Receiver Has on File:	Hermione	Doe	269873982	4/23/1997	U9689782922	123 Main
	Elizabeth	Doe	269873982	1/3/1970	U9678907662	123 Main
	Bernard	Doe	269873982	11/23/1971	U9689738872	123 Main

Without the universal patient identifier, it is inconclusive which patient is being identified. However, the universal patient ID 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 universal patient ID 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.

	First Name	Last Name	Cardholder ID	Birth Date	Universal Patient ID (Same Entity)	Address
Submitter sends	John	Doe	345345345	2/22/2004	U6839878387	123 Main
Receiver Has on File:	John	Doe	345345345	2/22/2004	U8390790098	123 Main
	John	Doe	345345345	1/15/2003	U6839878389	123 Main
	John	Doe	345345345	5/24/2001	U6823797832	123 Main
	John	Doe	345345345	10/11/1978	U9689738872	123 Main

Using internal matching rules, the receiver has confidence in the identity of the patient and may proceed with normal processing. The receiver may also alert the submitter on the response that they have a different Patient ID from the same enumerator on file.

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.

	First Name	Last Name	Cardholder ID	Birth Date	Universal Pat ID Entity #1	Universal Pat ID Entity #2	Address
Submitter sends	John	Doe	345345345	2/22/2003	U8390790098	Q12638782	123 Main
Receiver Has on File:	John	Doe	345345345	2/22/2004	U8390790098	Q12638782	123 Main
	John	Doe	345345345	1/15/2003	U6839878387	Q68798323	123 Main
	John	Doe	345345345	5/24/2001	U6823797832	Q79844043	123 Main
	John	Doe	345345345	10/11/1978	U9689738872	Q79098998	123 Main

Both universal patient ID's make it clear which patient is being identified – the outcome is no different from scenario #1. The universal patient ID makes it very clear and the receiver has confidence in the patient's identity and 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.

	First Name	Last Name	Cardholder ID	Birth Date	Universal Pat ID Entity #1	Universal Pat ID Entity #2	Address
Submitter sends	John	Doe	345345345	2/22/2003	==U8390790098==	Q12638783	123 Main
Receiver Has on File:	John	Doe	345345345	2/22/2004	==U8390790098==	Q12638782	123 Main
	John	Doe	345345345	1/15/2003	U6839878387	Q68798323	123 Main
	John	Doe	345345345	5/24/2001	U6823797832	Q79844043	123 Main
	John	Doe	345345345	10/11/1978	U9689738872	Q79098998	123 Main

Universal patient ID Entity #1 makes it clear which patient is being identified and the receiver has confidence in the patient's identity and normal processing may occur – outcome is no different from scenarios #1 and #6. However, the receiver may decide to disclose that it has on file a different universal patient ID from enumerating entity #2.

SCENARIO #8: Same name, same address, different dates of birth; 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.

	First Name	Last Name	Cardholder ID	Birth Date	Universal Pat ID Entity #1	Universal Pat ID Entity #2	Address
Submitter sends	John	Doe	345345345	2/22/2004	U8390790098	Q12638783	123 Main
Receiver Has on File:	John	Doe	345345345	3/22/2004	U8390790092	Q12638782	123 Main
	John	Doe	345345345	1/15/2003	U6839878387	Q68798323	123 Main
	John	Doe	345345345	5/24/2001	U6823797832	Q79844043	123 Main
	John	Doe	345345345	10/11/1978	U9689738872	Q79098998	123 Main

Neither universal patient ID makes it sufficiently clear which patient is being identified. With the universal patient identifiers, the receiver still does not have enough confidence regarding the patient's identity and should process accordingly.

SCENARIO #9: Match on all demographic information; 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.

	First Name	Last Name	Cardholder ID	Birth Date	Universal Pat ID #1	Universal Pat ID #2	Address
Submitter sends	John	Doe	345345345	2/22/2004	U8390790098	Q12638783	123 Main
Receiver Has on File:	John	Doe	345345345	2/22/2004	U8390790092	Q12638782	123 Main
	John	Doe	345345345	1/15/2003	U6839878387	Q68798323	123 Main
	John	Doe	345345345	5/24/2001	U6823797832	Q79844043	123 Main
	John	Doe	345345345	10/11/1978	U9689738872	Q79098998	123 Main

There is sufficient demographic information provided, without either Universal Patient ID, to identify the patient (based on internal matching rules). The receiver may proceed with the transaction but may alert the submitter on the response that they have different Patient ID's from the same enumerators on file.

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.

	First Name	Last Name	Cardholder ID	Birth Date	Universal Pat ID Entity #1 (same entity)	Universal Pat ID Entity #2 (different entity)	Universal Pat ID Entity #3 (different entity)	Address
Submitter sends	John	Doe	345345345	2/22/2003	==U8390790098==	Q12638782		123 Main
Receiver Has on File:	John	Doe	345345345	2/22/2004	==U8390790098==		A79809893	123 Main
	John	Doe	345345345	1/15/2003	U6839878387		A79084379	123 Main
	John	Doe	345345345	5/24/2001	U6823797832		A79827398	123 Main
	John	Doe	345345345	10/11/1978	U9689738872		A16298379	123 Main

The universal patient ID entity #1 makes it clear which patient is being identified. Universal patient identifier Entity #2 may be ignored by the receiver. The receiver has confidence in the patient's identity and normal processing may occur.

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.

Receivers should not reject transactions based on absence/presence of a UPI.

UPI should not be the sole basis for a rejection of a claim.
- 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, it may respond by telling the submitter, on the response, that it has a different UPI.
- 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," or "non-matched date of birth," etc.).

Additionally, submitters may choose to share the UPI with other trading partners to improve interoperability.

8. Conclusion

The Maintenance and Control Patient Identification Task Group developed ten 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 an 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 UPI's.
- 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 UPI's.

9. Frequently Asked Questions

9.1 Can a provider or payer be 'required' to send the Patient ID when it is in reference to a UPI, if there is no mandate for all stakeholders to support a UPI?

No, this is a situational field based upon trading partner agreement. The situation of use for the Patient ID has been modified to "*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.*"

9.2 How should a receiver respond when only one UPI is received but the UPI enumerator is a different entity?

If a receiver receives a transaction with a UPI that is unfamiliar, the receiver should make decisions about patient identity using their existing rules.

If the receiver is confident about the patient's identity using existing rules and has a UPI that differs from the one received, then the receiver may return the other UPI to the submitter in the appropriate fields (e.g. Patient ID Qualifier (331-CX) and Patient ID (332-CY), PatientIdentification).

Both the submitter and receiver may collect the received UPI for future reference.

9.3 From a patient consent perspective, since the patient is not aware of this unique ID being assigned to them and traversed throughout the healthcare system, should restrictions of use be placed on any UPI to prevent unintended consequences? For example, how do we prevent this ID from being used downstream to contact patients or being shared with other entities who may not be entitled to this information? Should the use be limited to business practices specific to the NCPDP standard? This is a new area for NCPDP, where data breaches could be a risk. To prevent these risks, should we consider formal legal language be tied to its use?

This is out of scope for the task group as it relates to business rules with the enumerating entity and not to communicating a UPI throughout the healthcare industry using NCPDP standards. However, a) it only rarely conveys information marginal to the information already conveyed in any transaction, and b) it is only useful to a party that has other reference data which identifies the patient anonymously using the UPI. It represents no risk greater than already inherent in sending names, dates of birth and member numbers in health care transactions.

10. Appendix A. History of Changes