



United States Core Data for Interoperability

— VERSION 1 (JULY 2020 ERRATA) —



The Office of the National Coordinator for  
Health Information Technology



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 various Data Elements by a common theme or use case.

A USCDI “Data Element” is the most granular level at which a piece of data is represented in the USCDI for exchange.

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## Version History

Version #	Description of change	Version Date
1	First Publication	February 2020
1 (July 2020 Errata)	<p>Corrections to Applicable Standards</p> <ul style="list-style-type: none"><li>• Substance (Medication) - Removed UCUM</li><li>• Patient’s Goals, Health Concerns, Assessment and Plan of Treatment - Removed LOINC, SNOMED CT</li><li>• Laboratory Tests, Values/Results - Removed SNOMED CT and UCUM</li><li>• Medications - Removed UCUM</li></ul>	July 2020

## USCDI v1 Summary of Data Classes and Data Elements

### Allergies and Intolerances

- Substance (Medication)
- Substance (Drug Class)
- Reaction

### Assessment and Plan of Treatment

- Assessment and Plan of Treatment

### Care Team Members

- Care Team Members

### Clinical Notes

- Consultation Note
- Discharge Summary Note
- History & Physical
- Imaging Narrative
- Laboratory Report Narrative
- Pathology Report Narrative
- Procedure Note
- Progress Note

### Goals

- Patient Goals

### Health Concerns

- Health Concerns

### Immunizations

- Immunizations

### Laboratory

- Tests
- Values/Results

### Medications

- Medications

### Patient Demographics

- First Name
- Last Name
- Previous Name
- Middle Name (including Middle Initial)
- Suffix
- Birth Sex
- Date of Birth
- Race
- Ethnicity
- Preferred Language
- Current Address
- Previous Address
- Phone Number
- Phone Number Type
- Email Address

### Problems

- Problems

### Procedures

- Procedures

### Provenance

- Author Time Stamp
- Author Organization

### Smoking Status

- Smoking Status

### Unique Device Identifier(s) for a Patient's Implantable Device(s)

- Unique Device Identifier(s) for a Patient's Implantable Device(s)

### Vital Signs

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



## DATA CLASS

### Allergies and Intolerances

Represents harmful or undesirable physiological responses associated with exposure to a substance.

DATA ELEMENT	APPLICABLE STANDARD(S)
<b>Substance (Medication)</b>	<ul style="list-style-type: none"><li>RxNorm, January 6, 2020 Full Release Update</li></ul>
<b>Substance (Drug Class)</b>	<ul style="list-style-type: none"><li>SNOMED International, Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT®) U.S. Edition, September 2019 Release</li></ul>
<b>Reaction</b>	<ul style="list-style-type: none"><li>SNOMED International, Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT®) U.S. Edition, September 2019 Release</li></ul>

## DATA CLASS

### Assessment and Plan of Treatment

Represents a health professional's conclusions and working assumptions that will guide treatment of the patient.

DATA ELEMENT	APPLICABLE STANDARD(S)
<b>Assessment and Plan of Treatment</b>	

**DATA CLASS**

## Care Team Member(s)

The specific person(s) who participate or are expected to participate in the care team.

DATA ELEMENT	APPLICABLE STANDARD(S)
<b>Care Team Member(s)</b>	

## Clinical Notes

Represents narrative patient data relevant to the respective note types.

DATA ELEMENT	APPLICABLE STANDARD(S)
	Logical Observation Identifiers Names and Codes (LOINC®) 2.67
<b>Consultation Note</b> <i>Contains the response to request from a clinician for an opinion or advice from another clinician.</i>	<ul style="list-style-type: none"> <li>Consult Note (LOINC® code 11488-4)</li> </ul>
<b>Discharge Summary Note</b> <i>A synopsis of a patient's admission and course in a hospital or post-acute care setting.</i>	<ul style="list-style-type: none"> <li>Discharge Summary (LOINC® code 18842-5)</li> </ul>
<b>History &amp; Physical</b> <i>Documents the current and past conditions and observations of the patient.</i>	<ul style="list-style-type: none"> <li>History and Physical Note (LOINC® code 34117-2)</li> </ul>
<b>Imaging Narrative</b> <i>Contains a consulting specialist's interpretation of image data.</i>	<ul style="list-style-type: none"> <li>Diagnostic Imaging Study (LOINC® code 18748-4)</li> </ul>
<b>Laboratory Report Narrative</b> <i>Contains a consulting specialist's interpretation of the laboratory report.</i>	
<b>Pathology Report Narrative</b> <i>Contains a consulting specialist's interpretation of the pathology report.</i>	
<b>Procedure Note</b> <i>Encompasses non-operative procedures including interventional cardiology, gastrointestinal endoscopy, osteopathic manipulation, and other specialty's procedures.</i>	<ul style="list-style-type: none"> <li>Procedure Note (LOINC® code 28570-0)</li> </ul>
<b>Progress Note</b> <i>Represents a patient's interval status during a hospitalization, outpatient visit, treatment with a LTPAC provider, or other healthcare encounter.</i>	<ul style="list-style-type: none"> <li>Progress Note (LOINC® code 11506-3)</li> </ul>

## DATA CLASS

### Goals

An expressed desired health state to be achieved by a subject of care (or family/group) over a period of time or at a specific point of time.

DATA ELEMENT	APPLICABLE STANDARD(S)
Patient's Goals	

## DATA CLASS

### Health Concerns

Health related matter that is of interest, importance, or worry to someone who may be the patient, patient's family or patient's health care provider.

DATA ELEMENT	APPLICABLE STANDARD(S)
Health Concerns	



## DATA CLASS

### Immunizations

Record of an administration of a vaccination or a record of a vaccination as reported by a patient, a clinician, or another party.

DATA ELEMENT	APPLICABLE STANDARD(S)
<b>Immunizations</b>	<ul style="list-style-type: none"><li>• CDC IIS: Current HL7 Standard Code Set, CVX -- Vaccines Administered, updates through January 31, 2020</li><li>• CDC National Drug Code (NDC) Directory – Vaccine NDC Linker Table, updates through January 31, 2020</li></ul>

## DATA CLASS

### Laboratory

DATA ELEMENT	APPLICABLE STANDARD(S)
<b>Tests</b> <i>Examinations of specimens derived from humans to provide information for the diagnosis, prevention, treatment of disease, or impairment of, or assessment of health.</i>	<ul style="list-style-type: none"><li>• Logical Observation Identifiers Names and Codes (LOINC®) Database version 2.67</li></ul>
<b>Values/Results</b> <i>Outcome of the examination of a tested specimen.</i>	

DATA CLASS

Medications

DATA ELEMENT	APPLICABLE STANDARD(S)
Medications	<ul style="list-style-type: none"> <li>RxNorm, January 6, 2020 Full Release Update</li> </ul>

DATA CLASS

Patient Demographics

DATA ELEMENT	APPLICABLE STANDARD(S)
First Name	
Last Name	
Previous Name	
Middle Name (including middle initial)	
Suffix	
Birth Sex	<p>Birth sex must be coded in accordance with HL7 Version 3 (V3) Standard, Value Sets for AdministrativeGender and NullFlavor (<a href="https://www.healthit.gov/sites/default/files/170299_f_29_hl7_v3_agender_and_nullflavor.pdf">https://www.healthit.gov/sites/default/files/170299_f_29_hl7_v3_agender_and_nullflavor.pdf</a>) attributed as follows:</p> <ol style="list-style-type: none"> <li>Male. M</li> <li>Female. F</li> <li>Unknown. nullFlavor UNK</li> </ol>
Date of Birth	
Race	<ul style="list-style-type: none"> <li>The Office of Management and Budget Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity,</li> </ul>

DATA ELEMENT	APPLICABLE STANDARD(S)
	Statistical Policy Directive No. 15, as revised, October 30, 1997 ( <a href="https://obamawhitehouse.archives.gov/omb/fedreg_1997standards">https://obamawhitehouse.archives.gov/omb/fedreg_1997standards</a> ) <ul style="list-style-type: none"> <li>• CDC Race and Ethnicity Code Set Version 1.0 (March 2000) (<a href="https://www.cdc.gov/phin/resources/vocabulary/index.html">https://www.cdc.gov/phin/resources/vocabulary/index.html</a>)</li> </ul>
<b>Ethnicity</b>	<ul style="list-style-type: none"> <li>• 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 (<a href="https://obamawhitehouse.archives.gov/omb/fedreg_1997standards">https://obamawhitehouse.archives.gov/omb/fedreg_1997standards</a>)</li> <li>• CDC Race and Ethnicity Code Set Version 1.0 (March 2000) (<a href="https://www.cdc.gov/phin/resources/vocabulary/index.html">https://www.cdc.gov/phin/resources/vocabulary/index.html</a>)</li> </ul>
<b>Preferred Language</b>	Request for Comment (RFC) 5646, “Tags for Identifying Languages”, September 2009 ( <a href="http://www.rfc-editor.org/info/rfc5646">http://www.rfc-editor.org/info/rfc5646</a> ) See <a href="https://tools.ietf.org/html/bcp47">https://tools.ietf.org/html/bcp47</a>
<b>Current Address</b>	
<b>Previous Address</b>	
<b>Phone Number</b>	<a href="#">ITU–T E.123 (02/2001) International Telecommunication Union E.123: Notation for national and international telephone numbers, e-mail addresses and web addresses</a>  <a href="#">ITU–T E.164 International Telecommunication Union E.164: The international public telecommunication numbering plan</a>
<b>Phone Number Type</b>	
<b>Email Address</b>	

## DATA CLASS

### Problems

Information about a condition, diagnosis, or other event, situation, issue, or clinical concept that is documented.

DATA ELEMENT	APPLICABLE STANDARD(S)
<b>Problems</b>	SNOMED International, Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT®) U.S. Edition, September 2019 Release

## DATA CLASS

### Procedures

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

DATA ELEMENT	APPLICABLE STANDARD(S)
<b>Procedures</b>	<ul style="list-style-type: none"><li>• Health Care Financing Administration Common Procedure Coding System (HCPCS), as maintained and distributed by HHS.</li><li>• Current Procedural Terminology, Fourth Edition (CPT-4), as maintained and distributed by the American Medical Association, for physician services and other health care services.</li><li>• SNOMED International, Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT®) U.S. Edition, September 2019 Release</li><li>• Optional:<ul style="list-style-type: none"><li>○ International Classification of Diseases ICD-10-PCS 2020</li><li>○ Optional for technology which records dental procedures: Code on Dental Procedures and Nomenclature (CDT), maintained and distributed by the American Dental Association, for dental services.</li></ul></li></ul>



## DATA CLASS

### Provenance

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

DATA ELEMENT	APPLICABLE STANDARD(S)
<b>Author Time Stamp</b>	
<b>Author Organization</b>	

## DATA CLASS

### Smoking Status

Representing a patient's smoking behavior.

DATA ELEMENT	APPLICABLE STANDARD(S)
<b>Smoking Status</b>	SNOMED International, Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT®) U.S. Edition, September 2019 Release

## DATA CLASS

### Unique Device Identifier(s) for a Patient's Implantable Device(s)

A unique numeric or alphanumeric code that consists of a device identifier and a production identifier.

DATA ELEMENT	APPLICABLE STANDARD(S)
<b>Unique Device Identifier(s) for a patient's implantable device(s)</b>	UDI identifier as described by applicable FDA regulation. (found at <a href="https://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/UniqueDeviceIdentification/">https://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/UniqueDeviceIdentification/</a> )

## Vital Signs

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

DATA ELEMENT	APPLICABLE STANDARD(S)
<b>Diastolic Blood Pressure</b>	<ul style="list-style-type: none"> <li>Logical Observation Identifiers Names and Codes (LOINC®) Database version 2.67</li> <li>The Unified Code of Units for Measure, Revision 2.1</li> </ul>
<b>Systolic Blood Pressure</b>	
<b>Body Height</b>	
<b>Body Weight</b>	
<b>Heart Rate</b>	
<b>Respiratory Rate</b>	
<b>Body Temperature</b>	
<b>Pulse Oximetry</b>	
<b>Inhaled Oxygen Concentration</b>	
<b>BMI Percentile (2 - 20 years)</b>	
<b>Weight-for-length Percentile (Birth - 36 Months)</b>	
<b>Head Occipital-frontal Circumference Percentile (Birth - 36 Months)</b>	