USCDI

United States Core Data for Interoperability

United States Core Data for Interoperability

Version 4 │ July 2023

v4

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
Version 4	Publication	July 2023

USCDI v4 Summary of Data Classes and Data Elements

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- Substance (Non-Medication)
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- Body Weight
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- 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. If a cell is empty, an applicable vocabulary standard has not been identified.
Substance (Medication) Pharmacologic agent believed to cause a harmful or undesired physiologic response following exposure.	• RxNorm Full Monthly Release, July 3, 2023
Substance (Drug Class) Pharmacologic category for an agent believed to cause a harmful or undesired physiologic response following exposure.	• Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT®) U.S. Edition, March 2023 Release
Substance (Non-Medication) 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.	• Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT) U.S. Edition, March 2023 Release
Reaction Harmful or undesired physiologic response following exposure to a pharmacologic agent or class of agents.	• Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT) U.S. Edition, March 2023 Release

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DATA CLASS

CARE TEAM MEMBER(S)

Information on 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. If a cell is empty, an applicable vocabulary standard has not been identified.
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.	

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DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S)
	Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. If a cell is empty, an applicable vocabulary standard has not been identified.
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.

DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S)
	Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. If a cell is empty, an applicable vocabulary standard has not been identified.
Consultation Note Response to request from a clinician for an opinion, advice, or service from another clinician. Examples include but are not limited to dermatology, dentistry, and acupuncture.	• Logical Observation Identifiers Names and Codes (LOINC®) version 2.74 • At minimum: Consult Note (LOINC code 11488-4)

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	Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. If a cell is empty, an applicable vocabulary standard has not been identified.
Discharge Summary Note Synopsis 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 2.74 　• At minimum: Discharge Summary (LOINC code 18842-5)
History & Physical 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 2.74 　• At minimum: History and Physical Note (LOINC code 34117-2)
Procedure Note Synopsis 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 2.74 　• At minimum: Procedure Note (LOINC code 28570-0)
Progress Note 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 2.74 　• At minimum: Progress Note (LOINC code 11506-3)

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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. If a cell is empty, an applicable vocabulary standard has not been identified.
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 2.74
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. If a cell is empty, an applicable vocabulary standard has not been identified.
Diagnostic Imaging Test Tests that generate visual images and require interpretation by qualified professionals. Examples include but are not limited to radiographic, photographic, and video images.	• Logical Observation Identifiers Names and Codes (LOINC) version 2.74

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	Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. If a cell is empty, an applicable vocabulary standard has not been identified.
Diagnostic Imaging Report Interpreted results of imaging tests. Usage Note: Includes both structured and unstructured (narrative) components.	

DATA CLASS

ENCOUNTER INFORMATION

Information related to interactions between healthcare providers and 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. If a cell is empty, an applicable vocabulary standard has not been identified.
Encounter Type Category of health care 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.	• Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT) U.S. Edition, March 2023 Release • International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) 2023

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	Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. If a cell is empty, an applicable vocabulary standard has not been identified.
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.	
Encounter Disposition Place or setting to which the patient left a hospital 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. If a cell is empty, an applicable vocabulary standard has not been identified.
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.	

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	Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. If a cell is empty, an applicable vocabulary standard has not been identified.
Facility Name Word or words by which a facility is known.	

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. If a cell is empty, an applicable vocabulary standard has not been identified.
Patient Goals Desired outcomes of patient's care.	
SDOH Goals Desired future states for an identified Social Determinants of Health-related health concern, condition, or diagnosis. Examples include but are not limited to food security, transportation security, and ability to access health care.	• Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT) U.S. Edition, March 2023 Release • Logical Observation Identifiers Names and Codes (LOINC) version 2.74
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 2.74

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DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S)
	Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. If a cell is empty, an applicable vocabulary standard has not been identified.
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 2.74

DATA CLASS

HEALTH INSURANCE INFORMATION

Data related to an individual's insurance coverage for health 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. If a cell is empty, an applicable vocabulary standard has not been identified.
Coverage Status Presence or absence of health care insurance.	
Coverage Type Category of health care payers, insurance products, or benefits. Examples include but are not limited to Medicaid, commercial, HMO, 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.	

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DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S)
	Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. If a cell is empty, an applicable vocabulary standard has not been identified.
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. If a cell is empty, an applicable vocabulary standard has not been identified.
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 bathing, ambulation, and preparing a light meal.	• Logical Observation Identifiers Names and Codes (LOINC) version 2.74

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DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S)
	Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. If a cell is empty, an applicable vocabulary standard has not been identified.
Disability Status Assessments of a patient's physical, cognitive, intellectual, or psychiatric disabilities. Examples include but are not limited to- vision, hearing, memory, and activities of daily living.	• Logical Observation Identifiers Names and Codes (LOINC) version 2.74
Mental/Cognitive Status Assessment or screening for the presence of a mental or behavioral problem. Examples include but are not limited to alertness, orientation, comprehension, concentration, and immediate memory for simple commands.	• Logical Observation Identifiers Names and Codes (LOINC) version 2.74
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.	
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 2.74
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 2.74

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DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S)
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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 2.74
SDOH Assessment Screening questionnaire-based, structured evaluation for a Social Determinants of Health-related risk. Examples include but are not limited to food, housing, and transportation security.	• Logical Observation Identifiers Names and Codes (LOINC) version 2.74 • Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT) U.S. Edition, March 2023 Release
Smoking Status Assessment of a patient's smoking behaviors. Examples include but are not limited to pack-years and current use.	• Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT) U.S. Edition, March 2023 Release

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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. If a cell is empty, an applicable vocabulary standard has not been identified.
Immunizations Vaccine product administered, planned, or reported.	Both standards are required: • IIS: Current HL7 Standard Code Set, CVX – Vaccines Administered, updates through June 6, 2023 • Vaccine National Drug Code (NDC) Directory – Vaccine NDC Linker Table, updates through June 7, 2023

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. If a cell is empty, an applicable vocabulary standard has not been identified.
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 2.74

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DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S)
	Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. If a cell is empty, an applicable vocabulary standard has not been identified.
Values/Results Documented findings of a tested specimen including structured and unstructured components.	• Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT) U.S. Edition, March 2023 Release
Specimen Type Substance being sampled or tested. Examples include but are not limited to nasopharyngeal swab, whole blood, serum, urine, and wound swab.	• Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT) U.S. Edition, March 2023 Release
Result Status State or condition of a laboratory test.	
Result Unit of Measure Unit of measurement to report laboratory test results.	• The Unified Code of Units for Measure, Revision 2.1
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 2.1
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.	• Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT) U.S. Edition, March 2023 Release Optional: • 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.	• Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT) U.S. Edition, March 2023 Release

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DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S)
	Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. If a cell is empty, an applicable vocabulary standard has not been identified.
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. Examples include but are not limited to hemolyzed, clotted, container leaking, and missing patient name. Usage note: This may include information about the contents of the container, the container, and the label.	• Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT) U.S. Edition, March 2023 Release

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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. If a cell is empty, an applicable vocabulary standard has not been identified.
Unique Device Identifier - Implantable Numeric or alphanumeric code that uniquely identifies an implantable 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. If a cell is empty, an applicable vocabulary standard has not been identified.
Medications Pharmacologic agent used in the diagnosis, cure, mitigation, treatment, or prevention of disease.	• RxNorm Full Monthly Release, July 3, 2023 Optional: • National Drug Code (NDC), July 20, 2023
Dose Amount of a medication for each administration.	

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DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S)
	Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. If a cell is empty, an applicable vocabulary standard has not been identified.
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 2.1
Indication Sign, symptom, or medical condition that is the reason for giving or taking a medication.	• Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT) U.S. Edition, March 2023 Release • International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM)
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. Examples include but are not limited to prescription directions for taking a medication, and package instructions for over-the-counter medications. Usage notes: May include route, quantity, timing/frequency, and special instructions (PRN, sliding scale, taper).	
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.	• Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT) U.S. Edition, March 2023 Release

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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. If a cell is empty, an applicable vocabulary standard has not been identified.
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 1.2 (July 2021)

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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 1.2 (July 2021)
Tribal Affiliation Tribe or band with which an individual associates.	
Sex Documentation of a specific instance of sex and/or gender information.	• Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT) U.S. Edition, March 2023 Release
Sexual Orientation A person's emotional, romantic, sexual, or affectional attraction to another person.	• Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT) U.S. Edition, March 2023 Release
Gender Identity A person's internal sense of being a man, woman, both, or neither.	• Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT) U.S. Edition, March 2023 Release
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)
Current Address Place where a person is located or may be contacted.	• Project US@ Technical Specification for Patient Addresses, Final Version 1.0
Previous Address Prior place where a person may have been located or could have been contacted.	• Project US@ Technical Specification for Patient Addresses, Final Version 1.0

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DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S)
	Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. If a cell is empty, an applicable vocabulary standard has not been identified.
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.	
Relationship Type Relationship of a person to a patient. Examples include but are not limited to parent, next-of-kin, guardian, and custodian.	

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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. If a cell is empty, an applicable vocabulary standard has not been identified.
Assessment and Plan of Treatment Health professional's conclusions and working assumptions that will guide treatment of the patient.	

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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. If a cell is empty, an applicable vocabulary standard has not been identified.
Problems Condition, diagnosis, or reason for seeking medical attention.	• Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT) U.S. Edition, March 2023 Release • International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) 2023
SDOH Problems/Health Concerns Social Determinants of Health-related health concerns, conditions, or diagnoses. Examples include but are not limited to homelessness and food insecurity.	• Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT) U.S. Edition, March 2023 Release • International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) 2023
Date of Diagnosis Date of first determination by a qualified professional of the presence of a problem or condition affecting a patient.	
Date of Resolution Date of subsiding or termination of a symptom, problem, or condition.	

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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. If a cell is empty, an applicable vocabulary standard has not been identified.
Procedures Activity performed for or on a patient as part of the provision of care.	• Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT) U.S. Edition, March 2023 Release • Current Procedural Terminology (CPT®) 2023, as maintained and distributed by the American Medical Association, for physician services and other health care services, and Healthcare Common Procedure Coding System (HCPCS), as maintained and distributed by HHS. • For technology primarily developed to record dental procedures: Code on Dental Procedures and Nomenclature (CDT), maintained and distributed by the American Dental Association, for dental services. Optional: • International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS) 2023
Performance Time Time and/or date a procedure is performed. Examples include but are not limited to vaccine or medication administration times, surgery start time, and time ultrasound performed.	

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DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S)
	Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. If a cell is empty, an applicable vocabulary standard has not been identified.
SDOH Interventions Actions or services to address an identified Social Determinants of Health-related health concern, condition, or diagnosis. Examples include but are not limited to education about food pantry program and referral to non-emergency medical transportation program.	• Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT) U.S. Edition, March 2023 Release • Current Procedural Terminology (CPT) 2023, as maintained and distributed by the American Medical Association, for physician services and other health care services. • Healthcare Common Procedure Coding System (HCPCS) Level II, as maintained and distributed by HHS.
Reason for Referral Explanation or justification for a referral or consultation.	• Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT) U.S. Edition, March 2023 Release • International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) 2023

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. If a cell is empty, an applicable vocabulary standard has not been identified.
Author Time Stamp Date and time of author action.	
Author Organization Organization associated with author.	

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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. If a cell is empty, an applicable vocabulary standard has not been identified.
Systolic Blood Pressure	Both standards are required. • Logical Observation Identifiers Names and Codes (LOINC) version 2.74 • The Unified Code of Units for Measure, Revision 2.1
Diastolic Blood Pressure	Both standards are required. • Logical Observation Identifiers Names and Codes (LOINC) version 2.74 • The Unified Code of Units for Measure, Revision 2.1
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 2.74 • The Unified Code of Units for Measure, Revision 2.1
Heart Rate	Both standards are required. • Logical Observation Identifiers Names and Codes (LOINC) version 2.74 • The Unified Code of Units for Measure, Revision 2.1
Respiratory Rate	Both standards are required. • Logical Observation Identifiers Names and Codes (LOINC) version 2.74 • The Unified Code of Units for Measure, Revision 2.1

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DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S)
	Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. If a cell is empty, an applicable vocabulary standard has not been identified.
Body Temperature	Both standards are required. • Logical Observation Identifiers Names and Codes (LOINC) version 2.74 • The Unified Code of Units for Measure, Revision 2.1
Body Height	Both standards are required. • Logical Observation Identifiers Names and Codes (LOINC) version 2.74 • The Unified Code of Units for Measure, Revision 2.1
Body Weight	Both standards are required. • Logical Observation Identifiers Names and Codes (LOINC) version 2.74 • The Unified Code of Units for Measure, Revision 2.1
Pulse Oximetry	Both standards are required. • Logical Observation Identifiers Names and Codes (LOINC) version 2.74 • The Unified Code of Units for Measure, Revision 2.1
Inhaled Oxygen Concentration	Both standards are required. • Logical Observation Identifiers Names and Codes (LOINC) version 2.74 • The Unified Code of Units for Measure, Revision 2.1
BMI Percentile (2 - 20 years)	Both standards are required. • Logical Observation Identifiers Names and Codes (LOINC) version 2.74 • The Unified Code of Units for Measure, Revision 2.1
Weight-for-length Percentile (Birth - 24 Months)	Both standards are required. • Logical Observation Identifiers Names and Codes (LOINC) version 2.74 • The Unified Code of Units for Measure, Revision 2.1

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DATA ELEMENT	APPLICABLE VOCABULARY STANDARD(S)
	Standards listed are required. If more than one is listed, at least one is required unless otherwise noted. If a cell is empty, an applicable vocabulary standard has not been identified.
Head Occipital-frontal Circumference Percentile (Birth - 36 Months)	Both standards are required. • Logical Observation Identifiers Names and Codes (LOINC) version 2.74 • The Unified Code of Units for Measure, Revision 2.1

Change Log

Changes between USCDI v3 and v4

Change Type	Description of change
Add Data Element	• Substance (Non-Medication) • Encounter Identifier • Facility Identifier • Facility Type • Facility Name • Treatment Intervention Preference • Care Experience Preference • Alcohol Use • Substance Use • Physical Activity • Result Unit of Measure • Result Reference Range • Result Interpretation • Specimen Source Site • Specimen Identifier • Specimen Condition Acceptability • Medication Instructions • Medication Adherence • Performance Time • Average Blood Pressure • Coverage Type • Functional Status • Smoking Status
Add Data Class	• Facility Information
Change Data Element Name	• Rename Unique Device Identifier(s) for a Patient's Implantable Device(s) to Unique Device Identifier Implantable
Change Data Class Name	• Goals to Goals and Preferences • Unique Device Identifier(s) for a Patient's Implantable Device(s) to Medical Devices • Assessment and Plan of Treatment to Patient Summary and Plan

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Change Type	Description of change
Change Data Element Definition	• Coverage Type • Functional Status • Smoking Status
Change Data Class Definition	• Goals and Preferences
Change Applicable Standards	• Laboratory – Values/Results • Medication - Indication • Reason for Referral
Move Data Element to Different Class (Does not change or limit how data element can be used)	• SDOH Assessment moved from Assessment and Plan of Treatment to Health Status Assessment Data Class
Updated Applicable Standards versions	• Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT) U.S. Edition, March 2023 Release • Logical Observation Identifiers Names and Codes (LOINC) version 2.74 • International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) 2023 • International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS) 2023. • Current Procedural Terminology (CPT) 2023 • Healthcare Common Procedure Coding System (HCPCS) Level II 2023 • RxNorm Full Monthly Release, July 3, 2023 • National Drug Code (NDC), July 20, 2023 • IIS: Current HL7 Standard Code Set, CVX – Vaccines Administered, updates through June 6, 2023 • Vaccine National Drug Code (NDC) Directory – Vaccine NDC Linker Table, updates through June 7, 2023

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Changes between USCDI Draft v4 and Final v4

Change Type	Description of change
Change Data Element Name	• Rename Specimen Condition and Disposition to Specimen Condition Acceptability • Rename Time of Procedure to Performance Time
Change Data Element Definition	• Facility Type • Treatment Intervention Preference • Care Experience Preference • Physical Activity • Result Unit of Measure • Result Reference Range • Result Interpretation • Specimen Condition Acceptability • Specimen Identifier • Medication Instructions • Medication Adherence • Performance Time • Average Blood Pressure • Coverage Type • Functional Status • Smoking Status
Change Data Class Definition	• Goals and Preferences
Change Applicable Standards	• Result Reference Range • Result Interpretation • Specimen Condition Acceptability • Medication Adherence • Indication • Reason for Referral

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