surescripts

E-Prescribing Companion Guide

surescripts

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1. E-Prescribing Documentation

Build and Support E-Prescribing Transactions

The E-Prescribing Companion Guide provides detailed technical guidance for implementing and supporting E-Prescribing transactions on the Surescripts network. Use this guide when building, certifying, integrating, or troubleshooting E-Prescribing solutions.

This guide supplements the NCPDP SCRIPT Standard by documenting **Surescripts-specific requirements, Application Certification Requirements (ACRs), and implementation best practices**.

Section Descriptions & Links

Use the section descriptions below to understand how the guide is organized and where to find what you need.

Product Overview

Overview of E-Prescribing capabilities, message types, and reference documentation

Integration & Production

Overview of integration, certification, and production processes

General Requirements

Understand rules and expectations that apply across all E-Prescribing message types

Messages Overview

Message flow, structure, and best practices

Element Details

Data element definitions, conditions, and business rules

Element Usage

How elements are used in workflows, including usage patterns and data quality guidance

Application Certification Requirements (ACR) Summary

Summary of all Application Certification Requirements referenced throughout the guide

Message Examples

Sample message format demonstrating structure, required elements, and expected usage

Alternate RxChange Workflows for Prior Authorization

RxChange workflows for prior authorization, including alternate routing scenarios

Error Guidance

Error codes, troubleshooting guidance, and best practices to resolve common issues

Message Continuity

Message continuity services, including retry, queuing, and fax failover

Disclaimers

Legal disclaimers covering guide usage, examples, and intellectual property

Key Sections by Role

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For Developers

Build and code the message integration: formats, elements, validation, and examples.

- **Message Format** & **General Message Requirements**: Start with the structural rules that every message must follow
- **UTC Time Format**, **Character Set**, & **Numeric Representation**: Encoding and data-format rules your code must enforce
- **Communication Rules** & **Timeouts**: Transport behavior, retries, and timeout handling
- **Message Validation** (including EPCS & state-specific): Validation logic to implement before sending/accepting messages
- **E-Prescribing Message Flows** & **Pharmacy Workflows**: How messages move so you model the right request/response chains
- **Per-Message Requirements** (NewRx, RxRenewal, RxChange, CancelRx, RxTransfer, Acknowledgement Messages, etc.): The transaction-by-transaction requirements you will code against
- **Element Details** (MessageHeader, Prescriber, Medication, Patient, etc.): Field-level definitions and the requirements designation key
- **Element Usage** (Drug Description, Sig, NDC, Quantity, Diagnosis, etc.): How to correctly populate the tricky high-impact fields
- **NewRx Message Example**: A reference example for confirming message accuracy and compliance
- **Error Guidance** (SCRIPT, Schema & Directory Errors): Diagnose and prevent the errors you will hit during integration.
- **Message Continuity** (HTTP Retry, Queue, Fax Services): Resilience patterns for outages and message delivery.

For Implementers

Plan onboarding, connectivity, go-live, directory setup, and outage continuity.

- **Integration Process:** Start here to learn more about integrating on the Surescripts network
- **Transition to Production**: Steps and gates to move from testing to live traffic
- **Terminology**, **Communication Rules**, **& Timeouts**: Steps and gates to move from testing to live traffic
- **E-Prescribing Message Flows**: Which message types your deployment must support and route.
- **Directory Information**: Directory dependencies for routing prescribers and pharmacies
- **Prescriber & Pharmacy Information - Surescripts Directory**: How directory data feeds correct addressing/SPI setup
- **State Specific Identifiers for EPCS:** Jurisdiction-specific setup for controlled substances
- **Faxing** & **Faxable Error Messages**: Fallback delivery to plan for in the deployment
- **Message Continuity — Services, Queue & Workbench:** Outage handling, message queue, and Workbench access/setup
- **Directory Errors** & **Frequent Receiver Validation Errors**: Common routing/directory failures to resolve during rollout

For Certification Teams

- **Compliance**: Sets the compliance bar the certification effort confirms
- **Requirements Designation**: How to read mandatory, conditional, and business rule designations when scoring conformance
- **Application Certification Requirements (ACR) Summary**: List of all Application Certification Requirements referenced throughout the guide
- **Display Requirements Tables** (by message type): Fields to display for each message
- **Display Requirements** & **Best Practices**: Background detail behind the Display Requirements Tables
- **Numeric Representation**, **Message Format**, & **General Message Requirements**: Format-level conformance items to validate
- **Message Validation** (including EPCS & state-specific): Validation behaviors to test, including controlled-substance rules
- **Acknowledgement Messages** & **Error Codes**: Confirm correct Status/Verify/Error handling and 900 error behavior
- **NewRx Message Example**: Reference example to compare candidate output during testing

For Business Analysts

- **About Electronic Prescribing** & **EPCS**: Foundational context on e-prescribing and controlled substances
- **About This Guide**, **Disclaimers**, & **Document References**: Scope, how to read the guide, and related source documents
- **E-Prescribing Best Practices**: Cross-cutting practices that shape requirements and stories
- **E-Prescribing Message Flows** & **Pharmacy Workflows**: The big-picture process map for requirements analysis
- **Messages Overview**: What each message does and the recommended behaviors
- **Acknowledgements Message Workflow Scenarios**: How acks/errors play out across realistic scenarios
- **Element Usage** (Drug Description, Sig, NDC, Quantity, Diagnosis, etc.): Data-quality expectations that drive acceptance criteria
- **Alternate RxChange Workflows for Prior Authorization**: Workflow variants to capture in PA-related requirements
- **Error Guidance**: Business rules that reduce errors and rework

Access Onboarding and Developer Tools

If you're looking for **onboarding resources, developer tools, or related E-Prescribing products**, start with the **E-Prescribing home page**.

- Get started with **prerequisites, onboarding guidance, and connectivity setup**
- Access **implementation tools** like Workbench, Message Tester, and Certification Tester
- Find **upgrade guidance, documentation links, and support resources**

2. Product Overview

About Electronic Prescribing

Electronic prescribing (e-prescribing) gives healthcare professionals in all care settings safer and more efficient electronic prescription management. The Surescripts E-Prescribing service supports prescriber-initiated e-prescribing message transmission from the prescribing system to the patient's pharmacy of choice. Network e-prescribing also includes transmission of pharmacy-initiated messages. A list of prescriber-initiated and pharmacy-initiated messages are provided below and will be updated periodically with document version changes.

The following messages should be supported per contract specifications:

Prescriber-initiated

- CancelRx
- Census
- DrugAdministration
- NewRx
- NewRxResponseDenied
- Recertification
- Resupply
- RxChangeResponse
- RxFillIndicatorChange
- RxRenewalResponse

Pharmacy-initiated

- CancelRxResponse
- NewRxRequest
- RxChangeRequest
- RxFill
- RxRenewalRequest
- RxTransferInitiationRequest
- RxTransfer
- RxTransferConfirm

Customers utilizing other Surescripts solutions will want to consider how those solutions can enhance their e-prescribing messages.

About Electronic Prescribing for Controlled Substances (EPCS)

E-Prescribing for Controlled Substances (EPCS) integrates into existing technology and workflows to offer dimensions of safety and security for controlled substance prescriptions.

Prescribing systems and pharmacy systems will be allowed to send and receive fillable messages for controlled substances on the Surescripts network when they have completed the following:

- Updated their e-prescribing software to meet all requirements specified by the Federal Drug Enforcement Administration (DEA) in the Interim Final Rule and the NCPDP SCRIPT messaging version that support EPCS.
- Undergone a third-party audit to ensure the software meets all DEA EPCS requirements.
- Achieved Surescripts Certification to this guide.
- Made audit results available to Surescripts with a Proof of Audit Letter & Surescripts EPCS Audit Attestation Form.

About This Guide

The Surescripts E-Prescribing Companion Guide was created to assist customers responsible for developing a system interface for these e-prescribing messages.

This guide is meant to support, integrate, and further clarify the NCPDP standard schemas, implementation guides, and best practices as used through the Surescripts network. It does not reproduce the base standard in its entirety.

Requirements beyond those in the NCPDP documentation are called out in this guide and are also enforceable. Surescripts enforces these requirements through certification testing, Application Certification requirements, business rules and compliance protocols. Customers should read and comprehend the associated standards prior to reading this guide.

> **Note:** The terms "message" and "transaction" are used interchangeably throughout this guide.

Note Usage

Throughout the guide, different note styles are used for the following purposes:

> **Note:** This is used when a Note is required for content specific to Surescripts.

> **Reference**: This is used when referencing NCPDP documentation.

✅ **Quality Check**: This is used when referencing an E-Prescribing quality guideline. The purpose of the quality guidelines is to provide e-prescribing clinicians, prescribing system vendors, and pharmacy system vendors with guidance regarding key principles and best practices to consider when initiating and transmitting e-prescribing transactions. It should be noted that the best practices described within this companion guide are based on proven strategies that have been successfully implemented by prescribing and pharmacy system vendors.

Document References

Please reference the following resources when reading this guide:

Surescripts provided materials
Directory Implementation Guide
Connectivity and Authentication Implementation Guide

> **Note**: The E-Prescribing Translation Matrix is available for download by clicking the button below

E-Prescribing Translation Matrix.xlsx

External materials to be obtained by the customer (available at www.NCPDP.org)
NCPDP SCRIPT Standard 2023011 files: **Note**: Schema files version may change and will not be considered final until published in the Generally Available guide. • XML files (schemas) 20230115 • NCPDP SCRIPT Implementation Guide V2023011 (May 2024 republication) • XML Standard Guide V2022071 • Note: The XML Standard only updates when the guide changes. The latest version is 2022071. NCPDP does not retroactively update XML versions with each new SCRIPT/Specialized Standard. This Standards Matrix shows the XML Guide version for each Standard • V2023011 SCRIPT Standards Examples Guide V10
NCPDP Structured and Codified Sig Format Implementation Guide (latest version
NCPDP SCRIPT Implementation Recommendations (latest version)
NCPDP's External Code List (ECL) V202301 (NCPDP online tool)

NCPDP SCRIPT

This guide utilizes the NCPDP (National Council for Prescription Drug Programs) messaging standard Prescriber/Pharmacist Interface SCRIPT version 2023011 as a baseline. To become an NCPDP member, please go to **https://www.ncpdp.org/Membership.aspx**.

The NCPDP SCRIPT Standard 2023011 package contains a complete list of fields and additional requirements. Customers should read and comprehend the associated standards prior to reading this guide.

NCPDP is an American National Standards Institute (ANSI) accredited Standard Development Organization. The NCPDP "SCRIPT" standard is a copyrighted document and may be obtained by contacting:

NCPDP
9240 E. Raintree Drive
Scottsdale, AZ 85260-7518
Phone: (480) 477-1000
Fax: (480) 767-1042
https://www.ncpdp.org

3. Integration & Production

The following section defines related technical and support elements needed to achieve certification for moving into production, along with our Integration, Compliance, and Certification processes.

Integration Process

When a customer begins integrating a Surescripts product into their application(s), they will be provided access to all the Surescripts documentation pertaining to the product being implemented. In addition, customers will be provided access to the staging environment to design, develop and test the product integration within their application.

> **Note:** The time frame of the project can vary depending on the customer's resource allocation for the project.

Meeting Requirements

During Integration, customers will ensure their system has met all product requirements. The Certification Testing will focus on message format, application workflow and display in accordance with Surescripts documentation and the associated Application Certification Requirements (ACRs). Upon successful completion of certification and, when applicable, other pre-production network requirements (e.g., Identity Proofing, Attestations, DEA audit), customers will be enabled in production.

For requirements, consider the following:

- Surescripts ACRs are required to be met to achieve production status on the Surescripts network and will be enforced as part of certification.
- To ensure high-quality transactions, Surescripts applies additional business rules above and beyond the NCPDP schema defined requirements that will cause a message to be successful or rejected.
- Surescripts test cases do not cover all possible scenarios in production. Customers are responsible for testing any other applicable scenarios specific to their production environment.
- In accordance with the customer’s legal agreement with Surescripts, each customer is responsible for ensuring compliance with all applicable laws including, but not limited to, local and state laws/regulations where doing business.

Transition to Production

Once certification and the contract are complete and approved by the Surescripts Certification Review Board, the customer is ready to move into production. Surescripts will configure the production connection and validate successful operations with the customer. Prior to the transition to production, Surescripts Account Management will work with the customer and internal Surescripts teams to discuss the following:

- Production support contacts (Escalation Matrix)
- Support process and training
- Support hours

> **Note**: The Escalation Matrix for use by Surescripts customers can be found in the *Surescripts Network Operations Guide*.

Surescripts Terminology Usage

The following table outlines terminology usage for this guide.

Term	Term Usage
must	Requirements that are enforced as part of the production code or by Surescripts business rules. Some business rules reside in the **Element Details** section of this guide.
shall	The requirements customers are required to meet in order to be certified on the Surescripts network. These requirements will be enforced as part of certification, not through business rules.
should	Used for guidance and best practices to produce superior results and enhance electronic messaging. Best practices can also be found in the Best Practice sections. Customers are encouraged, but not required, to meet best practices in order to be certified on the Surescripts network.
R.###	Designates a Surescripts E-Prescribing ACR.
S.###	Designates an ACR that is shared with other Surescripts products.

> **Note:** ACRs are found throughout the guide and are summarized in the **Application Certification Requirements Summary** section.

Communication Rules

Please refer to the Connectivity and Authentication Guide for details regarding communication and security protocol requirements as well as references to all links and IP addresses associated with Surescripts services. For the network to be reliable, there are communication rules to which all customers must adhere.

Timeouts

For timeouts, consider the following:

- When sending a message to Surescripts, the initiator should set the HyperText Transport Protocol (HTTP) timeout to no less than 30 seconds.
  - A receiving system must reply with a valid response within 24 seconds.
    Valid responses include:
    - Status message (Code 010 – Synchronous Response Indicating Successful Receipt)
    - Error message
    - Status message (Code 000 – Synchronous Acknowledgement – Further Response to Follow)
- When a Status (Code 000) is sent as a reply, a receiving system must follow-up with a Verify or Error within 24 hours, as Surescripts may return a timeout error.

> **Note:** Refer to the **Acknowledgement Messages** section for more information on using Status, Error, and Verify.

UTC Time Format

By using Coordinated Universal Time (UTC), the receiver of a message will know the time regardless of their time zone. For example: If a message was sent from Boston at 5:30PM EDT (Eastern Daylight Time), the time would be sent as 21:30 UTC time. If

this message was received in Chicago CDT (Central Daylight Time), the 21:30 UTC could be converted to the local CDT time of 4:30PM. Refer to **http://en.wikipedia.org/wiki/Coordinated_Universal_Time**, or **http://www.w3.org/XML/** for more information. UTC time must be synchronized with NIST (National Institute of Standards and Technology) and the difference must be less than one minute. Drift of no more than one minute will be acceptable.

When sending only a Date (not Date and Time), it should be sent in your local time zone, and the receiver should interpret it in their local time. Neither party should attempt to convert the Date to UTC.

All standard programming languages should have a function for generating a date in the UTC time zone or displaying a date in the local time zone. The format of the date/time fields in the XML schema must use the xsd:dateTime format. Examples of that format are: CCYY-MM-DDTHH:MM:SS.FZ, where the UTC time zone may be specified as Z, + 00:00, or - 00:00. For example, 2013-01-01T16:09:04.5Z, or 2013-01-01T16:09:04.5-00:00, or 2013-01-01T16:09:04.5+00:00, where 16:09:04.5Z would be 16 hours, 09 minutes, 04 seconds, 5 fractional seconds. UTC time is denoted by either the “Z” in the first example or the “-00:00” in the second example, or the “+00:00” in the third example. The fractional seconds is not required. Refer to xsd:dateTime for more information.

For simple date fields that do not include the time portion, the format is: CCYY-MM-DD.

Character Set

The character set contains ASCII values 32 – 126, which include:

Symbols	**! " # $ % & ' ( ) * + , - . / : ; < = > ? @ [\ ] ^ _ ` { | } ~**
Numerals	Ø to 9
Letters, upper and lower case	A to Z, a to z

UTF-8 is the required character encoding for XML. Other encoding formats are not supported by Surescripts. It is recommended that customers declare their UTF-8 formatting in the message header.

XML uses certain characters to describe the structure of the document. When an element value needs to include one of the special characters, the character must be replaced its predefined entity representation when writing the XML document. Most XML processor libraries automatically handle the character replacement. For more information see **https://en.wikipedia.org/wiki/List_of_XML_and_HTML_character_entity_references#predefined_entities_in_xml** or **https://www.w3.org/TR/REC-xml/#sec-predefined-ent**

Character	**Character Name**	**Received Value**
>	Greater than	>
<	Less than	<
"	Quote	"
&	Ampersand	&
'	Apostrophe	'

Numeric Representation

S.206: System shall support user entry and display of up to three digits to the right of the decimal place, without the system rounding or truncating. The decimal point is represented by a period and shall be used as follows:

- Only when there are significant digits to the right of the decimal

- When there is a digit before and after the decimal point
- Not with whole numbers

For example, consider the following possible values:

Correct Format Examples	Incorrect Format Examples
2.5	.27
0.15	3.00
21	14.

Compliance

Surescripts goal is efficiency and consistency across the network so all customers can meet the highest measures of patient safety, end-to-end reliability, and quality. To ensure that customers comply with and adhere to the approved certification requirements, Surescripts:

- Monitors customers in production to ensure all network customers remain in compliance with certification requirements and contractual terms.
- Initiates a remediation process for identified compliance issues.

To ensure network and patient safety, customer agrees to notify Surescripts of any modifications through use of the Surescripts recertification form. Upon receipt of this form, changes will be reviewed, and a determination made as to what (if any) level of certification may be required before being placed into production.

When changes are made to a customer's implementation, the customer should advise their account manager. The customer will be given a recertification guide to provide details regarding the changes made. Upon receipt of the completed document, the details will be reviewed, and a determination will be made as to what (if any) level of recertification is necessary.

As a reminder, Surescripts conducts certification with customers to ensure the application adheres to network requirements. Surescripts will enforce mandatory fields as required by the Standards body and Surescripts guide requirements. To maximize interoperability, customers are recommended to support optional fields that have been created to address gaps in discrete data needs and the many solutions that are in place for the benefit of the receiver. Surescripts encourages, but does not guarantee, the use of optional discrete fields to support end user workflows.

This guide is intended for certification on our network only and is not intended to ensure compliance with state and federal law. In accordance with the customer's legal agreement with Surescripts, each customer is responsible for conducting its own due diligence to ensure compliance with all applicable laws and requirements, including, but not limited to, local and state laws and regulations in which the customer's application is deployed and used.

4. General Requirements

Overview

This page defines the rules and requirements that apply to **all** e-prescribing messages, regardless of type. Whether sending a NewRx, RxRenewal, CancelRx, or another message, these validation rules must be followed to ensure successful transmission and processing through the Surescripts network.

Message Format

S.200: Customers shall be able to receive syntactically valid maximum and minimum populated messages. Optional data elements (and values therein) shall not cause message failure.

S.201: Customers shall ensure all messages are syntactically correct before transmission to Surescripts.

General Message Requirements

S.202: Receivers shall not reject any incoming messages due to misalignment of local directory contents, the lack of entries for the sender, or the use of address standardization within the customer's local directories.

S.207: If an element does not have a value to be sent, the application shall not send any data. If no data is sent, the receiving application shall not display a value equal to zero, nor infer any value for that field.

> **Note:** Placeholder values such as zero or N/A should not be sent.

S.209: The customer shall implement and maintain a Surescripts approved drug compendia that is updated at least monthly.

> **Notes**:
>
> Approved drug compendia for E-Prescribing include the following:
>
> - Elsevier Gold Standard
> - First Databank (FDB)
> - Merative (formerly IBM Truven Health Analytics)
> - National Library of Medicine (NLM) RxNorm
> - Oracle Health Multum Drug Database
> - SCHOLZ DataBank
> - Wolters Kluwer Medi-Span
> - Or others as approved by Surescripts

Per the Directory Implementation Guide, it is required that, prior to sending a message through Surescripts, the sending customer shall ensure that the intended receiver is enabled with the appropriate service level to accept the electronic transaction.

E-Prescribing Best Practices

The following general best practices apply to all E-Prescribing message types:

- The application should make clear to the user which data elements will be sent to the receiver and which elements are for internal/local use.
- The application should be able to send all data elements which can help the receiver better interpret the e-prescription message and make a more informed decision based on their scope of practice.
- Notes and other free text fields should not contain information for which there is a designated field.
- When using a codified field, ensure the code captures the intent and semantically matches the associated/related text field.
- When a pharmacy or prescribing system does not electronically support compounds or non-drug supply items, it is recommended they return a descriptive Error message with the code of 900. Refer to **900 Pharmacy and Prescriber Generated Errors.**

> **Note:** While we are able to enforce application adherence, we are unable to mandate specific behaviors or workflows be carried out by its users. Certification focuses on message format and, when appropriate, application workflow and display in accordance with Surescripts documentation and the associated ACRs.

✅ **Quality Checks - E-Prescribing messages:**

- **Transmit using the English language**: All e-prescribing messages should be transmitted using the English language. A common language ensures clear prescriber intent and patient safety. Additionally, languages other than English may contain characters which are not supported by the NCPDP SCRIPT standard (e.g., diacritics like ü, ñ, á). An extra translation step and/or use of such unsupported characters may lead to truncation or mistranslation thereby increasing the risk of an adverse drug event. Language translation on the prescription label should be handled and addressed by Pharmacy System Vendors best practices, if available.
- **Respond to requests in a timely fashion**: When receiving a "request" transaction that requires manual review, ensure "response" is transmitted within 48 hours. The time between the two transactions should be minimized as it represents a pause in the delivery of patient care. Unnecessary delays could result in increased follow-up requests or alternative means like phone calls or manual fax. This can risk departure of the electronic channel which leads to gaps in documentation, added human touchpoints, and less efficient network processing.
  - For Prescribing System Vendors: Develop the user interface to bring attention to the existence of requests awaiting a response with added functionality to alert requests nearing the 48-hour threshold.
  - For Prescriber System Vendors and Pharmacy System Vendors: Ensure requests are transmitted with information that presents a clear objective to the receiver thereby enabling a prompt response.
- **Test or dummy e-prescriptions**: Only transmit e-prescriptions that are intended for the pharmacist to dispense to the patient. Transmission of “test” or "dummy" e-prescription orders in the live, production environment is a violation of Surescripts network requirements established in both the contracts signed by network participants and the Network Operations Guide (NOG). The transmission of “test” e-prescriptions can result in not only severe patient safety consequences, but also Surescripts Compliance cases being opened to the original prescribing vendor system, and in extreme cases, even the temporary suspension of an entire prescribing vendor system from the Surescripts network as well. Engage with end-users and provide additional training to correct any inappropriate prescribing behaviors. If using this approach to determine insurance coverage, utilize other solutions specifically built to generate this information.

Operational Process/Duplicates

✅ **Quality Check - Operational Process/Duplicates**: Do not send duplicate transactions that contain identical content within 24 hours (one calendar day) unless the original transaction resulted in an error or was not delivered. Develop mechanisms and

implement procedures to alert/avoid duplicates as this can cause workflow inefficiencies, patient safety risks, and operational costs. If a duplicate prescription is not caught during adjudication or drug utilization review, this additional dispensed medication could cause adverse events and/or be a legal violation.

> **Note:** This quality check does not apply to FollowUpRequests. For more information on that message, see the **FollowUpRequest Element Usage** section.

Message Validation

Surescripts will ensure that customers are in compliance with the message specifications outlined in this guide during testing and will continue to enforce once in production.

At a minimum, Surescripts validations include:

- XML schema validation
- The sender identification and authentication
- The recipient identification
- Syntax of the message, including field lengths, data types, and code values
- Surescripts business rules

> **Note:** Surescripts ACRs are not enforced as part of validations, but instead through the certification process.

EPCS Message Validation Requirements

The EPCS flow for fillable messages follows the flow shown below with these additions:

- The "ControlledSubstance" service level for both the sender and receiver must be enabled for controlled substances or the message will be rejected.

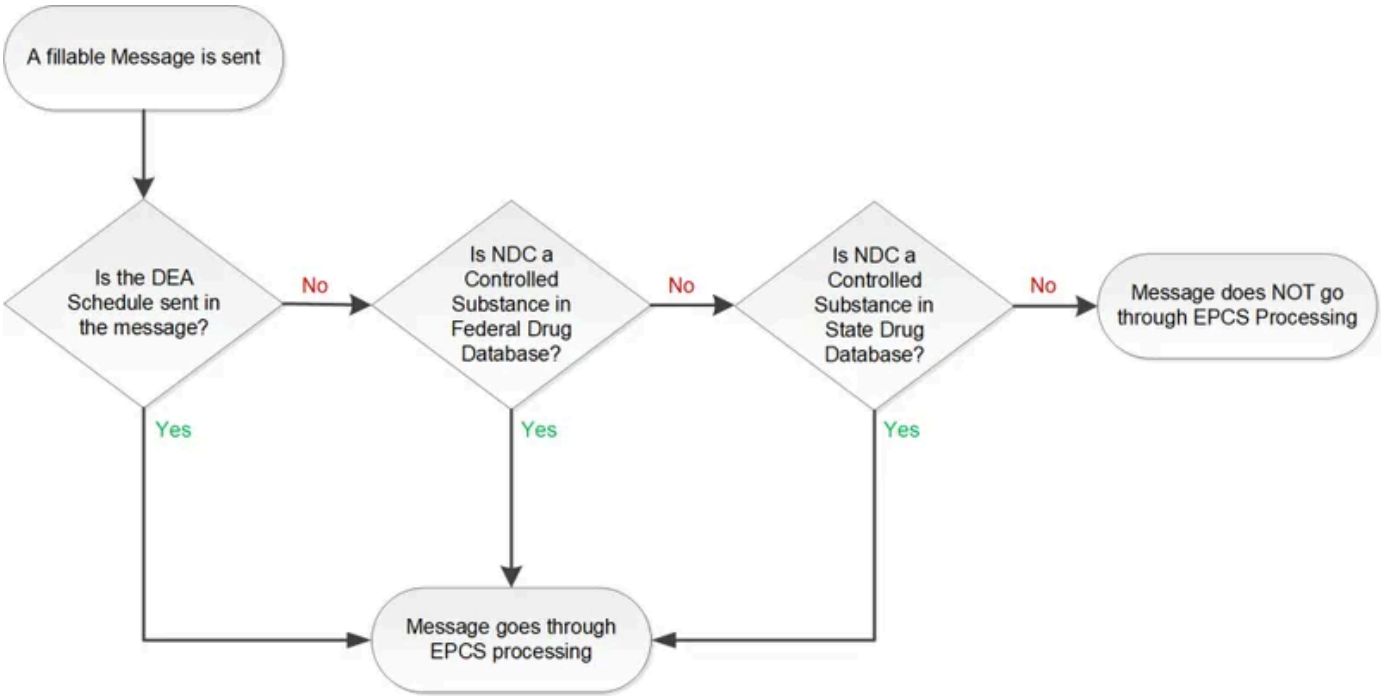
> **Note:** A pharmacy may send controlled substance requests without the "ControlledSubstance" service level enabled; however, to receive an affirmative response it must be enabled. Prescribers without a "ControlledSubstance" service level will be able to receive the request, but will only be able to send a Denied response.

- The message must be digitally signed and contain either the signature or the indicator that it has been signed. The sender of the message is required to sign all fields in the digital signature. Surescripts will not validate the signature.
  - Prescribing systems should only send the actual digital signature when the pharmacy's directory specialty includes SupportsDigitalSignature.
- The message must contain the NDC of any controlled substance.
- The DEASchedule of any controlled substance must be sent.
- The Patient address must be sent.
- The Prescriber address must be sent.

> **Note:** See **Element Details** and **Element Usage** for more details.

Reference: NCPDP SCRIPT Implementation Guide, V2023011 (May 2024 republication). Sec. 10: Pages 271 - 277

How Surescripts determines when to apply EPCS processing to a message



State Specific Validation for Controlled Substances

Note: The reference of "state" throughout this section includes U.S. Territories and foreign U.S. military bases.

Surescripts will stop controlled substance messages from being sent or received that are prohibited by state law as outlined below. Prescribing systems and their users are still ultimately responsible for continued compliance with all applicable laws and requirements, including but not limited to, local and state laws and regulations in which the customer's application is deployed and used.

Each message without a DEA Schedule will have the NDC checked to determine if the medication is a controlled substance at a federal or state level. Once a medication has been identified as a controlled substance, either federally or by the state it is written in or being sent to, the following validation checks occur:

- Apply the most restrictive DEA Schedule, federal or state, for EPCS processing.
- Validate that the state the prescription is written in/sent to allow e-Prescribing of controlled substances for the specific schedule of the medication in the message.
- For mail order pharmacies, Surescripts will not check the NDC against the location of the mail order pharmacy; however, the prescriber state is still validated. Mail order pharmacies are still required to perform the appropriate state validations.

Information regarding federal and state controlled substance prescribing laws and regulations is generally available from public sources. Federally, the Drug Enforcement Administration (DEA) posts its regulations at: **Diversion Control Division | Electronic Prescriptions for Controlled Substances (usdoj.gov)**, and at the state level, such information is available on board of pharmacy and/or state controlled substance authority websites. In addition, there are commercially available databases that can be used to research such information, such as at the National Association of Boards of Pharmacy (NABP) website (**NABP Survey of Pharmacy Law** and **NABPLAW Online**) or the Point-of-Care Partners (POCP) E-Prescribing State Law Review (**RRC ePrescribing Law Review**

(pocp.com). (Please note that Surescripts is sharing these resource links as examples and does not endorse or vouch for the reliability or completeness any of these potential information sources. Some of the resources linked may require the purchase of a license/membership to obtain additional information.)

EPCS DEA NCit Code

✅ **Quality Check - DEA Schedule Coding:** Send e-prescriptions for controlled substances with the appropriate DEA Schedule NCIt code as determined by the schedule of the medication within the DrugDescription field. The DEA Schedule is an attribute that drug compendia typically include for medications. Note that a medication could have a state-controlled level that is more restrictive than the federal level and it is the responsibility of the sender to ensure the correct DEA Schedule is sent.

Clinical Relevance/Rationale:

- EPCS transactions that do not comply with DEA regulations cannot be filled by receiving pharmacies, which may result in operational inefficiencies as well as delays in patient care.

Best Practices:

- Prescriber technology partners conduct regular internal audits to identify prescribers who are sending e-prescriptions for controlled substances that do not qualify as valid EPCS transactions per the DEA's EPCS requirements.
- Send an NDC for a controlled medication if it is included as a compound ingredient. Consider creating commonly ordered compound records that contain controlled substances that are linked to specific medication records.

Display Requirements

Surescripts understands our customers are in the best position to make workflow design decisions and we are committed to encouraging innovation. Surescripts is also committed to ensuring the highest level of quality and patient safety possible. If a workflow could result in a patient safety issue, or if a patient safety issue is identified, Surescripts may require application code changes to ensure positive patient outcomes.

R.300: The application shall be capable of providing search results that include all active pharmacies.

R.302: To ensure patient safety, the application shall take steps to ensure that the critical fields in the **Display Requirements Tables** section (as transmitted in the message) are reviewed by the sender for accuracy and displayed or made available to the receiver. The user shall be alerted if data in any of these elements has been truncated.

> **Note:** The code value for codified fields does not have to be displayed, only the description.

R.316: Pharmacy applications shall incorporate a prominent visual indication to pharmacy personnel using the pharmacy practice management system that the e-prescription they are viewing is either DEA compliant, non-DEA Compliant, or both as described below.

1. Pharmacy system alerts the pharmacist that the EPCS is DEA compliant and that if "seal of approval" is not on the EPCS, the pharmacist knows it is non-DEA compliant.
2. Pharmacy system alerts pharmacist when an EPCS is non-DEA compliant.
3. Pharmacy system does *both* (1) and (2).

Examples of possible indications include:

- A statement on the display such as: “This prescription meets the requirements of the Drug Enforcement Administration’s electronic prescribing for controlled substances rules (21 CFR Parts 1300, 1304, 1306, & 1311).”
- A statement on the display such as: “This prescription does not meet the requirements of the Drug Enforcement Administration’s electronic prescribing for controlled substances rules (21 CFR Parts 1300, 1304, 1306, & 1311).”
- A seal-of-approval icon or symbol that incorporates in its design, language such as “Authentic EPCS – received via DEA-approved processes.”
- A seal-of-disapproval icon or symbol that incorporates in its design language such as “NON-Authentic EPCS.”
- Other similar, unmistakable visual indications that vendors might devise.

Display Best Practices

At a minimum, pharmacy search results should include: Pharmacy Name, Street Address, City, State, Zip Code, Phone Number, and Specialty.

Directory Information

Directory Best Practices

✅ **Quality Checks - Directory and Routing Recommendations**: The e-prescribing network includes a directory for both pharmacies and prescribers. All pharmacies and prescribers are to be set up prior to transmitting messages across the network. The information needs to be updated regularly. Update directory information daily, using the nightly “delta” file to apply updates to your respective, internal databases. Complete a full update (or “true up”) at least once per week and do not block incoming prescription routing messages based on local directory information.

Prescribers frequently work in different practice settings, so it is important to identify whether the prescriber-patient relationship is valid, and the patient’s medical records are maintained. The Surescripts Provider Identifier (SPI) is the routing identifier that is assigned to a registered practice location in the Directory. Based on the vendor’s business model, a SPI is assigned to each respective practice location and used to route messages from that location accordingly, or, if the vendor participates in the Learning Directory, Surescripts will learn the additional practice locations based on the NewRx address content and append them in the Directory. All learned locations will have the same registered SPI; refill renewal requests will be routed to the registered SPI for all locations.

Prescribers:

The Drug Enforcement Agency (DEA) number and the National Provider Identifier (NPI) are widely used to identify prescribers. However, these identifiers cannot be used alone to identify prescribers due to various nuances, such as organizational versus individual NPIs, and multiple DEA numbers existing for a single prescriber.

For electronic prescribers, Surescripts uses the SPI to route messages. The SPI number is communicated by prescribers in e-prescription messages and is stored/catalogued by pharmacies upon receipt of messages. The prescriber technology partner administrator will maintain the accuracy of prescriber information in directories and make necessary updates using the following actions:

- Add a new prescriber to the directory.
- Update existing prescriber information.
- Download directory information to identify prescribers associated with the prescriber technology partner.
- Download the list of pharmacies on the network.

Pharmacies:

The NCPDP ID is used as the pharmacy's Surescripts routing number. The pharmacy technology partner administrator will maintain the accuracy of the pharmacy's information within the Surescripts Directory. This helps ensure that timely and regular updates are performed, thus preserving the accuracy and relevance of the data. Make sure to do the following:

- Add new pharmacies to the directory.
- Update existing pharmacy information.
- Download directory information to identify pharmacies associated with the pharmacy technology partner.
- Download the list of prescribers on the network.
- In the event that a NCPDP ID changes for a pharmacy location, contact the Surescripts Support team to discuss opportunities to transition the location with minimal impact to the pharmacy business.

Clinical Relevance/Rationale:

- Updating and maintaining directories is an integral part of a successful and efficient e-prescribing network. If the accuracy of prescriber and pharmacy information is not maintained, the pharmacy may not be able to contact the prescriber if needed. In addition, the pharmacy may not be able to route electronic refill renewal requests with certainty that the transaction is being delivered to the correct location. Pharmacies can also contribute to directory maintenance by updating their current operating status. Maintaining directory information ensures the relevant prescription information stays in the electronic channel to expedite processes and ensure patient safety.

RxRenewalRequest and RxChangeRequest Rerouting

Surescripts may reroute RxRenewalRequest and RxChangeRequest messages when the intended SPI is inactive or does not support the required service level. To support this process, Surescripts leverages standardized prescriber address information to identify other provider registrations at the same location. If an alternate SPI at that address supports the required service level and is designated as the primary recipient, the message may be forwarded to that SPI. If a valid alternate SPI is not identified, an error is returned to the pharmacy.

> **Notes**:
>
> - For additional details on address standardization and primary flag designations, refer to the Directory Implementation Guide, Address Best Practices section.
> - See **RxRenewal** and **RxChange** sections for more information on these messages.

Directory Requirements

S.203: Sender demographic information, when included in the message, shall match what was registered by the customer in the Surescripts Directory. When a prescribing system utilizes the Surescripts Learning Directory service, this requirement is satisfied for learned locations.

> **Note:** The address of the prescriber of the prescription order should be the practice physical address in which the patient encounter took place. For Long-Term Post Acute Care (LTPAC) based encounters, the prescriber should use the facility-based location, or, for home-based service, their practice of record for prescription orders. For Telehealth-based encounters that are not part of an associated prescriber practice location, the practice address within the message, and correlating directory record, should be associated with a prescriber associated credentialed location in the State from which the prescriber is licensed.

S.204: Recipient demographic information, when included in the message, shall match the Surescripts Directory or a Surescripts approved third party directory.

Sender and Recipient demographic information is defined as:

- Provider demographics:
  - SPI
  - NPI
  - Provider First Name
  - Provider Last Name
  - Address
  - Phone (Primary preferred, Secondary accepted)
  - Fax
- Pharmacy demographics:
  - NCPDPID
  - NPI
  - Business (Organization) Name

    > **Note:** The supplemental inclusion of clarifying descriptive content, such as store number or store type, which are not part of the business legal name, is permitted.

  - Address

    > **Note:** Use of approved third party directories that allow for name alignment to credentialing authorities and USPS address standardization, but do not materially modify the record, is allowed.

5. Messages Overview

This section provides guidelines for the data messaging interfaces between the prescribing system and the pharmacy. Some message flows include the utilization of LTPAC information. LTPAC is a variety of settings and services which help meet both the medical and non-medical needs of people with a chronic illness or disability who cannot care for themselves for long periods of time.

> **Notes**:
>
> - EPCS and LTPAC will have specific sections below where applicable.
> - For the purposes of this guide, when referring to LTPAC the term prescriber could be used in place of provider/prescriber/agent.

Quick Links

5.1. E-Prescribing Message Flows

E- Prescribing Message Flows Overview

The Surescripts E-Prescribing service enables new prescription transmissions from a prescriber to the patient's pharmacy of choice. The graphic below depicts allowable message flows between Surescripts network participants. Prescribers and pharmacies must have the appropriate service levels enabled to send or receive messages. See the Surescripts Directory Implementation Guide for more information.

R.318: Customers shall support the mandatory messages detailed in the Message Flow section of this guide per customer (Long Term and Post Acute Care (LTPAC) and non-LTPAC) settings and services:

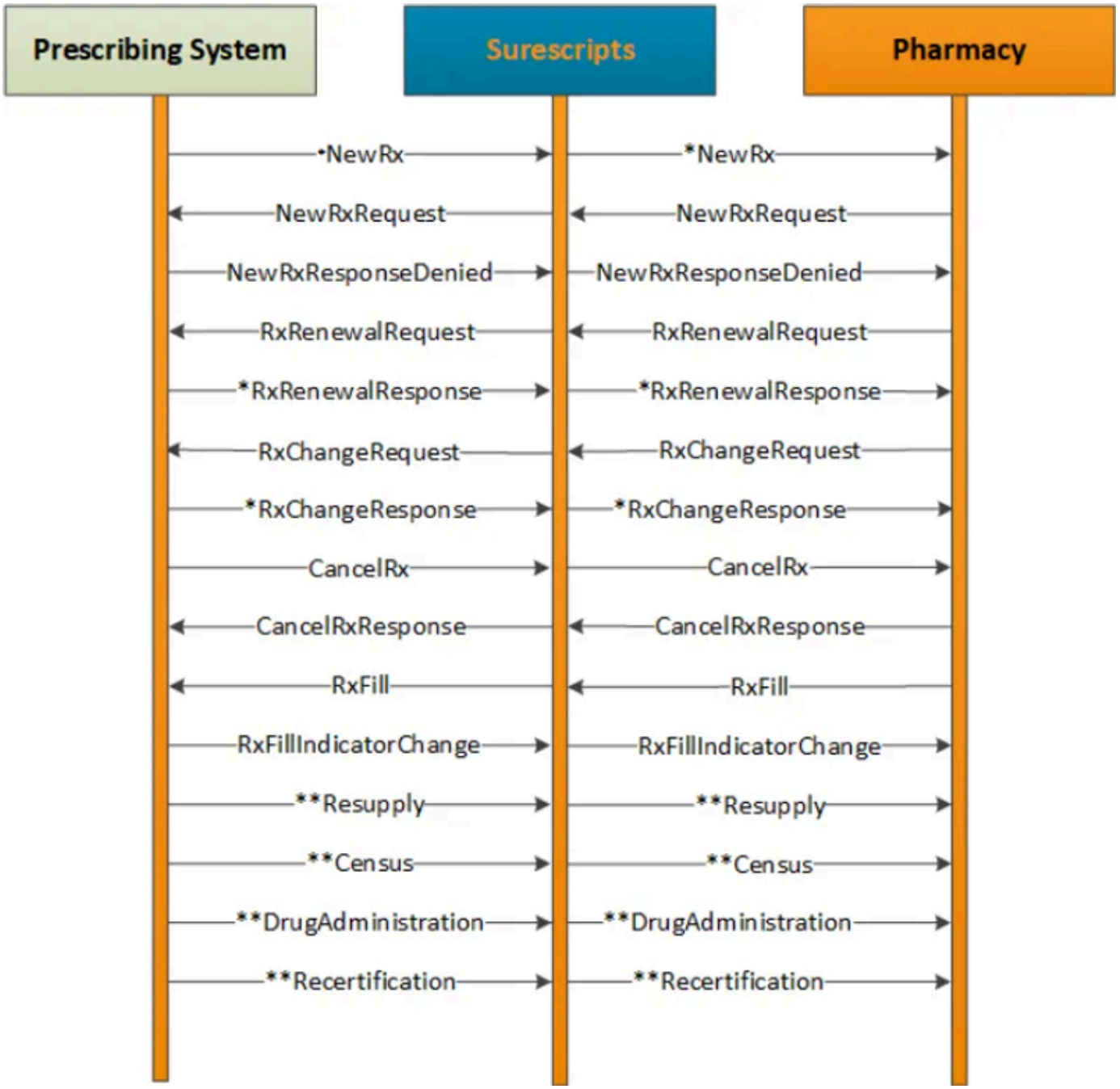
E-Prescribing Messages for non-LTPAC*:*

Required: NewRx; RxRenewalRequest/RxRenewalResponse; RxChangeRequest/RxChangeResponse; CancelRx/CancelRxResponse

E-Prescribing Messages for LTPAC:

Required: NewRx; CancelRx/CancelRxResponse; RxFill; RxFillIndicatorChange (pharmacies); Census; Resupply

Surescripts E-Prescribing Message Flow Diagram



Notes:

- Messages marked with one asterisk (*) are fillable messages. A fillable message is a message from the prescriber or prescribing system to the pharmacy that results in an initial prescription being filled, a change approval, or a refill approval. Other messages may support fillable messages or workflows.
- Messages marked with two asterisks (**) only apply to LTPAC.

Message Workflow

The following steps depict the basic workflow of a prescriber or pharmacy-initiated message:

1. Sender initiates a message for a patient via the sender's vendor system and transmits to Surescripts.
2. Surescripts validates the message:
    - If there is an issue with the message, Surescripts returns an Error back to the sender's vendor system and the process ends.
3. If no error in validation occurs, Surescripts routes the message to the appropriate receiver's vendor system.
4. The receiving system then validates the message and responds with a synchronous Status message (Code of either 000 or 010) or an Error to Surescripts.
5. Surescripts sends the synchronous response to the sender's vendor system:
    - If either the Status message (Code 010) or Error is returned, then the process ends.
6. If the synchronous message is a Status (Code 000) message, then the receiver's vendor system follows up with an asynchronous (free standing) Verify message (Code 010) or Error.
    - If a free standing asynchronous message is received, the sender's vendor system needs to synchronously acknowledge with a Status (Code 010) message.
    - When Surescripts receives either the Verify or Error, the message is validated and forwarded to the sender's vendor system.

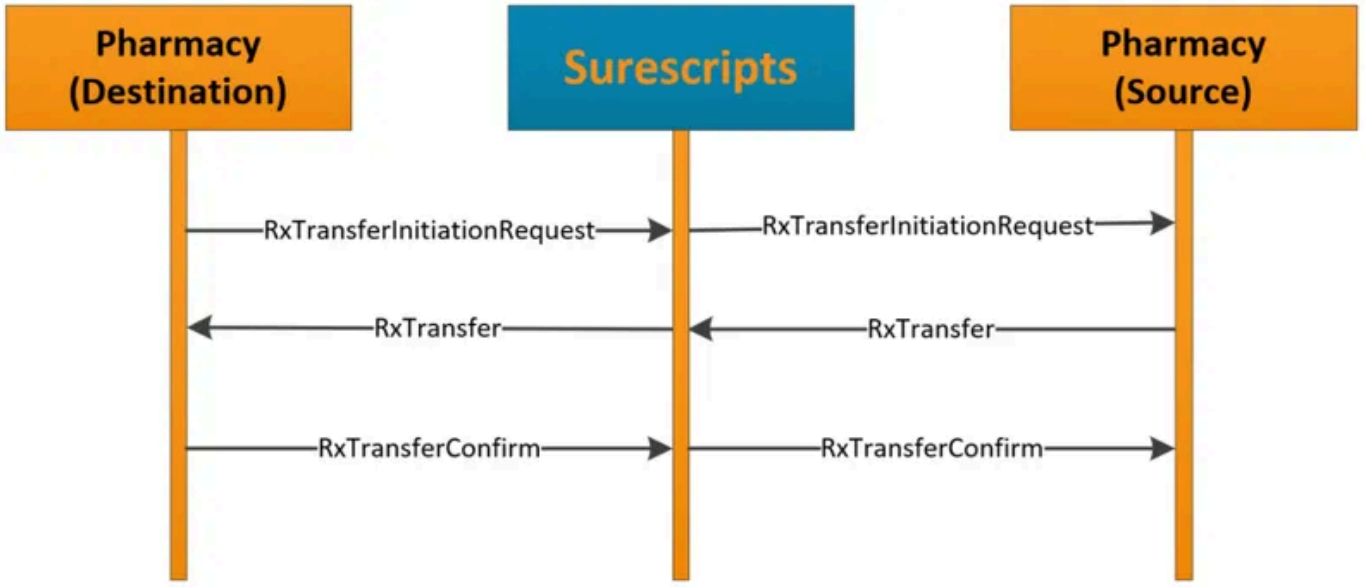
> **Note:** For additional information, see **Acknowledgement Message Table** section.

5.2. Pharmacy to Pharmacy Message Flow

Pharmacy to Pharmacy Flow

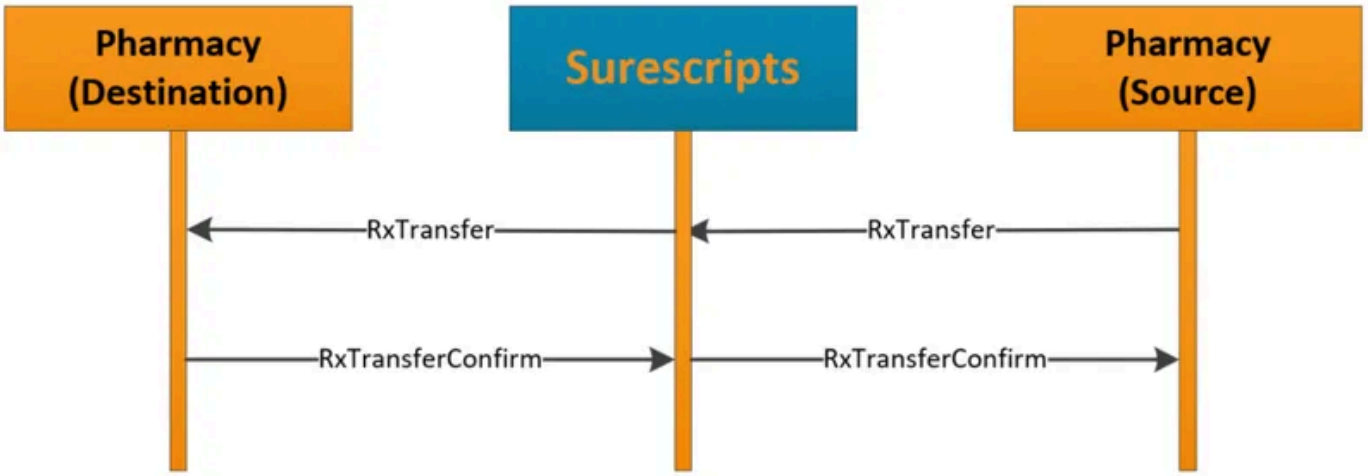
Solicited Pharmacy Transfer Flow

The following message flow is used by the destination (requesting) pharmacy to ask the source pharmacy to transfer one of more prescriptions for a specific patient. This is done using the prescription transfer request (RxTransferInitiationRequest) transaction.



Unsolicited Pharmacy Transfer Flow

The following message flow is used by the source pharmacy to transfer one prescription for a specific patient to the destination pharmacy. This model is unsolicited as the destination pharmacy is not expecting the transaction to be pushed from the source pharmacy.



5.3. NewRx

NewRx Overview

The NewRx message is an electronic prescription sent from the prescribing system to the pharmacy system using the NCPDP SCRIPT standard. A Status, Error, or Verify response is always sent after a NewRx message.

NewRx EPCS Requirements

- For CS-II only, one dispense event is permitted per the DEA IFR (Interim Final Rule). This means on a NewRx for a CS-II, the refill value must be equal to "0" (zero).
- Prescribers desiring to send a subsequent NewRx prescription(s) will send NewRxs with an effective date set in the future (example, 30 days, 60 days, 90 days), and the refill value on each will be set to "0" (zero).

NewRx LTPAC Requirements

- An open order is defined by specific usage of the medication quantity elements. An open order must have a medication CodeListQualifier = "QS" or "CF" and use the corresponding quantity value = "0" (zero). Open orders are dependent on regulatory expiration and audit processes in LTPAC settings and services.
- Open orders must not be sent for controlled substances when regulatory mandates apply.

> **Note:** In order for open orders to be successfully supported, the service level of LongTermCare must be enabled at the prescriber/pharmacy record level.

NewRx LTPAC Best Practices

- NewRx in the LTPAC setting or service may be used to convey an open order for a non-controlled substance or compound with a CodeListQualifier of QS or CF and a Quantity value of 0. These quantity distinctions notify the pharmacy that the prescription may be filled on a predefined trading partner agreed upon fill cycle. Orders that contain a defined quantity and number of fills may also be used in LTPAC settings and services with a CodeListQualifier of 38 and a quantity value >0. These prescriptions may be used within a care setting or as discharge orders to the patient's pharmacy of choice.
  - The number of refills for open orders = 99 and the number of refills for an acute closed order with defined quantity is determined by the prescriber.
- Prescribing system-initiated Change Process for LTPAC can be found in the **Prescribing System-Initiated Change Process for LTPAC - Requirements/Best Practices** section.
- OrderCaptureMethod should be used in all instances of NewRxs for LTPAC settings and services.
- Facility element information should be sent on all NewRx messages.
  - At a minimum, the Facility elements requires Identification. One or more Identification elements may be sent as needed, but at least one is required to be sent. Per NCPDP guidance in the Prescriber, Pharmacy and Facility Identifiers, the NPI is expected to be sent if one is known.
- Patient Location fields for unit, room and bed are important to the pharmacy profile of a resident and should also be sent when known.

5.4. RxRenewal

RxRenewal Overview

An RxRenewalRequest is originated by the pharmacy. This message is for the purpose of requesting approval for additional refills of a prescription.

R.313: RxRenewalRequests shall not be sent back to the prescriber for prescriptions where ProhibitRenewalRequest was set to true.

> **Note:** If a patient has approved refills remaining on a current prescription, no electronic message is required for a dispensing to occur.

An RxRenewalResponse is sent by the prescriber to the pharmacy in response to a request to refill a prescription. The response indicates whether the RxRenewalRequest has been Approved, ApprovedWithChanges, Denied, Replaced, or Pending. An Approved, ApprovedWithChanges, or Replace response indicates the current fillable prescription. In this case, a CancelRx is not sent for the original prescription following the RxRenewalResponse.

> **Note:** The MedicationResponse element contains the medication information that the prescriber is approving within an RxRenewalResponse. The Approved, ApprovedWithChanges, or Replace RxRenewalResponse is considered a fillable message.

RxRenewal Requirements

- Fillable RxRenewalResponse messages for controlled substance medications must be digitally signed.
- The RxRenewalRequest schema supports both a MedicationPrescribed and a MedicationDispensed loop. The MedicationDispensed element is the required element to be used per the RxRenewalRequest schema.
- In an RxRenewalRequest, one medication loop must contain WrittenDate. If the MedicationPrescribed loop is not present, then the MedicationDispensed loop must provide WrittenDate.
- When sent, PharmacyRequestedRefills must not be "0" (zero). Do not send this element if you want to allow the prescriber to determine appropriate number of refills.

RxRenewal Best Practices

- The MedicationDispensed element is used by the pharmacy to designate what the pharmacy is requesting for a renewal. The prescribing system reviews the request and sends their response to the MedicationDispensed in the MedicationResponse element.

  Examples:

  NewRx sent by prescriber with substitutions allowed.

  MedicationPrescribed: Lipitor 10 MG Oral Tablet

  NumberOfRefills: 1

  Pharmacy dispenses Atorvastatin 10 MG Oral Tablet

  Pharmacy sends an RxRenewalRequest with the following information

MedicationPrescribed: Lipitor 10 MG Oral Tablet

NumberOfRefills: 1

MedicationDispensed: Atorvastatin 10 MG Oral Tablet

PharmacyRequestedRefills: 2

Prescriber approves (based upon MedicationDispensed) and sends an RxRenewalResponse

Response type Approved:

MedicationResponse: Atorvastatin 10 MG Oral Tablet

NumberOfRefills: 2

Response type ApprovedWithChanges:

MedicationResponse: Atorvastatin 10 MG Oral Tablet

NumberOfRefills: 6

Response type Replace:

MedicationResponse: Lipitor 10 MG Oral Tablet

NumberOfRefills: 2

Note: For more information on Refills and Number of Dispensings, see the **NumberOfRefills** section.

- If the **non-EPCS** authorized prescriber receives an RxRenewalRequest for a controlled substance, they respond with a Denied message to the pharmacy. Should the prescriber wish to approve the request without having the "ControlledSubstance" service level enabled, they may then continue with their non-Electronic Data Interchange (EDI) workflow as determined by their application.
- The NDC/ProductCode in the RxRenewalRequest should not be the sole determination of the identification of the requested medication. When the incoming NDC does not match the related NewRx or cannot be found, systems should use other potential identifiers (e.g., RxNorm codes) and should always allow manual review of the drug description by the user. Therefore, all response types should be permitted (i.e., approved, approved with changes, denied, and replace).

Note: For more information on how to send a FollowUpRequest, see the **FollowUp Request Element Usage** section.

RxRenewal Prescriber Best Practices

- Prescribers should review all requests. Prescribers should not delete a request message from a processing queue without a response being generated to the requester. Prescribers should respond to RxRenewalRequests within 48 hours. See **RxRenewal LTPAC Best Practices** section for exception information.
- When using the Pending response, the provider should populate the reason code and ExpectedPendedResponseDate so the pharmacy knows when to expect an approval or denial to the request.
- If a message is received with a RequestExpirationDate, the receiving system should not send a response after that date.
- Matching a request back to an original message is not required to present the RxRenewalRequest to the Prescriber. See the **Message Linkage** section for more details.

- If another prescriber is responding to an RxRenewalRequest for non-controlled substances on the original prescriber's behalf (i.e., original prescriber who is out of the office), then one of the following options should be used. For controlled substance requests see **RxRenewal EPCS Requirements**.
  - PrescriberAgent - Used if the prescriber is out for a short time. The prescriber field in the RxRenewalResponse should contain the prescriber's name. The PrescriberAgent element should contain the name of the agent that is authorized to respond to refills for the prescriber. The RxRenewalRequest should be responded to with the RxRenewalResponse type of Replace.
  - Alternate Prescriber - When the original prescriber is unable to respond, the RxRenewalRequest should be responded to with the RxRenewalResponse type of Replace. The new prescriber information should be populated in the Prescriber elements. The new prescriber's SPI should be sent in the From element of the message header. If the original prescriber is the prescriber who should be handling any subsequent requests, the original prescriber information can be sent in the FollowUpPrescriber elements.

RxRenewal Pharmacy Best Practices

- If the prescriber has not responded within 48 hours the FollowUpRequest workflow should be utilized. See **RxRenewal LTPAC Best Practices** for exception information.
- When a Pending response is received, a pharmacy should not send follow-up requests until the day after the ExpectedPendedResponseDate.
- If request is no longer necessary, then a subsequent message with the Retraction/Withdrawal indicator included in the header should be used. For more information, see the MessageIndicatorFlag element in the **Message Header Elements** section.
- If a response will not be accepted by a pharmacy after a specific time limit, then that date should be populated in the RequestExpirationDate.
- A pharmacy may send an RxRenewalRequest for controlled substances regardless of whether the prescriber has the "ControlledSubstance" service level.
- For RxRenewal routing:
  - If FollowUpPrescriber was populated and ProhibitRenewalRequest was set to "true", the corresponding RxRenewalRequest should be sent to the FollowUpPrescriber's SPI. Otherwise, retain the original sending SPI for the electronically received NewRx. Evaluate this SPI (e.g., has Refill service level), and send RxRenewalRequest to this record.
  - If the original sending SPI is not available or does not have Refill service level, then it is important to ensure that when sending an RxRenewalRequest the correct SPI is selected based on service level and location. For example, confirm the Individual NPI, Address Line 1 or Address Line 2, Postal Code, Phone Fax, or Clinic Name prior to sending the message.

RxRenewal EPCS Requirements

- Denied and Replace responses must be the only allowed RxRenewalResponse types for all controlled substances.
- The prescriber signing the RxRenewalResponse to approve a controlled substance populates the prescriber element with their information, even if they are responding to a request that was sent to another prescriber.

RxRenewal LTPAC Best Practices

- RxRenewalRequests may be generated as an option for open orders that have hit their regulatory expiratory limit.
  - Prescribers in the LTPAC industry might not respond to RxRenewalRequests in a care setting for up to 30 days.
  - Pharmacies will want to understand that this length of time may impact workflows for follow up requests or urgent needs.

5.5. RxChange

RxChange Overview

An RxChangeRequest message is originated by the pharmacy to request a change to a new or fillable prescription. Response types for RxChangeRequests are Approved, ApprovedWithChanges, Denied, Validated, and Pending.

An RxChangeRequest may be sent with the following MessageRequestCode(s):

- "G" (Generic Substitution), may be used to request a prescriber allow the dispensing of a generic medication when substitution is not allowed by prescriber or regulations.
- "P" (Prior Authorization Required), may be used to request a prescriber review the drug requested and obtain a prior authorization from the payer for the existing prescription.

  > **Note:** The PriorAuthorization RxChangeResponse, unlike the other responses, is not considered a fillable message, cannot be used for medication changes, and does not have to be digitally signed.

  "T" (Therapeutic Interchange/Substitution), may be used to request a prescriber authorize a therapy change to the original prescription. This includes the workflow where a pharmacy requests a 30 to 90 day quantity or a formulary change.
- "D" (DUE – Drug Use Evaluation), may be used to request a prescriber authorize a change to the patient's current medication therapy, such as a dosing regimen change or an alternative medication that will have fewer, or no, adverse effects than the original prescription.
- "S" (Script Clarification), may be used to request a prescriber clarify the original prescription including, but not limited to DrugDescription, SigText, DaysSupply, etc.
- "OS" (Out of Stock), may be used to request a prescriber authorize a change to the original prescription due to the pharmacy being out of stock of the requested medication.
- “RM” (REMS), may be used when the pharmacy needs additional information from the prescriber about the REMS Requirements. (This is currently not supported by Surescripts).
- "U" (Prescriber Authorization), may be used to request prescriber authorization information, such as confirming their DEA number or enrollment with the prescription benefit plan. Denied and Validated are the only acceptable RxChangeResponse types for this workflow. Use the elements in the Validated response type to return the requested information.

RxChange Requirements

- An RxChangeResponse must be Validated or Denied when the RxChangeRequest has a MessageCodeRequest of "U" (Prescriber Authorization).
- MedicationPrescribed must be present when an RxChangeResponse is Approved, ApprovedWithChanges, or Validated.
- An RxChangeResponse must not be an ApprovedWithChanges when the RxChangeRequest has a MessageRequestCode of "P" (Prior Authorization).
- In the RxChange Prescriber Authorization (U) workflow, at least one MessageRequestSubCode must be sent.

RxChange Best Practices

- Matching a request back to an original message is strongly recommended, but not required to present the RxChangeRequest to the prescriber. See the **Message Linkage** section for more details.

- When ProhibitRenewalRequest is set to “true” in an RxChangeResponse, RxRenewalRequests should not be sent back to the originating prescriber.
- The MedicationRequested segment contains discrete elements to provide the requested changes and the Note field should only be used when the additional information cannot be captured discretely.
- RxChangeRequests should not be sent for a controlled substance medication other than "P" or "U". However, the prescribing system should be able to process and respond to any RxChangeRequest received for a controlled substance.
- The RxChangeResponse types have slightly different meaning than the response types for RxRenewal. The response type is determined by the changes being made and the appropriate response types should be used.
    - Approved response type should be used when a MedicationRequested occurrence from the RxChangeRequest is returned in MedicationPrescribed of the RxChangeResponse and no other changes are made. The Approved response (except the PriorAuthorization (P) use case) is considered a new fillable prescription and indicates to the pharmacy that the in-process prescription should no longer be dispensed and should be cancelled.
    - RxChangeResponse optional elements that are not part of the RxChangeRequest schema can be added on ApprovedWithChanges.
- RxChange for PriorAuthorization (P):
    - Pharmacies should assess the PriorAuthorizationStatus element of the related prescription from the sender to determine if an RxChangeRequest for PriorAuthorization (P) is necessary.
    - Prescribing vendors utilizing Surescripts Prior Authorization workflows should refer to the supplemental information in **Alternate RxChange Workflows for Prior Authorization**.
- The MessageRequestCode and MessageRequestSubCodes sent on the RxChangeRequest should be returned back on the RxChangeResponse. For each MessageRequestSubCode sent, the corresponding ResponseReasonCode should also be sent in the Validated response.

RxChange Prescriber Best Practices

- Prescribers should review and respond to all requests within 48 hours.
- When using a Pending response, the provider should populate the reason code and ExpectedPendedResponseDate so the pharmacy knows when to expect an approval or denial to the request.
- If a message is received with a RequestExpirationDate, the receiving system should not send a response after that date.
- For use cases G, T, S, and OS the pharmacy may provide suggestions in the MedicationRequested segment. Prescribers should review the requested medication(s) and be allowed to modify it as they see fit.
- If a prescriber location does not use a particular RxChange use case, then a specific error message should be returned indicating that workflow is not supported. Example: “The prescriber location does not support the RxChange use case of PA.”

RxChange Pharmacy Best Practices

- At least one occurrence of MedicationRequested should be sent, unless the use cases are for PriorAuthorization (P) or PrescriberAuthorization (U).
- When a Pending response is received, a pharmacy should not send follow-up requests until the day after the ExpectedPendedResponseDate.
- If the prescriber has not responded within 48 hours the FollowUpRequest workflow should be utilized.
- If request is no longer necessary, then a subsequent message with the Retraction/Withdrawal indicator included in the header should be used. For more information, see the MessageIndicatorFlag element in the **Message Header Elements** section.

- If a response will not be accepted by a pharmacy after a specific time limit, then that date should be populated in the RequestExpirationDate.
- For RxChange routing:
  - Retain the original sending SPI for the electronically received NewRx or affirmative RxRenewalResponse. Evaluate this SPI (e.g., has RxChange service level), and send RxChangeRequest to this record.
  - RxChange Requests should only be routed back to the SPI that sent the original prescription.
  - Do not send requests to a prescriber location that does not have the RxChange service level.

RxChange LTPAC Best Practices

- LTPAC settings and services do not always have prescribers available to approve or deny changes when initiated by a pharmacy. In many cases, facilities and pharmacies have contracts that apply to generic and therapeutic substitutions. RxFill is used in many cases to communicate when substitutions are made. If there is a pharmacy requested change to a prescribed therapy that is beyond trading partner agreement and RxChange is not supported, an alternative method of communication is recommended.
- The Prescriber-Initiated Change Process is used for prescribers to alter existing therapies and utilizes a NewRx > CancelRx > NewRx process with appropriate message linking and MessageRequestCode field indicators. This process is outlined in the CancelRx section. Appropriate message linking and field population is also outlined in the CancelRx section.

5.6. CancelRx and CancelRx Response

CancelRx and CancelRx Response Overview

The CancelRx is sent by the prescriber to notify the pharmacy that a previously prescribed prescription should be inactivated, and no additional product should be dispensed.

The CancelRxResponse is sent from the pharmacy to the prescribing system in response to a CancelRx.

> **Reference:** Specific formatting exists for CancelRxResponses, for more information see the NCPDP SCRIPT Implementation Recommendations, V1.69 (or latest version) Section 12.1.

CancelRx and CancelRxResponse Requirements

R.314: Receiving systems shall not automatically deny a CancelRx message due to the absence of either the PrescriberOrderNumber or the RelatesToMessageID.

CancelRx and CancelRxResponse Provider Best Practices

- When a CancelRx message is sent, a ReasonForCancellation should be sent to provide context for why the prescription is being cancelled.
- If the ReasonForCancellation is an allergic reaction, then the patient's allergies should be included.

Prescribing System-Initiated Change Process for LTPAC - Requirements/Best Practices

- **R.312:** In LTPAC prescribing systems, when making a prescription change using a CancelRx followed by a NewRx, a MessageRequestCode shall be used to identify the type/severity of change made. This field shall be sent in both the CancelRx and the subsequent NewRx.
- The ChangeOfPrescriptionStatusFlag should contain the appropriate code for canceling a medication that has not been dispensed or discontinuing an active order.

  Values:

  C = Use for canceling a prescription prior to a dispensing (administration)

  D = Used for canceling a prescription that has been dispensed (administered)
- Some scenarios for Prescriber-Initiated Changes include:
  - A data entry error is corrected by a prescriber or an agent of a prescriber and a CancelRx is sent with a subsequent NewRx.
  - A prescriber alters a course of therapy after making a clinical decision regarding a medication and sends the pharmacy a CancelRx followed by a subsequent NewRx.
- CancelRx should contain a CodeListQualifier value of "QS" (Quantity sufficient as determined by the dispensing pharmacy) or "CF" (Compound Final Quantity) and Quantity of "0" when discontinuing an open order.

5.7. RxTransferInitiationRequest

RxTransferInitiationRequest Overview

The RxTransferInitiationRequest message allows the destination pharmacy to solicit (pull) one or more prescriptions from the source pharmacy on behalf of a patient.

The destination pharmacy can send a “SPECIFIC” RxTransferInitiationRequest for a single prescription or send an “ALL” request for all of the patient's current medications. If multiple prescriptions are needed but not all of them, then separate requests for each medication must be made.

RxTransferInitiationRequest Requirements

- The RxTransferInitiationRequest “ALL” messages must not include the MedicationTransferRequested elements.
- The RxTransferInitiationRequest is allowed for active, current therapy or prescriptions allowed to be transferred by regulation.
- This transaction is not allowed for compounds, bulk transfers like file buyouts, or as a replacement for Medication History.
- Pharmacies are required to be enabled for all three transactions (RxTransferInitiationRequest, RxTransfer, and RxTransferConfirm) to utilize the electronic transfer messages.
- Pharmacies are required to use the Directory SearchOrganizations message (available in version 6.2 or later) to capture the necessary directory information to use the transfer transactions.

RxTransferInitiationRequest EPCS Requirements

The DEA’s EPCS IFR states in Section 1306.25(b) that: “Transfers are subject to the following requirements: (1) The transfer must be communicated directly between two licensed pharmacists.” Customers are responsible for adhering to all federal and state requirements for controlled substances including information required when transferring prescriptions.

RxTransferInitiationRequest Best Practices

- RxTransferInitiationRequest messages should be treated as a high priority and response times should adhere to all state/federal regulations.
- The FollowUpRequest element can be used if a timely response is not received.
- If request is no longer necessary, then a subsequent message with the Retraction/Withdrawal indicator included in the header should be used.
- Requests should not be deleted from a processing queue without a response being generated to the source pharmacy.
- The RxTransferInitiationRequest for a specific prescription can be made by including the drug description and additional fields such as patient's prescription number (SourceReference), drug name, drug class, or drug category.
- The Pharmacist element should be used to convey the demographic details of the pharmacist making the request as this information may be required by regulation.

5.8. RxTransfer

RxTransfer Overview

The RxTransfer message is used in both the push and pull scenarios. It allows the source pharmacy to respond to the RxTransferInitiationRequest with an Approved or Denied response. It is also used by the source pharmacy to send an unsolicited (push) transaction to the destination pharmacy at the patient's request.

RxTransfer Requirements

- Send separate push messages for each prescription that needs to be transferred.
- An RxTransfer response of Denied applies to all prescriptions requested and must contain a ReasonCode.
- Pharmacies are required to be enabled for all three transactions (RxTransferInitiationRequest, RxTransfer, and RxTransferConfirm).
- The Source Pharmacy is required in the Medication Transferred > Medication Dispensed element if transferring a controlled substance.
- In the MedicationTransferred element, the PrescriptionPreviouslyFilled is required and designates if a prescription has had any dispensings. If there is a known dispensing, then MedicationDispensed is required to be included.

RxTransfer EPCS Requirements

- Controlled substances can only be transferred if they were originally prescribed electronically.
- The MedicationPrescribed, MedicationDispensed, Pharmacy and Pharmacist include elements required to be captured on controlled substance transfers.
- The digital signature must be transferred if it was included in the original prescription.
- All fills should be documented in the MedicationTransferred/MedicationDispensed composite.

RxTransfer Best Practices

- RxTransfer messages should be treated as a high priority and response times should adhere to all state/federal regulations.
- If request is no longer necessary, then the Retraction/Withdrawal message should be used.
- The pharmacy should review all RxTransfer messages. They should not be deleted from a processing queue without a response being generated to the source pharmacy.
- If a transfer scenario is not supported, such as “ALL” or controlled substances, then a clear response should be provided such as “Pharmacy location does not support the RxTransfer workflow for “ALL”.
- The Pharmacist element should be used to identify the pharmacist responding with the transferred prescription(s).
- If Allergies, Observations, Supervisor and/or Notes are included in the original prescription, it is recommended to include those in the RxTransfer message.
- The source Pharmacy should send RxFill status of Transferred to notify the prescribing system that the prescription is now at a different pharmacy. For additional details see RxFill/RxFillIndicatorChange Best Practices.

5.9. RxTransferConfirm

RxTransferConfirm Overview

The RxTransferConfirm message allows the destination pharmacy to respond to an RxTransfer request with an Approved or Denied response that the transfer of a prescription(s) from the source pharmacy has been completed.

RxTransferConfirm Requirements

- Pharmacies are required to be enabled for all three transactions (RxTransferInitiationRequest, RxTransfer, and RxTransferConfirm).
- RxTransferRequest is required to be sent by the destination pharmacy that initiated the pull request but is not sent in the push scenario.
- An RxTransferConfirm response of Denied applies to all prescriptions requested and must contain a ReasonCode.
- Sending the RxFillConfirmIndicator is mandatory to indicate if the destination pharmacy supports RxFill notifications.

RxTransferConfirm Best Practices

- An RxTransfer request is considered pending until a response is received.
- If a confirmation is not received in a reasonable amount of time, then manual processes should be followed.
- The source pharmacy has the initial relationship with the prescriber and should send the Fill status of “Transferred” if the destination pharmacy does not support RxFill. The source pharmacy would know this from the RxFill Confirm indicator value sent.

5.10. RxFill/RxFillInidicatorChange

RxFill/RxFillIndicatorChange Overview

RxFill is used to provide prescribers with information regarding dispensing activity for a prescription. There are three common use cases for RxFill:

- To inform prescribers of a dispensing related activity for adherence monitoring typically used in a retail setting.
- Used in LTPAC settings to synchronize the care setting or service application with the pharmacy dispensing information.
- The message can be sent by the pharmacy as part of required regulatory notifications that may be sent regardless of the RxFillIndicator options sent within a message.

For prescribing systems, support of the RxFillIndicator element includes populating the desired value in prescriber-initiated messages such as NewRx, RxRenewalResponse, RxChangeResponse, and Resupply. RxFill messages are not to be sent to a prescriber location that does not have the RxFill service level.

For pharmacy systems, this includes sending fill status notifications based on the indications selected by the prescriber as well as adding or altering preferred notification types when the RxFillIndicatorChange is received. Per NCPDP guidance, if a RxFillIndicator element is sent on the NewRx but not on subsequent messages, the preferences selected in the NewRx are respected until actively changed by the prescriber.

RxFill/RxFillIndicatorChange Workflow and Scenarios

In the event that prescriber selections are made, the RxFill process starts with sending the RxFillIndicator element within the NewRx or applicable prescriber initiated message and the pharmacy then tracks the desired indications. In subsequent prescriber-initiated messages options may be added or altered for the preferred status types. If no RxFillIndicator is sent on the original NewRx, then no RxFill messages should be expected outside of trading partner agreements or regulatory required notifications. Additionally, prescribers have the ability to send an RxFillIndicatorChange message to request alterations to preferred fill status notifications.

The following scenarios are examples of how the RxFillIndicator and RxFillIndicatorChange message can be used.

Scenario 1 – Prescriber opts into receiving all RxFill notifications and then alters preferred selection:

1. Prescriber-initiated message sent with RxFillIndicator signifying “All” to a pharmacy that is enabled for RxFill.
2. Pharmacy processes the message and tracks the preferred fill status options.
3. Prescriber chooses to alter selected fill status options to “NotDispensed” using the RxFillIndicatorChange message.
4. Pharmacy updates the requested types and sends fill status only when prescription is not dispensed.
    - This RxFill message type may be sent when a patient does not pick up an automatic refill and the prescription is returned to stock.

Scenario 2 – Prescriber initiates the process to indicate preference for **PartiallyDispensed and NotDispensed only**, and then chooses not to send any RxFillIndicator on an RxRenewalResponse:

1. Prescriber sends NewRx with RxFillindicator signifying “PartiallyDispensed" and "NotDispensed” only.
2. Pharmacy processes the message and tracks the preferred fill status options.
3. Pharmacy sends RxFill messages only when the selected dispensing activity occurs.
    - This RxFill message type may be sent when a regulatory limitation causes only a partial fill to be dispensed to the patient.
4. Pharmacy sends RxRenewalRequest.

5. Prescriber sends an RxRenewalResponse with no RxFillIndicator.
6. Pharmacy system processes the message. RxFill messages are sent based on the indication for Partially Dispensed and Not Dispensed indications on the NewRx.

> **Note:** As per Surescripts Directories requirements, RxFillIndicatorChange messages will only be sent to pharmacies that have the service level enabled to allow them to receive RxFillIndicatorChange messages.

RxFill/RxFillIndicatorChange Requirements

- **R.315**: The pharmacy shall support the most recent RxFillIndicator for a prescription, either within the message or as an independent RxFillIndicatorChange message. If the pharmacy does not support RxTransfer, the RxFill FillStatus of Transferred is not required to be supported.

- Pharmacy systems are required to support all other fill status types.
- Pharmacy systems utilizing RxFill are required to support the RxFillIndicator element and the RxFillIndicatorChange message. The prescribing systems utilizing RxFill are required to support the RxFillIndicator element and are recommended to support the RxFillIndicatorChange message.
- One medication loop must contain WrittenDate. If the MedicationPrescribed loop is not present, then the MedicationDispensed loop must provide WrittenDate.
- When the status of the message is Dispensed or PartiallyDispensed, then the MedicationDispensed segment must be sent. When the status of the message is NotDispensed or Transferred, the MedicationPrescribed must be sent. For any status, both MedicationPrescribed and MedicationDispensed should be sent when available.

RxFill/RxFillIndicatorChange Best Practices

> **Note:** In the context of an RxFill message, 'Dispensed' indicates the medication is no longer in the possession of the pharmacy and has been handed, shipped, or delivered to the patient (or the patient's caregiver/representative). If the medication is still located in the pharmacy, it is not yet 'Dispensed'.

- The RxFill message contains dispensing and prescription transfer related information and therefore should be linked to any prescribing system initiated message that pertains to the reason the notification is being generated using the RelatesToMessageID.
- Fillable messages and Resupply should contain the RxFillIndicator if RxFill messages are desired.
- Send the Facility NPI in the FacilityIdentification element of the RxFill message when known.
- Once a prescription transfer is complete the pharmacy that has transferred the prescription should send a final RxFill message to the prescriber indicating the transfer status. If the transfer occurred electronically, and RxFillConfirmIndicator identifies the new pharmacy as supporting RxFill, then the message should also contain any information available about the pharmacy the prescription was transferred to, in the Notes field of the Fill Status Type "Transferred" element. If the receiving pharmacy does not support RxFill, then the transferring pharmacy should send a RxFill message with a Fill Status of "Transferred" and indicate in the Notes field that the receiving pharmacy does not support RxFill.
- While the use of ReasonCodes or Notes is optional to send in RxFill messages, pharmacy systems are strongly encouraged to support the inclusion of these additional elements. The Notes field should only be used when adding additional context or information that cannot be clearly communicated using the discrete data elements.

RxFill/RxFillIndicatorChange LTPAC Best Practices

- When a prescription is sent to a pharmacy via non-electronic means (e.g., Fax), the pharmacy will not have an indication of what types of fill status notifications the prescriber desires. In the LTPAC care setting, there is still a need to receive an RxFill message for prescriptions sent via a non-electronic method. Partnership agreements can allow RxFill messages to be sent, regardless of the method in which the pharmacy received the prescription.
- Resupply messages include the ability to alter selected RxFillIndicator preferences.
  - If no RxFillIndicator element is indicated in the Resupply message, no change would be made to previous preferences.
  - Care should be taken by the prescribing system when sending prescriptions with DoNotFill on profile only orders. This is to indicate to the pharmacy if any dispensing notifications are expected outside of trading partner agreements.
- The RxFill message is one method a prescribing system can use to reconcile a medication received to the original prescription prescribed for the purpose of administration, preventing unnecessary NewRxs to the pharmacy.

5.11. NewRxRequest/NewRxResponseDenied

NewRxRequest/NewRxResponseDenied Overview

A NewRxRequest can be sent from the pharmacy to the prescriber to request a new prescription for a patient. The patient may request this from a pharmacy, even if they have not had the prescription at that pharmacy previously. The prescriber responds either by sending a NewRx, which indicates approval, or a NewRxResponseDenied if they do not wish to approve the request.

NewRxRequest/NewRxResponseDenied Requirements

- In order to utilize NewRxRequest messages, service levels for NewRx, NewRxRequest, and NewRxResponseDenied must be enabled.
- A NewRxResponseDenied message must contain a DenialReason or a ReasonCode.
- The MessageID from the NewRxRequest is to be returned in the NewRx or NewRxResponseDenied RelatesToMessageID field.

NewRxRequest/NewRxResponseDenied Best Practices

- Scenarios for utilizing this message include requesting a medication:
  - by the specific drug name, strength and form
  - by the drug class or drug category
  - by condition being treated
  - that was not filled and has expired
  - by a different prescriber
- The NewRxRequest requires a DrugDescription to be sent. This should be populated with the compendia drug name, strength and form, when known, or it can be populated with the actual drug class or the specific type of medication being requested. Supplemental information such as drug code or drug class, diagnosis or Sig will assist the prescriber in determining the correct medication being requested. Incomplete or non-discrete information could impact the ability of the prescriber to respond to the request.
- For NewRxRequests routing:
  - Pharmacists should review all requests prior to submitting to the prescriber.
  - Prescriber location should be associated to the SPI with the appropriate service level where the patient encounters occurred.
- Prescribers should respond to NewRxRequests within 72 hours.
- If a message is received by a prescriber with a RequestExpirationDate, the receiving system should not send a response after that date.
- If request is no longer necessary, then a subsequent message with the Retraction/Withdrawal indicator included in the header should be used. For more information, see the MessageIndicatorFlag element in the **Message Header Elements** section.
- If a response will not be accepted by a pharmacy after a specific time limit, then that date should be populated in the RequestExpirationDate.
- The Note element should only be used to convey information that cannot be captured in the discrete elements.

5.12. Census

Census Overview

A Census notification message is sent from an LTPAC setting or service to the pharmacy to provide resident status. This message contains information related to the admission, discharge, and transfer status along with profile data such as diagnosis, allergy, and payer information. This message can be sent when any update to a patient profile information is made.

Census Requirements

- There are no requirements that are unique to this message. The validations applied to common elements found in other messages are **found in the tables in the Display Requirements Tables - Census** section.

Census Best Practices

- In some LTPAC pharmacies, a Census message that includes discharge information is sufficient to discontinue all prescriptions for that patient or resident's profile and no CancelRx is expected.
  - Timing of messages should be considered when discharging residents. If the Census message is sent prior to any CancelRx messages to discontinue prescriptions, a CancelRxResponse of Denied may occur.
  - It is best for trading partner agreements to stipulate the expected workflow.
- Updated External Code List (ECL) values in the MessageRequestCode make the options for communicating the type of census information more distinguishable to the pharmacy. Using the version as defined by NCPDP will ensure more accurate resident profile and decrease manual processes.
  - PriorPeriodCorrection segment allows the sender to identify a correction to previously sent Census messaging with incorrect payer information.

5.13. Resupply

Resupply Overview

Resupply messages are sent from a LTPAC setting or service to a pharmacy via the prescribing system as a request to replenish inventory. This message can be used for on-demand pharmacy or a cycle fill pharmacy depending on the need for inventory. A Status, Error, or Verify response is always sent after a Resupply message is received.

Resupply Requirements

A Resupply message must follow the business rules within elements found in subsequent sections of this guide.

R.311: When sending a Resupply message for a resident that resides within a facility care setting, the current facility data and patient location shall be populated.

Resupply EPCS Requirements

- Resupply is not a fillable message, only a request for supply or inventory. If an original prescription is for a controlled substance and the pharmacy has only supplied a portion of the original quantity, the Resupply can be used to request up to but not more than the total quantity approved in the NewRx.

Resupply Best Practices

When requesting inventory from a LTPAC pharmacy either the UrgencyIndicatorCode or the NeededNoLaterThan element found within the MedicationPrescribed element may be populated. These indicators will notify the pharmacy that inventory is critically low and cannot wait until the next routine delivery. It is not necessary to populate both elements.

When requesting inventory that is not critical to patient safety or a potential lapse in treatment, the NeededNoLaterThan element may be used to indicate a date and reason, whereas the UrgencyIndicatorCode is a flag only populated for a highly urgent situation.

Occasionally Resupply messages are sent as a standard practice of inventory management in a LTPAC setting or service and an RxFill message of NotDispensed – Requested Refill too soon is returned from the pharmacy. The Resupply has a FollowUpRequest element that may be used to make a subsequent request. These follow-up requests should follow a minimum of 24 hours between requests or time periods defined in trading partner agreements.

Message linkage would include a RelatesToMessageID that is the MessageID from the last fillable messages, such as NewRx. Non-electronic messages may disrupt the workflow and a RelatesToMessageID may not be present, but should be populated when possible to assist both systems in linking messages.

5.14. DrugAdministration

DrugAdministration Overview

The DrugAdministration message is a notification from a LTPAC setting or service to the pharmacy where prescribed medications are managed through cycle fills and related resupply inventory events. This message specifically communicates when inventory should be suspended, or held, and when it should be resumed. These notifications allow pharmacy systems to better control inventory and manage costs.

DrugAdministration Requirements

- There are no requirements that are unique to this message. The validations applied to common elements found in other messages are found in the tables in the **Display Requirements Tables - DrugAdministration** section.

DrugAdministration Best Practices

- DrugAdministration is specific to LTPAC settings who provide medication management services. An active order at the pharmacy is necessary in order to send this message to hold, cancel, or resume treatment.
- Scenarios for utilizing this message include:
  - Fixed Length: duration is known and defined
  - Indefinite: duration is undefined
  - Resume: notifies pharmacy of resume date
  - Cancel: modifies a suspension request by discontinuing the request
- Prescriptions should not be left on indefinite suspension. Additional messages should be sent as follow up to the pharmacy to resume administration or a CancelRx should be sent to discontinue therapy.

5.15. Recertification

Recertification Overview

The Recertification message is a notification to the pharmacy to approve on-going active orders due to routine cycle audits required for regulatory requirements. This message is prescriber initiated through LTPAC prescribing systems to create a retrievable audit trail of recapitulated prescriptions.

Recertification Requirements

- There are no requirements that are unique to this message. The validations applied to common elements found in other messages are found in the tables in the **Display Requirements Tables - Recertification** section.

Recertification EPCS Requirements

- Controlled substances that are active orders during an audit may be included in a recertification audit.

Recertification Best Practices

- This message is specific to LTPAC settings who provide medication management services. An active order at the pharmacy is necessary in order to send this message.
- This message is strictly a notification to continue therapy as prescribed. Recertification is informational only and not a fillable message.

5.16. PANotification

PANotification Overview

PANotification is a one-way, information-only transaction that can be sent from the pharmacy to the prescriber or from the prescriber to the pharmacy. The goal of this transaction is to close the communication gap at the pharmacy of the status of the prior authorization and reduce duplicate workflows. This message is required for customers using NCPDP SCRIPT messages.

- The pharmacy can use this to communicate to the prescriber that they have requested a prior authorization or they have received a prior authorization decision. The RTMID value, if available, should be used to indicate which prescription message this relates to.
- The prescriber can use this to communicate to the pharmacy that they have either started the prior authorization process or the process is complete. Prescribers may use this message if they have not included the information on a NewRx or have not received an RxChangeRequest.

5.17. Acknowledgement Messages

Acknowledgement Messages Overview

This section contains acknowledgement details, workflows, and scenarios.

> **Reference:** XML Standard Guide, V2022071. Sec. 7: Pages 33 - 34; Sec. 9.2 - 9.4: Pages 43 - 55

R.317: The application shall allow the status of a transaction to be viewable by an end user or application support staff. If the transaction resulted in an Error, ensure the error is displayed to supporting staff to allow for error resolution.

Status

Status is used to indicate to the sender that the message was accepted for system processing. A Status is always a synchronous response. Status 010 indicates that system processing is complete and was successful, Status 000 indicates that the final response is pending.

A Status 000 indicates that message processing is not complete. A subsequent acknowledgement message should be expected.

The Status message is not dependent on human interaction.

Status Best Practice

DescriptionCode is an optional element that contains codes suitable for use on error messages only. DescriptionCode element should not be used on a Status message.

Verify

This Verify message is returned as an asynchronous response as a follow-up to previous Status 000. The Verify message confirms that the receiving system successfully received and accepted the message.

A Verify indicates that message processing is complete. A subsequent acknowledgement message should not be sent or expected.

The Verify message is not dependent on human interaction.

Error

This message indicates that an error has occurred. An error can be generated when there is a communication problem or when an error occurs during system processing of the message.

The Error message is not dependent on human interaction.

> **Note:** For more information on Error, see the **Error Guidance** section.

Error Best Practice

In the case where the customer's time limitation threshold has been exceeded, and a syntactically valid message has been received, an error is an incorrect response.

Acknowledgement Message Table

Note: The terms "free standing" and "asynchronous" are interchangeable.

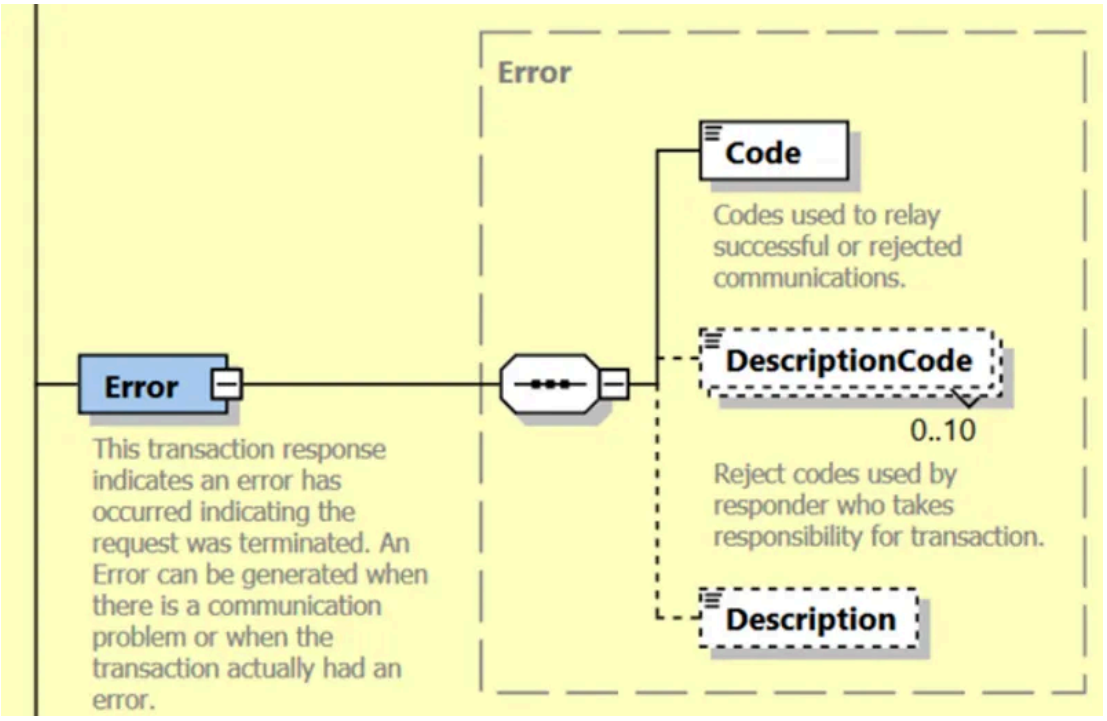
Message Type	Code	Meaning(s)	As Sender	As Receiver
Status	000	The transmission has been accepted for system processing, but has not yet reached its final status. There should be a final Verify (010) or Error forthcoming.	Follow with an asynchronous (free standing) Verify or Error to complete the message flow.	While an asynchronous Verify or Error is expected to follow a Status 000, if it is not received, no assumption should be made as to whether the original message has been received successfully or not. The recommendation is to wait 24 hours before following a manual process or sending a duplicate message.
Status	010	Confirms successful delivery and system acceptance of a message to its final destination. The final acknowledgement message to close the transaction workflow. No further acknowledgement message should follow.	Synchronous response indicates that message processing is complete.	Subsequent acknowledgement message should not be expected.
Verify	010	Asynchronous message that confirms successful delivery and system acceptance of a message to its final destination. The final acknowledgement message to close the transaction workflow. No further acknowledgement message should follow.	Send only if the original message was responded to with a Status 000.	Subsequent acknowledgement message should not be expected. Do not respond to a free standing Error or Verify with a new free standing Error or Verify.
Error	For a full list of NCPDP Error codes and their descriptions, see the NCPDP External Code List or schema.	Can be generated when there is a communication problem or when an error occurs during the system processing of the message. Closes the transaction workflow. Subsequent acknowledgement messages should not be expected. Could be synchronous or asynchronous. A synchronous error is sent in response to a message.	Send to acknowledge that the transaction failed system processing. Do not send an Error if the transaction workflow has already been closed (Status/Verify Code 010). Send as soon as possible after a Status	After receiving an Error, do not expect subsequent acknowledgement messages. Do not respond to a free standing Error or Verify with a new free standing Error or Verify.

Message Type	Code	Meaning(s)	As Sender	As Receiver
		An asynchronous error (also called Free Standing Error) is initiated as a new message after the Status (Code 000) is sent.	(Code 000) has been sent. Customers may create and return unique error descriptions which may further indicate why a system failure has occurred.	

Error Codes

For a full list of NCPDP Error codes (e.g., TransactionErrorCode) and their descriptions, see the NCPDP External Code List or schema.

Reference: NCPDP SCRIPT schema, V2023011 - Error



Reference: NCPDP SCRIPT ECL, V202301 - DescriptionCode

VALUES FOR ALL STANDARD FORMATS	
VALUE	DESCRIPTION
008	Request timed out before response could be received.
103	COO cardholder last name is invalid.
134	Sending a Quantity Sufficient with Quantity of 0 is invalid for this pharmacy.
144	Number of refills invalid.
210	Unable to process transaction. Please resubmit.
220	Transaction is a duplicate.
500	XML syntax error *Parser error (error that would be caught by the XML parser. Xpath of the element must accompany).*
1000	Unable to identify based on the information submitted (Xpath of the element must accompany).
2000	Data format is valid for the element, but content is invalid for the situation/context (Xpath of the element must accompany).
3000	Does not follow NCPDP standard or implementation guide rules. (Xpath of the element must accompany).
4000	Intermediary is unable to deliver transaction to the recipient.
4010	Intermediary is unable to process response from recipient.
4020	Intermediary system error.
4030	Sender not allowed to send this transaction type.
4040	Receiver does not support receiving this transaction type.

Reference: NCPDP SCRIPT ECL, V202301 - TransactionErrorCode

VALUES FOR ALL STANDARD FORMATS	
VALUE	DESCRIPTION
600	Communication problem - try again later
601	Receiver unable to process
602	Receiver System Error
700	Configuration Error
900	Transaction rejected

900 Error Text Table

The error codes below are tied to the 900 "Other" code from the NCPDP External Code List. When applicable, Surescripts will send the 900 code along with an error message. The table below details example error messages.

Error Scenario	Error/Description
NPI in the Pharmacy element does not pass the Luhn check digit.	NPI in Pharmacy does not pass the Luhn check digit.
NewRx message does not contain NDC, CompoundInformation element, or Supply qualifier.	No NDC or compound or supply code in message for MedicationPrescribed.
Sending prescriber does not have the service level to send EPCS transactions.	Sender does not meet controlled substance directory requirements.
Vendor application is not certified to send EPCS messages.	Message type not supported by sender. Sending portal is not configured to transmit controlled substances.
Pharmacy is not certified to receive EPCS messages.	Receiver does not meet controlled substance directory requirements.
DEASchedule is not present in a NewRx EPCS message.	Controlled substance must have a DEASchedule populated in Medication Prescribed
Controlled substance has been identified, but is not digitally signed or there is no digital signature indicator.	Controlled substance must be signed or Digital Signature Indicator must be true.
Patient address is not present in EPCS message.	Patient address required for controlled substance

900 Pharmacy and Prescriber Generated Errors

The error codes below are tied to the 900 "Other" code from the NCPDP External Code List. When applicable, it's recommended that the pharmacies and prescribers send the 900 code along with an error message. The table below details example error messages.

Error Scenario	Error/Description
The receiver only supports the digital signature indicator (flag), not the PKI digital signature.	Digital Signature Not Supported
The receiver only supports the digital signature, not the digital signature indicator (flag).	Digital Signature Indicator Not Supported
The prescription may not have met a legal or other requirement for EPCS.	Rx does not meet the requirements, legal or otherwise, for EPCS.
The Digital Certificate is not on file at the Certificate Authority.	Digital Certificate not on record.
The Digital Certificate has been revoked by the Certificate Authority.	Digital Certificate has been revoked.
The actual digest value does not match the calculated values or an error occurred when trying to process the digital signature.	Invalid Digital Signature
Compounds or non-drug supply items are not supported	The receiving system cannot process the compound or supply item.

Acknowledgement Message Workflow Scenarios

The following workflows depict various scenarios where Verify, Error, and Status are sent in response to a NewRx message. Note that for all of these scenarios, NewRx could be any of the following messages listed in **About Electronic Prescribing**.

Customers must support all messages as described in the **Acknowledgement Message Table**. Every message workflow ends with Status (Code 010), Verify, or Error.

Scenario 1 – Message errors at Surescripts

1a) A NewRx is sent.

1b) Surescripts receives the NewRx.

1c) Surescripts does not recognize the format of the message, or errors are contained within the message, and returns an Error or error text to the sending customer.

Scenario 2 – Message is acknowledged successfully by recipient

2a) A NewRx is sent.

2b) Surescripts forwards the message to the receiving customer.

2c) Receiving customer system validates the message and returns a Status (Code 010) to Surescripts. This indicates the message was accepted by the ultimate receiving system.

2d) Surescripts forwards the Status (Code 010) back to the sending customer.

Scenario 3 – Message errors at Receiver

3a) A NewRx is sent.

3b) Surescripts forwards the message to the receiving customer.

3c) Receiving customer system either does not recognize the format of the message, or errors are contained within the message, and returns an Error message or error text to Surescripts.

3d) Surescripts sends an Error to the sending customer.

Scenario 4 – Status 000 followed by an Error

4a) A NewRx is sent.

4b) Surescripts forwards the message to the receiving customer.

4c) Receiving customer system validates the message and returns a pending Status (Code 000) to Surescripts. This indicates that the message has been received for system processing, but processing is not yet complete and the message has not reached its ultimate destination.

4d) Surescripts forwards the Status (Code 000) back to the sending customer.

4e) Receiving customer system encounters an error when processing the message and initiates a new Error (sometimes referred to as a "Free-Standing Error").

> **Note:** Surescripts may convert the message to Fax and avoid sending the error back to the sending customer. See the **Faxing** section for more information.

4f) Surescripts forwards the Error to the sending customer.

4g) Sending customer system acknowledges the Error by sending back a verified Status (Code 010) to Surescripts.

4h) Surescripts forwards the verified Status (Code 010) to the receiving customer.

Scenario 5 – Status 000 followed by a Verify

5a) A NewRx is sent to Surescripts.

5b) Surescripts forwards the message to the receiving customer.

5c) Receiving customer system validates the message and sends back a Status (Code 000) to Surescripts. This indicates that the message has been received, but system processing is not yet complete and the message has not reached its ultimate destination.

5d) Surescripts forwards the Status (Code 000) back to the sending customer.

5e) Receiving customer system delivers the NewRx to the end point and initiates a new Verify (sometimes referred to as a "Free-Standing Verify").

5f) Surescripts forwards the Verify to the sending customer.

5g) Sending customer system acknowledges the Verify by sending back a Status (Code 010) to Surescripts. Code 010 indicates it was accepted by the ultimate receiver.

5h) Surescripts forwards the Status (Code 010) to the receiving system.

Scenario 6 – Connectivity Error with receiving customer

6a) A NewRx is sent to Surescripts.

6b) Surescripts attempts to forward the message to the receiving customer, but is unable to connect and receives an HTTP error or the connection times out after 24 seconds.

6c) Surescripts sends back a Status (Code 000) to the sending customer system. This indicates that the message has been received for system processing, but processing is not yet complete and the message has not reached its ultimate destination.

6d) Surescripts makes up to 3 additional delivery attempts with a delay of at least 1 minute, 5 minutes and then 10 minutes between each attempt.

6e) If one of the delivery attempts is successful and the receiving customer system returns a Status (Code 000), Surescripts will audit the response, but it will not deliver that recent Status (Code 000) to the sending customer as they have already received one from Surescripts in step 6c. Final status will be sent to the sending customer once the receiving system sends a free standing Error or Verify as in steps 4e and 5e above.

6f) If one of the delivery attempts is successful and the receiving customer system returns a Status (Code 010), Surescripts will convert the Status (Code 010) into a Free Standing Verify and deliver the Verify to the sending customer.

6g) Sending customer system acknowledges the Verify by sending back a Status (Code 010) to Surescripts. Code 010 indicates it was accepted by the ultimate receiving system.

6h) If one of the delivery attempts is successful and the receiving customer system returns an Error, Surescripts will forward the Error to the sending customer.

> **Note:** Surescripts may convert the message to Fax and avoid sending the error back to the sending customer. See the **Faxing** section for more information.

6i) Sending customer system acknowledges the Error by sending back a Status (Code 010) to Surescripts. Code 010 indicates it was accepted by the ultimate receiving system.

6j) If none of the delivery attempts are successful Surescripts will create and send a Free Standing Error to the sending customer.

> **Note:** Surescripts may convert the message to Fax and avoid sending the error back to the sending customer. See the **Faxing** section for more information.

6k) Sending customer system acknowledges the Error by sending back a Status (Code 010) to Surescripts. Code 010 indicates it was accepted by the ultimate receiving system.

5.18. Faxing

Faxing Overview

This service is optional and creates an alternate route for transactions if electronic communication is disrupted. This service delivers certain messages via facsimile (Fax) when they cannot be delivered electronically due to temporary/transient transmission failures, unless prohibited by state law. Both sender and receiver must have this feature enabled to utilize Faxing services.

> - Fillable messages for controlled substances will not be transmitted by Fax.
> - If fillable Fax messages are prohibited by state, messages sent via Fax are for informational purposes only.

For Faxing, consider the following:

- Current message types that are supported through Fax: NewRx, RxRenewal (Request/Response), and CancelRx (Request only).
  - To opt out of receiving CancelRx fax messages, contact Surescripts Customer Support, or your assigned Account Manager.
- Pharmacies may send an RxRenewalRequest for controlled substance that can fail over to a Fax message when a connectivity issue occurs.
- If a prescription for a controlled substance is sent, and a connectivity issue is encountered, an Error will be returned to the sender instead of failing over to a Fax message.
- Surescripts makes efforts to conform to the applicable state regulatory needs related to e-prescribing; however, it is ultimately the responsibility of the sender and receiver to fulfill compliance requirements.
- Information only Faxes – Some states permit information only Faxes for non-controlled substances. These Fax templates meet the state requirements for transmitting message details by Fax, but provide further instruction for the pharmacy to validate the prescription.

Message Delivered by Fax

The following steps occur when a message fails over to Fax:

1. Electronic message is initiated and received by Surescripts.
2. Surescripts encounters a connectivity issue with the receiver.
3. Surescripts creates a Status (Code 000) message and returns to sender.
4. If all retry attempts have been exhausted, Surescripts fails the message for delivery via Fax after determining that the message meets all required criteria.
5. The Fax delivery process is monitored for success.
6. When confirmation is received for successful delivery of Fax, a Verify (Code 010) status update is returned to the sender to notify that the message was delivered by Fax.
7. If a timeout occurs, Surescripts will return an error to the sender and a message may still be delivered via Fax. Duplicate messages should not be sent without confirming that the original message was received.

Faxable Error Messages

Surescripts can attempt to deliver the original message by Fax when a receiver responds with a certain error code. The following steps summarize the process:

1. Surescripts receives electronic message and attempts to deliver to the receiver.
2. Surescripts receives synchronous error message with code 600, 601, or 602 or a status 000 followed by asynchronous error message with code 600, 601, or 602.

- ErrorCode/DescriptionCode combinations that are Faxable include: 600, 600/008, 601, 602, 602/008.

> **Note:** Any other combination is not Faxable.

3. Surescripts returns Status (Code 000) and fails the message over for delivery via Fax after determining that the message meets all required criteria.
4. The Fax delivery process is monitored for success.
5. When successful, a Verify (Code 010) status update is returned to the sender to notify that the message was delivered by Fax.
6. If a timeout occurs, Surescripts will return an error to the sender.

> **Note:** For more information, see the **Message Continuity** section.

6. Element Details

Element Details Overview

This section defines the data elements used in E-Prescribing transactions on the Surescripts network. It documents Surescripts-specific requirements, conditions, and business rules that supplement the NCPDP SCRIPT Standard.

Use the Element Details tables to understand:

- When an element is **required, conditional, or optional**
- How elements must be populated to meet **certification and production requirements**
- Field-level rules enforced by Surescripts

Element Details referenced in this documentation should be treated as the **authoritative source** for field definitions and constraints.

Quick Links

6.1. Requirements Designation

Requirements Designation Overview

This table defines the requirement designation applied to each element in the message. The designation indicates whether an element is required by the NCPDP schema, enforced by Surescripts-defined business rules, or dependent on specific conditions. Understanding these designations helps ensure proper message construction, validation, and compliance with both standard and business-specific requirements.

Element Attributes

Code	Description
mandatory	The element must be used because it is required per the NCPDP schema.
business rule	If sent, the element must be used per the Surescripts business rule. **Note**: Not all business rules reside in this table.
conditional	The element must be used per the conditions specified.

Notes:

- Elements that are grouped together may be marked as mandatory; however, if the group itself is marked as conditional, then these are only required if you use the group.
- This guide only includes data elements where Surescripts has specific requirements or further explains the field usage. Refer to the NCPDP SCRIPT Schema listed in **Document References** for a complete list of fields.

6.2. Message Header Elements

Message Header Elements

Element	Codes	Comment
To	**mandatory**	This field will contain the NCPDPID of the pharmacy or the SPI (Surescripts Prescriber ID) of the prescriber. **Note:** All response messages and free standing messages should be sent to the same sender that initiated the original message.
@Qualifier	**conditional**	`business rule` If the To field is sent, then the Qualifier must also be sent. Values: D = Prescriber ID (Used for SPI) P = Pharmacy NCPDPID
From	**mandatory**	This field will contain the NCPDPID of the pharmacy or the SPI (Surescripts Prescriber ID) of the prescriber.
@Qualifier	**conditional**	`business rule` If the From field is sent, then the Qualifier must also be sent. Values: D = Prescriber ID (Used for SPI) P = Pharmacy NCPDPID
MessageID	**mandatory**	**S.205:** The sender shall ensure the combination of the From and MessageID elements, for all messages including Error, is unique for at least 18 months. Surescripts recommends an unformatted Globally Unique Identifier (GUID).
RelatesToMessageID	**conditional**	Send the RelatesToMessageID when the most recent and relevant message in the workflow contains a MessageID. If a NewRx is sent following a BenefitResponse message, populate the RelatesToMessageID with the MessageID from the response message. See **Message Linkage** section for more details.
SentTime	**mandatory**	Date of the transmission. Please see **UTC Time Format** section.
Security	**conditional**	
UsernameToken	**conditional**	For Mailboxing, UsernameToken is used. Please refer to the Surescripts Mailboxing Guide for more information.
Sender	**conditional**	
TertiaryIdentification	**conditional**	Surescripts populates the Account ID associated with the sender.

Element	Codes	Comment
Receiver	**conditional**	
TertiaryIdentification	**conditional**	Surescripts populates the Account ID associated with the receiver.
MessageIndicatorFlag	**conditional**	`business rule` Indicates to the receiver that they are not receiving the original message, but rather a copy for a specific purpose. Messages sent with MessageIndicatorFlag must be sent to a receiver on NCPDP Script version V2023011 or later. This field is not backwards compatible and will be rejected by Surescripts if sent to a recipient on SCRIPT V2017071. Values: • Informational – copy of the message exchange for informational purposes • DataSynchronization – exchange data between entities. • RetractionWithdrawal – retraction of the original request.
DigitalSignature	**conditional**	If used, either send values under Actual Digital Signature or the DigitalSignatureIndicator value.
@Version	**mandatory**	Version 1.1 should be used.
(Actual Digital Signature)	**conditional**	Repeats 1..2.
DigestMethod	**mandatory**	Values: SHA-1 SHA-256
DigestValue	**mandatory**	
SignatureValue	**mandatory**	
X509Data	**mandatory**	

Element	Codes	Comment
DigitalSignatureIndicator	**conditional**	Indicates if the prescription has been digitally signed. Values: true false **Note:** Surescripts recommends only sending this when the value is “true.”
PrescriberOrderGroup	**conditional**	
RxReferenceOrderGroup	**conditional**	

6.3. Message Linkage

Message Linkage Overview

Message linkage requirements and best practices are described in the table below. There are four key fields that are used to link messages together, and this linkage allows a software system to connect related messages to each other. For example, on an RxRenewalRequest the prescribing system needs to find the original NewRx to which the pharmacy is referring. This linkage should be done in an automated manner.

S.210: Customers shall support the scenarios in the Message Linkage section of this guide.

> **Note:** NCPDP refers to message linkage as trace number.

✅ **Quality Check**: Ensure electronic transactions are populated with the correct traceable elements for message linking when available. When this information is not included, human intervention is introduced which brings an additional risk of transcription/matching errors.

MessageID – The unique number assigned to each message. This ID initiates the electronic linking of subsequent message types.

RelatesToMessageID – The MessageID of the most recent and relevant message in the workflow.

RxReferenceNumber – The prescription number assigned by pharmacy system. This number should be populated on pharmacy-initiated messages. RxReferenceNumber must be populated on RxRenewalRequest, RxRenewalResponse, RxChangeRequest, and RxChangeResponse.

PrescriberOrderNumber – The prescription number created by the prescribing system. PrescriberOrderNumber must be populated on all fillable messages. For other message types if PrescriberOrderNumber is available, it should be sent.

The PrescriberOrderNumber or the RxReferenceNumber should be used as the primary criteria for matching messages. If it cannot be used, the following data in the message should be used:

- RelatesToMessageID
- Patient demographics
- Medication information
- Prescriber information
- Pharmacy information

Message Linkage Example

> **Note:** The following table is an example of message linking. This example is not all inclusive and the same methodology applies to other message types.

	NewRx	RxRenewal Request	RxRenewal Request FollowUp Request	RxRenewal Response	(2nd RxRenewal Request)
MessageID	12345	444333	555222	888333	89999
RelatesTo MessageID	N/A*	12345**	444333	555222	888333
Prescriber Order Number	RX123	RX123	RX123	RX897	RX897
	Status/ Error/ Verify	**Status/ Error/ Verify**	**Status/ Error/ Verify**	**Status/ Error/ Verify**	**Status/ Error/ Verify**
MessageID	888	77777	999999	555555	111111
RelatesTo MessageID	12345	444333	555222	888333	89999

Notes:

* For customers sending a NewRx following a BenefitResponse (either On-Demand Formulary or Real-Time Prescription Benefit, whichever is later in the workflow), populate the RelatesToMessageID with the MessageID from the BenefitResponse. The only exceptions for this are for NewRx that is following:

- a NewRxRequest
- a NewRx following a CancelRxResponse in the LTPAC environment

** Surescripts encourages the use of electronic prescribing messages but also acknowledges situations where alternative means of communication are necessary. Messages sent electronically will contain a MessageID which is later used in the RelatesToMessageID field of subsequent/related messages. However, in instances where there is no MessageID (e.g., original message sent by fax), the RelatesToMessageID will not be available to send in electronic messages that follow. In these instances, additional matching logic is needed to support subsequent workflows such as RxFill, RxRenewal, Resupply, RxChange, and CancelRx.

Long Term and Post Acute Care Message Linkage Example

Note: The following table is an example of Prescribing System Initiated Change Process message linking.

	NewRx	CancelRx	NewRx
MessageID	12345	444333	888333
RelatesToMessageID	N/A	12345	12345
PrescriberOrderNumber	RX123	RX123	RX123A
	Status/Error/Verify	**Status/Error/Verify**	**Status/Error/Verify**
MessageID	888	77777	555555
RelatesToMessageID	12345	444333	888333

6.4. Prescriber Elements

Prescriber Elements

> **Note:** Supervisor elements will also be detailed in this table when applicable.

Element Name	Codes	Comments
Prescriber	**mandatory**	For Quality Check information on Prescriber, see **Prescriber & Pharmacy Information - Surescripts Directory**
Identification	**mandatory conditional**	M = All messages for prescriber and supervisor except: C = RxFill and Census
DEANumber	**conditional**	`business rule` For prescriber-initiated messages for controlled substances at least one occurrence must contain the DEA number. Each prescriber of controlled substances will need to have a unique DEA or Institutional DEA Number registered/assigned to them in the Surescripts Directory and the EPCS service level enabled. The exception to this rule is a Public Health prescriber can use their Social Security Number in place of a DEA number. Military personnel are covered under Public Health prescribers. Military personnel are also required as part of the DEA audit to report their branch of service in the Note field. Only one DEA number for the location where the prescriber is located should be sent. The DEA number format in the Prescriber and Supervisor elements are validated. The first character must be alpha, and the second character can be alpha or 9 followed by 7 numbers. If there are more than 9 characters, the 10th must be a '-' (hyphen). The remaining characters are not validated.
NPI	**mandatory conditional**	M = All messages for prescriber and supervisor except: C = RxFill `business rule` For prescriber-initiated messages (NewRx, RxRenewalResponse, RxChangeResponse, CancelRx, Resupply, and Census) at least one occurrence must contain the individual (not organizational) NPI of the prescriber and supervisor if the supervisor loop is sent. The NPI check digit will be validated using the Luhn algorithm. (Applies to both Prescriber and Supervisor Loops.) For specific information see: **https://www.cms.gov/Regulations-and-Guidance/Administrative-Simplification/NationalProvIdentStand/Downloads/NPIcheckdigit.pdf**.
CertificateToPrescribe	**conditional**	The CTP is a field that may be required for prescribing in certain states.
Specialty	**conditional**	For Specialty prescriber values, go to **https://x12.org/codes** and click on **Provider Taxonomy Code Set**. `business rule` For EPCS-fillable messages when sending the social security number for military personnel, this field must be populated with the MPH specialty type code of "2083P0901X", "171000000X", "1710I1002X", or "1710I1003X".

Element Name	Codes	Comments
Name	**mandatory**	Prescriber or Supervisor Name.
Address	**mandatory conditional**	M = All fillable EPCS messages, and all other messages except: C = RxRenewalRequest and RxRenewalResponse On an RxRenewalResponse the prescriber should change this address to match what is in the Surescripts directory. For address information, customers should use the United States Postal Service (USPS) 28 standard as a guideline.
AddressLine1	**mandatory**	`business rule` Address Line 1 for the Prescriber or Supervisor elements must not begin with a PO Box. This will cause a rejection. This element must be sent for EPCS fillable messages.
City	**mandatory**	`business rule` This element must be sent for EPCS fillable messages.
StateProvince	**conditional**	`business rule` This element must be sent for EPCS fillable messages. Required for translation between versions.
PostalCode	**conditional**	`business rule` This element must be sent for EPCS fillable messages. Required for translation between versions.
PrescriberAgent	**conditional**	This field should be sent if the sender of the message is not the actual prescriber referenced in Prescriber/Identification.

6.5. Medication Elements

Medication Elements

The following should be used for developing MedicationPrescribed, MedicationDispensed, MedicationRequested, and MedicationResponse elements.

Element Name	Codes	Comments
DrugDescription	**mandatory**	Drug name (when applicable, include the full drug name, strength, and form). For a compound, the names of the ingredients in the compound or the prescriber's preferred name should be communicated here. See **DrugDescription Best Practices** section for more information. **R.305**: The drug name shall be an item that is currently available for dispensing. If there are active NDCs available, an inactive/obsolete NDC shall not be used. Customers are expected to work with their drug compendia vendor to satisfy this requirement. **R.306**: If the drug description for single medications as well as compounds exceeds the length of the DrugDescription field, the prescription shall not be sent electronically. **R.307**: When entering a prescription that has a free text DrugDescription and the prescription contains a controlled substance, EPCS requirements shall be followed. For Quality Check information on DrugDescription, see **DrugDescription Best Practices**
Product	**mandatory**	Within the Product element, one instance of DrugCoded, CompoundInformation, or NonDrugCoded must be sent. Up to 5 repetitions of ProductCode and DrugDBCode can be included within DrugCoded, or NonDrugCoded. • DrugCoded is used exclusively for medications and including an NDC is required. • NonDrugCoded is used for non-medication products that may have an NDC, supplies, durable medical equipment and digital therapeutics. If the product has an NDC then it should be included. • CompoundInformation is used to send a compound prescription. All active ingredients must be included and inactive ingredients may be included. **S.208:** Codified values within a message shall not conflict with the related textual concept.
NDC	**conditional**	Mandatory when sending DrugCoded, optional when sending NonDrugCoded. If a product has an NDC it is recommended to include it. `business rule` The NDC must be a valid 11 digit code. See **NDC Best Practices** for more information.
Strength/ Strength Form	**conditional**	
Code	**mandatory**	`business rule` Must be a valid FMT/NCI code. See **Codified Field Usage for Federal Medication Terminologies (FMT) Codes** for details.
Strength/ Strength UnitOfMeasure	**conditional**	

Element Name	Codes	Comments
Code	**mandatory**	`business rule` Must be a valid FMT/NCI code. See **Codified Field Usage for Federal Medication Terminologies (FMT) Codes**for details.
DEASchedule	**conditional**	`business rule` Must be a valid FMT/NCI code. See **Codified Field Usage for Federal Medication Terminologies (FMT) Codes**for details. For fillable messages, if the medication is categorized as a controlled substance by the Drug Enforcement Agency (DEA) or the state, this field must be sent. **R.308:** When sending a compound with one or more controlled substance ingredients, the message shall contain one of the following: • either the CompoundIngredient/DEASchedule for each controlled substance in the CompoundIngredient element • or the DEA schedule of the most restrictive ingredient in the DrugCoded/DEASchedule or NonDrugCoded/DEASchedule element.
Quantity	**mandatory**	
Value	**mandatory**	`business rule` If the drug Quantity Value uses a decimal, there must be at least one digit to the left and the right of the decimal point; the numbers to the right of the decimals cannot be all zeros, and, if there is more than one digit to the left of the decimal point, they cannot be all zeros. For NewRx, a quantity value of "0" (zero) indicates an open order used in LTPAC systems.
CodeList Qualifier	**mandatory**	`business rule` For NewRx: - If Quantity/Value is greater than "0" (zero), then Quantity/CodeListQualifier must be "38". For NewRx in LTPAC - If Quantity/Value = "0" (zero), then Quantity/CodeListQualifier must be "QS" or "CF" (for compound) and must have Long Term Care service level enabled. For Compounds: The MedicationPrescribed/Quantity/CodeListQualifier must be "CF" (Compound Final Quantity). This also applies to the MedicationDispensed, MedicationRequested, and MedicationResponse structures. The value "38" is applicable in the Quantity element of the CompoundInformation structure. Quantity/Value = "0" only applies to LTPAC.
QuanityUnitOfMeasure/ Code	**mandatory**	`business rule` Must be a valid FMT/NCI code. See **Codified Field Usage for Federal Medication Terminologies (FMT) Codes** for details.
DaysSupply	**conditional**	`business rule` This element is optional. When sent, DaysSupply element must be a whole number and not contain a decimal point. When using the structured sig elements, duration of therapy can be conveyed in the TimingAndDuration elements.

Element Name	Codes	Comments
WrittenDate	**conditional**	`business rule` The WrittenDate must not be a future date and should be sent in DateTime to accommodate for any time zone conversion issues that may occur. This element usage is dependent on message type. See schema for element requirements.
DrugUseEvaluation	**conditional**	DrugUseEvaluation details can be included for a number of interactions including drug to allergy, drug to condition, drug to drug and duplicate drugs. In addition to including the ServiceReasonCode, it is recommended to include additional details such as the ProfessionalServiceCode and ClinicalSignificanceCode.
AcknowledgementReason	**conditional**	`business rule` A DrugUseEvaluation Acknowledgement Reason must be sent when the Professional Service is equal to "ZZ".
Substitutions	**mandatory**	It is important that proper product/service substitution codes be used on e-prescriptions. Prescriber application vendors should ensure that their applications guide users to insert the proper codes that accurately express their wishes with respect to substitution.
NumberOfRefills	**conditional**	Quantity for the number of refills. When sending an open order, the NumberOfRefills quantity should be set to 99.

Sig	**conditional**	This element usage is dependent on message type.
		Sig contains either completely free text with no corresponding structured content or is a generated structured Sig that contains all the elements semantically captured by and corresponding to the codified elements and clarifying free text fields.
		business rule
		The SigText value for NewRx transactions must meet a fundamental level of safety and quality defined by Surescripts. Examples of unsafe and poor quality SigText values include:
		• SigText contains only one character or contains only special characters.
		  ◦ Examples: "1", "--", "."
		• SigText is missing multiple key elements, such as dose, route, or frequency.
		  ◦ Examples: "oral", "once", "IM", "n/a", "po"
		• SigText contains conflicting directions.
		  ◦ Example: "Take 1 capsule by mouth twice a day once daily."

SigText	**mandatory**	If you cannot fully represent the content of the prescriber's intended directions in the structured Sig only populate the free text. See **SigText Field Best Practices** section. Patient instructions should not be split between the SigText and Notes fields as this can result in an incorrect interpretation by the pharmacy staff of the prescriber's preferred patient instructions which may result in negative therapeutic outcomes and/or patient harm. Sigs should not be truncated because important information can be lost.
(StructuredSig	**conditional**	Structured elements supporting the SigText Codified information, the codes and their textual representations are required to semantically match with the string in the SigText. **Reference:** NCPDP SCRIPT Structured and Codified Sig Format Implementation Guide

Element Name	Codes	Comments
Elements)		
OrderCaptureMethod	**conditional**	Identifies how the order is captured; entered by a prescriber, a telephone order (where PrescriberAgent info should be sent), a verbal order (where PrescriberAgent information should be sent) or written (when NO PrescriberAgent information should be sent).
PatientCodifiedNote	**conditional**	
PatientCodified NoteQualifier	**conditional**	Codified note specific to patient or medication being prescribed.
PatientCodified NoteValue	**conditional**	When the PatientCodifiedNoteQualifier of AA or AB is sent Value can also be sent to provide quantification of the qualifier.
OtherMedicationDate	**conditional**	
OtherMedication DateQualifier	**conditional**	Qualification of Date/Time field. Example Qualifiers: • SoldDate is only allowed to be used in RxFill Notification, and RxRenewalRequest messages. • EffectiveDate (Begin) - Used for earliest fill date. The date or date/time (now or in the future) after which this prescription being transmitted can be dispensed (i.e., do not fill before date) as authorized by the prescriber. Exception: Electronic prescriptions for patients receiving LTPAC Pharmacy Services are exempt from the EffectiveDate usage stated above.

6.6. Pharmacy Elements

Pharmacy Elements

Element Name	Codes	Comments
Pharmacy	**conditional**	`business rule` NewRx and CancelRx must have a Pharmacy listed in the Pharmacy elements. For Quality Check information on Pharmacy, see **Prescriber & Pharmacy Information - Surescripts Directory**
Identification	**mandatory**	
NCPDPID	**mandatory**	`business rule` In addition to being required to be populated, the Pharmacy ID (NCPDPID) in the message body must match the NCPDPID in the message header.
Address	**conditional**	
AddressLine1	**conditional**	`business rule` A PO Box must not be sent in Address Line 1.

6.7. Benefits Coordination Elements

Benefits Coordination Element

Element Name	Codes	Comments
Benefits Coordination	**conditional**	**R.304**: Prescribing vendors who are utilizing the Surescripts Eligibility 270/271 messages shall populate the first BenefitsCoordination element with the associated information returned in a Surescripts 271 message. If more than one active coverage is returned, only the single coverage information utilized to write the prescription is sent. Subsequent BenefitsCoordination elements should be used for coupon/discount information. Prescribing vendors who are not utilizing the Surescripts Eligibility 270/271 messages should use the first BenefitsCoordination element for coupon/discount information. The 271 message's ISA13 control number shall be populated in the BenefitsCoordination/InterchangeControlNumber field in all instances including scenarios where there's no active coverage. **Note:** See **Benefits Coordination** Benefits Coordination table for details on how the 271 response should be mapped to BenefitsCoordination.

6.8. Facility Elements

Facility Elements

Element Name	Codes	Comments
Facility	**conditional**	For LTPAC, this element should be sent. The Facility element in messages initiated from a prescribing system are an integral part of communicating resident location.
Identification	**mandatory**	
NPI	**conditional**	When sending the Facility element, the NPI should be sent when known.
Address	**conditional**	
AddressLine1	**conditional**	`business rule` A PO Box must not be sent in Address Line 1.

6.9. Patient Elements

Patient Elements

Element Name	Codes	Comments
HumanPatient	**mandatory**	
Name	**mandatory**	For Quality Check information on Patient/Name, see **Patient**
DateOfBirth	**mandatory**	Date should be used instead of DateTime to represent the birth date. The format is CCYY-MM-DD. For Quality Check information on Patient/DateOfBirth, see **Patient**
Address	**mandatory** **conditional**	M = NewRx, RxTransferRequest, RxTransferResponse, RxTransferConfirm, and all EPCS fillable messages. C = All remaining messages For Quality Check information on Patient/Address, see **Patient**
AddressLine1	**mandatory**	`business rule` This element must be sent for EPCS fillable messages.
City	**mandatory**	`business rule` This element must be sent for EPCS fillable messages.
StateProvince	**conditional**	`business rule` This element must be sent for EPCS fillable messages. Required for translation between versions.
PostalCode	**conditional**	`business rule` This element must be sent for EPCS fillable messages. Required for translation between versions.
CommunicationNumbers	**conditional**	
PrimaryTelephone	**mandatory**	For Quality Check information on Patient/CommunicationNumbers/PrimaryTelephone, see **Patient**

6.10. Allergy Elements

Allergy Elements

Element Name	Codes	Comments
AllergyOrAdverseEvent	**conditional**	Used to transmit patient allergies and adverse events. A choice of NoKnownAllergies or the Allergies element is required. NoKnownAllergies - Used to communicate that the patient does not have known allergies. Allergies - Used to communicate the known allergy or adverse information. **Note:** When prescribing a product that the patient also shows an allergy to, the DrugUseEvaluation elements should be included to show prescriber acknowledges the conflict.
Allergies/ DrugProductCoded/ Qualifier	**conditional**	`business rule` A Qualifier should be sent whenever a code is sent.

6.11. LTPAC Only Elements

LTPAC Only Element

Element Name	Codes	Comments
PriorPeriodCorrection	**conditional**	Allows the sender to identify a correction to previously sent Census messaging with incorrect payer information.

7. Element Usage

Element Usage Overview

The Element Usage section explains how to correctly populate and interpret key e-prescribing elements in real-world workflows. It goes beyond structural definitions to provide guidance on expected usage, clinical intent, and data quality considerations.

Use Element Usage alongside:

- **Element Details** — for structure, cardinality, and requirements
- **ACRs and business rules** — for enforceable constraints

Together, these define **what must be sent** and **how it should be used in practice** to support safe, compliant e-prescribing.

Quick Links

7.1. RxRenewal

The following sections provide additional information for RxRenewalRequest and RxRenewalResponse elements.

RxRenewalResponse Table

Customers are required to support each RxRenewalResponse type indicated in the table below. When sending an RxRenewalResponse, follow the rules below to determine the workflow and the type of response to send the requesting pharmacy. The RxRenewalResponse type should be determined by the application, rather than the end user, using the criteria in the table.

R.303: The RxRenewalResponse type shall be determined by the rules in the following table. Exceptions to this requirement include items in the common message header and the optional Structured and Codified Sig.

Response Type	Definition
Approved	An Approved response is appropriate when the PharmacyRequestedRefills value (if sent by the requesting pharmacy) is returned in the NumberOfRefills and no other changes or additions were made. The NumberOfRefills in an RxRenewalResponse represents the total number of dispensings authorized and must be a value of 1 or greater. The WrittenDate is updated to the date of approval. When the PharmacyRequestedRefills is not present in an RxRenewalRequest, the response can be Approved if no other changes or additions were made.
ApprovedWithChanges	An ApprovedWithChanges response should only be sent when the prescriber is approving a number of refills which differs from the suggested PharmacyRequestedRefills value sent by the pharmacy in the RxRenewalRequest. The WrittenDate is updated to the date of approval. For all other changes or additions to the request, see Replace.
Denied	A Denied response indicates the RxRenewalRequest has not been approved by the prescriber. The information in the response should match the information in the RxRenewalRequest. Denial Reason or Reason code must be included to explain the denial.
Pending	A Pending response is an informational response allowing the prescriber to temporarily hold the RxRenewalRequest while sending a response to the pharmacy. It is recommended to include a Reason code and Expected Response date with the Pending response.
Replace	Replace - A Replace response should be used whenever any change or addition is made beyond the number of refills suggested by the pharmacy in the RxRenewalRequest. The WrittenDate is updated to the date of approval. All fields may be changed with the exception of the patient's DateOfBirth. If an incorrect patient DateOfBirth is received on the RxRenewalRequest, a Denied should be sent to the pharmacy and a new prescription should be sent.

RxRenewal Element Usage

In the NewRx, the total number of dispensings is 1 + the refill quantity; however, in the RxRenewalResponse (including the Replace type) the total number of dispensings is only the refill quantity. The application should make this distinction clear to the user during the approval process.

R.309: An automatic response for RxRenewalRequests shall not be sent back to the pharmacy. Exceptions to this requirement include an automatic Denial for non-support of Compounds or Supplies, a deceased patient, or when the original prescription contained the ProhibitRenewalRequest flag.

- Automatic response: A response that is generated systematically without allowing the receiver to review the request.

NumberOfRefills

The NumberOfRefills is used by the prescriber to communicate a number of dispensings for the prescription.

A NewRx and an affirmative RxChangeResponse have a total dispensing equal to a first fill quantity plus the number of fills identified in the NumberOfRefills element.

Examples:

NewRx:

Quantity is 30 tablets

Number of Refills is 3

Total dispensings = 4

Total quantity to be dispensed = 120 tablets

RxChangeResponse affirmative responses are: Approved, ApprovedWithChanges, and Validated.

Quantity is 30 tablets

Number of Refills is 3

Total dispensings = 4

Total quantity to be dispensed = 120 tablets

RxRenewalResponse affirmative responses are: Approved, ApprovedWithChanges, and Replace. It uses the NumberOfRefills element to communicate the total dispensings:

Quantity is 30 tablets

Number of Refills is 3

Total dispensings = 3

Total quantity to be dispensed = 90 tablets

Note: The NumberOfRefills in a CancelRx does not change the intent of the message to discontinue dispensings.

7.2. FollowUpRequest

FollowUpRequest Element Usage

The FollowUpRequest is used to resubmit an electronic request that has not yet received a response. This element should be utilized when a system permits a user to resubmit a request. To help avoid unnecessary requests, applications should provide users with the ability to view the status of any message that has not received a response.

Receivers of messages that support the FollowUpRequest element should ensure that end users are able to differentiate the most recent FollowUpRequest when multiple requests have been received.

FollowUpRequest is an element in multiple messages and the guidance provided here applies to all instances.

The initial and any subsequent FollowUpRequest should have a minimum 48 hour interval between each request.

R.310: When responding to a FollowUpRequest, only one response shall be sent and shall reference the most recent request.

R.323: Prescribing systems shall be able to identify and correctly interpret the FollowUpRequest field in inbound messages.

R.324: When sending a follow up message for an outstanding request, the Pharmacy System shall populate and transmit the FollowUpRequest field.

> **Note:** For additional information on message linkage for the FollowUpRequest, please see the **Message Linkage** section. The RelatesToMessageID requirement differs from 2017071 to better align with NCPDP.

7.3. MessageIndicatorFlag

Overview

The MessageIndicatorFlag element is used to denote to the receiver that the message received is a copy of the original message and is being sent for a specific purpose such as informational, data synchronization or retraction/withdrawal.

MessageIndicatorFlag Best Practices

Data synchronization

- If MessageIndicatorFlag is set to “DataSynchronization”, the receiver should treat this message as designed for synchronization or conversion activities and use the data within the message accordingly per trading partner agreements.

Informational

- If MessageIndicatorFlag is set to “Informational”, the receiver should treat this message as informational only and use the data within the message accordingly per trading partner agreements.

RetractionWithdrawal

- If MessageIndicatorFlag is set to “RetractionWithdrawal”, the receiver should take no further action on the original message.
- This can be used to communicate the withdrawal on a RxRenewalRequest, RxChangeRequest, NewRxRequest, RxTransferInitiationRequest or RxTransfer messages that have not received a response, excluding acknowledgement messages.
- Some examples of potential use cases are when the request is no longer necessary or relevant, the original request was sent with an error or when the response time exceeds pharmacy standard.

Prescriber Best Practices

- Prescribing systems should be able to receive and identify details in the MessageIndicatorFlag to understand the appropriate context of the message.
- If a retraction is received the original request should not be responded to.

Pharmacy Best Practices

- Pharmacies should only send retract messages when a response hasn't been received for the previous request.
- Pharmacies should check the receiver’s Version in the directory download file to make sure the recipient is on SCRIPT version 2023011 or later. This element changes the purpose of a message and is not compatible with versions prior and will be rejected in translations to avoid confusion.
- When retracting a message, a copy of the original request with a unique MessageID should be sent with the MessageIndicatorFlag set to RetractionWithdrawal, and linked to the original request with PrescriberOrderNumber, RelatesToMessageID and RxReferenceNumber. The RelatesToMessageID should be the MessageID of the message being retracted.

R.319: Request messages shall not be responded to after a retraction has been received.

R.320.1: Retractions shall not be sent for requests that have already been responded to with an Approved or Denied status.

R.321: Receiving systems must be able to identify and correctly interpret the received MessageIndicatorFlag field.

R.322: The pharmacy application shall send a retraction when they have an outstanding request, for which a response would no longer be accepted.

7.4. DrugDescription

DrugDescription Best Practices

Customers should work with their drug compendia vendors to utilize the compendia's e-prescribing preferred name as mentioned in the DrugDescription field (see the **Medication Elements**) section.

Use E-Prescribing Preferred Name

✅ **Quality Check - Use the E-Prescribing Preferred Name**: The drug segment of the SCRIPT standard allows up to 105 characters within the DrugDescription field. The content of the DrugDescription field most accurately conveys prescriber intent when using the E-Prescribing Preferred Name (EPN) as published by a commercial compendium source, or the RxNorm Prescribable Name (PSN).

- RxNorm is a normalized naming system with unique identifiers for generic and branded drugs maintained by the National Library of Medicine. For more information, see **https://www.nlm.nih.gov/research/umls/rxnorm/**

  Clinical Relevance/Rationale:

  - Incomplete or inaccurate drug descriptions create workflow disruptions on both sides of the network and may introduce risks to patient health and safety.
  - Entering drug descriptions as free text into the Note field rather than using the designated field may result in higher rates of dispensing or processing errors. NCPDP recommends that software providers only use the EPN from the drug database provided by either the drug compendium source or the National Library of Medicine RxNorm data. The use of standardized drug naming methodology reduces variation, thereby improving operational quality and optimizing e-prescribing processes.

  Best Practices - For Technology Partners:

  - Display the EPN to end users in the final summary screen even if additional alternate names are displayed to end users within the application.
  - Limit the ability for end users to create or use personalized content (free text) in the DrugDescription field.

  Best Practices - For Prescribers:

  - Only enter the drug description into the designated DrugDescription field. Ensure drug descriptions are not entered into the Note field. If unable to find a specific medication or product within the drug database, work through internal support channels to request that the product be added prior to e-prescribing.
    - Do not add other extraneous information to the drug description such as medication changes, dosage increase, etc.

Optional Inclusion of a Reference Name

✅ **Quality Check - Optional Inclusion of a Reference Name:** A standardized reference drug name sourced from the compendia may be conditionally included in parentheses after the EPN to help with drug selection and patient safety. It is not intended to be interpreted as the specific product prescribed while the EPN should exactly correspond with the product identifiers (e.g., representative NDC, RxNorm code and qualifier).

  - Example standardized Format: “EPN (Reference drug name)”
    - Example: “diltiazem ER 120 mg capsule, extended release 12hr (Cardizem SR)”

  In addition, for the implementation of drug descriptions that include a parenthetical reference drug name, follow the recommended implementation guidance below:

1. If the prescribed drug is a brand/single-source brand, send the trade name as the EPN. Note, a reference generic name may be sent in parenthesis at the end.

   a. Align the representative NDC, RxNorm code and RxNorm qualifier to that branded trade EPN.

   b. Do not send truncated names. If brand and generic names do not both fit within the 105-character limit of the field, only send the EPN.

2. In all other non-brand scenarios, send format of generic EPN + (branded trade name).

   a. For old products where the branded trade name is no longer available, the drug description may be sent without the reference branded trade name.

   b. Align all reference names and product indicators with the EPN per Orange Book and Compendia guidelines.

3. For patient safety, it is recommended that the e-prescription drug description that is sent to the pharmacy match what was displayed to the prescriber.
4. Communicate only one concept in the EPN, either the proprietary “brand” name of the product or the chemical “generic” name of the product. When there is no generic product commercially available, use the proprietary “brand” name as the EPN.

Clinical Relevance/Rationale:

- For certain products, the compendium’s EPN alone may not always provide enough clarity to distinguish between similar multi-ingredient products or products with slightly different formulations – e.g., the generic extended-release metformin equivalents for Fortamet, Glumetza, or Glucophage XR (none of which are freely interchangeable or AB-rated by the FDA). Furthermore, ISMP also recommends the inclusion of an additional drug name to help distinguish between Look-alike-Sound-alike (LASA) medications as an additional safety check. Hence, appropriately placed generic or reference brand names can provide supplemental information that may help drive improved product selection, clarity, and dispensing accuracy.
- Pharmacies are limited by each state’s board of pharmacy regulations and scope of practice rules. Many states have specific regulations regarding the use of generic products in place of brand- name products that may take into account the U.S. Food and Drug Administration (FDA) bioequivalence ratings, the pharmacokinetic/pharmacodynamic properties or the therapeutic outcome of the medication (e.g., narrow therapeutic index medications, biosimilars, etc.). It is important that the drug description clearly references either a brand or a generic product, so the pharmacy can determine the single prescribed medication. This helps the pharmacist interpret the “Dispense As Written (DAW)” intentions indicated by the prescriber to determine if a substitution may occur.

Examples:

- Use “ProAir 90 mcg/actuation solution for inhalation” or “albuterol sulfate hfa 90 mcg/actuation aerosol inhaler (Proair HFA)” instead of “albuterol (ProAir, Ventolin HFA) 90 mcg/actuation.”
- Use “Harvoni 90-400 mg tablet” instead of “ledipasvir-sofosbuvir (Harvoni) 90-400 mg tablet” or “ledipasvir-sofosbuvir 90-400 mg tablet.”

E-Prescribing Drug Name Sequence

✅ **Quality Check - E-Prescribing Drug Name Sequence:** At a minimum, ensure the EPN is in the following sequence: product name, strength, strength unit and dosage form.

Best Practices:

- For non-medications, transmit the complete product name. Non-medications (e.g., test strips, insulin pump machine) rarely have an applicable strength or dosage form, thus all elements may not be available.
- The EPN may also include a dosage route or drug delivery device.

Examples:

- Use “Hydroxyzine hydrochloride 100 mg tablet” or “Hydroxyzine HCl 100 mg tablet” instead of “Hydroxyzine HCl tablet 100 mg.”
- Lancets 31 Gauge

Proper Use of Punctuation

✅ **Quality Check - Proper Use of Punctuation:**

Best Practices and Examples:

- Use hyphens (i.e., “-“) instead of forward slashes, back slashes, or pipes (i.e., “/”, ”\”, “|”) to separate similar elements. Use “Augmentin 875-125 mg tablet” instead of “Augmentin 875/125 mg tablet.”
- When large numbers are required, use commas to separate groups of three digits in numbers of 1,000+. Use “Heparin 10,000 unit subcutaneous injection” instead of “Heparin 10000 unit subcutaneous injection.”
- Use a forward slash to write a concentration or proportion per unit of volume. Use “Fluticasone 50 mcg/actuation nasal spray” instead of “Fluticasone, 50 mcg per actuation, nasal spray.”
- Ensure a space is used between numbers and the units to which they refer. Use “simvastatin 80 mg tablet” instead of “simvastatin 80mg tablet.”

Multiple Salts

✅ **Quality Check - Multiple Salts**: When there are multiple drug formulations with different salts, include the specific salt name in the drug description.

Clinical Relevance/Rationale:

- Providing complete and accurate salt form names is a critical method of avoiding confusion or misinterpretation, especially for medications that come in similar formulations.

Best Practices:

- Only use United States Pharmacopeia Convention (USP) approved abbreviations, including, but not limited to, K, Na, HBr and HCl may be used. Otherwise, spell the salt name out in its entirety.

Examples:

- Use “Hydroxyzine hydrochloride 100 mg tablet” or “Hydroxyzine HCl 100 mg tablet” instead of “Hydroxyzine 100 mg tablet.”
- Use “Metoprolol tartrate 50 mg tablet” instead of “Metoprolol 50 mg tablet.”
- Use “Hydroxyzine pamoate 25 mg capsule” instead of “Hydroxyzine PAM 25 mg capsule.”

Dosage Strength Values

✅ **Quality Check - Dosage Strength Values**: For dosage strength, use only Arabic (decimal) numbers rather than Roman numerals or abbreviations such as “M” for thousands or millions. Always use a leading zero when a decimal point is required. Do not use

trailing zeroes.

Clinical Relevance/Rationale:

- The clear identification of numbers, including the proper use of zeroes and decimals, prevents ten- or hundred-fold dosing errors and reduces risks to patient safety.

Best Practices - For Technology Partners:

- When appropriate, develop mechanisms to identify non-numeric values and implement logic to identify decimals without a leading or trailing zero(s). When appropriate, also implement decision support or default values to reduce manual entry.

Best Practices - For Prescribers:

- When possible, avoid the use of zeroes by employing alternative units of measure (e.g., use 30 mcg instead of 0.03 mg).

Examples:

- Use “Aspirin 325 mg tablet” instead of “Aspirin V grains.”
- Use “Pancrelipase 12,000-38,000-60,000 units delayed release capsules” instead of “Pancrelipase 12M-38M-60M delayed release capsules.”
- Use “Digoxin 0.25 mg tablet” instead of “Digoxin .25 mg tablet.”
- Use “Warfarin 5 mg tablet” instead of “Warfarin 5.0 mg tablet.

Strengths for Active Ingredients

✅ **Quality Check - Dosage Strengths for Active Ingredients**: Provide the dosage strength(s) of each active ingredient for drugs with three or fewer active ingredients and group them together after the drug name. The proprietary name alone, without accompanying strength and strength units, is only acceptable when the list of active ingredients is too lengthy to be entered into the field. However, include the dose strengths of all active ingredients on prescriptions for controlled substances, particularly narcotic combinations. For oral contraceptive prescriptions, include dosage strengths (for estrogen, progestin, and iron) to assist with decision-making and clinical support for these drugs. It is acceptable to either include or exclude any inert or placebo ingredients.

A number of drug categories do not require a listing of all active ingredients, including multivitamins, hydration solutions, bowel preparation therapies and other medications with four or more active ingredients.

Clinical Relevance/Rationale:

- Sound medication therapy management requires that healthcare team members be given access to a complete list of the patient’s current medication(s), including all active ingredients. An incomplete list of medications or active ingredients increases the risk of misinterpretation.

Examples:

- Use “Augmentin 875 mg-125 mg tablet” instead of “Augmentin 875 mg tablet."
- Use “Norel SR 325 mg-8 mg-40 mg-50 mg sustained-release tablet” or “Norel SR tablet." Both are acceptable. Note: Norel SR contains four active ingredients.
- Use “Ortho Tri-Cyclen Lo 28-day 0.18-0.215-0.25 mg 25 mcg tablets." Do not use “Ortho Tri-Cyclen Lo 28-day tablets,” as there are two active ingredients whose strengths change by phase.
- Use “Prenatal Plus Iron tablet” instead of listing the strengths for the 10 vitamins and four minerals in the drug.
- Use “PEG-3350 and electrolytes for oral solution” or “NuLYTELY Powder for Solution” instead of a complete or partial strengths list.

- Use “Fioricet with Codeine 325-50-40-30 mg capsule” to include all active ingredient strengths, especially the essential narcotic dose strength.

Include Route of Administration

✅ **Quality Checks - Include Route of Administration**: It is critical to include the route of administration for e-prescriptions when the drug name and strength combination can be administered via different routes.

Clinical Relevance/Rationale:

A drug may have multiple forms in which it is delivered for different clinical indications (e.g., Ofloxacin otic versus ophthalmic solution). Despite having the same drug name and active ingredients, it is clinically important to identify which medication is to be dispensed to the patient. One medication formulation may have different physical, chemical, or pharmacokinetic/pharmacodynamic properties and may therefore produce significantly different clinical outcomes in patients than another formulation.

Best Practices:

- Ensure the identified dosage route is specific and not abbreviated.
- List the route after the dosage strength and strength unit, and before the dosage form in the EPN.

Examples:

- Use “Ofloxacin 0.3% ophthalmic solution” instead of “Ofloxacin 0.3% solution.”
- Use “Flovent 50 mcg/actuation nasal suspension” instead of “Flovent 50 mcg/actuation suspension.”

Use the Complete Dosage Form

✅ **Quality Checks - Use the Complete Dosage Form**: Include the complete dosage form for all medications. Ensure the dosage form indicates any modified release forms of a drug. It is particularly important to include modified release forms when a drug is described as any of the following:

- Sustained, Controlled, Extended, Timed, or Continuous release

Clinical Relevance/Rationale:

- When applicable, it is essential to know the modified release forms so they can identify the time period over which a drug is released. This bioavailability information is crucial for issues such as dosing intervals and drug-drug interactions.
- Some compounds that are described as “24 hour” may have ingredients that slowly absorb into the bloodstream due to their chemical properties, but do not actually require any special time-release delivery mechanisms.

Best Practices:

- Do not abbreviate the dosage form, even in the case of a modified release dosage form.
- Though a brand name may include an abbreviation, acronym, symbol, or code to indicate a modified release form, there is no industry standard for such extensions; specify the type of release with the dosage form.
- The use of “24 hour” or similar indicators is not recommended to fully convey the modified release form of a drug, and instead, use this in conjunction with a more specific indicator (e.g., “24 hour extended-release”) or not at all.

Examples:

- Use “Toprol XL 100 mg extended-release tablet” instead of “Toprol XL 100 mg tablet.”

- Use “Allegra-D 24 Hour 180 mg-240 mg extended-release tablet” instead of “Allegra-D 24 Hour tablet.”

Include Drug Delivery Mechanism or Device

✅ **Quality Checks - Include Drug Delivery Mechanism or Device**: When a drug is available in multiple variants of the same dosage strength and dosage form, communicate the drug delivery mechanism or device in conjunction with either the drug name or the dosage form. Do not modify or eliminate the drug name and/or dosage form due to the addition of the delivery method or device.

Clinical Relevance/Rationale:

- The communication of specific drug delivery mechanisms or devices is important for differentiating between multiple drug variants.

Examples:

Lantus (insulin glargine) subcutaneous solution may be dispensed as:

- “Lantus 100 units/mL subcutaneous solution” (interpreted as vial).
- “Lantus SoloStar Pen 100 units/mL subcutaneous solution” or “Lantus 100 units/mL subcutaneous solution Pen.”

7.5. SigText

SigText Field Best Practices

Use a Sig Builder

✅ **Quality Check - Use a Sig Builder**: Ensure the vast majority of patient directions are created using a standardized SIG composition function whenever possible.

Clinical Relevance/Rationale:

- The utilization of a SIG builder is an important step in the creation of a high quality, repeatable SIG. Use of a SIG builder ensures variability in patient directions is reduced as the directions are inserted by the system in the same format each time. This helps ensure all needed elements are present and reduces the amount of human manipulation needed thereby reducing the overall risk of an adverse drug event.

Best Practices - For Technology Partners:

- Implement a robust, default Sig-builder tool to help end users construct high quality, repeatable directions from comprehensive usability testing.
- There will be a limited number of instructions that even a complex Sig-builder cannot accommodate. In these cases, allow end users to enter free-text, custom patient instructions. If free text must be used for more complex directions, consider clearing out the pre-populated Sig to avoid possible conflicting information.

Ensure Sig Directions are Complete and Accurate

✅ **Quality Checks - Ensure Sig Directions are Complete and Accurate**: Ensure all information in the patient directions or SigText field is clinically correct and complete, with all the required components written in the same order as listed below (i.e., action, dose, dose units, route, frequency, and auxiliary information). Ensure information in the SigText field is not unnecessarily repeated nor conflicts with any other field of the e-prescription.

Examples:

- Use “Take 1 tablet by mouth daily” instead of just “Daily.”
- Use “Take 1-2 tablets by mouth daily as needed for pain” instead of “1 PO QD. Take 1-2 tablets as needed for pain.”
- Use “Take 1 capsule (40 mg) by mouth daily” instead of “Take 1 capsule (40 mg total) by mouth once daily Take 2 capsules (80mg total) by mouth once daily.

Clinical Relevance/Rationale:

- Since directions contain the information for patient use of a drug/therapy, it is critical that the information be accurate, complete, and unambiguous. The use of a Structured and Codified Sig standardizes the structure and syntax of the prescriber’s directions to the dispensing pharmacist and patient, thereby reducing the opportunity for misinterpretation of the prescriber’s intent.
- If the patient instructions are vague, ambiguous or in conflict with information elsewhere in the transaction, it will be necessary to contact the prescriber for clarification. This creates workflow disruptions for pharmacies and prescribers alike. Moreover, if such conflicts result in misinterpretation and incorrect directions on the prescription label, they can threaten patient safety.

Best Practices - For Technology Partners:

- Ensure the SIG builder provides all needed elements in the composed SIG.
- Using compendia sourced information, when possible, prepopulate or provide the user with the “action”, “dose unit”, and “route” based on the drug selected.
- If the end user is unable to convey the complete and accurate instructions with the SIG builder, allow the prescriber to opt out of the standardized Sig and create a completely custom Sig.
- To improve efficiency, allow end users to save favorite, properly formatted Sig strings for future use.
- Construct the final patient directions using any discrete elements from a Sig-builder in the normal Sig pattern: action, dose, dose unit, route, frequency. Avoid delineators in the final directions.
- Always clearly display the final fully constructed Sig to the end user prior to transmission.

Best Practices - For Prescribers:

- Save the most commonly written Sigs, including tapered doses and other complex regimens.
- Ensure that the Sig is constructed with all essential elements in the appropriate order so the patient directions will be clearly understood.

Never Truncate or Split Directions

✅ **Quality Checks - Never Truncate or Split Directions**: While the NCPDP limit is 1000 characters, some applications are developed to support fewer. In either instance, patient directions should not overflow into the Notes field. If patient directions are being transmitted in an unstructured way and they exceed character limits, then communicate by other means, such as by faxing the information to the pharmacy or printing out and providing the instructions to the patient.

Clinical Relevance/Rationale:

- The receipt of incomplete patient directions prevents the pharmacist from performing clinical checks. More importantly, the pharmacist will not be able to fully counsel the patient on how to take/use their medication. Or the pharmacist may provide information to the patient that conflicts with the prescriber’s recommendation. This can lead to patient confusion and possible medication errors.

Best Practices - For Technology Partners:

- Warn end users when the character count nears or exceeds the defined character limits. Consider replacing directions that exceed character limits with “take as directed per physician written instructions” and develop workflow(s) to educate patients about the instructions and/or provide printed copies of the directions.
- Create default directions that are less than the character limits for commonly prescribed lengthy patient directions, such as tapered doses and titrations. For example, for a 60 mg prednisone taper using 10 mg tablets write, “Take 6 tabs orally daily for 2 days, 5 tabs daily for 2 days, 4 tabs daily for 2 days, continue to decrease by 1 tab every 2 days until gone.”

Contains Only Patient Directions

✅ **Quality Checks - Contains Only Patient Directions**: Ensure the SigText field only contains information relating to the patient directions. Do not include information for which another designated field exists in the SCRIPT standard (e.g., ensure the patient directions never include the quantity, drug name, refills, NDC or RxCUI values, etc.).

Example:

- Use “Take 1 tablet by mouth once daily” instead of “Take 1 tablet by mouth once daily, #30 3 Refills.”

Clinical Relevance/Rationale:

- Many clinical decision support tools leverage the e-prescription's discrete data fields and rely on specific types of information being entered in the correct designated fields intended to accommodate it. Thus, only patient directions are to be entered in the SigText field to optimize the benefits from the decision support tools as well as improve the overall quality of the e-prescription.

Use Structured and Codified Sig

✅ **Quality Checks - Use Structured and Codified Sig**: Send patient directions in a structured and codified manner following the SCRIPT standard.

Clinical Relevance/Rationale:

- Adoption of Structured and Codified Sig minimizes ambiguity and assists in the standardization of Sigs in effort to avoid the possibility of inaccurate translation by the receiving partner. Standardization minimizes permutations, facilitates accuracy, promotes patient safety, and improves efficiency. Standardized, structured data reduces the potential for transcription errors and enables automated monitoring of quality metrics. When prescription directions are transmitted using a structured data format and standard terminologies, the meaning is preserved in a system-processable form. Because the clinical components such as route of administration and administration timing are represented as standardized terms, every receiving system will interpret the information in the same way. Moreover, each receiver can map the Sig components to its internal data structures to support clinical alerts, dispensing automation, or other processing.

Best Practices - For Technology Partners:

- When initiating implementation of Structured and Codified Sig, determine the 100 most common Sig concepts and make sure the system can fully accommodate the construction and transmission of these Sig strings. Develop system enhancements to accommodate the codification of less frequently used Sigs.
- Ensure the code systems remain up-to-date with newly published versions of SNOMED CT® and FMT code sets. It is recommended that the most recent version of the code system be used.

Send an Indication

✅ **Quality Checks - Send an Indication**: Including an indication in patient directions is strongly recommended. The indication is a statement of the reason or therapeutic objective for the prescribed medication. Only use "PRN" (i.e., "as needed") in conjunction with an indication or intended therapeutic objective.

> **Note:** The use of an indication does not replace the use of the Diagnosis segment, which remains separate and is to be completed whether an indication is added to the patient directions or not.

Examples:

- Use "Take 1 tablet by mouth every 4 hours as needed for mild to moderate pain."
- Use "Use according to instructions on dose pack for poison ivy rash."

Clinical Relevance/Rationale:

- The inclusion of indications is helpful to patients, pharmacists, and other prescribers. Including indications on prescriptions helps patients better understand and manage their medications. Pharmacists use indications when counseling patients and to help ensure the correct drugs have been prescribed. Prescribers may find indications helpful when they see patients who have been or are concurrently being treated by other prescribers.

- Using PRN without any added information assumes the patient or caretaker fully understands and remembers what the direction “as needed” signifies. This understanding may not exist or may be very short-lived. Without the full indication, PRN provides little to no additional information upon which the pharmacist can base patient counseling, thus it can lead to incorrect and possibly unsafe use by the patient.

Best Practices - For Technology Partners:

- If the Sig-builder tool is used, ensure that it requires end users to enter the specific indication or conditions for PRN use if the prescriber selects a PRN frequency.

Best Practices - For Prescribers:

- Enter the indication into the Sig whenever possible to help the patient and the pharmacist fully understand the intended use of the medication.

Take as Directed

✅ **Quality Checks - Take as Directed**: Qualify the use of statements such as “Take as directed” and “Use as instructed” to clearly dictate where or from whom the patient can obtain the specific directions.

Examples:

- Use “Inject subcutaneously as directed per sliding scale provided by physician” instead of “Inject as directed.”
- Use “Use as instructed per instructions on package” instead of “Use as instructed.”

Clinical Relevance/Rationale:

- Using a Sig such as “Take as directed” without referencing the source of the instructions, may cause confusion for the patient regarding the medication dosage, route, or frequency. Vague instructions can lead to a patient-safety risk due to incorrect and unsafe medication usage.

Best Practices - For Technology Partners:

- If a Sig-builder tool is used, ensure that it requires end users to enter the specific source of the instruction after selecting the “Take/use as directed/instructed” option before they can finalize the transaction.

Best Practices - For Prescribers:

- Limit the use of these statements to specific scenarios when a set of instructions is clearly provided to the patient and/or caretaker.
- When entering “Take/use as directed/instructed,” make sure the specific source of the directions/instructions is made clear in the e-prescription and to the patient.
- Ensure that only patient directions are written in the SigText field; enter any information for the pharmacist regarding medication dispensing or counseling into the Note field.

Specify Duration of Therapy for Acute Treatments

✅ **Quality Checks - Specify Duration of Therapy for Acute Treatments**: Only specify duration of therapy for medications with a defined length of therapy (e.g., antibiotics).

Examples:

- Appropriate: Use “amoxicillin 250 mg/5 ml suspension; take 5 mL by mouth 3 times a day for 10 days” (duration of therapy appropriately indicated for acute antibiotics treatment).
- Inappropriate: “Lipitor 40 mg tablet; take 1 tablet by mouth every night for 30 days” (duration of therapy inappropriately specified for a chronic medication regimen).

Best Practices - For Technology Partners:

- Ensure the system does not enter default durations of therapy for all medications in the patient directions.

Clinical Relevance/Rationale:

- Most prescriptions are written for chronic medications. A duration of therapy may be appropriate for acute medications, as the defined duration may enhance a patient’s understanding of his or her therapy and increase adherence to the treatment plan. A duration of therapy listed for a chronic medication may be misinterpreted as a limit and may create a risk to patient safety if the patient believes they are intended to stop the medication at the end of the specified therapy duration.

Avoid Abbreviations, Acronyms, or Symbols

✅ **Quality Checks - Avoid Abbreviations, Acronyms, or Symbols**: Avoid the use of abbreviations (including Latin), acronyms and symbols when communicating patient instructions. Spell most terms out completely in English. The Institute for Safe Medication Practices (ISMP) provides a complete list of Error-Prone Abbreviations, Symbols, and Dose Designations. The abbreviations, symbols and dose designations included in this list should never be used in any part of an e-prescribing transaction.

Examples:

- Use “Take one tablet by mouth twice daily” instead of “1 tablet po bid.”
- Use “Instill one drop into both eyes once daily” instead of “1 gtt ou qday.”

Clinical Relevance/Rationale:

- Latin abbreviations, as well as other abbreviations, are often misinterpreted. These misinterpretations can cause patients to take/use medications incorrectly, resulting in patient-safety risks.

7.6. Communication Numbers

Communication Numbers Requirements

When CommunicationNumbers is sent, the PrimaryTelephone must be sent.

For PrimaryTelephone, in the U.S. or Canada, Surescripts validates that the prescriber, supervisor, pharmacy, or facility number is:

- Exactly 10 digits
- Not all zeros or repeating numbers
- Not a sequential number (1234567890, 0123456789, 9876543210)
- Not 555 as the area code

7.7. NDC

NDC Best Practices

An NDC, by definition, is specific to a manufacturer/labeler, product, and associated packaging information. A representative NDC is an 11-digit NDC code that is intended to depict a category of medication regardless of package size and manufacturer/labeler. A representative NDC is not intended to infer specificity or preference to the imbedded manufacturer/labeler. In order to maximize the opportunity that the selected NDC exists among the various drug compendia vendor's files, a representative NDC should be a nationally available product and (not be a repackaged NDC, obsolete NDC, private label NDC, unit dose NDC, or inner package/clinic package) unless it is the only NDC available identifying that category of medication.

> **Note:** For more information on handling obsolete NDCs, see ACR R.305.

Surescripts will use the DEA Schedule to determine how to process the message. If the DEA Schedule is not present, Surescripts will validate NDC to determine controlled substance status. If the NDC indicates that it is a controlled substance, the message will be rejected because the DEA Schedule is required for a controlled substance. If the NDC is not found, Surescripts will pass the prescription along to the pharmacy.

Representative NDC - Include Brand and Generic Distinctions

✅ **Quality Check - Representative NDC - Include Brand and Generic Distinctions**: A representative NDC denotes the medication product concept to be prescribed, including the same medication or chemical ingredient in the same strength, form, route of administration, drug delivery mechanism or device, and a brand or generic distinction.

Example:

- A prescriber selects atorvastatin 20 mg oral tablets to be ordered. The drug identifier that the prescriber's system transmits is representative of a generic product, such as NDC 00378395109. It would be inappropriate to transmit a representative NDC for the brand Lipitor 20 mg oral tablet.

7.8. Codified Field Usage for Federal Medication Terminologies (FMT) Codes

Note: For a list of FMT codes maintained by the NCI (National Cancer Institute), go to: **http://evs.nci.nih.gov/ftp1/NCPDP/About.html**. Use the valid value from the appropriate row of the downloaded data. This list should be updated on a monthly basis.

The Table below includes some example Fields.

Codified Field/Field Code	Comment
StrengthForm/Code	Use the NCPDP StrengthForm Terminology rows from the downloaded data.
StrengthUnitOfMeasure/Code	Use the NCPDP StrengthUnitOfMeasure Terminology rows from the downloaded data.
QuantityUnitOfMeasure/Code	Use the NCPDP QuantityUnitOfMeasure Terminology rows from the downloaded data.
DoseUnitOfMeasure/Code	Use the NCPDP DoseUnitOfMeasure Terminology rows from the downloaded data.
DEASchedule	Use the NCPDP DEASchedule Terminology rows from the downloaded data.

7.9. Note

Note Requirements

Fields that cannot be codified are sent in this free text field. Military [prescriber] personnel using their Social Security Number for EPCS are also required to report their branch of service here.

Note Element Best Practices

On occasion a need may arise for the initiator of the transaction to send additional patient-specific information that is relevant to the prescription, but for which a dedicated field does not currently exist in the standard as a discrete element. This need should be exceedingly rare, but when necessary, the NCPDP SCRIPT Standard allows for the transmission of the information in two ways.

First, the PatientCodifiedNote field is able to relay a set of pre-defined notes using a standardized code system. Second, the optional 210-character free-text Note field.

Reference: NCPDP SCRIPT Implementation Guide, V2023011 (May 2024 republication). Sec. 8.1.6.19: Pages 196 - 197

Send Codified Notes

✅ **Quality Check - Send Codified Notes**: Ensure when a note can be sent in a codified fashion it is done so using the PatientCodifiedNote field. An extensive list can be found in the NCPDP SCRIPT Implementation Guide referenced above.

Clinical Relevance/Rationale:

- Sending information in a clear, codified fashion reduces the potential for error by reducing the reliance on a human to identify, transcribe, and respond to the information. Further, systems can be developed to systematically respond to codified notes, reducing the amount of clinician time spent reading notes and ensuring all notes are processed.

Examples:

- In order to relay the need for the patient to make an appointment or schedule labs, send “AL” in the patient codified note element and leave the Note field Null/empty.
- In order to relay the information that this prescription is a vacation supply, send “AN” in the patient codified note element and leave the Note field Null/empty.
- In order to relay information for incrementation dispensing or partial fills, send “AK” in the patient codified note element and leave the Note field Null/empty.

Best Practices – For Technology Partners:

- Develop systems to have the ability to send and receive PatientCodifiedNote using the current named version of the NCPDP External Code List (ECL).
- Ensure end users have a means to quickly populate codified note information without the need to populate free text into the Note field.
- Submit a Data Element Request Form (DERF) to NCPDP for any note concepts which are frequently utilized but for which the ECL does not currently support.

Appropriate Use of Notes

✅ **Quality Check - Appropriate Use of Notes**: Any information that has a designated field (e.g., patient identifiers, prescriber name, drug description, quantity, etc.) is not to be written in the Note field. In addition, ensure information in the Note field does not conflict with information in any other fields of the e-prescription.

Examples of information that have their own discrete fields and therefore are not to be transmitted through the Note field includes, but is not limited to:

Example	Appropriate Field
-“Pt. needs an appointment for further refills.” -“Partial fills allowed”	Patient Codified Note
“DOB: 12-12-1989"	Patient Segment
“Prescribed by: Dr. XZY NPI: 123456789”	Prescriber Segment
“DAW” or “Ok to Substitute”	Substitution
“Dispense 30 tablets”	Quantity
-“Take 1 tablet by mouth twice daily” -"For acute pain”	SIG
“Metoprolol Tartrate 50 mg oral tablet”	Drug
“Dx: 401.9”	Diagnosis
Discount card or coupon information	Benefits Coordination
“90-day supply”	Days Supply
“Allergic to Amoxicillin”	Allergy
“Please label in Spanish”	Language
“Blood pressure 140/90”	Observation
340B information	Office of Pharmacy Affairs ID
“Please dispense 15 grams”	Quantity
“Patient on hospice”	Hospice
“Do not fill before CCYY-MM-DD"	Other Medication Date
“Give 3 refills”	Number of Refills
“Follow up with PCP”	Follow Up Prescriber Type

Clinical Relevance/Rationale:

- The Note field of a transaction is intended to allow prescribers and pharmacists to communicate information that is relevant to the transaction but is not contained in another designated field. Due to the free text nature of the <Note> field, it is not automatically or systematically reviewed by the receiving technology system, and therefore requires manual review. It is crucial that all key prescription information be entered into the designated fields.This helps improve patient safety by reducing the amount of unnecessary information healthcare providers review, reduces human touchpoints, and helps leverage e-prescribing technology to increase efficiency in the dispensing workflow.

Labeling of the Note Field

✅ **Quality Check - Labeling of the Note Field**: Label the Note field as “Notes to Pharmacy” or “Notes to Prescriber” to clearly convey the purpose of the field, and display near the end of the prescription workflow to encourage discrete field use early on.

Clinical Relevance/Rationale:

- Use of the free text Note field by prescribers and pharmacies are often unnecessary and/or inappropriate. Instruct users on the appropriate use of this field; the label name and field description are a passive, yet crucial part of this process. The position of the field within the workflow of the application can also have an impact on its use and can affect behavior. Placement of the Note field near the end of the workflow (after drug selection and the input of directions, quantity information and days supply) can help deter the entry of information that has a designated field elsewhere in the e-prescription.

Best Practices – For Technology Partners:

- In addition to altering the name of the field, include an explanatory watermark (i.e., an embedded overlay reminder statement) in the Note field that briefly describes the intent of the field (e.g., “This field is for additional non-structured information needed for the pharmacist to dispense the prescription.”) Studies demonstrate this approach to be successful at decreasing the incidence of inappropriate Sig-related information in the Note field.
- Provide default selections for commonly written notes to help prescribers save time and standardize such notes (e.g., "Prescription #1 of #3”, “Dose changed,” etc.).
- Consider implementing an additional step or click to access the <Note> field to discourage use of the field when it is not needed.

Distinction Between Directions and Notes

✅ **Quality Check - Distinction Between Directions and Notes**: Ensure the Note field is free of any and all patient directions. Patient directions are ONLY to be written in the SigText field alone or along with the Structured and Codified Sig information populated.

Examples:

- Use Sig: “Take 1 tablet orally twice daily.” Notes: “Null” instead of Sig: “Take 1 orally.” Notes: “Twice daily.”
- Use Sig: “Take 1 tablet by mouth once a day with breakfast.” Notes: “Null” instead of Sig: “Take 1 tablet by mouth once a day.” Notes: “take at breakfast.”

Clinical Relevance/Rationale:

- The inclusion of patient directions in the Note field can result in patient harm. Depending on when the content of the field is reviewed during the dispensing workflow at the pharmacy, it can result in a change in process. For example, if the content of the Note field is not reviewed during data entry in the pharmacy, it may require the prescription to be edited later in the workflow or missed altogether. Due to such a deviation from normal pharmacy workflow, there is an increased risk that the directions will not be captured on the patient label.

Best Practices – For Technology Partners:

- To reduce the likelihood an end user will enter patient directions in the Note field, enhance the sig-builder tool to:
  - Include all discrete parts of a prescription.
  - Accommodate complex directions.
  - Default to or suggest common directions for frequently prescribed medications.
  - Allow the end user to append free-text instructions to the structured Sig created by the Sig- builder tool.

- If free text must be used for complex directions, consider clearing out the pre-populated Sig to avoid possible conflicting information.
- If the prescriber is unable to convey complete instructions with appended free-text, allow them to disable the Sig-builder and write entirely free-text patient directions.

Best Practices – For Prescribers:

- If you are not able to construct patient directions in the Sig-builder tool or Sig free-text (SigText field), do not attempt to send the prescription electronically. Use handwritten, fax or phone prescribing instead.

Avoid Programmed Insertion of Information into the Note Field

✅ **Quality Check - Avoid Programmed Insertion of Information into Note Field**: Ensure information is not automatically inserted into the Note field of a new transaction.

Best Practices – For Technology Partners:

- Ensure that default information is consistently applied to the designated field. For example, transmit any patient benefit or pharmacy discount card information in the Benefits Coordination segment, not the Note field.

Best Practices – For Prescribers:

- If given the functionality to save prescription orders for future use, omit any notes from the saved prescription and reconsider the need for a patient-specific note each time a new e-prescription is transmitted.

7.10. ProhibitRenewalRequest

ProhibitRenewalRequest

The ProhibitRenewalRequest element is used to denote that an RxRenewalRequest should not be sent to the sending prescriber for a NewRx, RxChangeResponse, or RxRenewalResponse. This is usually used when the visit is for a one time prescription (i.e., Urgent Care Center or Emergency Department). In addition to service level validation, the RxRenewalRequest process needs to use this flag for proper routing of the request.

7.11. State Specific Identifiers for EPCS

State Specific Identifiers for EPCS

Customers are responsible to meet all applicable laws and requirements, including, but not limited to, local and state laws and regulations in which the customer's application is deployed and used. This section gives guidance where the states have redefined how the state license number fields are used specifically for EPCS.

Identifier for Midlevel Practitioners

Some states require midlevel practitioners (i.e., advance practice registered nurses (APRNs), physicians assistants (PAs), etc.) with prescriptive authority to include their prescriptive authority identification number in all prescriptions they create. In addition to their prescription authorization number, midlevel practitioners are required to also include their DEA number and may be required to include the DEA number of the supervising prescriber on all prescriptions for controlled substances. When sent, the midlevel practitioner's information should be placed in the message in the prescriber loop and the supervising physician's DEA number should be placed in the supervisor loop.

E-prescribing vendors should populate the Prescriber State License Number field with the prescription authorization number on all prescriptions (for both non-controlled and controlled substances).

Prescriber loop:

StateLicenseNumber in the Identification element in the prescriber section.

For APRNs, the letters "APRN" should always appear first in the field followed by the actual number.

Example: APRN123456789

DEANumber in the Identification element in the prescriber section.

Supervisor loop:

DEANumber in the Identification element in the supervisor section.

It is recommended to automate the inclusion of the supervisor information in e-prescriptions written by mid-level practitioners to avoid the need to include it manually. Many states require the supervisor to be included for all prescriptions and it may cause delays or rejections in the prescription fulfillment if not included. Also pharmacies may be at risk if such information is identified as missing on prescriptions during payer audits, because the payment for such prescriptions may be challenged or reversed.

7.12. Prescriber & Pharmacy Information - Surescripts Directory

Prescriber & Pharmacy Information - Surescripts Directory Best Practices

✅ **Quality Check - Check Surescripts Directory**: While prescribers should confirm the patient's preferred pharmacy at every visit, technology partners should ensure pharmacy Directories information is updated and accurate as per Surescripts requirements.

7.13. Patient

Patient Requirements/Best Practices

Check Patient Demographics

✅ **Quality Checks - Check Patient Demographics**:

- **Patient/Name**: Ensure complete, legal names are sent in all transactions. FirstName and LastName must be sent per the schema. MiddleName should be sent, if available. It is imperative that patient names be consistent across disparate e-prescribing systems.
- **Patient/DateOfBirth**: Ensure the patient's accurate date of birth, which must be sent per the schema, is included in all transactions is in format CCYY-MM-DD. Date of birth is a common differentiator used by healthcare providers especially in scenarios where two or more patients have a similar name. Accurate inclusion improves processing efficiency and patient safety related to similar patient names.
    - For Prescribing System Vendors: If you are presented with a scenario where a third-party payer has a different date of birth on file, present a separate field in your user interface which allows for billing with the alternate date of birth while still allowing end-users to communicate using the accurate date of birth.
- **Patient/Address**: Include the patient's complete address while ensuring AddressLine1 does not contain a P.O. Box or other non-physical address. Healthcare providers often use address to differentiate patients if they have patients with similar descriptions, like name and date of birth. An address may be used by pharmacy personnel to deliver medications, so it is important that the address be a physical location and not a P.O. Box.
- **Patient/CommunicationNumbers/PrimaryTelephone**: Include the patient's primary contact phone number as the primary telephone number in the CommunicationNumbers/PrimaryTelephone field. With the inclusion of a patient's primary phone number in the transaction, the healthcare provider is better able to expeditiously communicate with the patient if they are not physically in-person. In addition, many pharmacies send "order ready", "problem with filling", "refill reminders" or other alerts via phone or short messaging service (SMS), which further establishes the importance of having a means to best contact the patient.

7.14. Drug Identifiers

Drug Identifiers Best Practices

Use NDC Field or ProductCode Field

✅ **Quality Checks - Use NDC Field or ProductCode Field**: Drug identifiers, which are numeric values used to represent a specific drug concept, can be communicated in two ways using the NCPDP SCRIPT Standard: the NDC field or the ProductCode field.

The NDC field facilitates the transmission of the National Drug Code (NDC), while the ProductCode field can be used to transmit the RxNorm Concept Unique Identifier (RxCUI), which is created and maintained by the National Library of Medicine (NLM). A representative NDC is required to be included if the prescribed product is commercially available with a nationally recognized NDC. A representative NDC is one of any 11-digit NDC codes belonging to the same product concept that is nationally available, not repackaged, not obsolete, not private label, and not unit dose (unless it is the only NDC available).

A product concept describes a medication or non-medication that has the same active ingredient, strength, route, dosage form, drug delivery system or packaging, and therapeutic use/indication. For example, all fluoxetine 20 mg tablets have the same product concept, but fluoxetine 20 mg capsules have a different overarching product concept. Product concepts also have brand and generic distinctions. A representative NDC is intended to supplement the "description" of an electronic communication message and is used to convey a product concept between disparate technology systems to facilitate automation.

Best Practices:

- Ensure the NDC semantically matches the product description.
- Note that the NDC is not intended to infer specificity or preference to the imbedded manufacturer/labeler for dispensing or administration purposes, nor is it intended to indicate a substitution preference.
- When the representative NDC does not match to the description, there is a potential patient safety concern if the pharmacy dispenses the incorrect medication based on the NDC. At minimum, this mismatch results in workflow disruptions because the pharmacy staff has to manually correct the system-selected medication based on its description.

NewRx Description	Example of representative NDC	Examples of what not to send		
		NDC	NDC Description	Reason
Glumetza 500 mg extended release tablet	680120002XX	681800338XX	Metformin 500 mg extended release film coated tablet	Brand vs generic mismatch
Levothroid 100 mcg oral tablet	004561323XX	000746624XX	Synthroid 0.1 mg oral tablet	Brand vs brand mismatch
Methylprednisolone 4 mg tablet dose pack	007815022XX	597623327XX	MethylPREDNISolone 4 MG oral tablet	Different package/unit of use
Metoprolol tartrate 50 mg tablet	000930733XX	003784598XX	Metoprolol succinate 50 MG extended release oral tablet	Different product

Ensure Drug Description Matches the Drug Identifiers

✅ **Quality Checks - Drug Description Matches the Drug Identifiers**: Ensure the drug identifier(s) used in conjunction with the drug description conceptually match the product written. Ensure the EPN makes a clear brand/generic distinction, thus the representative NDC and/or RxNorm CUI and Term Type also match.

Clinical Relevance/Rationale:

- The drug identifiers, when used in conjunction with the drug description, ensures accurate communication of the prescriber's intent regarding the product to be dispensed. If the drug identifier does not exactly match the drug product and the full details in the drug description, the pharmacy may be required to contact the prescriber for clarification, thereby disrupting pharmacy/prescriber workflows and may cause a delay in patient care.

Best Practices - For Technology Partners:

- When an RxNorm value is transmitted, it is essential that the value correspond with both the drug description and NDC transmitted in the e-prescription message. If an RxNorm concept exists, transmit the RxCUI/Term Type and the compendia recommended EPN. If an RxNorm concept does not exist, associate the NDC that relates to the compendia recommended EPN.
- Regularly (at least once a month) update drug database(s) to consistently send correct and up to date NDC and RxCUI numbers, and ensure that no obsolete, repackaged, private-label or unit dose NDCs are sent
- Limit end users to using only pre-formatted drug description strings provided by the application. If the application allows the end user to modify any part of the pre-formatted drug description, then employ a system check to ensure correct correspondence of the numerical code and drug description.

Example:

- A prescriber prescribes a brand medication, Levoxyl 88 mcg tablet. The drug identifier the prescriber's system transmits would therefore include a representative NDC 60793085301, which is associated with the Levoxyl 0.088 mg tablet and the RxNorm RxCUI 966175. In addition, the Term Type SBD is also associated with the brand Levoxyl 88mcg.

7.15. Quantity & QuantityUnitOfMeasure

Quantity & QuantityUnitOfMeasure Best Practices

Enter Accurate Quantity and QuantityUnitOfMeasure Values

✅ **Quality Checks - Enter Accurate Quantity and QuantityUnitOfMeasure Values**: An electronic transaction requires end users to communicate the specific quantity of the prescribed product to be dispensed, along with its corresponding qualifier. The NCPDP SCRIPT Standard uses the QuantityUnitOfMeasure field to qualify the quantity of medication to be dispensed. This field uses the National Cancer Institute Thesaurus (NCIt) code subset for Quantity Unit of Measure.

Enter a correct, numerical value into the Quantity field that does not conflict with the DaysSupply and SigText fields. Furthermore, ensure that the QuantityUnitOfMeasure field is correctly associated with the drug product entered in the DrugDescription or drug identifier field.

Regularly check the most recently published Quantity Unit of Measure code set (at least monthly) and continuously create new mappings to any newly published quantity unit of measure codes. When available, use the most specific metric quantity unit of measure code to qualify the dispense quantity of the prescribed product.

- The Quantity Unit of Measure Code (QUOM) value of “C38046 (Unspecified)” is only to be used when a quantity qualifier value is not available for use in the version of the NCIt Codes.
- The quantity unit of measure code “C64933 (Each)” is only to be used for products that are not measured in volume or weight and can only be expressed in units of one/each, such as canes, wheelchairs, various braces or orthotics and other DME supplies.
- Some non-drugs such as diabetic test strips, lancets, needles, and devices have specific Quantity Unit of Measure Codes that are to be used at all times with the appropriate quantity values.

  Example:

  A 100 mL bottle of amoxicillin 400 mg/5 mL oral suspension with the NDC “00093416173” and RxCUI of “308189” would use “#100” and “C28254 (Millimeter)” as the quantity and quantity qualifier, respectively. This further confirms exactly which bottle size to dispense instead of “#1” and “C38046 (Unspecified)” or “C64933 (Each)”.

  Clinical Relevance/Rationale:

  It is important to transmit and receive accurate quantity and quantity qualifier information for the following reasons:

  - Patient safety: Ambiguity or discrepancies in any of the fields can result in patient harm or reduced efficacy.
  - Patient expense: Additional and/or unnecessary patient expense can occur if the desired quantity is unspecified or ambiguous to the pharmacist, who may as a result, face auditing difficulties related to reimbursement.
  - Workflow disruptions: Additional call-backs from the pharmacy to the prescriber’s office to clarify the quantity appropriate for the patient can be avoided.

  Best Practices - For Drug Compendia:

  - Provide guidance for displaying unit-of-use packaging to e-prescribing system vendors so the metric-decimal quantity and the quantity qualifier description are displayed to the prescriber when creating an e-prescription.
  - For drugs/items that are measured in volume (mL) or weight/mass (gm) and are dispensed in unit-of-use packaging, ensure the prescription metric decimal quantity options displayed to the prescriber represent what is commercially available from the pharmaceutical company for the drug/item prescribed (e.g., eye drops – 5 mL, 10 mL, or 15 mL).

- Provide the quantity and Quantity Unit of Measure description along with the package information to technology providers to display to the end users to help guide their selection.

Best Practices - For Technology Partners:

- Once the end user has identified the specific drug and drug dosage being prescribed, ensure the system displays a list of appropriate quantities and quantity qualifiers (e.g., the commercially available package sizes and quantities for the prescribed product).

7.16. DaysSupply

Days Supply Best Practices

Correct Numerical Value Entered for DaysSupply

✅ **Quality Checks - Correct Numerical Value Entered for DaysSupply**: Ensure the value entered into the DaysSupply field appropriately conveys the number of days that one fill of the prescription will last the patient. Ensure the Days Supply information does not contradict the information in other fields, specifically the quantity and patient directions fields. Be aware that although DaysSupply is an optional field in the standard, it may still be mandated by state regulations and required to be transmitted for opioid products.

> **Note:** "Days Supply" and "length of therapy" are different concepts that have different uses. Length of therapy information (e.g., "take 1 tablet by mouth one time daily for 10 days") conveys the specific time period during which the drug regimen will be used. This information is entered as part of the patient directions and is a set duration regardless of the dispense quantity. In contrast, Days Supply conveys the length of time a single fill of the prescription will last the patient as calculated using the dispense quantity and the patient directions. See **SigText - Specify Duration of Therapy for Acute Treatments** for more details.

Example:

- If a physician writes a quantity of "40" with patient directions of "Take 1 tablet by mouth four times daily," the DaysSupply field would be "10" to be consistent with the information entered in the other two fields.
- Alternatively, if a physician writes a quantity of "300 mL" with the Sig "Take 5 mL by mouth three times daily; take for 14 days and then discard the remainder," the DaySupply field would be 20 days, but the length of therapy would be 14 days.

Clinical Relevance/Rationale:

- The Days Supply value may be used by the pharmacist to double-check the dispense quantity or the patient directions by using any two values to solve for the third. Days Supply can provide useful information to the pharmacist for monitoring patients' adherence to the prescribed regimen. This information can also provide an acceptable rationale for dispensed quantities in the event of third-party audits.

Best Practices - For Technology Partners:

- When possible, prepopulate the DaysSupply field to reduce the possibility of incorrect values being entered and to shorten the time required for writing e-prescriptions.
- If the calculated Days Supply is not a whole number, round down to the nearest whole number.

Best Practices - For Prescribers:

- Omit Days Supply from an e-prescription if the dose form is ambiguous for a medication such as a gel, cream, or ointment unless it is mandated by state regulations – e.g., for opioids. For non-opioid products, send Days Supply in these cases if there is a specific dose of measurable quantity, such as separated gel packs.
- If needed, the free text Note field may be used to provide further information regarding the Days Supply; ensure it does not merely repeat the Days Supply value.

7.17. WrittenDate

WrittenDate Best Practices

Ensure Valid Written Date, Not Future

✅ **Quality Checks - Enter Valid Written Date, Not Future**: In most cases, the value in the WrittenDate field will match the date the message was transmitted. The WrittenDate cannot be for a future date.

In NCPDP SCRIPT, the Effective Date is sent in the “OtherMedicationDate” composite with the “OtherMedicationDateQualifier” of “EffectiveDate”. The Effective Date is intended to denote the earliest fill date. It is the date after which the e- prescription being transmitted can be dispensed (i.e., “do not fill before date”), as authorized by the prescriber. This field can be helpful for titrated or controlled medications. The Effective Date cannot precede the Written Date.

Example:

- The prescriber sends two prescriptions for methylphenidate 5 mg oral tablets intending to have the pharmacy dispense one prescription now and the other in 30 days. For the second prescription, the Effective Date field is populated to clearly communicate this intent.

XML

```
<WrittenDate>
  <Date>2020-08-01</Date>
</WrittenDate>

<OtherMedicationDates>
  <OtherMedicationDate>
    <Date>2020-09-01</Date>
  </OtherMedicationDate>
    <OtherMedicationDateQualifier>EffectiveDate</OtherMedicationDateQualifier>
</OtherMedicationDates>
```

7.18. Diagnosis

Diagnosis Best Practices

Ensure Valid Diagnosis Codes and Qualifiers

✅ **Quality Checks - Ensure Valid Diagnosis Codes and Qualifiers**: The NCPDP SCRIPT Standard allows for the transmission of a diagnosis code under the ICD-9 or ICD-10 format in the optional Diagnosis composite within the Medication Prescribed segment.

Include an (ICD-10) diagnosis code in every transaction. Ensure the first occurrence of the diagnosis element aligns to the primary diagnosis. If a secondary diagnosis is needed, a second occurrence of the diagnosis element may be sent. Transmit the diagnosis code without the decimal and include the appropriate qualifier code in the Primary.Qualifier or Secondary.Qualifier fields. Note that "ICD-10" is not a valid qualifier value. To increase interoperability and improve data quality, it is important to adhere to the standard(s) to ensure that all parties are able to send, receive and interpret the information in a meaningful way.

Example:

- Drug Description: Divalproex sodium 500 mg extended-release oral tablet Directions: Take 1 tablet by mouth one time daily Quantity: 30 tablets
  Diagnosis Code: G43.111 (Migraine with Aura, intractable, with migrainosus)

XML

```
<Diagnosis>
  <ClinicalInformationQualifier>1</ClinicalInformationQualifier>
  <Qualifier>ABF</Qualifier>
  <Value>G43111</Value>
  <Description>Migraine with Aura, intractable, with migrainosus</Description>
  <EffectiveDate>
    <Date>2024-04-29</Date>
  </EffectiveDate>
  <ExpirationDate>
    <Date>2025-04-29</Date>
  </ExpirationDate>
</Diagnosis>
```

Clinical Relevance/Rationale:

The inclusion of diagnosis information in its designated field can help healthcare providers validate the prescription's purpose. This can improve patient counseling and help providers identify opportunities to optimize patient care.

Best Practices - For Technology Partners:

- Develop practical workflows that require all transactions to be associated with a diagnosis code prior to transmission.
- When receiving diagnosis code(s), ensure the application displays this information in a meaningful manner.
- Enable clinical-decision support tools to screen for potential drug-disease interactions and to allow for better dose alerts based on diagnosis.
- Ensure the diagnosis code is included in any subsequent transaction referencing the original NewRx (RxRenewal Request, RxChange Request, etc.)

Best Practices - For Prescribers:

- Associate the pertinent diagnosis with the medication, which may not be the same as the primary visit diagnosis.
- Diagnoses can be included in the Medication segment to communicate diagnoses directly related to the prescription. Diagnoses can also be in the included Patient segment which is used to communicate current diagnoses not directly related to the medication but may be important to the healthcare professional involved in the patient's care.

7.19. AllergyOrAdverseEvent

AllergyOrAdverseEvent Best Practices

✅ **Quality Checks - Ensure Proper Allergy Reporting**: The NCPDP SCRIPT Standard currently allows for the transmission of allergy or adverse event information in the optional AllergyOrAdverseEvent element.

Transmit all of the reported drug and chemical allergies. Send either the “NoKnownAllergies” element or the “Allergies” element, never both.

Example:

	<AdverseEvent>		<DrugProductCoded>		
	<Text>	<Code>	<Text>	<Code>	<Qualifier>
Send	Drug Allergy	416098002	Codeine	Q830PW7520	UN
Don't Send	"Affect Muscles"		HCTZ		

Clinical Relevance/Rationale:

- Receiving only a portion of the patient allergy or adverse event profile may provide the receiver of the transaction with a false sense of security that they have all of the clinical information needed to appropriately verify the prescription. This could lead to a patient allergy record not being added to the profile and not taken into consideration when DUR and profile review are performed. Transmit standardized and codified information whenever possible to ensure automated processing and reduced human touchpoints. It is acceptable to describe a patient's exposure or reaction in Notes to Pharmacy.

Best Practices - For Technology Partners:

- Ensure the system does not allow both elements to be populated and transmitted in the same message.

7.20. Observation

Observation Best Practices

✅ **Quality Checks - Include Available Patient Observations**: While the inclusion of patient observation information is not required by the NCPDP SCRIPT Standard, the transmission of this information is supported through the Observation segment of the standard.

Include patient observation information with exact measure dates (e.g., weight, height, systolic and diastolic blood pressures, etc.), in e-prescription messages for all patients when available, especially the pediatric patient population or where weight-based dosing is necessary.

> **Reference:** For more information on Patient Height and Weight, see NCPDP SCRIPT Implementation Guide, V2023011 (May 2024 republication), Sec. 8.1.9: Pages 226 - 227.

Examples:

- Treatment for otitis media in a four-year-old patient
- The prescriber wants to dose with amoxicillin 90 mg/kg/day divided into two doses for a duration of five days.
- The pharmacist is expected to double-check the appropriateness of the prescribed dose for the patient, calculated using the patient's weight.

In this scenario, it is imperative that the e-prescription includes the patient's weight (e.g., 15 kg) and the date the measurement was taken (e.g., CCYY-MM-DD). The calculated dose would be 675 mg/dose.

Clinical Relevance/Rationale:

- The dosage of many drugs is calculated based on a patient's weight or body surface area (BSA). This approach is especially used for pediatric and neonatal populations, as they require higher precision in dosing and tend to have greater fluctuations in weight. Furthermore, some medications can be contraindicated when a patient's blood pressure is elevated or depressed, and pharmacists can use blood pressure information to assess for drug-disease interactions and therapeutic outcomes. This information is essential for pharmacists to provide clinical decision support and double-checks to ensure that the patient receives the appropriate dose(s) of the prescribed medication(s).

Best Practices - For Technology Partners:

- Ensure the system is able to capture commonly documented clinical values, such as weight and height at minimum.
- When receiving Observation data, ensure the application can display this information in a meaningful manner.

Best Practices - For Prescribers:

- Ensure the most recent, up-to-date weight, height or blood pressure measurements are entered when creating e-prescriptions along with the dates the measurements were taken.

7.21. Substitutions

Substitutions Best Practices

Ensure Accurate Substitution Authorization Using DAW

✅ **Quality Checks - Ensure Accurate Substitution Authorization Using DAW**: As part of the Medication Prescribed segment, the NCPDP SCRIPT Standard includes the Substitutions field, which allows the prescriber to identify whether the prescribed medication may be substituted for a therapeutic and bio-equivalent medication product. The Dispense as Written (DAW) code is used to communicate the substitution authorization for each prescription.

Use the Substitutions field to indicate “Dispense as Written” codes. Ensure substitution information is not included in the Note field unless it is required by law.

Clinical Relevance/Rationale:

- In most states, when a prescriber issues a prescription for a brand-name drug, regulations allow the pharmacist to substitute an FDA-approved generic medication in its place. However, a prescriber may override such rules by prescribing brand-name/trade-name drugs and requesting that they be "dispensed as written". Pharmacists rely on the substitutions indicator to determine whether they are allowed to dispense a generic equivalent. It is important that the information in this field be accurate and that prescribers are familiar with the appropriate use cases. Since generic medications are typically less expensive than their branded counterparts, there may be financial implications for the patient and/or pharmacy if incorrect or inconsistent information is transmitted.

Best Practices - For Technology Partners:

- Ensure this field defaults to “0” to indicate substitution is allowed, thus saving the prescriber time during order entry. The prescriber would need to actively select “1” to indicate a substitution is not allowed (i.e., Dispense as Written) if they choose to order a brand-name medication and have the patient receive the brand-name medication.
- Ensure the e-Prescribing Preferred Name (EPN) only indicates the brand/trade name.

Best Practices - For Prescribers:

- Some state programs (e.g., Medicaid) require the prescriber to include the phrase “BRAND MEDICALLY NECESSARY” for a brand prescription with no substitutions permitted. The ReasonForSubstitutionCodeUsed field is designed for this purpose and should be used, in addition to being entered in the Note field.
- Do not indicate “Dispense as Written” (Substitution = 1) for generic medications. If the prescriber wants a brand-name medication to be dispensed, select the brand-name medication from the database and indicate “Substitution Not Allowed (1).”

7.22. Prior Authorization Status

Prior Authorization Status Best Practices

The status of a prior authorization can be communicated between prescribers and pharmacies through particular standard e-Prescribing messages or through the PANotification transaction. Timely communication of prior authorization status can reduce the need for prescriber and pharmacy communication outside of the electronic workflow.

- In the NewRx message, the status of a requested or received prior authorization can be communicated by the provider in the Medication Prescribed | PriorAuthorizationStatus element.
- For RxChange messages, the pharmacy can use the MessageRequestCode of P – Prior Authorization to indicate a prior authorization is required for the medication. The prescriber can respond using the MedicationPrescribed | PriorAuthorizationStatus element in the RxChange response to communicate the status of the prior authorization.
- For an RxRenewal request, the pharmacy may use the MessageRequestCode element in the RxRenewalRequest to notify the prescriber a prior authorization is required. Prescribers can then use the MedicationResponse | PriorAuthorizationStatus element to communicate the status of the prior authorization in the RxRenewalResponse.
- The PANotification transaction can be sent by either the prescriber or the pharmacy to communication that they have requested a prior authorization or they have received a prior authorization decision.

7.23. Extensibility

Extensibility Requirements

Extensibility was added to allow trading partners a consistent way to include additional information in the SCRIPT messages. It was created to enable the integration of extra information in messages in a safe and meaningful way. It can help streamline testing of new data elements, maintain the standard's simplicity while accommodating uncommon use cases, and most importantly, paves a quicker path to introducing new features that benefit patients, providers, pharmacies, and payers.

- Surescripts will not validate data in extensions beyond the schema requirements.
- It is recommended that partners do not reject transactions that include an extension that is not expected and instead ignore the information.

Reference: XML Standard Guide, V2022071, Sec. 4: Pages 11 - 22

When using extensions the following rules as defined by NCPDP that must be observed:

- The core schema must be followed.
- Extensions must not contradict the base standard.
- Extensions must not alter content from the base standard.
- Extensions must not be used when standard fields are available.
- External Code List values cannot be modified by extensions.
- Extensions must not be sent unless published in an approved registry maintained by NCPDP, unless there is a trading partner agreement with the ultimate receiver.

8. Application Certification Requirements (ACR) Summary

ACR Overview

This section provides a consolidated view of all Application Certification Requirements (ACRs) that must be met to support compliant E-Prescribing transactions. It serves as a quick reference to help implementers identify required capabilities, validate conformance, and ensure their application satisfies certification criteria before production use.

Quick Links

8.1. Numeric Representation (S.206)

Overview

This section holds the application certification requirements located in the **Numeric Representation** section in the guide.

S.206

S.206: System shall support user entry and display of up to three digits to the right of the decimal place, without the system rounding or truncating. The decimal point is represented by a period and shall be used as follows:

- Only when there are significant digits to the right of the decimal
- When there is a digit before and after the decimal point
- Not with whole numbers

For example, consider the following possible values:

Correct Format Examples	Incorrect Format Examples
2.5	.27
0.15	3.00
21	14.

8.2. Message Format (S.200, S.201)

Overview

This section holds the application certification requirements located in the **Message Format** section in the guide.

S.200

S.200: Customers shall be able to receive syntactically valid maximum and minimum populated messages. Optional data elements (and values therein) shall not cause message failure.

S.201

S.201: Customers shall ensure all messages are syntactically correct before transmission to Surescripts.

8.3. General Message Requirements (S.202, S.207, S.209)

Overview

This section holds the application certification requirements located in the **General Message Requirements** section in the guide.

S.202

S.202: Receivers shall not reject any incoming messages due to misalignment of local directory contents, the lack of entries for the sender, or the use of address standardization within the customer's local directories.

S.207

S.207: If an element does not have a value to be sent, the application shall not send any data. If no data is sent, the receiving application shall not display a value equal to zero, nor infer any value for that field.

> **Note:** Placeholder values such as zero or N/A should not be sent.

S.209

S.209: The customer shall implement and maintain a Surescripts approved drug compendia that is updated at least monthly.

> **Notes**:
>
> Approved drug compendia for E-Prescribing include the following:
>
> - Elsevier Gold Standard
> - First Databank (FDB)
> - Merative (formerly IBM Truven Health Analytics)
> - National Library of Medicine (NLM) RxNorm
> - Oracle Health Multum Drug Database
> - SCHOLZ DataBank
> - Wolters Kluwer Medi-Span
> - Or others as approved by Surescripts

8.4. Display Requirements (R.300, R.302, R.316)

Overview

This section holds the application certification requirements located in the **Display Requirements** section in the guide.

S.300

R.300: The application shall be capable of providing search results that include all active pharmacies.

R.316

R.316: Pharmacy applications shall incorporate a prominent visual indication to pharmacy personnel using the pharmacy practice management system that the e-prescription they are viewing is either DEA compliant, non-DEA Compliant, or both as described below.

1. Pharmacy system alerts the pharmacist that the EPCS is DEA compliant and that if “seal of approval” is not on the EPCS, the pharmacist knows it is non-DEA compliant.
2. Pharmacy system alerts pharmacist when an EPCS is non-DEA compliant.
3. Pharmacy system does *both* (1) and (2).

Examples of possible indications include:

- A statement on the display such as: “This prescription meets the requirements of the Drug Enforcement Administration’s electronic prescribing for controlled substances rules (21 CFR Parts 1300, 1304, 1306, & 1311).”
- A statement on the display such as: “This prescription does not meet the requirements of the Drug Enforcement Administration’s electronic prescribing for controlled substances rules (21 CFR Parts 1300, 1304, 1306, & 1311).”
- A seal-of-approval icon or symbol that incorporates in its design, language such as “Authentic EPCS – received via DEA-approved processes.”
- A seal-of-disapproval icon or symbol that incorporates in its design language such as “NON-Authentic EPCS.”
- Other similar, unmistakable visual indications that vendors might devise.

R.302

R.302: To ensure patient safety, the application shall take steps to ensure that the critical fields in the **Display Requirements Tables** section (as transmitted in the message) are reviewed by the sender for accuracy and displayed or made available to the receiver. The user shall be alerted if data in any of these elements has been truncated.

> **Note:** The code value for codified fields does not have to be displayed, only the description.

Display Requirements Tables

NewRx

Element Group / Name	Sender	Receiver
Prescriber, FollowUpPrescriber, PrescriberAgent (for receivers only), and Supervisor:		
Prescriber: First Name	X	X
Prescriber: Last Name	X	X
Prescriber: Address		X
Prescriber: Primary Phone		X
Patient:		
Patient: First Name	X	X
Patient: Last Name	X	X
Patient: Address	X	X
Patient: Primary Phone	X	X
Patient: Gender	X	X
Patient: Date of Birth	X	X
Patient: Height and Weight	X	X
Pharmacy:		
Pharmacy Name	X	
Medication:		
Drug Description	X	X
Quantity Value and Unit of Measure	X	X
Sig (free text Sig vs. structured)	X	X
Notes	X	X
Refills	X	X
Days Supply	X	X
Substitution (if dispensed as written)	X	X
Diagnosis Description (first, at a minimum)	X	X
Effective Date	X	X
Compound Information: Description: • Strength - Value, Form, and Unit of Measure • Quantity - Value, and Unit of Measure	X	X

RxRenewalRequest

Element Group / Name	Sender	Receiver
Prescriber, FollowUpPrescriber, PrescriberAgent (for receivers only), and Supervisor:		
Prescriber: First Name	X	X
Prescriber: Last Name	X	X
Prescriber: Address	X	
Prescriber: Primary Phone	X	
Patient:		
Patient: First Name	X	X
Patient: Last Name	X	X
Patient: Address	X	X
Patient: Primary Phone	X	X
Patient: Gender	X	X
Patient: Date of Birth	X	X
Patient: Height and Weight		
Pharmacy:		
Pharmacy Name		X
Medication:		
Drug Description	X	X
Quantity Value and Unit of Measure	X	X
Sig (free text Sig vs. structured)	X	X
Notes	X	X
Refills	X	X
Days Supply	X	X
Substitution (if dispensed as written)	X	X
Diagnosis Description (first, at a minimum)		X
Effective Date	X	X
Compound Information: Description: • Strength - Value, Form, and Unit of Measure • Quantity - Value, and Unit of Measure	X	X

RxRenewalResponse

Element Group / Name	Sender	Receiver
Prescriber, FollowUpPrescriber, PrescriberAgent (for receivers only),and Supervisor:		
Prescriber: First Name	X	X
Prescriber: Last Name	X	X
Prescriber: Address		X
Prescriber: Primary Phone		X
Patient:		
Patient: First Name	X	X
Patient: Last Name	X	X
Patient: Address	X	X
Patient: Primary Phone	X	X
Patient: Gender	X	X
Patient: Date of Birth	X	X
Patient: Height and Weight	X	X
Pharmacy:		
Pharmacy Name	X	
Medication:		
Drug Description	X	X
Quantity Value and Unit of Measure	X	X
Sig (free text Sig vs. structured)	X	X
Notes	X	X
Refills	X	X
Days Supply	X	X
Substitution (if dispensed as written)	X	X
Diagnosis Description (first, at a minimum)		X
Effective Date	X	X
Compound Information: Description: • Strength - Value, Form, and Unit of Measure • Quantity - Value, and Unit of Measure	X	X

RxChangeRequest

Element Group / Name	Sender	Receiver
Prescriber, FollowUpPrescriber, PrescriberAgent (for receivers only), and Supervisor:		
Prescriber: First Name	X	X
Prescriber: Last Name	X	X
Prescriber: Address	X	
Prescriber: Primary Phone	X	
Patient:		
Patient: First Name	X	X
Patient: Last Name	X	X
Patient: Address	X	X
Patient: Primary Phone	X	X
Patient: Gender	X	X
Patient: Date of Birth	X	X
Patient: Height and Weight		
Pharmacy:		
Pharmacy Name		X
Medication:		
Drug Description	X	X
Quantity Value and Unit of Measure	X	X
Sig (free text Sig vs. structured)	X	X
Notes	X	X
Refills	X	X
Days Supply	X	X
Substitution (if dispensed as written)	X	X
Diagnosis Description (first, at a minimum)	X	X
Effective Date	X	X
Compound Information: Description: • Strength - Value, Form, and Unit of Measure • Quantity - Value, and Unit of Measure	X	X

RxChangeResponse

Element Group / Name	Sender	Receiver
Prescriber, FollowUpPrescriber, PrescriberAgent (for receivers only), and Supervisor:		
Prescriber: First Name	X	X
Prescriber: Last Name	X	X
Prescriber: Address		X
Prescriber: Primary Phone		X
Patient:		
Patient: First Name	X	X
Patient: Last Name	X	X
Patient: Address	X	X
Patient: Primary Phone	X	X
Patient: Gender	X	X
Patient: Date of Birth	X	X
Patient: Height and Weight	X	X
Pharmacy:		
Pharmacy Name	X	
Medication:		
Drug Description	X	X
Quantity Value and Unit of Measure	X	X
Sig (free text Sig vs. structured)	X	X
Notes	X	X
Refills	X	X
Days Supply	X	X
Substitution (if dispensed as written)	X	X
Diagnosis Description (first, at a minimum)	X	X
Effective Date	X	X
Compound Information: Description: • Strength - Value, Form, and Unit of Measure • Quantity - Value, and Unit of Measure	X	X

CancelRx

> **Note:** Click **here** for CancelRxResponse Display Requirements information.

Element Group / Name	Sender	Receiver
Prescriber, FollowUpPrescriber, PrescriberAgent (for receivers only), and Supervisor:		
Prescriber: First Name		X
Prescriber: Last Name		X
Prescriber: Address		X
Prescriber: Primary Phone		X
Patient:		
Patient: First Name	X	X
Patient: Last Name	X	X
Patient: Address	X	X
Patient: Primary Phone	X	X
Patient: Gender	X	X
Patient: Date of Birth	X	X
Pharmacy:		
Pharmacy Name	X	
Medication:		
Drug Description	X	X
Quantity Value and Unit of Measure	X	X
Sig (free text Sig vs. structured)	X	X
Notes	X	X
Refills	X	X
Substitution (if dispense as written)		
Effective Date	X	X
Compound Information: Description: • Strength - Value, Form, and Unit of Measure • Quantity - Value, and Unit of Measure	X	X

NewRxRequest

Element Group / Name	Sender	Receiver
Prescriber, FollowUpPrescriber, PrescriberAgent (for receivers only), and Supervisor:		
Prescriber: First Name	X	X
Prescriber: Last Name	X	X
Prescriber: Address	X	
Prescriber: Primary Phone	X	
Patient:		
Patient: First Name	X	X
Patient: Last Name	X	X
Patient: Address	X	X
Patient: Primary Phone	X	X
Patient: Gender	X	X
Patient: Date of Birth	X	X
Pharmacy:		
Pharmacy Name		
Medication:		
Drug Description	X	X
Quantity Value and Unit of Measure	X	X
Sig (free text Sig vs. structured)	X	X
Notes	X	X
Refills	X	X
Substitution (if dispense as written)		
Effective Date		
Compound Information: Description: • Strength - Value, Form, and Unit of Measure • Quantity - Value, and Unit of Measure	X	X

NewRxResponseDenied

Element Group / Name	Sender	Receiver
Prescriber, FollowUpPrescriber, PrescriberAgent (for receivers only), and Supervisor:		
Prescriber: First Name		X
Prescriber: Last Name		X
Prescriber: Address		
Prescriber: Primary Phone		
Patient:		
Patient: First Name	X	X
Patient: Last Name	X	X
Patient: Address	X	X
Patient: Primary Phone	X	X
Patient: Gender	X	X
Patient: Date of Birth	X	X
Pharmacy:		
Pharmacy Name		
Medication:		
Drug Description	X	X
Quantity Value and Unit of Measure	X	X
Sig (free text Sig vs. structured)	X	X
Notes	X	X
Refills	X	X
Substitution (if dispense as written)		
Effective Date		
Compound Information: Description: • Strength - Value, Form, and Unit of Measure • Quantity - Value, and Unit of Measure		

CancelRxResponse

Element Name	Sender	Receiver
ResponseType		
Approved		X
Approved/Note		X
Denied		X
Denied/DenialReason		X
Denied/ReasonCode		X
Prior Dispensing		X

Census

Element Group / Name	Sender	Receiver
Prescriber, FollowUpPrescriber, PrescriberAgent (for receivers only), and Supervisor:		
Prescriber: First Name		X
Prescriber: Last Name		X
Prescriber: Address		X
Prescriber: Primary Phone		X
Patient:		
Patient: First Name	X	X
Patient: Last Name	X	X
Patient: Address		X
Patient: Primary Phone		X
Patient: Gender	X	X
Patient: Date of Birth	X	X
Medication:		
Drug Description		
Quantity Value and Unit of Measure		
Sig (free text Sig vs. structured)		
Notes		
Substitution (if dispense as written)		
Effective Date		
Compound Information: Description: • Strength - Value, Form, and Unit of Measure • Quantity - Value, and Unit of Measure		

Resupply

Element Group / Name	Sender	Receiver
Prescriber, FollowUpPrescriber, PrescriberAgent (for receivers only), and Supervisor:		
Prescriber: First Name		X
Prescriber: Last Name		X
Prescriber: Address		X
Prescriber: Primary Phone		X
Patient:		
Patient: First Name	X	X
Patient: Last Name	X	X
Patient: Address		X
Patient: Primary Phone		X
Patient: Gender	X	X
Patient: Date of Birth	X	X
Medication:		
Drug Description	X	X
Quantity Value and Unit of Measure	X	X
Sig (free text Sig vs. structured)	X	X
Notes	X	X
Substitution (if dispense as written)		
Effective Date	X	X
Compound Information: Description: • Strength - Value, Form, and Unit of Measure • Quantity - Value, and Unit of Measure		

DrugAdministration

Element Group / Name	Sender	Receiver
Prescriber, FollowUpPrescriber, PrescriberAgent (for receivers only), and Supervisor:		
Prescriber: First Name		X
Prescriber: Last Name		X
Prescriber: Address		X
Prescriber: Primary Phone		X
Patient:		
Patient: First Name	X	X
Patient: Last Name	X	X
Patient: Address		X
Patient: Primary Phone		X
Patient: Gender	X	X
Patient: Date of Birth	X	X
Medication:		
Drug Description	X	X
Quantity Value and Unit of Measure	X	X
Sig (free text Sig vs. structured)	X	X
Notes	X	X
Substitution (if dispense as written)		
Effective Date	X	X
Compound Information: Description: • Strength - Value, Form, and Unit of Measure • Quantity - Value, and Unit of Measure	X	X

Recertification

Element Group / Name	Sender	Receiver
Prescriber, FollowUpPrescriber, PrescriberAgent (for receivers only), and Supervisor:		
Prescriber: First Name	X	X
Prescriber: Last Name	X	X
Prescriber: Address		X
Prescriber: Primary Phone		X
Patient:		
Patient: First Name	X	X
Patient: Last Name	X	X
Patient: Address		X
Patient: Primary Phone		X
Patient: Gender	X	X
Patient: Date of Birth	X	X
Medication:		
Drug Description	X	X
Quantity Value and Unit of Measure	X	X
Sig (free text Sig vs. structured)	X	X
Notes	X	X
Substitution (if dispense as written)	X	X
Effective Date	X	X
Compound Information: Description: • Strength - Value, Form, and Unit of Measure • Quantity - Value, and Unit of Measure	X	X

RxTransferInitiationRequest

Element Group / Name	Sender	Receiver
Prescriber, FollowUpPrescriber, PrescriberAgent (for receivers only), and Supervisor:		
Prescriber: First Name		
Prescriber: Last Name		
Prescriber: Address		
Prescriber: Primary Phone		
Patient:		
Patient: First Name	X	X
Patient: Last Name	X	X
Patient: Address	X	X
Patient: Primary Phone	X	X
Patient: Gender	X	X
Patient: Date of Birth	X	X
Pharmacy:		
Pharmacy Name (source and destination)	X	X
Medication:		
Drug Description	X	X
Quantity Value and Unit of Measure		
Sig (free text Sig vs. structured)		
Notes	X	X
Refills		
Days Supply		
Substitution (if dispense as written)		
Effective Date		
Compound Information: Description: • Strength - Value, Form, and Unit of Measure • Quantity - Value, and Unit of Measure	N/A	N/A

RxTransfer

Element Group / Name	Sender	Receiver
Prescriber, FollowUpPrescriber, PrescriberAgent (for receivers only), and Supervisor:		
Prescriber: First Name	X	X
Prescriber: Last Name	X	X
Prescriber: Address	X	X
Prescriber: Primary Phone	X	X
Patient:		
Patient: First Name	X	X
Patient: Last Name	X	X
Patient: Address	X	X
Patient: Primary Phone	X	X
Patient: Gender	X	X
Patient: Date of Birth	X	X
Pharmacy:		
Pharmacy Name (source and destination)	X	X
Medication:		
Drug Description	X	X
Quantity Value and Unit of Measure	X	X
Sig (free text Sig vs. structured)	X	X
Notes	X	X
Refills	X	X
Days Supply	X	X
Substitution (if dispense as written)	X	X
Effective Date	X	X
Compound Information: Description: • Strength - Value, Form, and Unit of Measure • Quantity - Value, and Unit of Measure	N/A	N/A

RxTransferConfirm

Element Group / Name	Sender	Receiver
Prescriber, FollowUpPrescriber, PrescriberAgent (for receivers only), and Supervisor:		
Prescriber: First Name		
Prescriber: Last Name		
Prescriber: Address		
Prescriber: Primary Phone		
Patient:		
Patient: First Name	X	X
Patient: Last Name	X	X
Patient: Address	X	X
Patient: Primary Phone	X	X
Patient: Gender	X	X
Patient: Date of Birth	X	X
Pharmacy:		
Pharmacy Name (source and destination)	X	X
Medication:		
Drug Description		
Quantity Value and Unit of Measure		
Sig (free text Sig vs. structured)		
Notes		
Refills		
Days Supply		
Substitution (if dispense as written)		
Effective Date		
Compound Information: Description: • Strength - Value, Form, and Unit of Measure • Quantity - Value, and Unit of Measure	N/A	N/A

8.5. E-Prescribing Message Flows (R.318)

Overview

This section holds the application certification requirements located in the **E-Prescribing Message Flows** section in the guide.

R.318

R.318: Customers shall support the mandatory messages detailed in the Message Flow section of this guide per customer (Long Term and Post Acute Care (LTPAC) and non-LTPAC) settings and services:

E-Prescribing Messages for non-LTPAC*:*

Required: NewRx; RxRenewalRequest/RxRenewalResponse; RxChangeRequest/RxChangeResponse; CancelRx/CancelRxResponse

E-Prescribing Messages for LTPAC:

Required: NewRx; CancelRx/CancelRxResponse; RxFill; RxFillIndicatorChange (pharmacies); Census; Resupply

8.6. RxRenewal (R.313)

Overview

This section holds the application certification requirements located in the **RxRenewal** section in the guide.

R.313

R.313: RxRenewalRequests shall not be sent back to the prescriber for prescriptions where ProhibitRenewalRequest was set to true.

8.7. CancelRx and CancelRxResponse Requirements (R.314)

Overview

This section holds the application certification requirements located in the **CancelRx and CancelRxResponse Requirements** section in the guide.

R.314

R.314: Receiving systems shall not automatically deny a CancelRx message due to the absence of either the PrescriberOrderNumber or the RelatesToMessageID.

8.8. Prescribing System-Initiated Change Process for LTPAC – Requirements/Best Practices (R.312)

Overview

This section holds the application certification requirements located in the **Prescribing System-Initiated Change Process for LTPAC - Requirements/Best Practices** section in the guide.

R.312

R.312: In LTPAC prescribing systems, when making a prescription change using a CancelRx followed by a NewRx, a MessageRequestCode shall be used to identify the type/severity of change made. This field shall be sent in both the CancelRx and the subsequent NewRx.

8.9. RxFill/RxFillIndicatorChange Requirements (R.315)

Overview

This section holds the application certification requirements located in the **RxFill/RxFillIndicatorChange Requirements** section in the guide.

R.315

R.315: The pharmacy shall support the most recent RxFillIndicator for a prescription, either within the message or as an independent RxFillIndicatorChange message. If the pharmacy does not support RxTransfer, the RxFill FillStatus of Transferred is not required to be supported.

8.10. Resupply Requirements (R.311)

Overview

This section holds the application certification requirements located in the **Resupply Requirements** section in the guide.

R.311

R.311: When sending a Resupply message for a resident that resides within a facility care setting, the current facility data and patient location shall be populated.

8.11. Acknowledgement Messages (R.317)

Overview

This section holds the application certification requirements located in the **Acknowledgement Messages Overview** section in the guide.

R.317

R.317: The application shall allow the status of a transaction to be viewable by an end user or application support staff. If the transaction resulted in an Error, ensure the error is displayed to supporting staff to allow for error resolution.

8.12. Message Header Elements (S.205)

Overview

This section holds the application certification requirements located in the **Message Header Elements** section in the guide.

S.205

S.205: The sender shall ensure the combination of the From and MessageID elements, for all messages including Error, is unique for at least 18 months. Surescripts recommends an unformatted Globally Unique Identifier (GUID).

8.13. Message Linkage (S.210)

Overview

This section holds the application certification requirements located in the **Message Linkage** section in the guide.

S.210

S.210: Customers shall support the scenarios in the Message Linkage section of this guide.

8.14. Medication Elements (R.305, R.306, R.307, S.208, R.308)

Overview

This section holds the application certification requirements located in the **Medication Elements** section in the guide.

R.305

R.305: The drug name shall be an item that is currently available for dispensing. If there are active NDCs available, an inactive/obsolete NDC shall not be used. Customers are expected to work with their drug compendia vendor to satisfy this requirement.

R.306

R.306: If the drug description for single medications as well as compounds exceeds the length of the DrugDescription field, the prescription shall not be sent electronically.

R.307

R.307: When entering a prescription that has a free text DrugDescription and the prescription contains a controlled substance, EPCS requirements shall be followed.

S.208

S.208: Codified values within a message shall not conflict with the related textual concept.

R.308

R.308: When sending a compound with one or more controlled substance ingredients, the message shall contain one of the following:

- either the CompoundIngredient/DEASchedule for each controlled substance in the CompoundIngredient element
- or the DEA schedule of the most restrictive ingredient in the DrugCoded/DEASchedule or NonDrugCoded/DEASchedule element.

8.15. Benefits Coordination (R.304)

Overview

This section holds the application certification requirements located in the **Benefits Coordination Elements** section in the guide.

R.304

R.304: Prescribing vendors who are utilizing the Surescripts Eligibility 270/271 messages shall populate the first BenefitsCoordination element with the associated information returned in a Surescripts 271 message. If more than one active coverage is returned, only the single coverage information utilized to write the prescription is sent. Subsequent BenefitsCoordination elements should be used for coupon/discount information. Prescribing vendors who are not utilizing the Surescripts Eligibility 270/271 messages should use the first BenefitsCoordination element for coupon/discount information. The 271 message's ISA13 control number shall be populated in the BenefitsCoordination/InterchangeControlNumber field in all instances including scenarios where there's no active coverage.

Identifier	271	X12 Data Type	Benefits Coordination	SCRIPT 2023011 Schema
Interchange Control Number	ISA 13	n 9/9	Interchange ControlNumber	n 9
PBM Participant ID	2100A/NM1/09	an 2/80	Payer Identification/ PayerID	an 1..80
PCN	2110C1/REF/03 when REF/01 = "N6"	an 1/80	Payer Identification/ Processor Identification Number	an 1..35
PBM/Payer Name	2100A/NM1/03	an 1/60	PayerName	an 1..70
PBM Member ID	2100C/NM1/09	an 2/80	PBMMemberID	an 1..80
Cardholder ID	2100C/REF/01 when REF/01 = "HJ"	an 1/50	CardholderID	an 1..35
BIN	2110C1/REF/02 when REF/01 = "N6"	an 1/50	Payer Identification/ IINNumber	an 1..35
Group Number	2110C1/REF/02 when REF/01 = "6P"	an 1/50	GroupID	an 1..35
Group Name	2100C1/REF/03 when REF01 = "6P"	an 1/80	GroupName	an 1..70

Note: There are differences between the field lengths in the Eligibility and SCRIPT schemas that could result in data being truncated.

8.16. RxRenewal (R.303)

Overview

This section holds the application certification requirements located in the **RxRenewalResponse Table** section in the guide.

R.303

R.303: The RxRenewalResponse type shall be determined by the rules in the following table. Exceptions to this requirement include items in the common message header and the optional Structured and Codified Sig.

> **Note:** See the **RxRenewalResponse Table** in the RxRenewal section for more information.

8.17. RxRenewal Element Usage (R.309)

Overview

This section holds the application certification requirements located in the **RxRenewal Element Usage** section in the guide.

R.309

R.309: An automatic response for RxRenewalRequests shall not be sent back to the pharmacy. Exceptions to this requirement include an automatic Denial for non-support of Compounds or Supplies, a deceased patient, or when the original prescription contained the ProhibitRenewalRequest flag.

- Automatic response: A response that is generated systematically without allowing the receiver to review the request.

8.18. FollowUpRequest Element Usage (R.310, R.323, R.324)

Overview

This section holds the application certification requirements located in the **FollowUpRequest Element Usage** section in the guide.

R.310

R.310: When responding to a FollowUpRequest, only one response shall be sent and shall reference the most recent request.

R.323

R.323: Prescribing systems shall be able to identify and correctly interpret the FollowUpRequest field in inbound messages.

R.324

R.324: When sending a follow up message for an outstanding request, the Pharmacy System shall populate and transmit the FollowUpRequest field.

8.19. MessageIndicatorFlag (R.319, R.320.1, R.321, R.322)

Overview

This section holds the application certification requirements located in the **MessageIndicatorFlag** section in the guide.

R.319

R.319: Request messages shall not be responded to after a retraction has been received.

R.320.1

R.320.1: Retractions shall not be sent for requests that have already been responded to with an Approved or Denied status.

R.321

R.321: Receiving systems must be able to identify and correctly interpret the received MessageIndicatorFlag field.

R.322

R.322: The pharmacy application shall send a retraction when they have an outstanding request, for which a response would no longer be accepted.

9. Message Examples

Examples Disclaimer

Examples provided throughout this guide are not intended to be all-inclusive. This pertains to example workflows, element-specific (field) examples, or message examples. Customers should not restrict coding to the examples used herein.

When developing, this guide should be used along with the accompanying schema file, additional documentation referenced, and applicable customary XML coding standards.

> **Note:** Version 20230115, which is a republication of version 2023011, is used throughout this guide.

NewRx (from Prescriber) Message Example

The following example uses the Surescripts message header and the NCPDP NewRx (from Prescriber) message example.

XML

```
<Message DatatypesVersion="20230115" TransportVersion="20230115" TransactionDomain="SCRIPT" TransactionVersion="20230115" Structur
    <Header>
        <To Qualifier="P">7701630</To>
        <From Qualifier="D">1999999999992</From>
        <MessageID>7f0931fa9daa419abc3e9c0a698c4bfd</MessageID>
        <SentTime>2024-04-25T03:35:23.726Z</SentTime>
        <SenderSoftware>
            <SenderSoftwareDeveloper>MDLITE</SenderSoftwareDeveloper>
            <SenderSoftwareProduct>443</SenderSoftwareProduct>
            <SenderSoftwareVersionRelease>2.2</SenderSoftwareVersionRelease>
        </SenderSoftware>
        <PrescriberOrderNumber>110089</PrescriberOrderNumber>
    </Header>
    <Body>
        <NewRx>
            <Patient>
                <HumanPatient>
                    <Names>
                        <Name>
                            <LastName>SMITH</LastName>
                            <FirstName>MARY</FirstName>
                        </Name>
                    </Names>
                    <GenderAndSex>
                        <AdministrativeGender>N</AdministrativeGender>
                    </GenderAndSex>
                    <DateOfBirth>
                        <Date>1954-12-25</Date>
                    </DateOfBirth>
                    <Address>
                        <AddressLine1>45 EAST ROAD SW</AddressLine1>
                        <City>CLANCY</City>
                        <StateProvince>WI</StateProvince>
                        <PostalCode>54999</PostalCode>
                        <CountryCode>US</CountryCode>
                    </Address>
                    <CommunicationNumbers>
                      <PrimaryTelephone>
                        <Number>6512551122</Number>
                      </PrimaryTelephone>
                </CommunicationNumbers>
                </HumanPatient>
            </Patient>
            <Pharmacy>
                <Identification>
                    <NCPDPID>7701630</NCPDPID>
                    <NPI>7878787878</NPI>
                </Identification>
                <BusinessName>MAIN STREET PHARMACY</BusinessName>
                <CommunicationNumbers>
                    <PrimaryTelephone>
                        <Number>6152205656</Number>
                    </PrimaryTelephone>
                </CommunicationNumbers>
            </Pharmacy>
            <Prescriber>
```

```
                <NonVeterinarian>
                    <Identification>
                        <NPI>1999999992</NPI>
                    </Identification>
                    <Names>
                        <Name>
                            <LastName>JONES</LastName>
                            <FirstName>MARK</FirstName>
                        </Name>
                    </Names>
                    <Address>
                        <AddressLine1>211 CENTRAL ROAD</AddressLine1>
                        <City>JONESVILLE</City>
                        <StateProvince>TN</StateProvince>
                        <PostalCode>37777</PostalCode>
                        <CountryCode>US</CountryCode>
                    </Address>
                    <CommunicationNumbers>
                        <PrimaryTelephone>
                            <Number>6152219800</Number>
                        </PrimaryTelephone>
                    </CommunicationNumbers>
                </NonVeterinarian>
            </Prescriber>
            <MedicationPrescribed>
                <DrugDescription>Calan SR 240MG oral tablet</DrugDescription>
                <Product>
                    <DrugCoded>
                        <NDC>00025189131</NDC>
                    </DrugCoded>
                </Product>
                <Quantity>
                    <Value>60</Value>
                    <CodeListQualifier>38</CodeListQualifier>
                    <QuantityUnitOfMeasure>
                        <Code>C48542</Code>
                    </QuantityUnitOfMeasure>
                </Quantity>
                <WrittenDate>
                    <Date>2024-04-29</Date>
                </WrittenDate>
                <Substitutions>
                    <Substitutions>0</Substitutions>
                </Substitutions>
                <NumberOfRefills>2</NumberOfRefills>
                <Sig>
                    <SigText>TAKE ONE TABLET TWO TIMES A DAY UNTIL GONE</SigText>
                </Sig>
            </MedicationPrescribed>
        </NewRx>
    </Body>
</Message>
```

10. Alternate RxChange Workflows for Prior Authorization

Workflow Overview

Surescripts provides multiple workflows to enable pharmacies to automate the retrospective prior authorization process.

The preferred workflow is when both the pharmacy and the prescribing system have implemented the NCPDP RxChange message. Alternatively, when the prescriber is not RxChange-enabled, Surescripts uses the structured data from the RxChangeRequest message to allow the prescriber to complete the prior authorization process electronically using Surescripts Prior Authorization Portal.

The alternate workflow provides benefits to the pharmacy RxChange for Prior Authorization workflow when communicating with prescribers who have not yet implemented RxChange including:

- Improved PA turnaround time using Electronic Prior Authorization (ePA).
- Provides PA determination to pharmacies using RxChangeResponse to close the loop.

Alternate Workflows

Surescripts supports two alternate RxChange for PriorAuthorization workflows. In one workflow, Surescripts performs the enablement check, and in the other, the pharmacy performs the check. The following are the steps for each workflow.

Surescripts Determines Route – RxChangeRequest to Generic SPI (Recommended)

Surescripts determines whether to route the RxChangeRequest electronically or by fax in this workflow. The pharmacy sends the RxChangeRequest to a generic SPI and Surescripts determines what the delivery route should be. If the prescriber is enabled, the message is delivered electronically, and if not the message is converted to fax.

> **Note:** Surescripts uses a generic faxing template. A pharmacy-specific branding template is available upon request in some instances. The fax template provides instructions for using Surescripts Prior Authorization Portal, and it also outlines other options available to prescribers for responding to the PA notifications.

1. Pharmacy processes the prescription and identifies the need for prior authorization.
2. Pharmacy sends Surescripts an RxChangeRequest to SPI “0000000000000” (a generic SPI).

   > **Note:** Surescripts requires the pharmacy to send the provider’s fax number. Pharmacies should review fax number accuracy on a regular basis and have a secondary process in place if the fax process fails.

3. If the RxChangeRequest is related to a NewRx, include the BenefitsCoordination from the NewRx.
   - Pharmacy should always send the IINNumber (formerly BIN).
   - The pharmacy should always send the ProcessorIdentificationNumber (PCN), if known.
4. Surescripts attempts to match the provider demographics in the RxChangeRequest to a provider with an RxChange service level in the Surescripts Directory.

   a. If Surescripts finds a match:

      i. Surescripts sends the RxChangeRequest to the provider’s RxChange-enabled SPI.

ii. Prescribing vendor receives the RxChangeRequest and initiates the prior authorization with the PBM (pharmacy benefit manager)/payer identified in the BenefitsCoordination composite.

> **Note:** If the SPI is not ePA-enabled, Surescripts can append the Note field with a transaction (TRX) code on behalf of the sending pharmacy. This TRX code can be used by the prescriber to complete the prior authorization within Surescripts Prior Authorization Portal. The TRX code with the portal URL will be appended to the Note field only if there are available characters per the schema. Surescripts will not edit or remove any existing pharmacy notes. The TRX code will only be added to the Note field from pharmacies that have opted into this service.

iii. Prescribing vendor completes the ePA process with the PBM/payer.

iv. Prescribing vendor sends an RxChangeResponse to the pharmacy via Surescripts and notes whether the prior authorization was approved or denied.

b. If Surescripts does not find a match:

i. Surescripts faxes a prior authorization notification including directions for completing the PA to the prescriber using the pharmacy-provided fax number. The fax includes a Surescripts-generated unique TRX code which can be used to retrieve and initiate the PA on Surescripts Prior Authorization Portal so it can be completed electronically.

> **Note:** Once Surescripts generates the unique TRX code, the prescriber has seven days to sign into Surescripts Prior Authorization Portal to complete the PA. The TRX code expires after that time.

ii. If the prescriber chooses Surescripts Prior Authorization Portal, the prescriber uses the unique TRX code that is found on the fax to initiate the PA.

iii. Once the ePA process is complete, Surescripts sends an RxChangeResponse to the pharmacy with an approval/denial response and the authorization number, if applicable.

iv. The RxChangeResponse is addressed from 8398058138001, not the generic SPI the pharmacy initially addressed the RxChangeRequest to.

> **Note:** In cases where the prescriber does not complete the PA using Surescripts Electronic Prior Authorization or Prior Authorization Portal, Surescripts cannot send an RxChangeResponse as the NCPDP standard does not have an appropriate reason when the outcome of the PA is unknown. Pharmacies should utilize a secondary process for notifying the prescriber if they do not receive an RxChangeResponse after 48 hours.

Pharmacy Checks Directory to Determine Route – Surescripts Faxes

The pharmacy checks the Surescripts directory to determine the prescriber's RxChange enablement. If the prescriber has the RxChange service level, the pharmacy follows the normal flow and sends the message electronically. If not, Surescripts converts the message to fax.

> **Note:** Surescripts uses a generic fax template. A pharmacy-specific branding template is available upon request in some instances. The fax template provides instructions for using Surescripts Prior Authorization Portal, and it also outlines other options available to prescribers for responding to the PA notifications.

1. Pharmacy processes the prescription and identifies the need for prior authorization.

2. Pharmacy attempts to match the provider demographics to a provider with an RxChange service level in the Surescripts Directory.

   a. If the pharmacy finds a match:

      i. The pharmacy sends the RxChangeRequest to the prescriber's RxChange-enabled SPI and follows the normal RxChange workflow.

      > **Note:** If the SPI is not ePA-enabled, Surescripts can append the Note field with a transaction (TRX) code on behalf of the sending pharmacy. This TRX code can be used by the prescriber to complete the prior authorization within Surescripts Prior Authorization Portal. The TRX code with the portal URL will be appended to the Note field only if there are available characters per the schema. Surescripts will not edit or remove any existing pharmacy notes. The TRX code will only be added to the Note field from pharmacies that have opted into this service.

   b. If the pharmacy does not find a match or if the provider is not in the Surescripts Directory:

      i. The pharmacy sends Surescripts an RxChangeRequest to SPI "0000000000000" (a generic SPI).

      > **Note:** Surescripts requires the pharmacy to send the provider's fax number in the RxChangeRequest.

      ii. If the RxChangeRequest is related to a NewRx, include the BenefitsCoordination from the NewRx.

         - Pharmacy should always send the IINNumber (formerly BIN).
         - The pharmacy should always send the ProcessorIdentificationNumber (PCN), if known.

      iii. Surescripts attempts to match the prescriber demographics to a prescriber with an RxChange service level in the Surescripts Directory.

   c. If Surescripts finds a match:

      i. Follow **step 4a** in the **Surescripts Determines Route – RxChangeRequest to Generic SPI (Recommended)** section.

   d. If Surescripts does not find a match:

      i. Follow **step 4b** in the **Surescripts Determines Route – RxChangeRequest to Generic SPI (Recommended)** section.

Key Elements of the RxChangeRequest

> - Pharmacies sending the RxChangeRequest to the generic Surescripts SPI "0000000000000" are required to send valid RxChange transactions. The requirements in this section define elements required to be included in the transaction for this workflow. This may include data that is now optional in the schema, or explains what data is required for the actual field. Refer to the schema for additional requirements.
> - Fields listed in the table below are required. If applicable fields are not sent, it may prevent the RxChange from being processed properly. Refer to the NCPDP SCRIPT Schema listed in Document References for a complete list of fields.

Element Name	Comments
Header	
To	The identification of the intended receiver of the message. To must be populated with SPI “0000000000000” (a generic SPI).
Patient	
HumanPatient	
Address	
AddressLine1	Contains the patient’s demographic information.
City	Contains the patient’s demographic information.
State	Contains the patient’s demographic information.
ZipCode	Contains the patient’s demographic information.
Prescriber	
Fax Number	Contains the prescriber’s fax number in at least one element.
Benefits Coordination **Note:** The pharmacy should include the information for the PBM/payer who rejected the claim.	
PayerIdentification	Contains the PBM/payer’s Surescripts Participant ID.
IINNumber	Contains the health plan’s Card Issuer ID or Issuer Identification Number.
ProcessorIdentificationNumber	Contains the health plan’s PCN, if known.
GroupID	Contains the health plan’s group number, if available.

Key Elements of the RxChangeResponse

This section outlines some of the key elements on the RxChangeResponse for the prior authorization workflow. These elements are sent to the pharmacy to provide visibility into the outcome of the prior authorization. Refer to the NCPDP SCRIPT Schema listed in Document References for a complete list of elements.

Element Name	Comments
Medication Prescribed	
PriorAuthorization	Prescribing vendor systems should send the prior authorization number, if provided by the PBM/payer
PriorAuthorizationStatus	The status of the prescription’s prior authorization as known by the sender.

11. Error Guidance

This section is designed to help prevent and troubleshoot network errors. It does not include every error scenario but addresses many of the common errors and provides specific recommendations related to NCPDP SCRIPT TransactionErrorCodes(s), DescriptionCode(s), and other errors experienced on the Surescripts network. When additional assistance is needed, please contact Surescripts Support or your assigned Account Manager.

This supplement will:

- Provide guidance on sending various TransactionErrorCode and DescriptionCode combinations
- Offer recommendations regarding TransactionErrorCode(s) and DescriptionCode(s) received
- Identify and reduce errors that impact the effectiveness of transacting on the network

Preventing Errors

Preventing errors begins by ensuring that the information being sent in a message is schematically valid, meets additional business rules, application certification requirements (ACRs), and best practice guidance. Messages that do not pass schema and business rule validations will result in Surescripts errors. Messages that do not align with best practice guidance may result in a partner rejection.

General Best Practice Guidance

- Follow all NCPDP Schema and conditional workflow validations.
- Follow Surescripts business rules and application certification requirements.
- Displaying error details to the end user may help improve corrective actions needed to fix a message prior to retrying.
- Check error reports in Workbench Message Search/Dashboard or request reports from Surescripts Support, as applicable. It is recommended that software vendors review these reports and errors returned to their system on a regular basis.
- Prevent duplicates and looping: Retrying messages should be limited to a finite number of attempts and over a limited period, such as 3-5 attempts over a 30-minute time frame.
    - Setting time parameters when retries are appropriate can help prevent endless loop retries.
- Implement system features that do not allow the end user to accidentally resend the same message while waiting for the send process to complete.

SCRIPT Error Guidance

See the below table for additional information on Transaction Error Codes.

TransactionErrorCode	Description	Recommendation
600	Communication Problem - Try again later	This error is most commonly used when a point in communication is disrupted and the sender should consider resending the message. Retrying a message with the same MessageID and SentTime should be reserved for issues with connectivity. Retrying this message type with or without the same MessageID and SentTime may also be dependent on the DescriptionCode. Note: When no DescriptionCode is sent or when sent in combination with a DescriptionCode of 008, Surescripts will retry and then error or send as a fax if fax criteria are met.
601	Receiver unable to process	A message that received this error should only be retried if the issue can be identified and corrected. This error message indicates the need for a new MessageID and SentTime due to tracking when a message is corrected. Note: When no DescriptionCode is sent and the message does meet the fax criteria, then the fax error message Faxable Error Message (FEM) would be sent to the recipient. Faxable Error Message indicates an Communication Error has been encountered but the message meets fax criteria and can be faxed to the intended recipient.
602	Receiver system error	This error could be caused from connectivity or other receiver system issues. Retrying this message type with or without the same MessageID and SentTime is dependent on the DescriptionCode. Note: When no DescriptionCode is sent and the message does meet the fax criteria, then the FEM would be sent to the recipient
700	Configuration error	Only retry if issue can be identified and corrected. This error is most commonly used when transaction types are not supported. Note: When no DescriptionCode is sent and the message does meet the fax criteria, then the FEM would be sent to the recipient
900	Transaction rejected	This error should be reserved for issues identified by intermediaries. Only retry if the issue can be identified and corrected. Retrying this message type with or without the same MessageID and SentTime is dependent on the DescriptionCode. Note: No faxing occurs for this error type.

See the table below for additional information on general Error Description codes.

Error Description Code	Description	Recommendation
008	Request timed out before response could be received.	Best Practice: Use with a 600 or 602 error. Will be retried and then faxed by Surescripts if faxing criteria are met.
103	COO cardholder last name is invalid.	Best Practice: Use with TransactionErrorCode 601 or 900. Note: It is okay to try the message again with a new MessageID and SentTime when correction has been made.
134	Sending a Quantity Sufficient with Quantity of 0 is invalid for this pharmacy	Best Practice: Use with TransactionErrorCode 601 or 900. Note: It is okay to try the message again with a new MessageID and SentTime when correction has been made.
144	Number of refills invalid	Best Practice: Use with TransactionErrorCode 601 or 900. Note: It is okay to try the message again with a new MessageID and SentTime when correction has been made.
210	Unable to process transaction. Please resubmit.	Best Practice: Use with TransactionErrorCode 600 - could also be used with TransactionErrorCode 601 or 900. It is best to include free text to specifically identify the issue. Note: It is okay to try the message again with a new MessageID and SentTime when correction has been made.
220	Transaction is a duplicate	Best Practice: Use with TransactionErrorCode 601 or 900. DO NOT RETRY.
500	XML syntax error – Parser error (error that would be caught by the XML parser. Xpath of the element must accompany).	Best Practice: Use with TransactionErrorCode 601 or 900. Free text is helpful with this combination. Note: It is okay to try the message again with a new MessageID and SentTime when correction has been made.
1000	Unable to identify based on the information submitted (Xpath of the element must accompany).	Best Practice: Use with TransactionErrorCode 601 or 900. Additional free text is useful. Note: It is okay to try the message again with a new MessageID and SentTime when correction has been made.
2000	Data format is valid for the element, but content is invalid for the situation/context (Xpath of the element must accompany).	Best Practice: Use with TransactionErrorCode 601 or 900. Additional free text is useful. Note: It is okay to try the message again with a new MessageID and SentTime when correction has been made.
3000	Does not follow NCPDP standard or implementation guide rules (Xpath of the element must accompany).	Best Practice: Use with TransactionErrorCode 601 or 900. Additional free text is useful. Note: It is okay to try the message again with a new MessageID and SentTime when correction has been made.
4000	Intermediary is unable to deliver transaction to the recipient.	Best Practice: Use with TransactionErrorCode 600 or 602 sent by intermediaries. When used in combination with TransactionErrorCode 600, retry is due to connectivity issue. When used with TransactionErrorCode 602, additional free text may be helpful.

Error Description Code	Description	Recommendation
		Note: It is okay to try the message again with a new MessageID and SentTime when correction has been made.
4010	Intermediary is unable to process response from recipient.	Best Practice: Use with TransactionErrorCode 600 or 602 sent by intermediaries. When used in combination with 600, retry is due to connectivity issue. When used with 602 additional free text may be helpful. Note: It is okay to try the message again with a new MessageID and SentTime when correction has been made.
4020	Intermediary system error.	Best Practice: Use with TransactionErrorCode 900 sent by intermediaries. May also be used with 602 error code, additional free text may be helpful. Note: It is okay to try the message again with a new MessageID and SentTime when correction has been made.
4030	Sender not allowed to send this transaction type.	Best Practice: Use with TransactionErrorCode 700 - configuration error.
4040	Receiver does not support receiving this transaction type.	Best Practice: Use with TransactionErrorCode 700 - configuration error.
Null value	When no DescriptionCode is sent and no free text accompanies the error code.	Best Practice: TransactionErrorCode 600 would be retried by Surescripts and then faxed if criteria for faxing are met. If TransactionErrorCode 601, 602, or 700 are sent and no DescriptionCode is sent, then Surescripts will fax if the faxing criteria are met. TransactionErrorCode 900 with no DescriptionCode will be passed to the recipient, free text is recommended.
Null value	Free Text	Best Practice: When sending free text send enough information to the receiver to identify what corrections (if any) need to be addressed prior to resending or specify not to resend. • If message should not be resent then specify in free text with reason not to resend (e.g., "Do not retry, duplicate"). • If the error has a TransactionErrorCode but no DescriptionCode and does not meet the fax criteria, then the free text will be passed to the recipient. • If the error has a TransactionErrorCode but no DescriptionCode and does meet the fax criteria, then the FEM would be sent to the recipient.

Additional Error Guidance

Network errors are seen in several forms and are broken down by types or categories of validation. This section covers some of the common errors that Surescripts validates and related best practice guidance.

Schema Validations

Surescripts validates incoming messages per the NCPDP Schema, which can be a large portion of errors seen on the network. Some common validations that violate schema include:

- Datatype errors: These errors include invalid character types sent within an element. Example: alpha characters in a numeric only field.
- Missing or incomplete elements: These errors are usually caused by a system not correctly removing all the appropriate .xsd identifiers of an element and sending incomplete tags. Example: A conditional element that has an opening tag, no value, and no closing tag.
- Codified values: Surescripts does not validate that all codified values pointing to an external code set are up to date or accurate per the associated code set (e.g., ICD-10 or SNOMED CT codes). Sending systems should ensure that the codified values they are sending are accurate and valid prior to sending the electronic message. When specific codified values are identified by NCPDP, Surescripts will communicate to the network if updates are required to pass validation or if we will allow values to pass and leave it to the receiving system to identify or error.
- Datatype designation: Adhere to the datatype designation to avoid these errors. This can be accommodated by restricting character types in the application.

Directory Errors

When local directory download files are out of alignment or service levels are not present for the intended message types being sent, errors can occur. Keeping local directories updated with current information can help avoid common directory related errors.

Directory Error Details

- Replaced/Updated Routing Identifier Records: If an SPI moves Refill services for a specific location or if a new NCPDPID replaces an old, expired one, the sender should ensure they are moving activity to the alternate identified route based on service levels and enablement dates.
- Out of Sync Directory Records: Services listed on the Surescripts Directory do not match up with the owner set up. These will often be "Partner Responded" errors and require the record owner to review/update the Surescripts record accordingly.
- Directory related content errors can occur when fields do not meet defined business rules or an element is determined (i.e., DEA number) as expired or does not conform to expected formatting (i.e., NPI LUHN check). Missing required elements should be corrected for successful activity.
- Permission/Record Access: If a record (SPI or NCPDP) has changed owner via a Change of Vendor, and the previous record owner attempts to use that record to send a message, an authentication error will occur. A record must be aligned with the Account associated with the authenticating mTLS certificate in order to transact. Contact Surescripts Support if you encounter an authentication failure and need further assistance.

Best Practice Guidance/Requirements

- Record Management: Ensure that registered records are current and up-to-date for the location. Surescripts suggests quarterly review of all owned records.
    - Learning Directory: If using the Learning Directory feature to maintain practice locations, ensure that message content is properly formatted and includes the practice location for the patient encounter.
- Use Directory Messaging to ensure updates made at the local practice/store are pushed in near real time and can be in sync for the most current services. When Directory Messaging is not available, have updates made within 24 hours against the Surescripts Directory.
- Obtain a Download Export daily and pass along to the end users within 24 hours. For more information, please see the Application Certification Requirements in the Directories Implementation Guide.
    - The absence of a record in Full version of the Download Export file should be treated as a disabled record.

Frequent Receiver Validation Errors

Errors can also occur after receipt of a message and be returned by the receiving system, after review of the message content. Some of the most common partner responded errors returned can be found below.

- Duplicate messages are by far the most common customer rejection on the network across E-Prescribing message types
- Invalid codified values
- NDC issues: For example, mismatched, expired, or unidentifiable codes
- Error messages sent in relation to an expired prescription
- Errors sent for messages after responses were received non-electronically
- EPCS issues:
  - Missing or incorrect DEA number
  - Missing or incorrect DEA schedules
  - Digital signatures that are incomplete
  - Digital signature indicators that are missing within a fillable transaction
  - Exceeding maximum allowed refills
- Validations on response type. Example: incorrect changes made on a RxRenewalResponse > Approved
- Expired written date

Best Practice Guidance

- Using only approved and up to date codified values of the right datatype and character limits.
- Validating controlled substance prescription messages for correct:
  - Prescriber DEA number
  - DEA Schedule
  - Digital Signature components of indicator
  - State and federal allowed maximum refills
- Follow the applicable Application Certification Requirements (ACRs) and guidance for the fields that can be sent on a response based on the response type.
- Validate the written date. NCPDP and Surescripts provide guidance on this field.

12. Message Continuity

Surescripts provides several services to help ensure the continuity of electronic messages during intermittent and prolonged disruption in connectivity. The initial configuration and set up for most of these services is completed by the Surescripts support team for the operational services described.

Available Services

HTTP Retry

Definition

This service is a fully electronic means of message delivery retry attempts when an intermittent or short interruption in the successful delivery of a message occurs.

Triggers

The electronic retry is attempted a total of three times per message. This service buffers these interruptions when a receiver or any connection within the path is briefly unavailable for any reason. If there is not a successful receipt at the end of the third attempt, messages proceed to an alternative route.

Fax Service

Definition

This is an optional service for limited E-Prescribing message types to deliver via electronic fax when the electronic channel has failed.

Triggers

This service must be enabled by both sender and receiver to process messages via fax. Please contact your support team or account manager for assistance if you are unsure of your system configuration or need an update. This service is used for specific E-Prescribing messages only and can be used complementary to the Message Queue Service (MQS).

Process Overview

This service delivers non-controlled substance messages via fax when they cannot be delivered electronically due to prolonged temporary or transient transmission failures, unless prohibited by state law.

- Current message types that are supported through faxing: NewRx, RxRenewalRequest, RxRenewalResponse, and CancelRxRequest. Note: This does not apply to CancelRxResponse.
- Pharmacies may send an RxRenewalRequest message for a controlled substance that can fail over to a fax message when a connectivity issue occurs.
- If a prescription for a controlled substance is sent and a connectivity issue is encountered, an Error will be returned to the sender instead of failing over to a fax message for the fillable type message (NewRx and RxRenewalResponse).
- Surescripts makes efforts to conform to the applicable state regulatory needs related to E-Prescribing; however, it is ultimately the responsibility of the sender and receiver to fulfill compliance requirements. For more information, see **State Specific Validation for Controlled Substances**.
- **Information only faxes**: Some states permit information only faxes for non-controlled substances. These fax templates meet the state requirements for transmitting message details by fax but provide further instruction for the pharmacy to validate the

prescription.

- **CancelRx** has an “opt out” feature to disallow the receiving of this message type via fax.
- **RxRenewalRequests** have an “opt-in” feature related to receiving of RxRenewalRequests that are Controlled Substances.

Message Queue Service

Definition

This optional service creates a queue to hold messages electronically during times of electronic disruption. Once electronic connectivity is fully restored, messages can then be released from the queue and delivered to the customer. Additionally, a message queue can be configured to slow the traffic to a receiver in the event that intermittent or more localized issues occur to help prevent faxing backup or unnecessary errors.

Status of the Message Queue

- **Disable Queue** - Deliver Messages: This status will return messages to normal delivery routes and release all messages held in the queue.
- **Hold Messages**: This status enables the message queue to electronically hold messages.
- **(Hold / Release) - Async Message Delivery**: This status sends messages to the queue and processes them for immediate release, providing a consistent throttled volume of traffic delivered to customer systems. This is helpful for issues with intermittent system performance, throttling messages, or as a means to test customer ability to receive messages prior to returning to normal route processing.

Process Overview

This service is used to hold incoming electronic E-Prescribing messages when a customer system is experiencing disruptions in connectivity. Messages will be posted to a queue and released based upon a configuration set in the portal. This is a complementary service to HTTP Retry and will retrieve messages from the HTTP Retry queue once configured to a hold status. Once messages are released from the queue, the delivery rate can be throttled to prevent potentially overloading the receiver.

Messages are set to hold in the message queue or to deliver asynchronously. If the status is set to Hold Messages, then messages will have a maximum timeout that is set based on a customer determined configuration of up to 24 hours. If the timeout is reached and the message queue is still set to Hold Messages, then the message will release to fax or error depending on type. If the Async Message Delivery status is set, then messages are queued and delivered as described above and can fail to fax or error if connectivity is not restored. This setting can still help prevent fax overload.

Utilization of Services

Setups Prior to Use

1. There are two configurations that will be set prior to utilization of MQS. These configurations can only be set by Surescripts internal users to suit the needs of the customer.

   a. The first configuration is how long a message can be held before timing out. This setting ensures that a message is not held indefinitely and can be set at a maximum of 24 hours. This configuration set up can be completed with Integration or Support teams. The timeout feature only applies to the Hold Messages status of the message queuing service and not the Async Message Delivery status.

   b. The second configuration is set based on the volume rate of delivery a customer can consume when messages are released. Surescripts will create this setting for each portal but it can be adjusted as needed if delivery is found to be

inadequately slow or too overwhelming.

Engaging the Queue to Hold E-Prescribing Messages

> **Note:** This queue service is currently engaged manually through portal configurations.

1. If Surescripts becomes aware of message failure thresholds being exceeded:

   a. The manual engagement of this queue will occur if impact to the network is significant or fax volume bottlenecks occur.

   b. Messages will begin to be pulled into the message queue as soon as this service has been engaged. E-Prescribing messages will be retrieved from the HTTP Retry queue but not from the fax queue. Depending on the customer type and volume of messages, a message queue may be set to Hold Messages or to Async Message Delivery.

   c. Then a call will be made to the customer to align a course of action including the option to participate in this service.

   d. If the impact to the network is less significant, a call will be made to the customer to align on a plan that may include the configuration of an E-Prescribing hold queue.

2. The process to configure a queue can be customer initiated through a service ticket or a call to support, including after hours.

   a. It is important to engage support as soon as possible if you are opting to utilize this service.

   b. Messages will begin to be pulled into the message queue as soon as this service has been engaged. E-Prescribing messages will be retrieved from the HTTP Retry queue but not from the fax queue.

   c. There are two options for utilization of this service:

      - *Option 1*: Immediate hold of messages to queue with end time TBD.
      - *Option 2*: Hold and asynchronously deliver messages, essentially slowing the traffic and potentially preventing errors or faxing.

During an Outage

1. When impact to the network is significant or there is impact to efficient patient prescription processing, then network notifications may be sent to alert the other side of the network that a queue has been configured to hold messages.
2. During an outage it is important for customers to remain engaged with Surescripts support teams.
3. Real-time data can be captured to understand the flow of messages to the MQS including but not limited to the number of E-Prescribing messages being held at a given time and whether or not messages are hitting the preset timeout limit.
4. Surescripts will capture data during an outage that will be documented in the case.
5. Customers can view messages in Workbench to see the current status of a given message to assist with troubleshooting.

Dispensing the Queue to Release E-Prescribing Messages

1. When customer connectivity is restored, it is important to follow up with Surescripts.
   1. If a timeout maximum has been reached the message is released and an error is returned to the sender or sent to fax depending on the type of message and customer allowable configurations on faxing.
   2. If connectivity issues are still not restored after 24 hours, there is an option to engage the service again.

> **Note:** Most network partners would prefer a secondary method is used to communicate after 60-90 minutes of a message not reaching its intended end point.

2. When notifications have been sent related to a customer outage then notifications are also sent when connectivity is restored.

Follow-up After an Outage

Once an outage has been resolved, you as a customer may receive a survey with some follow up questions that will help us understand your experience with the queuing service. This information serves to inform Surescripts of your feedback and work to continuously evolve the trust fabric of the network.

Tools and Access - Workbench

Prerequisites

1. Access to Workbench.
2. Access to appropriate account and portal. This is important for larger corporations with multiple portals and staging environments.

> **Note:** Some users may have view-only access while others are able to make edits or manage available options.

Navigation (Steps to Utilization and Management)

1. Log into the Workbench production environment.
2. Navigate to the Product Configuration microsite.
3. Select Search within the Update Portal section.

    a. You may enter the account name, the portal name, or both to search.

    b. To search via account, you can enter the account name into the search, find the account using search terms, or selecting it from a drop down.

    c. To search via portal, you can enter the portal name into the search or find the portal using search terms.

4. Select Search to generate a list of portal names based on the terms you've entered.
5. From the Search Results, select the name of your portal to go to that portal's information page.
6. On the portal's Information page, select the E-Prescribing tab.
7. Select the hyperlink of the Configuration Name (portal name).
8. In the left navigation, select Message Queue Service to go to the Edit Message Queue Service screen.

    a. Select the queuing option that meets your needs:

    - **Disable Queue** - Deliver Messages: This status will return messages to normal delivery routes and release all messages held in the queue.
    - **Hold Messages**: This status enables the message queue to electronically hold messages.
    - **(Hold / Release) - Async Message Delivery**: This status sends messages to the queue and processes them for immediate release, providing a consistent throttled volume of traffic delivered to customer systems. This is helpful for

issues with intermittent system performance, throttling messages, or as a means to test customer ability to receive messages prior to returning to normal route processing.

b. Select the Save button to submit your choice.

c. Select the Reset button to discard unsaved changes.

Utilization of Services

Process to Utilize Message Queue Services

1. The MQS can be configured to either immediately hold all messages or slow the message delivery rate.
2. Once an outage has been resolved, the MQS is disengaged so message delivery can resume.

13. Disclaimers

Guide Disclaimer

In the event that the Participant chooses to make any software changes based upon recommendations in this guide, the Participant acknowledges and agrees that Surescripts Network shall bear no responsibility or liability for the Participant's changes or any effects thereof. The Participant shall also be required to transition to the new guide at such time as said guide is published, which may involve different or additional parameters than are published in this guide.

Examples Disclaimer

Examples provided throughout this guide are not intended to be all-inclusive. This pertains to example workflows, element-specific (field) examples, or message examples. Participants should not restrict coding to the examples used herein.

When developing, this guide should be used along with additional documentation referenced and applicable customary coding standards.

Copyright

14. Document Change Log

2026-07-30

Sec. Title	Change Description
N/A	Developer portal - initial release
E-Prescribing Documentation	New guide landing page with quick links and section description
Product Overview	Moved Guide Disclaimer and Examples Disclaimer sections to new **Disclaimers** page
General Requirements - Overview	New sub section
RxRenewalRequest and RxChangeRequest Rerouting	New sub section
Messages Overview	New main page with quick links
Element Details	New main page with quick links
Requirements Designation	New sub section
Element Usage Overview	New main page with quick links
Application Certification Requirements (ACR) Summary	New main page with quick links
Display Requirements Tables	Split out each table by message type
Disclaimers	New page