USCDI United States Core Data for Interoperability

United States Core Data for Interoperability

Draft Version 6 | March 2025 Errata

This communication was printed, published, or produced and disseminated at U.S. taxpayer expense.

v6

The USCDI is a standardized set of health data classes and constituent data elements for nationwide, interoperable health information exchange.

A USCDI **Data Class** is an aggregation of Data Elements by a common theme or use case.

A USCDI **Data Element** is a piece of data defined in USCDI for access, exchange, or use of electronic health information.

Version History

Version #	Description of change	Version Date
Draft Version 6	Publication	January 2025
Draft Version 6 (March 2025 Errata)	Consistent with Executive Order 14168 the Sex, Pronouns, Sexual Orientation, Gender Identity, Name to Use, and Sex Parameter for Clinical Use data elements have been removed or updated in the Patient Demographics/Information and Observations Data Classes.	March 2025

Background: United States Core Data for Interoperability

In 2024, ASTP adopted USCDI version 3 (USCDI v3) as a standard (at 45 CFR 170.213) and required USCDI v3 for certain criteria within the ONC Health IT Certification Program (Certification Program) in the Health Data, Technology, and Interoperability: Certification Program Updates, Algorithm Transparency, and Information Sharing (HTI-1) Final Rule. As a baseline for exchange across care settings and use cases, USCDI provides a standardized set of data elements to drive interoperability. USCDI groups data elements into data classes that share a common theme, but that does not limit its use or exchange to the context indicated by the class name. For example, *First Name* and *Last Name* are in the *Patient Demographics/Information* data class and are used for patient matching, but may also be exchanged to identify a patient in a document, a laboratory result, or a diagnostic imaging report. Likewise, the data element *Performance Time* in the Procedures data class can describe not only when a skin biopsy is performed, but can also describe when a vaccine is given or when an electrocardiogram (EKG) is done.

Annual USCDI updates help drive interoperability by keeping pace with clinical, technology, and policy changes. A USCDI version can be voluntarily adopted by industry prior to the regulatory "floor" being updated through the rulemaking process when the USCDI version is approved as part of ASTP's Standards Version Advancement Process (SVAP). SVAP enables health IT developers in the ONC Health IT Certification Program to voluntarily incorporate newer versions of specific ASTP regulated standards and implementation specifications into their products, including newer USCDI versions. ASTP included USCDI v4 in the recently published SVAP Approved Standards for 2024, which enables health IT developers to incorporate it into their certified health IT products as of August 19, 2024. In the Health Data, Technology, and Interoperability: Patient Engagement, Information Sharing, and Public Health Interoperability (HTI-2) Proposed Rule, ASTP proposed to raise the USCDI version baseline adopted for the Certification Program from USCDI v3 to v4.

USCDI is also referenced in HHS funded programs consistent with the HHS Health IT Alignment Policy, as well as through HHS regulated programs. For example, CMS' Interoperability and Prior Authorization Final Rule (CMS-0057-F), Health Resources and Services Administration (HRSA) Health Center Controlled Networks, SAMHSA Certified Community Behavioral Health Centers, and exchange networks such as the Trusted Exchange Framework and Common Agreement™ (TEFCA™) require the capability to exchange USCDI data elements. USCDI also serves as the foundation for datasets developed as part of the ASTP USCDI+ Program, which identifies extensions to USCDI to meet specific programmatic and/or use case requirements. One such example is the HRSA Health Center Program Uniform Data System (UDS) Modernization Initiative (UDS+), which HRSA uses to reduce health centers' reporting burden and improve the availability of data, while aligning to federal data standards.

Feedback on USCDI+ datasets has highlighted certain data elements as broadly applicable across care settings and use cases and thus critical additions to USCDI. These include, for example, data elements *Unique Device Identifier*, *Facility Address*, *Date of Onset*, and *Family Health History*.

Consistent with Executive Order 14168 the Sex, Pronouns, Sexual Orientation, Gender Identity, Name to Use, and Sex Parameter for Clinical Use data elements have been removed or updated in the Patient Demographics/Information and Observations Data Classes.

Draft United States Core Data for Interoperability Version 6

ASTP invites proposals for new data elements (via the ONDEC submission system) and feedback on previously submitted data elements. During the Draft USCDI v6 submission cycle from July to September 2024, ASTP received over 130 comments on existing data elements and almost 80 submissions recommending new data elements. Recently, ASTP has been able to use feedback from our USCDI+ datasets to help inform the technical maturity and breadth of applicability of data elements. ASTP reviewed and considered these comments and submissions in the development of the Draft USCDI v6. ASTP extends its thanks to all who provided feedback.

ASTP identified key policy priorities guiding our selection for this version of USCDI. These priorities include:

- Implementation burden for standards development organizations, developers of certified health IT products, and healthcare entities who will integrate these changes into clinical and other workflows.
    - Additional factors that may impact implementation burden, such as new regulatory requirements (e.g., those included in HTI-1 final rule), are also considered.
- Important additions that will broadly benefit health IT users, while emphasizing these areas:
    - Health data needs for improving health outcomes, public health reporting, and behavioral health integration with primary care.
    - Data elements demonstrated through the USCDI+ programs to be a critical addition to USCDI.

ASTP identified the following new data elements for Draft USCDI v6, which is set forth on the following pages and discussed in greater detail in the ASTP Standards Bulletin 2025-1.

New Data Elements Added to Draft USCDI v6

Facility Information • Facility Address	**Medical Devices** • Unique Device Identifier ✹	**Orders** • Portable Medical Order
Patient Summary and Plan • Care Plan	**Problems** • Date of Onset • Family Health History	

✹ Significantly modified data element (see more info below)

Draft USCDI v6 Public Feedback Period

With its publication, Draft USCDI v6 is open for public comment until **April 14, 2025, at 11:59 pm ET**. In addition to the feedback requested above, ASTP is seeking feedback on any aspect of Draft USCDI v6 and is requesting specific input on the following areas:

1. Suggestions for improvement in the data classes or elements in Draft USCDI v6, including:
    a. Data class and element definitions, usage notes, and examples; and
    b. Examples of code systems used by health IT developers and implementers to communicate data element scope.
2. Should other existing Level 2 data elements be added to USCDI v6 instead of, or in addition to, those in Draft USCDI v6? If so, why?
3. Which additional data elements from USCDI+ domains should be added to USCDI v6?
4. Are there significant barriers to development, implementation, or use of any of these data elements that warrant a change in the final version of USCDI v6?

ASTP will work with the Health Information Technology Advisory Committee (HITAC) to develop recommendations on Draft USCDI v6 during the open comment period.

ASTP is targeting release of the final USCDI v6 in July 2025.

Draft USCDI v6 Summary of Data Classes and Data Elements

Allergies and Intolerances
- Medication Allergy Intolerance
- Drug Class Allergy Intolerance
- Non-Medication Allergy Intolerance
- Reaction

Care Team Members
- Care Team Member Name
- Care Team Member Identifier
- Care Team Member Role
- Care Team Member Location
- Care Team Member Telecom

Clinical Notes
- Consultation Note
- Discharge Summary Note
- Emergency Department Note
- History & Physical
- Operative Note
- Procedure Note
- Progress Note

Clinical Tests
- Clinical Test
- Clinical Test Result/Report

Diagnostic Imaging
- Diagnostic Imaging Test
- Diagnostic Imaging Report

Encounter Information
- Encounter Type
- Encounter Identifier
- Encounter Diagnosis
- Encounter Time
- Encounter Location
- Encounter Disposition

Facility Information
- Facility Identifier
- Facility Type
- Facility Name
- Facility Address

Goals and Preferences
- Patient Goals
- SDOH Goals
- Treatment Intervention Preference
- Care Experience Preference

Health Insurance Information
- Coverage Status
- Coverage Type
- Relationship to Subscriber
- Member Identifier
- Subscriber Identifier
- Group Identifier
- Payer Identifier

Health Status Assessments
- Health Concerns
- Functional Status
- Disability Status
- Mental/Cognitive Status
- Pregnancy Status
- Alcohol Use
- Substance Use
- Physical Activity
- SDOH Assessment
- Smoking Status

Immunizations
- Immunizations
- Lot Number

Laboratory
- Tests
- Values/Results
- Specimen Type
- Result Status
- Result Unit of Measure
- Result Reference Range
- Result Interpretation
- Specimen Source Site
- Specimen Identifier
- Specimen Condition Acceptability

Medical Devices
- Unique Device Identifier

Medications
- Medications
- Dose
- Dose Unit of Measure
- Route of Administration
- Indication
- Fill Status
- Medication Instructions
- Medication Adherence

Observations
- Advance Directive Observation

Orders
- Medication Order
- Laboratory Order
- Diagnostic Imaging Order
- Clinical Test Order
- Procedure Order
- Portable Medical Order

Patient Demographics/Information
- First Name
- Last Name
- Middle Name (Including middle initial)
- Name Suffix
- Previous Name
- Date of Birth
- Date of Death
- Race
- Ethnicity
- Tribal Affiliation
- Sex
- Preferred Language
- Interpreter Needed
- Current Address
- Previous Address
- Phone Number
- Phone Number Type
- Email Address
- Related Person's Name
- Relationship Type
- Occupation
- Occupation Industry

Patient Summary and Plan
- Assessment and Plan of Treatment
- Care Plan

Problems
- Problems
- Family Health History
- SDOH Problems/Health Concerns
- Date of Onset
- Date of Diagnosis
- Date of Resolution

Procedures
- Procedures
- Performance Time
- SDOH Interventions
- Reason for Referral

Provenance
- Author
- Author Role
- Author Time Stamp
- Author Organization

Vital Signs
- Systolic Blood Pressure
- Diastolic Blood Pressure
- Average Blood Pressure
- Heart Rate
- Respiratory Rate
- Body Temperature
- Body Height
- Body Weight
- Pulse Oximetry
- Inhaled Oxygen Concentration
- BMI Percentile (2 - 20 years)
- Weight-for-length Percentile (Birth - 24 Months)
- Head Occipital-frontal Circumference Percentile (Birth- 36 Months)

DATA CLASS

ALLERGIES AND INTOLERANCES

Harmful or undesired physiological responses associated with exposure to a substance.

DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S) Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. Where an applicable vocabulary standard has not been identified, this field will remain empty.
Medication Allergy Intolerance Pharmacologic agent believed to cause a harmful or undesired physiologic response following exposure.	• RxNorm® Full Monthly Release, January 6, 2025
Drug Class Allergy Intolerance Pharmacologic category for an agent believed to cause a harmful or undesired physiologic response following exposure.	• SNOMED Clinical Terms® (SNOMED CT®) U.S. Edition, September 2024 Release
Non-Medication Allergy Intolerance Non-pharmacologic agent believed to cause a harmful or undesired physiologic response following exposure. Examples include but are not limited to latex, eggs, pollen, and peanuts.	• SNOMED Clinical Terms (SNOMED CT) U.S. Edition, September 2024 Release
Reaction Harmful or undesired physiologic response following exposure to a substance	• SNOMED Clinical Terms (SNOMED CT) U.S. Edition, September 2024 Release

DATA CLASS

CARE TEAM MEMBERS

Information about a person who participates or is expected to participate in the care of a patient.

DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S) Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. Where an applicable vocabulary standard has not been identified, this field will remain empty.
Care Team Member Name	
Care Team Member Identifier Sequence of characters used to uniquely refer to a member of the care team. Examples include but are not limited to National Provider Identifier (NPI) and National Council of State Boards of Nursing Identifier (NCSBN ID).	
Care Team Member Role Responsibility of an individual within the care team. Examples include but are not limited to primary care physician and caregiver.	
Care Team Member Location Place where care is delivered by a care team member. Examples include but are not limited to clinic address and location description.	
Care Team Member Telecom Phone or email contact information for a care team member.	• ITU-T E.123, Series E: Overall Network Operation, Telephone Service, Service Operation and Human Factors, International operation - General provisions concerning users: Notation for national and international telephone numbers, email addresses and web addresses (incorporated by reference in § 170.299); and • ITU-T E.164, Series E: Overall Network Operation, Telephone Service, Service Operation and Human Factors, International operation - Numbering plan of the international telephone service: The international public telecommunication numbering plan

DATA CLASS

CLINICAL NOTES

Narrative patient data relevant to the context identified by note types.
Usage note: Clinical Notes data elements are content exchange standard agnostic. They should not be interpreted or associated with the structured document templates that may share the same name.

DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S) Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. Where an applicable vocabulary standard has not been identified, this field will remain empty.
Consultation Note Narrative summary of care provided in response to a request from a clinician for an opinion, advice, or service. Examples include but are not limited to dermatology, dentistry, and acupuncture.	• Logical Observation Identifiers Names and Codes (LOINC®) version 2.78 • At minimum: Consult Note (LOINC code 11488-4)
Discharge Summary Note Narrative summary of a patient's admission and course in a hospital or post-acute care setting. Usage note: Must contain admission and discharge dates and locations, discharge instructions, and reason(s) for hospitalization. Examples include but are not limited to dermatology discharge summary, hematology discharge summary, and neurology discharge summary.	• Logical Observation Identifiers Names and Codes (LOINC) version 2.78 • At minimum: Discharge Summary (LOINC code 18842-5)
Emergency Department Note Narrative summary of care delivered in an emergency department.	• Logical Observation Identifiers Names and Codes (LOINC) version 2.78 • At minimum: Emergency Department Note (LOINC code 34111-5)
History & Physical Narrative summary of current and past conditions and observations used to inform an episode of care. Examples include but are not limited to admission, surgery, and other procedure.	• Logical Observation Identifiers Names and Codes (LOINC) version 2.78 • At minimum: History and Physical Note (LOINC code 34117-2)

DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S) Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. Where an applicable vocabulary standard has not been identified, this field will remain empty.
Operative Note Narrative summary of a surgical procedure. Usage note: May include procedures performed, operative and anesthesia times, findings observed, fluids administered, specimens obtained, and complications identified.	• Logical Observation Identifiers Names and Codes (LOINC) version 2.78 • At minimum: Surgical operation note (LOINC code 11504-8)
Procedure Note Narrative summary of non-operative procedure. Examples include but are not limited to interventional cardiology, gastrointestinal endoscopy, and osteopathic manipulation.	• Logical Observation Identifiers Names and Codes (LOINC) version 2.78 • At minimum: Procedure Note (LOINC code 28570-0)
Progress Note Narrative summary of a patient's interval status during an encounter. Examples include but are not limited to hospitalization, outpatient visit, and treatment with a post-acute care provider, or other healthcare encounter.	• Logical Observation Identifiers Names and Codes (LOINC) version 2.78 • At minimum: Progress Note (LOINC code 11506-3)

DATA CLASS

CLINICAL TESTS

Non-imaging and non-laboratory tests performed that result in structured or unstructured findings specific to the patient to facilitate the diagnosis and management of conditions.

DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S) Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. Where an applicable vocabulary standard has not been identified, this field will remain empty.
Clinical Test Non-imaging or non-laboratory test. Examples include but are not limited to electrocardiogram (ECG), visual acuity exam, macular exam, and graded exercise testing (GXT).	• Logical Observation Identifiers Names and Codes (LOINC) version 2.78
Clinical Test Result/Report Findings of clinical tests.	

DATA CLASS

DIAGNOSTIC IMAGING

Tests that result in visual images requiring interpretation by a credentialed professional.

DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S) Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. Where an applicable vocabulary standard has not been identified, this field will remain empty.
Diagnostic Imaging Test Tests that generate visual images and require interpretation by qualified professionals. Examples include but are not limited to computed tomography-head, radiograph-chest, and ultrasound-pelvis.	• Logical Observation Identifiers Names and Codes (LOINC) version 2.78
Diagnostic Imaging Report Interpreted results of imaging tests. Usage Note: Includes structured and unstructured (narrative) components.	

DATA CLASS

ENCOUNTER INFORMATION

Information related to interactions between healthcare providers and patients.

DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S) Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. Where an applicable vocabulary standard has not been identified, this field will remain empty.
Encounter Type Category of healthcare service. Examples include but are not limited to office visit, telephone assessment, and home visit.	
Encounter Identifier Sequence of characters by which an encounter is known.	
Encounter Diagnosis Coded diagnoses associated with an episode of care.	• SNOMED Clinical Terms (SNOMED CT) U.S. Edition, September 2024 Release • International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) 2025
Encounter Time Date/times related to an encounter. Examples include but are not limited to scheduled appointment time, check in time, and start and stop times.	
Encounter Location Place where a patient's care is delivered.	• National Healthcare Safety Network (NHSN) Healthcare Facility Patient Care Location (HSLOC) Version 2022 • SNOMED Clinical Terms® (SNOMED CT®) U.S. Edition, September 2024 Release
Encounter Disposition Place or setting where the patient went after a hospital stay or encounter.	

DATA CLASS

FACILITY INFORMATION

Physical place of available services or resources.

DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S) Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. Where an applicable vocabulary standard has not been identified, this field will remain empty.
Facility Identifier Sequence of characters representing a physical place of available services or resources.	
Facility Type Category of service or resource available in a location. Examples include but are not limited to hospital, laboratory, pharmacy, ambulatory clinic, long-term and post-acute care facility, and food pantry.	
Facility Name Word or words by which a facility is known.	
Facility Address Physical location of available services or resources.	

DATA CLASS

GOALS AND PREFERENCES

Desired state to be achieved by a person or a person's elections to guide care.

DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S) Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. Where an applicable vocabulary standard has not been identified, this field will remain empty.
Patient Goals Desired outcomes of patient's care.	
SDOH Goals Desired future state for an identified Social Determinants of Health-related concern, condition, or diagnosis. Examples include but are not limited to food security, transportation security, and ability to access healthcare.	• Logical Observation Identifiers Names and Codes (LOINC) version 2.78 • SNOMED Clinical Terms (SNOMED CT) U.S. Edition, September 2024 Release
Treatment Intervention Preference Person's goals, preferences, and priorities for care and treatment in case that person is unable to make medical decisions because of a serious illness or injury. Examples include but are not limited to thoughts on cardiopulmonary resuscitation, mental health treatment preferences, and thoughts on pain management.	• Logical Observation Identifiers Names and Codes (LOINC) version 2.78
Care Experience Preference Person's goals, preferences, and priorities for overall experiences during their care and treatment. Examples include but are not limited to religious beliefs, dislikes and fears, and thoughts and feelings to be shared.	• Logical Observation Identifiers Names and Codes (LOINC) version 2.78

DATA CLASS

HEALTH INSURANCE INFORMATION

Data related to an individual's insurance coverage for healthcare.

DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S) Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. Where an applicable vocabulary standard has not been identified, this field will remain empty.
Coverage Status Presence or absence of healthcare insurance.	
Coverage Type Category of healthcare payers, insurance products, or benefits. Examples include but are not limited to Medicaid, commercial, HMO, Veterans Benefits Administration, Medicare Part D, and dental.	
Relationship to Subscriber Relationship of a patient to the primary insured person.	
Member Identifier Sequence of characters used to uniquely refer to an individual with respect to their insurance.	
Subscriber Identifier Sequence of characters used to uniquely refer to the individual that selects insurance benefits.	
Group Identifier Sequence of characters used to uniquely refer to a specific health insurance plan.	
Payer Identifier Sequence of characters used to uniquely refer to an insurance payer.	

DATA CLASS

HEALTH STATUS ASSESSMENTS

Assessments of a health-related matter of interest, importance, or worry to a patient, patient's authorized representative, or patient's healthcare provider that could identify a need, problem, or condition.

DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S) Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. Where an applicable vocabulary standard has not been identified, this field will remain empty.
Health Concerns Health-related issue or worry. Examples include but are not limited to weight gain and cancer risk.	
Functional Status Assessment of a person's ability to perform activities of daily living and activities across other situations and settings. Examples include but are not limited to Functional Assessment Standardized Items (FASI) and Timed Up and Go (TUG).	• Logical Observation Identifiers Names and Codes (LOINC) version 2.78
Disability Status Assessment of a patient's physical, cognitive, or psychiatric disabilities. Examples include but are not limited to American Community Survey, Veterans RAND Health Survey, and Patient-Reported Outcomes Measurement Information System (PROMIS).	• Logical Observation Identifiers Names and Codes (LOINC) version 2.78
Mental/Cognitive Status Assessment or screening for the presence of a mental or behavioral problem. Examples include but are not limited to Confusion Assessment Method (CAM) and Patient Health Questionnaire (PHQ).	• Logical Observation Identifiers Names and Codes (LOINC) version 2.78
Pregnancy Status State or condition of being pregnant or intent to become pregnant. Examples include but are not limited to pregnant, not pregnant, and unknown.	

DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S) Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. Where an applicable vocabulary standard has not been identified, this field will remain empty.
Alcohol Use Evaluation of a patient's consumption of alcohol. Examples include but are not limited to history of alcohol use, alcohol use disorder identification test, and alcohol intake assessment.	• Logical Observation Identifiers Names and Codes (LOINC) version 2.78
Substance Use Evaluation of a patient's reported use of drugs or other substances for non-medical purposes or in excess of a valid prescription. Examples include but are not limited to substance use disorder score, and substance use knowledge assessment.	• Logical Observation Identifiers Names and Codes (LOINC) version 2.78
Physical Activity Evaluation of a patient's current or usual exercise. Examples include but are not limited to frequency of muscle-strengthening physical activity, days per week with moderate to strenuous physical activity, and minutes per day of moderate to strenuous physical activity.	• Logical Observation Identifiers Names and Codes (LOINC) version 2.78
SDOH Assessment Screening questionnaire-based, structured evaluation for a Social Determinants of Health-related risk. Examples include but are not limited to food, housing, transportation security, and health literacy.	• Logical Observation Identifiers Names and Codes (LOINC) version 2.78 • SNOMED Clinical Terms (SNOMED CT) U.S. Edition, September 2024 Release
Smoking Status Assessment of a patient's smoking behaviors. Examples include but are not limited to pack-years and current use.	• SNOMED Clinical Terms (SNOMED CT) U.S. Edition, September 2024 Release

DATA CLASS

IMMUNIZATIONS

Record of vaccine administration.

DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S) Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. Where an applicable vocabulary standard has not been identified, this field will remain empty.
Immunizations Vaccine product administered, planned, or reported.	Both standards are required: • CVX– Vaccines Administered, updates through December 16, 2024 • National Drug Code (NDC), updates through January 14, 2025
Lot Number Sequence of characters representing a specific quantity of manufactured material within a batch of a vaccine product.	

DATA CLASS

LABORATORY

Analysis of clinical specimens to obtain information about the health of a patient.

DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S) Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. Where an applicable vocabulary standard has not been identified, this field will remain empty.
Tests Analysis of specimens derived from humans which provide information for the diagnosis, prevention, treatment of disease, or assessment of health.	• Logical Observation Identifiers Names and Codes (LOINC) version 2.78
Values/Results Documented findings of a tested specimen including structured and unstructured components.	• SNOMED Clinical Terms (SNOMED CT) U.S. Edition, September 2024 Release
Specimen Type Substance being sampled or tested. Examples include but are not limited to nasopharyngeal swab, whole blood, serum, urine, and wound swab.	• SNOMED Clinical Terms (SNOMED CT) U.S. Edition, September 2024 Release
Result Status State or condition of a laboratory test.	
Result Unit of Measure Unit of measurement to report quantitative results.	• The Unified Code of Units for Measure, Revision 2.2
Result Reference Range Upper and lower limit of quantitative test values expected for a designated population of individuals. Usage note: Reference range values may differ by patient characteristics, laboratory test manufacturer, and laboratory test performer.	• The Unified Code of Units for Measure, Revision 2.2

DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S) Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. Where an applicable vocabulary standard has not been identified, this field will remain empty.
Result Interpretation Categorical assessment of a laboratory value, often in relation to a test's reference range. Examples include but are not limited to high, low, critical high, and normal.	• SNOMED Clinical Terms (SNOMED CT) U.S. Edition, September 2024 Release • Health Level 7® (HL7) Code System ObservationInterpretation
Specimen Source Site Body location from where a specimen was obtained. Examples include but are not limited to right internal jugular, left arm, and right eye.	• SNOMED Clinical Terms (SNOMED CT) U.S. Edition, September 2024 Release
Specimen Identifier Sequence of characters assigned by a laboratory for an individual specimen. Example includes but is not limited to accession number.	
Specimen Condition Acceptability Information regarding a specimen, including the container, that does not meet a laboratory's criteria for acceptability. Usage note: This may include information about the contents of the container, the container, and the label. Examples include but are not limited to hemolyzed, clotted, container leaking, and missing patient name.	• SNOMED Clinical Terms (SNOMED CT) U.S. Edition, September 2024 Release • HL7 Code System SpecimenCondition

DATA CLASS

MEDICAL DEVICES

An instrument, machine, appliance, implant, software, or other article intended to be used for a medical purpose.

DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S) Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. Where an applicable vocabulary standard has not been identified, this field will remain empty.
Unique Device Identifier Numeric or alphanumeric code that uniquely identifies a medical device. Usage note: Contains a device identifier (DI) and one or more production identifiers (PI).	• FDA Unique Device Identification (UDI) System

DATA CLASS

MEDICATIONS

Pharmacologic agents used in the diagnosis, cure, mitigation, treatment, or prevention of disease.

DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S) Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. Where an applicable vocabulary standard has not been identified, this field will remain empty.
Medications Pharmacologic agent used in the diagnosis, cure, mitigation, treatment, or prevention of disease.	• RxNorm Full Monthly Release, January 6, 2025 Optional: • National Drug Code (NDC), updates through January 14, 2025
Dose Amount of a medication for each administration.	
Dose Unit of Measure Units of measure of a medication. Examples include but are not limited to milligram (mg) and milliliter (mL).	• The Unified Code for Units of Measure, Revision 2.2

DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S) Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. Where an applicable vocabulary standard has not been identified, this field will remain empty.
Route of Administration Physiological administration path of a therapeutic agent into or onto a patient. Examples include but are not limited to oral, topical, and intravenous.	• SNOMED Clinical Terms (SNOMED CT) U.S. Edition, September 2024 Release • National Cancer Institute Thesaurus (NCIt) v24.10d, FDA Structured Product Labeling (SPL) Terminology
Indication Sign, symptom, or medical condition that is the reason for giving or taking a medication.	• SNOMED Clinical Terms (SNOMED CT) U.S. Edition, September 2024 Release • International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) 2025
Fill Status State of a medication with regards to dispensing or other activity. Examples include but are not limited to dispensed, partially dispensed, and not dispensed.	
Medication Instructions Directions for administering or taking a medication. Usage note: May include route, quantity, timing/frequency, and special instructions (PRN, sliding scale, taper). Examples include but are not limited to prescription directions for taking a medication, and package instructions for over-the-counter medications.	
Medication Adherence Statement of whether a medication has been consumed according to instructions. Examples include but are not limited to taking as directed, taking less than directed, and not taking.	• SNOMED Clinical Terms (SNOMED CT) U.S. Edition, September 2024 Release

DATA CLASS

OBSERVATIONS

Findings or other clinical data collected about a patient during care.

DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S) Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. Where an applicable vocabulary standard has not been identified, this field will remain empty.
Advance Directive Observation Information about a patient or provider authored document indicating its location, content, type, and verification status. Usage note: May include structured or unstructured data, whether a person has one or more advance directive documents, the type of advance directive, the location of the document, and whether it has been verified. Such documents may be used should a person be unable to communicate their wishes, preferences, or priorities to their provider. Examples include but are not limited to an indication that a living will is on file, a reference to the location of durable medical power of attorney, and the validating provider.	

DATA CLASS

ORDERS

Provider-authored request for the delivery of patient care services.

Usage notes: Orders convey a provider's intent to have a service performed on or for a patient, or to give instructions on future care.

DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S) Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. Where an applicable vocabulary standard has not been identified, this field will remain empty.
Medication Order Provider-authored request for the dispensing of a therapeutic agent.	• RxNorm® Full Monthly Release, January 6, 2025
Laboratory Order Provider-authored request for the performance of a laboratory test.	• Logical Observation Identifiers Names and Codes (LOINC) version 2.78
Diagnostic Imaging Order Provider-authored request for the performance of a diagnostic imaging study.	• Logical Observation Identifiers Names and Codes (LOINC) version 2.78
Clinical Tests Order Provider-authored request for the performance of a non-laboratory or non-imaging test.	• Logical Observation Identifiers Names and Codes (LOINC) version 2.78
Procedure Order Provider-authored request for the performance of a diagnostic or therapeutic intervention.	

DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S) Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. Where an applicable vocabulary standard has not been identified, this field will remain empty.
Portable Medical Order Provider-authored request for end-of-life or life-sustaining care for a person who has a serious life-limiting medical condition. Usage note: These are meant to follow a person regardless of when and where such an order might be needed (e.g., hospital, care facility, community, home). There are variations in requirements and names for portable medical orders based on jurisdiction. Examples include but are not limited to POLST (Portable Medical Order for Life-Sustaining Treatment), MOLST (Medical Orders for Life-Sustaining Treatment), and out-of-hospital DNR (do-not-resuscitate).	

DATA CLASS

PATIENT DEMOGRAPHICS/INFORMATION

Data used to categorize individuals for identification, records matching, and other purposes.

DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S) Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. Where an applicable vocabulary standard has not been identified, this field will remain empty.
First Name	
Last Name	
Middle Name (Including middle initial)	
Name Suffix Name component following family name that may be used to describe a person's position in a family.	
Previous Name	
Date of Birth Known or estimated year, month, and day of the patient's birth.	
Date of Death Known or estimated year, month, and day of the patient's death.	
Race	Both standards are required: • The Office of Management and Budget Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity, Statistical Policy Directive No. 15, as revised, October 30, 1997 • CDC Race and Ethnicity Code Set Version 1.3 (November 2024)

DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S) Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. Where an applicable vocabulary standard has not been identified, this field will remain empty.
Ethnicity	Both standards are required: • The Office of Management and Budget Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity, Statistical Policy Directive No. 15, as revised, October 30, 1997 • CDC Race and Ethnicity Code Set Version 1.3 (November 2024)
Tribal Affiliation Tribe or band with which an individual associates.	
Sex Documentation of a specific instance of sex.	Both values must be supported: • SNOMED CT U.S. Edition: 248152002 (Female) • SNOMED CT U.S. Edition: 248153007 (Male)
Preferred Language	• IETF (Internet Engineering Task Force) Request for Comment (RFC) 5646, “Tags for Identifying Languages”, September 2009 Adopted at 45 CFR 170.207(g)(2)
Interpreter Needed Indication of whether a person needs language interpretation services.	• Logical Observation Identifiers Names and Codes (LOINC) version 2.78 • SNOMED Clinical Terms (SNOMED CT) U.S. Edition, September 2024 Release
Current Address Place where a person is located or may be contacted. Usage note: If the address pattern is not supported in the standard, implementations should align as closely as possible and avoid truncating any values.	• Project US@ Technical Specification for Patient Addresses, Final Version 1.0

DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S) Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. Where an applicable vocabulary standard has not been identified, this field will remain empty.
Previous Address Prior place where a person may have been located or could have been contacted. Usage note: If the address pattern is not supported in the standard, implementations should align as closely as possible and avoid truncating any values.	• Project US@ Technical Specification for Patient Addresses, Final Version 1.0
Phone Number Numbers and symbols to contact an individual when using a phone.	Both standards are required: • ITU-T E.123, Series E: Overall Network Operation, Telephone Service, Service Operation and Human Factors, International operation - General provisions concerning users: Notation for national and international telephone numbers, email addresses and web addresses, February 2001 • ITU-T E.164, Series E: Overall Network Operation, Telephone Service, Service Operation and Human Factors, International operation - Numbering plan of the international telephone service, The international public telecommunication numbering plan, November 2010 Adopted at 45 CFR 170.207(q)(1)
Phone Number Type Contact point when using a phone. Examples include but are not limited to home, work, and mobile.	
Email Address Unique identifier of an individual's email account that is used to send and receive email messages.	
Related Person's Name Name of a person with a legal or familial relationship to a patient.	

DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S) Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. Where an applicable vocabulary standard has not been identified, this field will remain empty.
Relationship Type Relationship of a person to a patient. Examples include but are not limited to parent, next-of-kin, guardian, and custodian.	
Occupation Type of work of a person. Examples include but are not limited to infantry, business analyst, and social worker.	• Occupational Data for Health, version 20201030
Occupation Industry Type of business that compensates for work or assigns work to an unpaid worker or volunteer. Examples include but are not limited to U.S. Army, cement manufacturing, and children and youth services.	• Occupational Data for Health, version 20201030

DATA CLASS

PATIENT SUMMARY AND PLAN

Conclusions and working assumptions that will guide treatment of the patient, and recommendations for future treatment.

DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S) Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. Where an applicable vocabulary standard has not been identified, this field will remain empty.
Assessment and Plan of Treatment Health professional's conclusions and working assumptions that will guide treatment of the patient.	
Care Plan Shared plan informed by members of a coordinated care team that details conditions, needs, and goals along with strategies for addressing them. Usage notes: Includes prioritized problems, health concerns, assessments, goals, and interventions from across care settings. Examples include nursing care plan, diabetic care plan, multiple chronic conditions care plan, and long term services and support care plan.	

DATA CLASS

PROBLEMS

Condition, diagnosis, or reason for seeking medical attention.

DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S) Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. Where an applicable vocabulary standard has not been identified, this field will remain empty.
Problems Condition, diagnosis, or reason for seeking medical attention.	• SNOMED Clinical Terms (SNOMED CT) U.S. Edition, September 2024 Release • International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) 2025
Family Health History Family member's health conditions that are relevant to a patient's care.	• SNOMED Clinical Terms (SNOMED CT) U.S. Edition, September 2024 Release • International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) 2025
SDOH Problems/Health Concerns Social Determinants of Health-related concerns, conditions, or diagnoses. Examples include but are not limited to homelessness and food insecurity.	• SNOMED Clinical Terms (SNOMED CT) U.S. Edition, September 2024 Release • International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) 2025
Date of Diagnosis Date of first determination by a qualified professional of the presence of a problem or condition affecting a patient.	
Date of Onset Date or estimated date when signs or symptoms of a condition began. Usage note: This may be a specific day, week, month, or year, or it may be an estimate.	
Date of Resolution Date of subsiding or termination of a symptom, problem, or condition.	

DATA CLASS

PROCEDURES

Activity performed for or on a patient as part of the provision of care.

DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S) Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. Where an applicable vocabulary standard has not been identified, this field will remain empty.
Procedures Activity performed for or on a patient as part of the provision of care.	• SNOMED Clinical Terms (SNOMED CT) U.S. Edition, September 2024 Release • Current Procedural Terminology (CPT®) 2025, as maintained and distributed by the American Medical Association, for physician services and other healthcare services, and Healthcare Common Procedure Coding System (HCPCS), as maintained and distributed by HHS • Code on Dental Procedures and Nomenclature (CDT) 2025, maintained and distributed by the American Dental Association Optional: • 2025 International Classification of Diseases, Tenth Revision, Procedure Coding System (2025 ICD-10-PCS)
Performance Time Time and/or date an activity is performed. Examples include but are not limited to vaccine or medication administration times, surgery start time, time ultrasound performed, and laboratory specimen collection time.	
SDOH Interventions Actions or services to address an identified Social Determinants of Health-related concern, condition, or diagnosis. Examples include but are not limited to education about food pantry program and referral to non-emergency medical transportation program.	• SNOMED Clinical Terms (SNOMED CT) U.S. Edition, September 2024 Release • Current Procedural Terminology (CPT) 2025, as maintained and distributed by the American Medical Association, for physician services and other healthcare services. • Healthcare Common Procedure Coding System (HCPCS) Level II, as maintained and distributed by HHS.

DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S) Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. Where an applicable vocabulary standard has not been identified, this field will remain empty.
Reason for Referral Explanation or justification for a referral or consultation.	• SNOMED Clinical Terms (SNOMED CT) U.S. Edition, September 2024 Release • International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) 2025

DATA CLASS

PROVENANCE

The metadata, or extra information about data, regarding who created the data and when it was created.

DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S) Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. Where an applicable vocabulary standard has not been identified, this field will remain empty.
Author Actor that created or revised the data. Usage note: The actor may be a provider, a patient, a device, an outside medical record, or something else. The source of the information can be used to form assessments about its quality, reliability, trustworthiness, or can indicate where to go to determine the origins of the information.	
Author Role Category of actor that participated in the creation or revision of data. Usage note: The source of the information can be used to form assessments about its quality, reliability, trustworthiness, or can indicate where to go to determine the origins of the information. Examples include but are not limited to provider, patient, family member, and device.	
Author Time Stamp Date and time of author action.	
Author Organization Organization associated with author.	

DATA CLASS

VITAL SIGNS

Physiologic measurements of a patient that indicate the status of the body's life sustaining functions.

DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S) Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. Where an applicable vocabulary standard has not been identified, this field will remain empty.
Systolic Blood Pressure	Both standards are required. • Logical Observation Identifiers Names and Codes (LOINC) version 2.78 • The Unified Code of Units for Measure, Revision 2.2
Diastolic Blood Pressure	Both standards are required. • Logical Observation Identifiers Names and Codes (LOINC) version 2.78 • The Unified Code of Units for Measure, Revision 2.2
Average Blood Pressure Arithmetic average of systolic and diastolic components of two of more blood pressure readings in a specified time period or according to a specified algorithm or protocol. Examples include but are not limited to 3-day morning and evening home monitoring, clinical encounter repeat average, and 24-hour ambulatory measurement.	Both standards are required. • Logical Observation Identifiers Names and Codes (LOINC) version 2.78 • The Unified Code of Units for Measure, Revision 2.2
Heart Rate	Both standards are required. • Logical Observation Identifiers Names and Codes (LOINC) version 2.78 • The Unified Code of Units for Measure, Revision 2.2
Respiratory Rate	Both standards are required. • Logical Observation Identifiers Names and Codes (LOINC) version 2.78 • The Unified Code of Units for Measure, Revision 2.2

DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S) Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. Where an applicable vocabulary standard has not been identified, this field will remain empty.
Body Temperature	Both standards are required. • Logical Observation Identifiers Names and Codes (LOINC) version 2.78 • The Unified Code of Units for Measure, Revision 2.2
Body Height	Both standards are required. • Logical Observation Identifiers Names and Codes (LOINC) version 2.78 • The Unified Code of Units for Measure, Revision 2.2
Body Weight	Both standards are required. • Logical Observation Identifiers Names and Codes (LOINC) version 2.78 • The Unified Code of Units for Measure, Revision 2.2
Pulse Oximetry	Both standards are required. • Logical Observation Identifiers Names and Codes (LOINC) version 2.78 • The Unified Code of Units for Measure, Revision 2.2
Inhaled Oxygen Concentration	Both standards are required. • Logical Observation Identifiers Names and Codes (LOINC) version 2.78 • The Unified Code of Units for Measure, Revision 2.2
BMI Percentile (2 - 20 years)	Both standards are required. • Logical Observation Identifiers Names and Codes (LOINC) version 2.78 • The Unified Code of Units for Measure, Revision 2.2

DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S) Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. Where an applicable vocabulary standard has not been identified, this field will remain empty.
Weight-for-length Percentile (Birth - 24 Months)	Both standards are required. • Logical Observation Identifiers Names and Codes (LOINC) version 2.78 • The Unified Code of Units for Measure, Revision 2.2
Head Occipital-frontal Circumference Percentile (Birth - 36 Months)	Both standards are required. • Logical Observation Identifiers Names and Codes (LOINC) version 2.78 • The Unified Code of Units for Measure, Revision 2.2

Changes between USCDI v5 and Draft USCDI v6

Change Type	Description of change

Added Data Element	• Facility Information
	  ◦ Facility Address
	• Medical Devices
	  ◦ Unique Device Identifier*
	• Orders
	  ◦ Portable Medical Orders
	• Patient summary and Plan
	  ◦ Care Plan
	• Problems
	  ◦ Date of Onset
	  ◦ Family Health History
	* Data element significantly modified.

Added Applicable Standards	• Medication Order
	  ◦ Add RxNorm as applicable standard
	• Laboratory Order
	  ◦ Add LOINC as applicable standard
	• Diagnostic Imaging Order
	  ◦ Add LOINC as applicable standard
	• Clinical Test Order
	  ◦ Add LOINC as applicable standard

Change Type	Description of change
Updated Applicable Standards Versions	• SNOMED Clinical Terms (SNOMED CT) U.S. Edition, September 2024 Release • Logical Observation Identifiers Names and Codes (LOINC) version 2.78 • Current Procedural Terminology (CPT) 2025 • Healthcare Common Procedure Coding System (HCPCS) Level II 2025 • RxNorm Full Monthly Release, January 6, 2025 • CVX – Vaccines Administered, updates through December 16, 2024 • National Drug Code (NDC), updates through January 14, 2025 • CDC Race and Ethnicity Code Set Version 1.3 (November 2024) • Unified Code of Units for Measure, Revision 2.2 • 2025 International Classification of Diseases, Tenth Revision, Procedure Coding System (2025 ICD-10-PCS) • Code on Dental Procedures and Nomenclature (CDT) 2025
Changed Data Element Definition	• Reaction • Performance Time • SDOH Assessment • Result Unit of Measure • Coverage Type