

Learning Collaborative on Using Data to Improve Care

Session 2

Friday, April 8, 2022

THE NACHC MISSION

America's Voice for Community Health Care

The National Association of Community Health Centers (NACHC) was founded in 1971 to promote efficient, high quality, comprehensive health care that is accessible, culturally and linguistically competent, community directed, and patient centered for all.





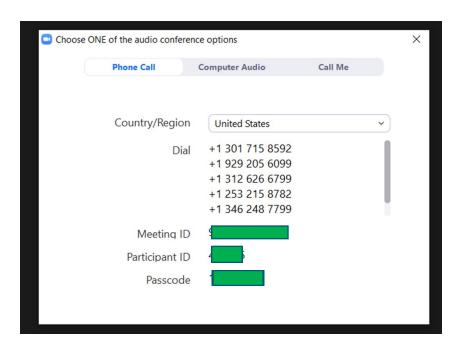
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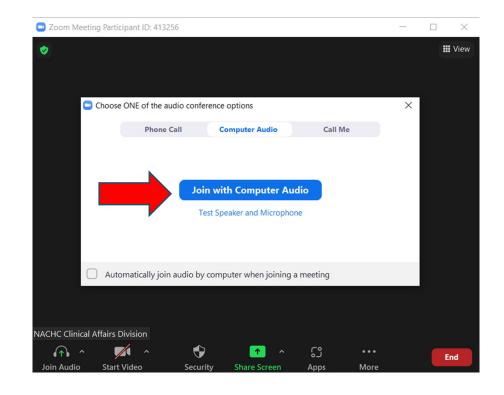


AUDIO CONNECTIONS

Option 1: "Phone Call"
Follow the unique process on your screen using your phone

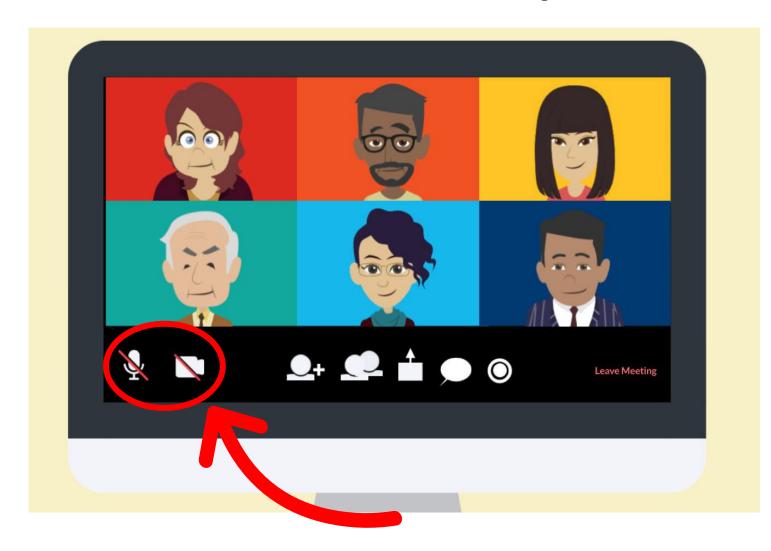


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You must have computer speakers
and a microphone





MUTE / VIDEO



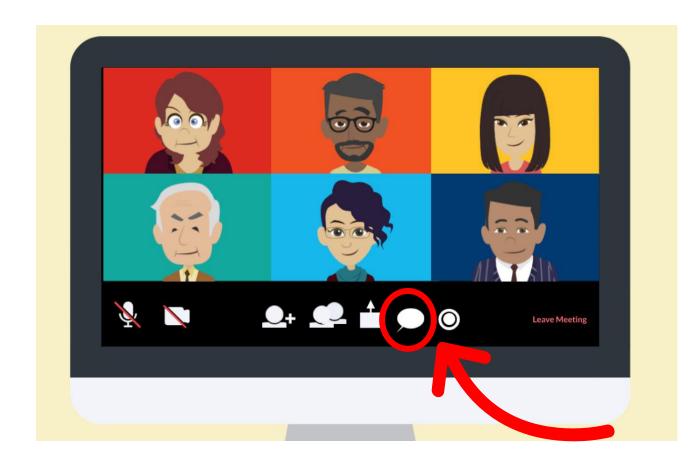
1. Mute

Please only unmute yourself if you are going to speak, and then immediately mute yourself again.

2. Start Video

Please share your video as much as possible.

CHAT BOX



Chat Box

Type in the chat box and press "Enter" or use it to read the chat







Friendly Reminders

- Today's Event is being RECORDED
- Please keep your audio line MUTED
- The **CHATBOX** is open for the duration of this event
- Questions from the **CHAT BOX** will be answered after the presentation is completed.
- We will have POLLING QUESTIONS for you to vote on today!







Communicate, Collaborate, Interoperate!
Harmonize Data via the United States Core
Data for Interoperability Version 3 (USCDIv3)

SOGI, Tribal Affiliation, Date of Death, Occupation, Industry, Health Insurance, Social Determinants of Health



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AGENDA

1 Recap: USCDI: Why does it matter?

Occupation and Industry
Health Insurance

Sexual Orientation

Gender Identity

5 SDoH: Assessment

SDoH: Goals and Data Class

Tribal Affiliation
Date of Death

6 Discussion/ Q&A and Next Steps

OBJECTIVES

- 1. Explore specific USCDIv3 content (SOGI, SDoH, etc.)
- 2. Provide examples and templates and invite participants to give NACHC feedback to optimize our own comments to ONC
- 3. Provide insight and materials to support our partners making submissions to the USCDI

Core Principles



Comprises a core set of data needed to support patient care and facilitate patient access using health IT

Establishes a consistent baseline of data for other use cases

Expands over time via a predictable, transparent, and collaborative **public** process

Why USCDI Matters

- New standard in the ONC Cures Act Final Rule in 2020
- Required for new Certification Criterion (application programming interface (API) to access patient data, using FHIR® US Core
- USCDI v1 replaces the Common Clinical Data Set in these Certification Criteria, using C-CDA or US Core:
 - Transitions of Care documents (create, send, and receive)
 - Clinical Information reconciliation and incorporation
 - Patient View, Download, and Transmit of their health data
 - Electronic case reporting to public health agencies
 - Create C-CDA document
 - Access to data via APIs
- USCDI defines "Electronic Health Information" (for now)



2020



USCDI Version 1

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)

USCDI Version 2

Allergies and Intolerances

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

Assessment and

Plan of TreatmentAssessment and

Plan of Treatment

SDOH Assessment

Health Concerns

Patient Goals

SDOH Goals

Goals

Health Concerns

Immunizations

Immunizations

Care Team Member(s)

- Care Team Member Name
- Care Team Member Identifier
- Care Team Member RoleCare Team Member Location
- Care Team Member Telecom

Laboratory

- Tests
- Values/Results

Medications

Medications

Clinical Notes

- Consultation Note
- Discharge Summary Note
- History & Physical
- 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 Diagnosis
- Encounter Time
- Encounter Location
- Encounter Disposition

Patient Demographics

- First Name
- Last Name
- Previous Name
- Middle Name (including Middle Initial)
- Suffix
- Sex (Assigned at Birth)
- Sexual Orientation
- Gender IdentityDate of Birth
- Race
- Ethnicity
- Preferred Language
- Current Address
- Previous Address
- Phone Number
- Phone Number Type
- Email Address

Problems

- Problems
- SDOH Problems/Health Concerns
- Date of Diagnosis
- Date of Resolution

Procedures

- Procedures
- SDOH Interventions

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 PressureSystolic Blood
- Pressure
- Body Height
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- Body TemperaturePulse Oximetry
- Inhaled Oxygen Concentration
- BMI Percentile (2 - 20 Years)
- Weight-for-length Percentile (Birth – 36 Months)
- Head Occipital-frontal Circumference Percentile (Birth - 36 Months)

New Data Classes and Elements in Draft USCDI v3

Health Insurance Information *

- Coverage Status
- Coverage Type
- Relationship to Subscriber
- Member Identifier
- Subscriber Identifier
- Group Number
- Payer Identifier

Health Status ★

- Functional Status
- Disability Status
- Mental Function
- Pregnancy Status

Laboratory

- Specimen Type
- Result Status

Patient Demographics

- Date of Death
- Tribal Affiliation
- Related Person's Name
- Related Person's Relationship
- Occupation
- Occupation Industry

Procedures

Reason for Referral

Key: ★ New Data Class





USCDI establishes a minimum set of data classes that are **required** to be **interoperable nationwide**

Designed to be expanded in an iterative and predictable way over time

The USCDI ONC New Data Element and Class (ONDEC) Submission System supports this process.

ONC will accept submissions for USCDI Draft v3 through April 30, 2022



Sexual Orientation and Gender Identity

Sexual Orientation and Gender Identity

CDC

Collecting SO/GI data is essential to providing high-quality, patient-centered care for transgender people. SO/GI data can be collected in several ways:

- 1. Information can be obtained through patient portals and transmitted to an individual's EHR.
- 2. Questions can be included on registration forms for all patients as part of the demographic section along with information about race, ethnicity, and date of birth.
- 3. Providers and their care team can ask questions during the patient visit, for instance, as part of a social or sexual-history discussion.

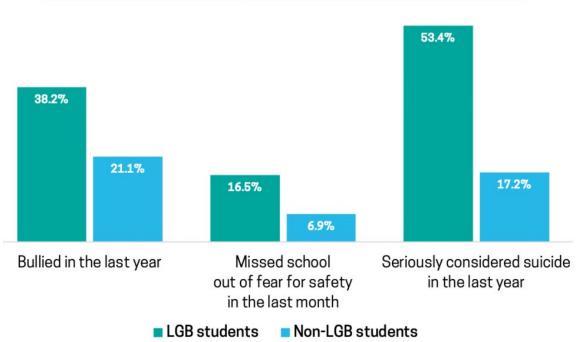
The USCDIv1 does not have SOGI as a requirement, however USCDIv2 and several federal reporting systems, including HRSA's UDS and Ryan White Reporting (RSR) require this data to be submitted



Sexual Orientation

Gender identity

HIGH SCHOOL STUDENTS IN MICHIGAN, BY SEXUAL ORIENTATION





Patient Demographics















III USCDI V2

II Draft USCDI V3

Level 2



Comment

Data Element

Sexual Orientation

A person's identification of their emotional, romantic, sexual, or affectional attraction to another person

Additional Information

Applicable Vocabulary Standard(s)

Sexual orientation must be coded in accordance with SNOMED CT® and HL7 Version 3 Standard, Value Sets for AdministrativeGender and NullFlavor, attributed as follows:

- Lesbian, gay or homosexual. 38628009
- Straight or heterosexual. 20430005
- Bisexual. 42035005
- · Something else, please describe. nullFlavor OTH

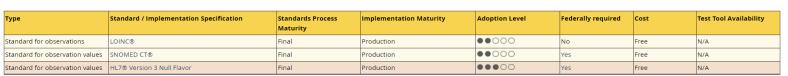
www.nachc.org

f 🗾 in 🖾 🖶 📙

- Don't know. nullFlavor UNK
- Choose not to disclose. nullFlavor ASKU

Adopted at 45 CFR 170.207(o)(1)

Representing Patient-Identified Sexual Orientation



 An article in JAMIA provides helpful information for planning and implementing sexual orientation and gender identity data collection in electronic health records. See LOINC projects in the Interoperability Proving Ground. For more information about observations and observation values, see Appendix III for an informational resource developed by the Health IT Standards Committee. LOINC® code: 76690-7 Sexual orientation ONC's 2015 Edition certification requirements reference the following value set for sexual orientation. Codes from (i) through (iii) are SNOMED CT® and (iv) through (vi) are from HL7 Version 3: (i) Lesbian, gay or homosexual.38628009 (ii) Straight or heterosexual. 20430005 (iii) Bisexual. 42035005 (iv) Something else, please describe.nullFlavor OTH (v) Don't know. nullFlavor ASKU SNOMED CT® code: Sexually attracted to neither male nor female sex 765288000 (Not required in ONC's 2015 Edition certification requirements) 	Limitations, Dependencies, and Preconditions for Consideration	Applicable Value Set(s) and Starter Set(s)
	data collection in electronic health records. See LOINC projects in the Interoperability Proving Ground. For more information about observations and observation values, see Appendix III for an informational resource	ONC's 2015 Edition certification requirements reference the following value set for sexual orientation. Codes from (i) through (iii) are SNOMED CT® and (iv) through (vi) are from HL7 Version 3: (i) Lesbian, gay or homosexual.38628009 (ii) Straight or heterosexual. 20430005 (iii) Bisexual. 42035005 (iv) Something else, please describe.nullFlavor OTH (v) Don't know. nullFlavor UNK (vi) Choose not to disclose. nullFlavor ASKU SNOMED CT® code: Sexually attracted to neither male nor female sex 765288000 (Not required in ONC's 2015 Edition

T6690-7	LONG COMMON NAME Sexual orientation			on
Example Answer List LL3323-4				
Source: Office of the National Coordinator for Health Information Technology				
Answer		Code	Score	Answer ID
Bisexual © http://snomed.info/sct ID:42035005 Bisexual (finding)				LA22877-7
Heterosexual © http://snomed.info/sct ID:20430005 Heterosexual (finding)				LA22876-9
Homosexual © http://snomed.info/sct ID:38628009 Homosexual (finding)				LA22875-1
Other				LA46-8
Asked but unknown				LA20384-6
Unknown © http://snomed.info/sct ID:261665006 Unknown (qualifier value)				LA4489-6





Sexual Orientation: NACHC Response

NACHC believes sexual orientation is a core component of many patients' identities. However, it is also associated with serious health inequity and health disparities. Furthermore, it is clinically relevant to a number of domains of sexual health, trauma and interpersonal violence, substance abuse and mental health risk factors.

We strongly support the requirement for sexual orientation data to be captured in a standardized way in EHRs to support patients' identities, reduce health disparities and facilitate effective clinical risk that may be modified by sexual orientation.

Patient Demographics













III USCDI V2

| Draft USCDI V3







Data Element

Gender Identity

A person's internal sense of being a man, woman, both, or neither.

Additional Information

Applicable Vocabulary Standard(s)

Gender Identify must be coded in accordance with SNOMED CT® and HL7 Version 3 Standard, Value Sets for AdministrativeGender and NullFlavor, attributed as follows:

f 🗾 in 🖂 🚍

- Male. 446151000124109
- Female, 446141000124107
- Female-to-Male (FTM)/Transgender Male/Trans Man. 407377005
- Male-to-Female (MTF)/Transgender Female/Trans Woman. 407376001
- Gendergueer, neither exclusively male nor female. 446131000124102
- · Additional gender category or other, please specify. nullFlavor OTH
- Choose not to disclose, nullFlavor ASKU

Adopted at 45 CFR 170.207(o)(2)

View Submission +

Representing Patient Gender Identity



Limitations, Dependencies, and Preconditions for Consideration	Applica
 An article in JAMIA provides helpful information for planning and implementing sexual orientation and gender identity data collection in electronic health records. 	■ Ge
• Even though clinicians and their patients would benefit from having these data in patient records, this does not suggest that it is the sole responsibility of clinicians and their staffs to collect these sensitive data.	■ Ma

- When patients provide a response to this question in a patient portal, it could contradict with the information collected by providers.
- · See LOINC projects in the Interoperability Proving Ground.

imitations Dependencies and Preconditions for Consideration

- For more information about observations and observation values, see Appendix II for an informational resource developed by the Health IT Standards Committee.
- The Gender Harmony Project is updating the representation of several sex-related concepts, including gender identity. Their proposed value set (extensible for other use cases) for gender identity does not include the concepts of Female-to-Male (FTM)/Transgender Male/Trans Man, Male-to-Female (MTF)/Transgender Female/Trans Woman, or Additional gender category or other, please specify. HL7 Version 3 code: OTH that are included in the ONC value set which was established in regulation and incorporated by reference.

Applicable Value Set(s) and Starter Set(s)

- Gender identity. LOINC® code: 76691-5
- Male. SNOMED CT® code 446151000124109
- Female, SNOMED CT® code 446141000124107
- Female-to-Male (FTM)/Transgender Male/Trans Man. SNOMED CT® code: 407377005
- Male-to-Female (MTF)/Transgender Female/Trans Woman. SNOMED CT® code: 407376001
- · Identifies as non-conforming gender (SNOMED CT (US) synonyms include: Genderqueer; Identifies as neither exclusively male nor female, Non-binary gender) SNOMED CT® code: 446131000124102
- · Additional gender category or other, please specify. HL7 Version 3 code: OTH
- Choose not to disclose. HL7 Version 3 code: ASKU

LOINC CODE 76691-5	LONG COMMON NAME Gender identity	/
Example Answer List LL3322-6		
Source: Office of the National Coordinator for Health Information Technology		
Answer	Code Score	Answer ID
Identifies as male © http://snomed.info/sct ID:446151000124109 Identifies as male gender (finding)		LA22878-5
Identifies as female © http://snomed.info/sct ID:446141000124107 Identifies as female gender (finding)		LA22879-3
Female-to-male transsexual © http://snomed.info/sct iD:407377005 Female-to-male transsexual (finding)		LA22880-1
Male-to-female transsexual © http://snomed.info/sct ID:407376001 Male-to-female transsexual (finding)		LA22881-9
Identifies as non-conforming © http://snomed.info/sct ID:446131000124102 Identifies as non-conforming gender (finding	0	LA22882-7
Other		LA46-8
Asked but unknown		LA20384-6



Gender Identity: NACHC Response

NACHC believes gender identity is a foundational component of patient identity. It is also associated with serious health inequities and disparities. Furthermore, it is clinically relevant to a number of clinical domains including sexual health, cancer risk, trauma and interpersonal violence, substance abuse and mental health risk factors. We strongly support the requirement for gender identity data to be captured in a standardized way in EHRs to support patients' identities, reduce health disparities and facilitate effective clinical assessments.

NACHC believes the long-term approach should align with the work of the Gender Harmony Working Group; however, this work is likely not mature enough to be promoted to USCDIv3. Therefore, we propose for USCDIv3 an interim approach of removing the codes from the Gender Identity value set and retaining the remainder:

- •Female-to-Male (FTM)/Transgender Male/Trans Man. 407377005
- •Male-to-Female (MTF)/Transgender Female/Trans Woman. 407376001



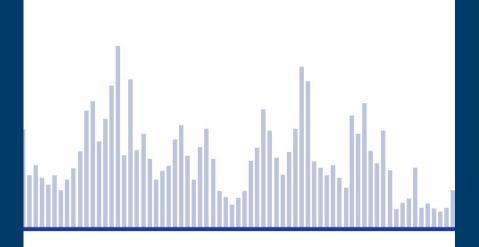
Sexual Orientation and Gender Identity



0%	0%	0%
Fully Agree with proposed	Agree with modifications	Disagree
. 0	0	Disagree

TECHNICAL REPORT

A Guide to the Collection of Occupational Data for Health: Tips for Health IT System Developers





Occupation and Industry

Representing Job, Usual Work, and Other Work Information







Туре	Specification		Implementation Maturity	Adoption Level	Federally required	Cost	Test Tool Availability
Standard for observations	LOINC®	Final	Production	•0000	No	Free	N/A
Standard for observation values	Occupational Data for Health (ODH) Code System	Balloted Draft	Pilot	Feedback Requested	No	Free	No
Standard for observation values	CDC Census 2010 Industry and Occ upation System	Balloted Draft	Pilot	•0000	No	Free	Yes
Implementation Specification	HL7 EHRS-FM Release 2: Functional Profile; Work and Health, Release 1 – US Realm	Balloted Draft	'	Feedback Requested	No	Free	

Limitations, Dependencies, and Preconditions for Consideration

- Self-reported, structured and standardized work history has broad applicability to healthcare as part of the medical record and is suitable for many use cases supporting patient care, population health, and public health.
- An Information Model, Occupational Data for Health (ODH), supports the collection and classification of Work Information in health IT systems and has been published in JAMIA.
- The ODH industry value set includes the search-friendly terms from the North American Industry Classification System (NAICS) index with the respective category. The terms in this value set are relatable to the general public.
- The ODH occupation value set includes the search-friendly terms from the Occupational Information Network-Standard Occupational Classification (O*NET-SOC) system alternate titles with the respective category. The terms in this value set are relatable to the general public.
- NIOSH has prepared A Guide to the Collection of Occupational Data for Health to provide tips to health IT system developers seeking to implement work concepts.

Applicable Security Patterns for Consideration

Representing Industry

- Past or Present Industry Question (LOINC code 86188-0)
- Usual Industry Question (LOINC code 21844-6)
- PHVS_Industry_NAICS_Detail_ODH (urn:oid: 2.16.840.1.114222.4.11.7900)
- PHVS Industry CDC Census2010 codes (urn:oid:2.16.840.1.114222.4.11.7187)

Representing Occupation

- Past or Present Occupation Question (LOINC 11341-5)
- Usual Occupation Question (LOINC 21843-8)
- PHVS_Occupation_CDC_ONETSOC_Detail_ODH (urn: oid: 2.16.840.1.114222.4.11.7901)
- PHVS_Occupation_CDC_Census2010 codes (urn:oid:2.16.840.1.114222.4.11.7186)

Representing Employment Status

- Employment Status Question (LOINC 74165-2)
- PHVS_EmploymentStatus_ODH (urn:oid: 2.16.840.1.114222.4.11.7129)

Representing Work Schedule

- Work Schedule Question (LOINC 74159-5)
- PHVS_WorkSchedule_ODH (urn:oid: 2.16.840.1.114222.4.11.7130)

Representing Work Classification

- Work Classification Question (LOINC 85104-8)
- PHVS_WorkClassification_ODH (urn:oid: 2.16.840.1.114222.4.11.7597)

Representing Job Supervisory Level or Pay Grade

- Job Supervisory Level or Pay Grade Question (LOINC: 87707-6)
- PHVS_JobSupervisoryLevelorPayGrade_ODH (unr:oid: 2.16.840.1.114222.4.11.7613)





Industry

Concept Code	Concept Name	Preferred Concept Name	Code System	Value Set
311611.000001	Abattoirs [Animal (except Poultry) Slaughtering]	Abattoirs [Animal (except Poultry) Slaughtering]	Occupational Data for Health (ODH)	Industry NAICS Detail (ODH)
621410.000002	Abortion clinics [Family Planning Centers]	Abortion clinics [Family Planning Centers]	Occupational Data for Health (ODH)	Industry NAICS Detail (ODH)
334519.000003	Abrasion testing machines manufacturing [Other Measuring and Controlling Device Manufacturing]	Abrasion testing machines manufacturing [Other Measuring and Controlling Device Manufacturing]	Occupational Data for Health (ODH)	Industry NAICS Detail (ODH)
339114.000004	Abrasive points, wheels, and disks, dental, manufacturing [Dental Equipment and Supplies Manufacturing]	Abrasive points, wheels, and disks, dental, manufacturing [Dental Equipment and Supplies Manufacturing]	Occupational Data for Health (ODH)	Industry NAICS Detail (ODH)
327910.000005	Abrasive products manufacturing [Abrasive Product Manufacturing]	Abrasive products manufacturing [Abrasive Product Manufacturing]	Occupational Data for Health (ODH)	Industry NAICS Detail (ODH)
212322.000006	Abrasive sand quarrying and/or beneficiating [Industrial Sand Mining]	Abrasive sand quarrying and/or beneficiating [Industrial Sand Mining]	Occupational Data for Health (ODH)	Industry NAICS Detail (ODH)
212399.000007	Abrasive stones (e.g., emery, grindstones, hones, pumice) mining and/or beneficiating [All Other Nonmetallic Mineral Mining]	Abrasive stones (e.g., emery, grindstones, hones, pumice) mining and/or beneficiating [All Other Nonmetallic Mineral Mining]	Occupational Data for Health (ODH)	Industry NAICS Detail (ODH)
423840.000008	Abrasives merchant wholesalers [Industrial Supplies Merchant Wholesalers]	Abrasives merchant wholesalers [Industrial Supplies Merchant Wholesalers]	Occupational Data for Health (ODH)	Industry NAICS Detail (ODH)
212399.000009	Abrasives, natural, mining and/or beneficiating [All Other Nonmetallic Mineral Mining]	Abrasives, natural, mining and/or beneficiating [All Other Nonmetallic Mineral Mining]	Occupational Data for Health (ODH)	Industry NAICS Detail (ODH)
322121.000010	Absorbent paper stock manufacturing [Paper (except Newsprint) Mills]	Absorbent paper stock manufacturing [Paper (except Newsprint) Mills]	Occupational Data for Health (ODH)	Industry NAICS Detail (ODH)

Occupation

Concept Code	Concept Name	Preferred Concept Name	Code System	Value Set
15- 1132.00.000001	.NET Developer [Software Developers, Applications]	.NET Developer [Software Developers, Applications]	Occupational Data for Health (ODH)	Occupation ONETSOC Detail (ODH)
15- 1131.00.000002	.NET Programmer [Computer Programmers]	.NET Programmer [Computer Programmers]	Occupational Data for Health (ODH)	Occupation ONETSOC Detail (ODH)
51- 5112.00.000003	1st Pressman [Printing Press Operators]	1st Pressman [Printing Press Operators]	Occupational Data for Health (ODH)	Occupation ONETSOC Detail (ODH)
51- 5112.00.000004	1st Pressman On Web Press [Printing Press Operators]	1st Pressman On Web Press [Printing Press Operators]	Occupational Data for Health (ODH)	Occupation ONETSOC Detail (ODH)
25- 2011.00.000005	2 Year Olds Preschool Teacher [Preschool Teachers, Except Special Education]	2 Year Olds Preschool Teacher [Preschool Teachers, Except Special Education]	Occupational Data for Health (ODH)	Occupation ONETSOC Detail (ODH)
39- 3011.00.000006	21 Dealer [Gaming Dealers]	21 Dealer [Gaming Dealers]	Occupational Data for Health (ODH)	Occupation ONETSOC Detail (ODH)
51- 5112.00.000007	2nd Pressman [Printing Press Operators]	2nd Pressman [Printing Press Operators]	Occupational Data for Health (ODH)	Occupation ONETSOC Detail (ODH)
27- 1014.00.000008	3D Animator [Multimedia Artists and Animators]	3D Animator [Multimedia Artists and Animators]	Occupational Data for Health (ODH)	Occupation ONETSOC Detail (ODH)
27- 1013.00.000010	3D Artist (Three Dimensional Artist) [Fine Artists, Including Painters, Sculptors, and Illustrators]	3D Artist (Three Dimensional Artist) [Fine Artists, Including Painters, Sculptors, and Illustrators]	Occupational Data for Health (ODH)	Occupation ONETSOC Detail (ODH)
27- 1014.00.000009	3D Artist [Multimedia Artists and Animators]	3D Artist [Multimedia Artists and Animators]	Occupational Data for Health (ODH)	Occupation ONETSOC Detail (ODH)
27- 1014.00.000011	3D Designer (Three- dimensional Designer) [Multimedia Artists and Animators]	3D Designer (Three-dimensional Designer) [Multimedia Artists and Animators]	Occupational Data for Health (ODH)	Occupation ONETSOC Detail (ODH)
27- 1014.00.000012	3D Modeler (Three- dimensional Modeler) [Multimedia Artists and Animators]	3D Modeler (Three-dimensional Modeler) [Multimedia Artists and Animators]	Occupational Data for Health (ODH)	Occupation ONETSOC Detail (ODH)
27- 1014.00.000013	3D Specialist [Multimedia Artists and Animators]	3D Specialist [Multimedia Artists and Animators]	Occupational Data for Health (ODH)	Occupation ONETSOC Detail (ODH)
29- 2034.00.000014	3D Technologist [Radiologic Technologists]	3D Technologist [Radiologic Technologists]	Occupational Data for Health (ODH)	Occupation ONETSOC Detail (ODH)
51- 5112.00.000015	3rd Pressman [Printing Press Operators]	3rd Pressman [Printing Press Operators]	Occupational Data for Health (ODH)	Occupation ONETSOC Detail (ODH)

"Occupation" and "Industry" Are Key Concepts About Work- And Must Be In Context

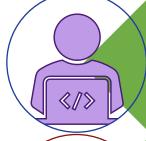
Job (Past or Present)

Usual Work

Public Health Use

Electronic case reporting (eCR)

Cancer reporting
Vital records death reporting
eCR



Occupation

Type of work

LOINC 11341-5

History of Occupation

LOINC 21843-8

Usual Occupation



Industry

Type of business

LOINC 861880-0

Occupation Industry

LOINC 21844-6

Usual Industry

Patient Care Example

Leverage knowledge of the patient's occupation to achieve better outcomes

- Consider diseases such as Lyme Disease in patients working outdoors, such as agricultural workers
- Evaluate truck drivers' medication use
- Evaluate need for accommodations during pregnancy
- Assist patient in successful return to work after illness or injury



Leverage job occupations and job industries among patients to address pertinent health concerns

Provide
useful
educational
materials in
the patient's
primary
language

Establish screening for early recognition of work-related illness/injury

Provide public-facing workers with vaccinations for COVID-19

Electronically report work-related conditions as required

Recognize new associations between work and health Support research into the relationships between work and health



Occupation and Industry: NACHC Response

NACHC believes occupational health is central to understanding patient risk and context in a patient-centered way.

We firmly support the use of the code systems and codes described by NIOSH and we can further state we are working with 3 clinical organizations using 3 different EHRs to implement these codes in production at this time.





Occupation



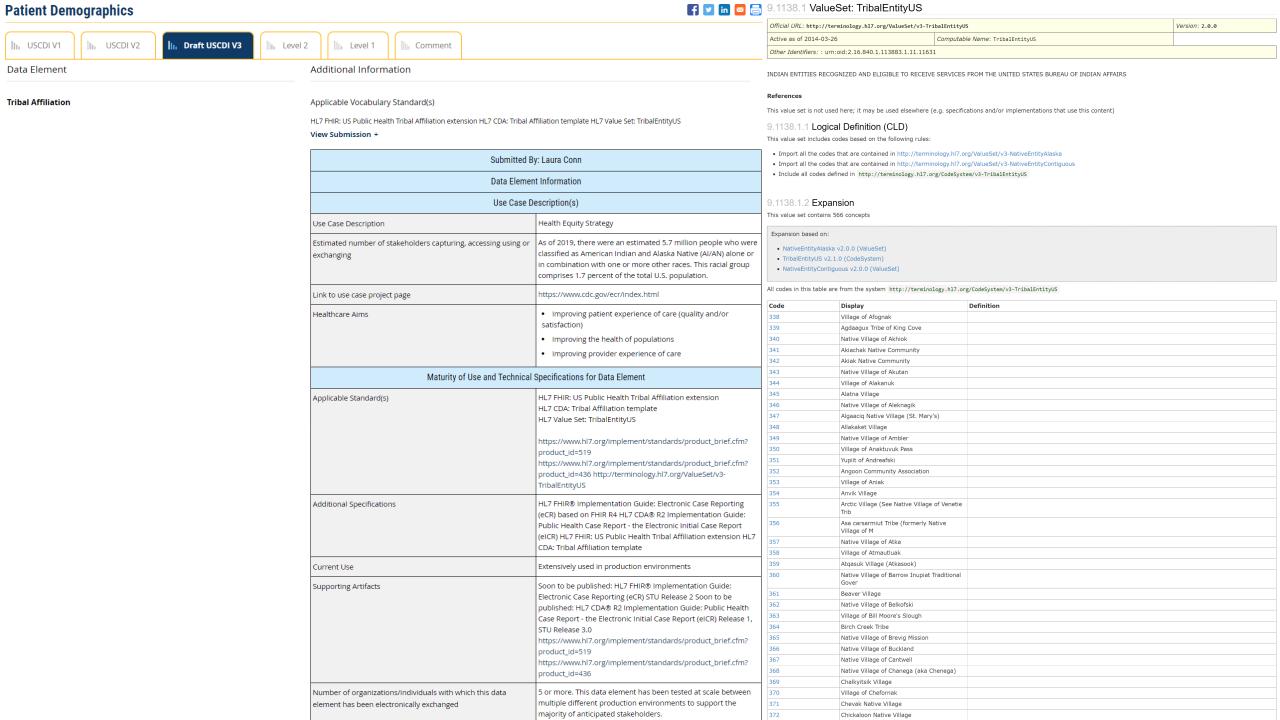
0%	0%	0%
Fully Agree with proposed comments	Agree with modifications	Disagree

Industry



 0%	0%	0%	
Fully Agree with proposed comments	Agree with modifications	Disagree	

Tribal Affiliation



Tribal Affiliation: NACHC Response

NACHC believes tribal affiliation is foundational component of patient identity and required for patient-centered care. We strongly support the use of the code systems and codes described by the Tribal Entity code systems to ensure robust and patient-centered support for patients with tribal affiliation in the US healthcare system.



Tribal Affliation



0%	0%	0%	
Fully Agree with	Agree with modifications	Disagree	
proposed			
proposed comments			

Date of Death

Patient Demographics

First Name

Last Name

Middle Name (including middle initial)

Suffix

Previous Name

Date of Birth

Date of Death



Ethnicity

Tribal Affiliation 🙀

Sex (Assigned at Birth)

Sexual Orientation

Gender Identity

Preferred Language

Current Address

Previous Address

Phone Number

Phone Number Type

Email Address

Related Person's Name



Related Person's Relationship



Occupation Industry



Use Case Description	1. Systematic awareness and data life cycle
	completeness in regards to a Patient
	records and data maintainers (i.e.
	Providers and Health Plans)
	2. Meaningful analytic driven guidance
	relating to disease tracking, patient
	longevity, and population trends.
	3. Population studies – include or exclude
	members based on living status from
	study criteria will have more accurate
	outcomes and or interventions
	4. Bereavement considerations impacting
	family members. Payers could reduce
	member notification to member and
	family or better service survivors on next
	steps
	5. Health Plans can reduce fraud and
	abuse by monitoring claim activity for
	deceased membership.

Estimated number of stakeholders
capturing, accessing using or exchangin

>1M+: This would be used by multiple entities (plans, providers, health proxies) for the individuals and for population health uses.

Use Case Description

Date of death is required to be captured in inpatient certified EHR systems as part of ONC's 2015 Certification

Estimated number of stakeholders All inpa capturing, accessing using or exchanging date of

All inpatient EHRs are required to capture date of death in their certified EHRs.

Link to use case project page

https://www.healthit.gov/testmethod/demographics

Healthcare Aims

• Improving the health of populations

www.nachc.org

- Reducing the cost of care
- Improving provider experience of care

Maturity of Use and Technical Specifications for Data Element

Applicable Standard(s)	Follow the DOB format
Additional Specifications	HL7 USCore Implementation Guide v3.1.0 and v3.1.1 (Errata release) both allow for capturing deceased as either a Boolean (yes/no) or the date of death in the Patient profile. (Reference Link) However, neither version of the USCore Implementation Guide state the element as a Must Support or required. USCore would need to bring the Patient profile upto-date if the proposed Date of Death element is approved for USCDI v2.

7.6.1 Resource Profile: Observation - Death Date

$Official\ URL:\ \texttt{http://hl7.org/fhir/us/mdi/StructureDefinition/Observation-death-date}$	Version: 1.0.0-ballot
Active as of 2022-03-31	Computable Name: ObservationDeathDate

7.6.1.1.1 Terminology Bindings

Path	Conformance	ValueSet / Code
Observation.language	preferred	CommonLanguages Max Binding: AllLanguages
Observation.status	required	Fixed Value: final
Observation.category	preferred	ObservationCategoryCodes
Observation.code	example	Pattern: LOINC code 81956-5
Observation.dataAbsentReason	extensible	DataAbsentReason
Observation.interpretation	extensible	ObservationInterpretationCodes
Observation.bodySite	example	SNOMEDCTBodyStructures
Observation.method	extensible	ValueSetDateEstablishmentMethods
Observation.referenceRange.type	preferred	ObservationReferenceRangeMeaningCodes
Observation.referenceRange.appliesTo	example	<u>ObservationReferenceRangeAppliesToCodes</u>
Observation.component.code	example	Pattern: LOINC code 80616-6
Observation.component.dataAbsentReason	extensible	DataAbsentReason
Observation.component.interpretation	extensible	ObservationInterpretationCodes





Submitted By: Jeff Lyall / Cigna		
Data Element Information		
Use Case D	escription(s)	
Use Case Description	1. Systematic awareness and data life cycle completeness in regards to a Patient records and data maintainers (i.e. Providers and Health Plans) 2. Meaningful analytic driven guidance relating to disease tracking, patient longevity, and population trends. 3. Population studies – include or exclude members based on living status from study criteria will have more accurate outcomes and or interventions 4. Bereavement considerations impacting family members. Payers could reduce member notification to member and family or better service survivors on next steps 5. Health Plans can reduce fraud and abuse by monitoring claim activity for deceased membership.	
Estimated number of stakeholders capturing, accessing using or exchanging	>1M+ : This would be used by multiple entities (plans , providers, health proxies) for the individuals and for population health uses.	
Use Case Description	Date of death is required to be captured in inpatient certified EHR systems as part of ONC's 2015 Certification	
Estimated number of stakeholders capturing, accessing using or exchanging	All inpatient EHRs are required to capture date of death in their certified EHRs.	
Link to use case project page	https://www.healthit.gov/test- method/demographics	
Healthcare Aims	Improving the health of populations Reducing the cost of care Improving provider experience of care	

Maturity of Use and Technical Specifications for Data Element				
Applicable Standard(s)	Follow the DOB format			
Additional Specifications	HL7 USCore Implementation Guide v3.1.0 and v3.1.1 (Errata release) both allow for capturing deceased as either a Boolean (yes/no) or the date of death in the Patient profile. (Reference Link) However, neither version of the USCore Implementation Guide state the element as a Must Support or required. USCore would need to bring the Patient profile up-to-date if the proposed Date of Death element is approved for USCDI v2.			
Current Use	In limited use in production environments			
Number of organizations/individuals with which this data element has been electronically exchanged	N/A			
Potential Challenges				
Restrictions on Standardization (e.g. proprietary code)	N/A			
Restrictions on Use (e.g. licensing, user fees)	N/A			
Privacy and Security Concerns	Same security measure apply to this data element.			
Estimate of Overall Burden	EMR capture expiration dates			

LOINC CODE LONG COMMON NAME LOINC STATUS

86345-6

U.S. standard certificate of death - recommended 2003 Active
revision set

Term Description

 $Contains the set of terms used in the 2003 \, version of the \, U.S. \, Standard \, Certificate \, of \, Death.$

Source: Regenstrief LOINC

Panel Hierarchy

69446-3

69450-5

69444-8

69448-9

69437-2 69439-8

69452-1

21843-8

69438-0

Injury date comment

Injury incident description Narrative

Coroner - medical examiner case number

If transportation injury, specify:

Death certifier details

Death certifier [Type]

Death certifier Address

History of Usual occupation

Forensic medicine Referral note

History of Usual industry

Injury leading to death associated with transportation event

Highest level of education [US Standard Certificate of Death]

Place of injury

Injury at work?
Injury location Narrative

Details for each LOINC in Panel LHC-Forms LOINC Name R/O/C Cardinality Example UCUM Units U.S. standard certificate of death - recommended 2003 revision set 86345-6 69434-9 Location of death name Facility 69435-6 Street address where death occurred if not facility Death propouncer details Date and time pronounced dead [US Standard Certificate of Death] {TmStp Date of death 31211-6 Death date comment 74497-9 Was the medical examiner or coroner contacted? Cause of death [US Standard Certificate of Death] 69440-6 Disease onset to death interval 69441-4 Other significant causes or conditions of death 80905-3 Body disposition method Were autopsy findings available to complete the cause of death? 69436-4 69443-0 Did tobacco use contribute to death 69442-2 Timing of recent pregnancy in relation to death 69449-7 Manner of death 71481-6 Did the death of this person involve injury of any kind 69445-5 Injury date

C

С

C

LOINC CODE LONG COMMON NAME LOINC STATUS 80616-6 Date and time pronounced dead [US Standard Active **Certificate of Death**] **Term Description** This term was created for, but not limited in use to, the CDC HL7 Version 2.6 Implementation Guide: Reporting Death Information from the EHR to Vital Records, R1.2. Source: Regenstrief LOINC **Part Description** LP203285-4 Date and time pronounced dead The date and time the decendent was pronounced dead. Source: Centers for Disease Control and Prevention **Fully-Specified Name** Component Date and time pronounced dead **TmStp Property** Time Pt ^Patient System Scale Qn Method US standard certificate of death **Basic Attributes**

Class	SURVEY.CDC	
Туре	Surveys	
First Released	Version 2.56	
Last Updated	Version 2.56	
Order vs. Observation	Observation	

U.S. STANDARD CERTIFICATE OF DEATH

ITEMS 24-28 MUST BE COMPLETED BY PERSON	24. DATE PRONOUNCED DEAD (Mo/Day/Yr	r)	25. TIME PRONOUNCED DEAD
WHO PRONOUNCES OR CERTIFIES DEATH			
26. SIGNATURE OF PERSON PRONOUNCING DEATH (Only when applicable	e) 27. LICENSE NUMBER	28. DA	ATE SIGNED (Mo/Day/Yr)
29. ACTUALORPRESIMED DATE OF DEATH 30. ACT (Mo/Day/Yr) (Spell Month)	TUAL OR PRESUMED TIME OF DEATH	31. WAS MEDICAL EX CORONER CONT.	XAMINER OR ACTED? □ Yes □ No

86345-6 U.S. standard certificate of death - recommended 2003 Active LOINC CODE LONG COMMON NAME LOINC STATUS 81956-5 Date and time of death [TimeStamp] Active revision set Fully-Specified Name **Term Description** Component Date and time of death Contains the set of terms used in the 2003 version of the U.S. Standard Certificate of Death. TmStp Source: Regenstrief LOINC Property Pt Time **Panel Hierarchy** ^Patient System Details for each LOINC in Panel | LHC-Forms Qn Scale Method LOINC Name R/O/C Cardinality Example UCUM Units U.S. standard certificate of death - recommended 2003 revision set 86345-6 **Additional Names** 69434-9 Location of death name Facility **Short Name** Date+time of death 69435-6 Street address where death occurred if not facility 74499-5 Death pronouncer details 80616-6 Date and time pronounced dead [US Standard Certificate of Death] {TmStp} **Basic Attributes** Date of death Class ADMIN.PATIENT Death date comment Type Clinical 74497-9 First Released Version 2.56 LONG COMMON NAME Cau 31211-6 Date of death Discouraged 69453-9 Last Updated Version 2.66 Order vs. Observation Observation 69440-6 Dise 69441-4 Oth **Status Information** 80905-3 Bod LONG COMMON NAME LOINC STATUS LOINC CODE 81954-0 Date of death [Date] Active 69436-4 Wei Status Discouraged 69443-0 This term is discouraged because it is ambiguous - the Component is "Date of death" with a Property of "TmStp", Did Comment which implies date and time of death. Mapping to two new terms, one for "Date of death" with Property "Date", and 69442-2 **Fully-Specified Name** one for "Date and time of death" with Property "TmStp". 69449-7 Date of death Component Map-To Long Common Name Mapping Guidance 71481-6 Date Property 81956-5 Date and time of death [TimeStamp] Date and time of death [TmStp] 69445-5 Time Pt 81954-0 Date of death [Date] Date of death [Date] 69446-3 System ^Patient 69450-5 Place of injury Qn Scale 69444-8 Injury at work? Member of these Panels Method Injury location Narrat Long Common Name 11374-6 Injury incident descrip **Additional Names** Case notification panel [CDC.PHIN] 69448-9 Injury leading to death Congenital syphilis case investigation and report panel [CDC.CS] **Short Name** Date of death If transportation injur Continuity Assessment Record and Evaluation (CARE) tool - Expired Death certifier details End Stage Renal Disease (ESRD) Death Notification - OMB CMS form 2746 Death certifier [Type] 68359-9 **Basic Attributes** 69437-2 Death certifier Addres 47245-6 HIV treatment form Document 69439-8 Class ADMIN.PATIENT Coroner - medical exa 48547-4 Omaha System 2005 panel Clinical 69452-1 Type PCORnet Common Data Model set - version 3.0 [PCORnet] History of Usual occur 85057-8 First Released Version 2.56 21843-8 U.S. standard certificate of death - recommended 2003 revision set Last Updated Version 2.66 History of Usual indus 86345-6 21844-6 www.nachc.org Order vs. Observation Observation Highest level of education [US Standard Certificate of Death] 69438-0 Forensic medicine Referral note

LOINC STATUS

LONG COMMON NAME

"Patient Characteristic, Expired"

QDM Datatype?

Performance/Reporting Period: 2022

QDM Datatype (QDM Version 5.5 Guidance Update):

The "Patient Characteristic Expired" data element should document that the patient is deceased.

Timing: The "Patient Characteristic, Expired" is a single point in time representing the date and time of death. It does not have a start and stop time.

Note: Patient Characteristic Expired is fixed to SNOMED-CT® code 419099009 (Dead) and therefore cannot be further qualified with a value set.

QDM Category (QDM Version 5.5 Guidance Update)

Individual Characteristic

Individual Characteristic represents specific factors about a patient, clinician, provider, or facility. Included are demographics, behavioral factors, social or cultural factors, available resources, and preferences. Behaviors reference responses or actions that affect (either positively or negatively) health or healthcare. Included in this category are mental health issues, adherence issues unrelated to other factors or resources, coping ability, grief issues, and substance use/abuse. Social/cultural factors are characteristics of an individual related to family/caregiver support, education, and literacy (including health literacy), primary language, cultural beliefs (including health beliefs), persistent life stressors, spiritual and religious beliefs, immigration status, and history of abuse or neglect. Resources are means available to a patient to meet health and healthcare needs, which might include caregiver support, insurance coverage, financial resources, and community resources to which the patient is already connected and from which the patient is receiving benefit. Preferences are choices made by patients and their caregivers relative to options for care or treatment (including scheduling, care experience, and meeting of personal health goals) and the sharing and disclosure of their health information.

Data Elements defined by this QDM Datatype:

["Patient Characteristic, Expired": "Dead (finding)"]

ODM Attributes

cause

The recorded cause of death.

Note: Previous versions of the QDM referred to this attribute as reason.

<u>expiredDateTime</u>

The date and time that the patient passed away.





Public Health Information Network Vocabulary Access and Distribution System (PHIN VADS)

Code System Concept

Code System Concept Code 419099009

Code System Concept Name Dead (finding)

Code System Preferred Concept Name Dead (finding)

Concept Status Published

Concept Status Date 09/01/2020

Code System Name SNOMED-CT

Dead (finding) {419099009, SNOMED-CT}

Parent/Child (Relationship Type)

- Dead death without witness (finding) (702710003, SNOMED-CT)
- Dead expected (finding) {418646009, SNOMED-CT}
- Dead sudden death (finding) {418362005, SNOMED-CT}
- Dead suspicious death (finding) [419393000, SNOMED-CT]
- Dead unexpected (finding) {419697005, SNOMED-CT}
- Dead on arrival at hospital (finding) (63238001, SNOMED-CT)
- Died without sign of disease (finding) {89816009, SNOMED-CT}
 - <u>Eastern Cooperative Oncology Group performance status grade 5 (finding)</u>
 - {423409001, SNOMED-CT}

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- Finding of place of death (finding) (366044004, SNOMED-CT)
- Found dead (finding) {419973004, SNOMED-CT}

Date of Death: NACHC Response

NACHC is supportive of a standards-based concept of date and time of death; however, we feel more guidance and support would be useful to accompany this concept. The USCDIv3 submission page does not point to a specific concept for date of death.

NACHC suggests the use of the LOINC code 80616-6 as the appropriate term due to its use in federal programs for death reporting and certification.

NACHC is sensitive to the fact that in some use cases a date of death may be available but not a time, and so suggests that the implementation guidance in this case addresses the situation in which date but not time are available by defaulting to a null time or by linking this code to the clinical date of death code 81954-0 which specifies a date and not a date/time and could be mapped to an 80616-6 code with a null time.

It should be noted that the FHIR profile referenced in comment for *DeathCertification* references SNOMED-CT concepts and not LOINC and it is expected that the USCore profile would reference the LOINC code for both patient deceased (SCT 419099009) and date of death (80616-6)

This approach encourages the transmission of the death certificate data for clinical care and mandatory reporting to subsequent providers and for potential research use cases.



Date of Death



 0%	0%	0%	
Fully Agree with proposed comments	Agree with modifications	Disagree	

Health Insurance Information



Data related to an individual's insurance coverage for health care.

	Draft USCDI V3	
11.	Draff USCDI V3	

Dr.	Level	2
0.00		

Data Element

Coverage Status

The presence or absence of coverage for a particular encounter or claim.

Coverage Type

Categories of health care payors (e.g, Medicare, TRICARE, Commercial Managed Care - PPO).

Relationship to Subscriber

Relationship of a person to the primary insured person in an insurance plan.

Member Identifier

Identifies an individual covered by the benefits offered by an employer or healthcare insurer.

Subscriber Identifier

The identifier assigned to the individual that selects benefits offered by an employer or healthcare insurer.

Group Number

The identifier associated with a specific health insurance plan typically provided thorough an employer.

Payer Identifier

The identifier defining a payer entity.

Health Insurance Information

Maturity of Use and Technical Specifications for Data Element				
	NUBC, CPT, HCPCS, HIPPS, ICD-9, ICD-10, DRGs, NDC, POS, NCPDP codes, and X12 codes. http://hl7.org/fhir/us/carin-bb/artifacts.html#5			
Additional Specifications	HL7® FHIR® US Core Implementation Guide v3.1.1 based on FHIR R4			

- AMA CPT: The CPT procedure and modifier codes are owned by the American Medical Association.
- X12: CARC (Claim Adjustment Reason Codes are owned by X12...
- NUBC: The NUBC secretariat is the American Hospital Association..
- NUCC: National Uniform Claim Committee (NUCC) is presently maintaining the Taxonomy code set. The codes are free and publically available for download and use. If the use however is "For commercial use, including sales or licensing, a license must be obtained". It would be appropriate for an app developer to file the license form just like they would for any other code set; however, there is no fee.
- · NCPDP: Retail Pharmacy data standards are defined by the NCPDP.
- · 3M APR-DRG: AP-DRGs and APR-DRGs are owned by 3M. Use of AP-DRGs and APR-DRGs require a license.

Code Systems Not Requiring Licenses

This IG includes value set bindings to code systems that are industry standard codes available for use without licenses. The following information summarizes the set of Code Systems required by this IG that are available for use:

- ICD-CM Diagnosis Codes (ICD-10-CM): International Statistical Classification of Diseases and Related Health Problems (ICD). This IG will use version 10. The ICD-10-CM code set is maintained by the National Center for Health Statistics (NCHS) of the Centers for Disease Control and Prevention (CDC) for use in the United States. It is based on ICD-10, which was developed by the World Health Organization (WHO) and is used internationally a medical classification.
- ICD-Procedure Codes (ICD-PCS): The ICD-10-PCS code set is owned by CMS...
- DRGs.:MS-DRGs are owned by CMS. MS-DRGs are used for the Medicare population.
- HCPCS Level II Procedure and Modifier Codes: Primarily include non-physician products, supplies, and procedures not included in CPT. They are owned by CMS and are available for use.
- NDC (National Drug Codes): The US Federal Drug Administration (FDA) Data Standards Council assigns the first 5 digits of the 11 digit code..
- RARCCodes: The RARC codes are owned by CMS.

Health Insurance Information: NACHC Response

NACHC believes health insurance information is critical to support patient access and care systems that support care. Interoperable health insurance information ensures robust and patient-centered support for health center patients enrolled in different health insurance information the US healthcare system.

We support the use of the code systems and codes described by the Health Insurance submission; however, this submission is lacking granularity in many of its component data elements. We have extracted the appropriate terminology bindings that we have imputed from the standards linked to these proposals and suggest harmonization with the work from DaVinci as part of the final submission.



Health Insurance



 0	0	0	
Fully Agree with proposed comments	Agree with modifications	Disagree	



PRAPARE and SDoH Content

Social Determinants of Health

• Social determinants of health are conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks. By working to establish policies that positively influence social and economic conditions and those that support changes in individual behavior, we can improve health for large numbers of people in ways that can be sustained over time

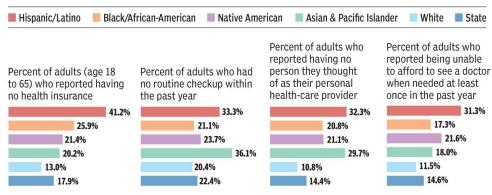




Social Determinants of Health

Health and race

Racial and ethnic disparities in access to health care for Rhode Island residents.

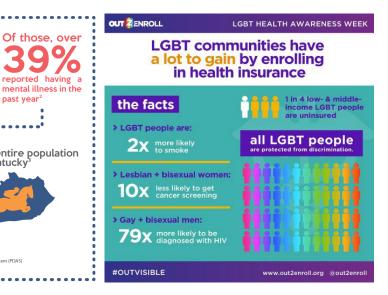


past year² More than the entire population of Kentucky³ That is nearly million people

reported having a mental illness in the

of the U.S. population

dentifies as lesbian, gay, or





SOURCE: R.I. Department of Health Behavioral Risk

Factor Surveillance System, 2011-2013



THE PROVIDENCE JOURNAL







Patient Report Problem



Provider Prescribes

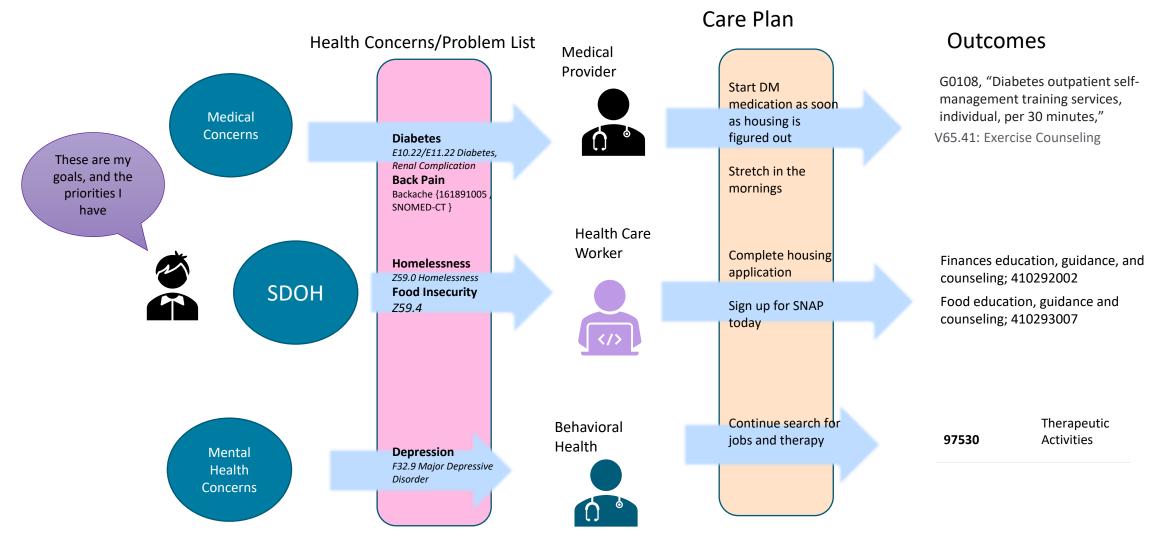


Typical approach

The provider is the keeper of the problem list

Responsible for updating and maintaining it

A new approach







ISA SDOH Elements

The Interoperability Standards Advisory (ISA) is an attempt to provide a scan of all the standards-based content that supports interoperability, below are the SDOH data elements described on ISA

- Alcohol Use
- Drug Use
- IPV
- Financial Resource Strain
- Food Insecurity
- Housing insecurity

- Level of Education
- Physical Activity
- Social Capital
- Stress
- Transportation Insecurity
- Vaping
- Secondhand smoking





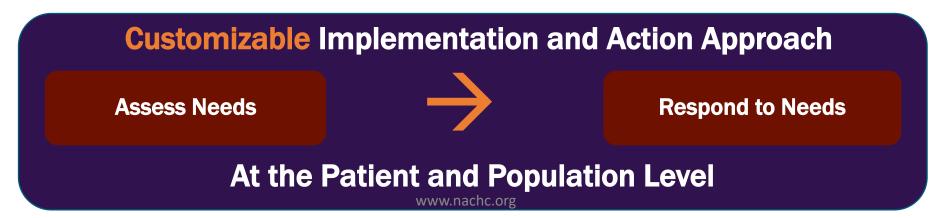
What Is PRAPARE?







A national <u>standardized</u> patient risk assessment protocol built into the EHR designed to engage patients in assessing and addressing social determinants of health







PRAPARE Design

- COMPREHENSIVE yet low burden, parsimonious, and relevant for health centers nationally
- STANDARDIZED Measures Linked with standardized codes
- EVIDENCE-BASED and STAKEHOLDER-DRIVEN
 - Developed and tested by health centers
 - Validated
- WORKFLOW AGNOSTIC Can fit within existing workflows and be combined with other tools/data
- EMBEDDED IN HIT
- PATIENT-CENTERED
 - Meant to facilitate conversations and build relationships with patients
 - Standardize the need rather than the question
- ACTIONABLE at patient and population level





HIT Enabled

- Built into the EHR
 - E.g., NextGen, eCW, GE Centricity, Greenway Intergy, Epic, Cerner, Meditab (others in progress)
- Social Service Referral Platforms
 - E.g., UniteUs, Aunt Bertha, and others
- Care Management platforms
- Other

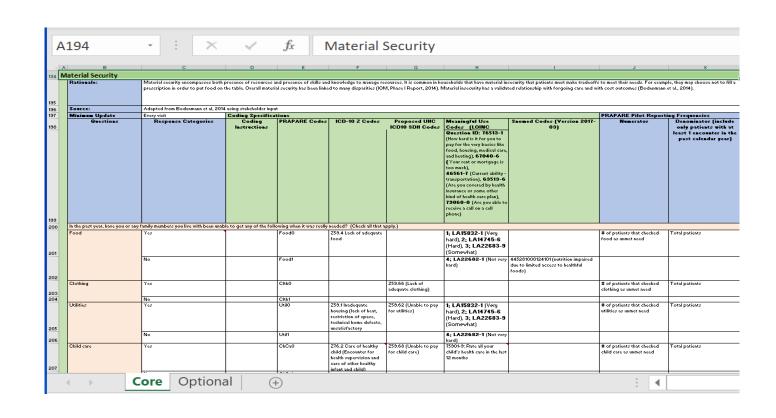






PRAPARE CODING AND DATA DICTIONARY

- Crosswalks including ICD10, LOINC, Snomed
- New proposed codes for PRAPARE responses in process: ICD10, LOINC
- PRAPARE Data
 Documentation available in Toolkit









PRAPARE DOMAINS

Core				
UDS SDH Domains	Non-UDS SDH Domains (MU-3)			
1. Race	10. Education			
2. Ethnicity	11. Employment			
3. Veteran Status	12. Material Security			
4. Farmworker Status	13. Social Isolation			
5. English Proficiency	14. Stress			
6. Income	15. Transportation			
7. Insurance				
8. Neighborhood				
9. Housing Status and Stability				

Optional				
1. Incarceration History	3. Domestic Violence			
2. Safety	4. Refugee Status			

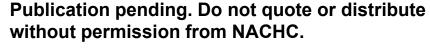






USER EXPERIENCES

- Easy to administer
- Possible to implement using various workflows and staffing models
- Builds patient-provider relationship
- Identifies new needs
- Leads to positive changes at the patient, health center, and community/population levels
- Facilitates collaboration with community partners
- Importance of targeted messaging and staff support
- Demonstrates patients are complex



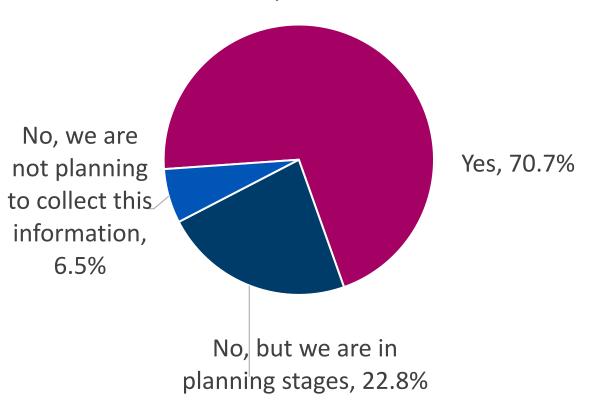




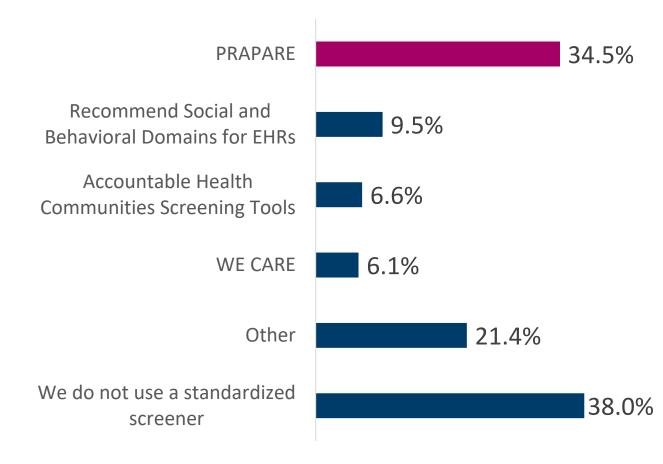


National SDOH Screening 2019

Does your health center collect data on individual patients social risk factors, outside of the data reportable in the UDS?



Which standardized screener(s) for social risk factors, if any, do you use?

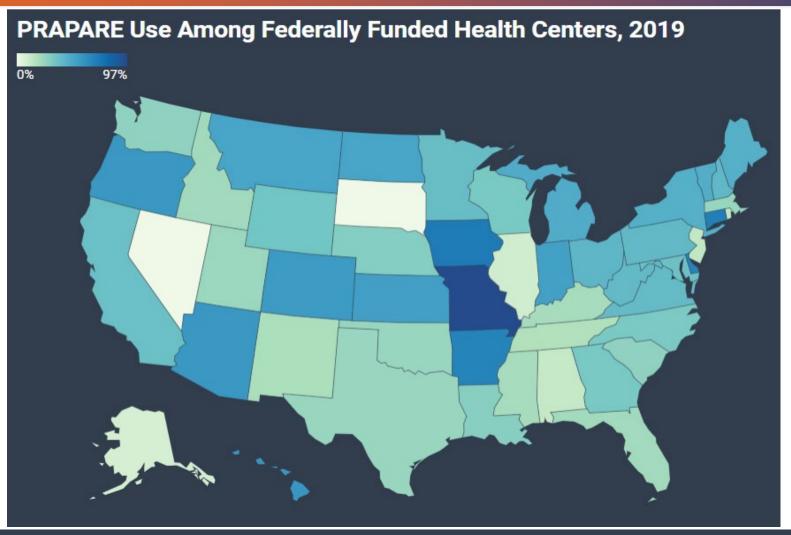






National PRAPARE Use 2019

http://bit.ly/PRAPAREMap2019



Note: Excludes Health Center Program Look-Alikes and may underestimate the true volume of federally funded health centers using PRAPARE. For example, data may not capture all health centers accessing PRAPARE through some Electronic Health Records or other Health Information Technology platforms, and does not capture health centers using parts of PRAPARE.



For (1) Food Insecurity: LOINC, SNOMED-CT, ICD-10-CM, and CPT/HCPCS terminologies are specified by value sets in NLM's Value Set Authority Center (VSAC).

For (2) Housing Instability and Homelessness, (3) Inadequate Housing, (4) Transportation Insecurity, (5) Financial Strain, (6) Social Isolation, (7) Stress, (8) Interpersonal Violence, (9) Education, (10) Employment, and (11) Veteran Status:

- The corresponding value sets are under development by the Gravity Project.
- The value sets will be complete prior to publishing of USCDI v2.0;
- Even if a particular value set might be incomplete, the value set will be citable.

The details of the domains and specific consensus-approved value sets for each of the activities will be externally maintained as part of a hierarchy of LOINC panels and, where necessary, VSAC value sets referenced by the LOINC panels. The proposed structure is as follows:

Survey (Panel) LOINC code

- a. Food Insecurity Domain (Panel) (LOINC code)
- i. Food Insecurity Assessment (Panel) (LOINC code)
- 1. Value set (LOINC codes)
- ii. Food Insecurity Health Concerns (Panel) (LOINC code)
- 1. Value set (SNOMED-CT and ICD-10-CM)
- iii. Food Insecurity Goals (Panel) (LOINC code)
- 1. Value set (LOINC codes)
- iv. Food Insecurity Interventions (Panel) (LOINC code)
- 1. Value set (SNOMED-CT, HCPCS, CPT, LOINC)
- v. Food Insecurity Outcomes (Panel) (LOINC code)
- 1. Value set (LOINC codes)
- b. Domain: Housing Instability and Homelessness
- c. Etc.

https://vsac.nlm.nih.gov/

SDOH Assessment

Applicable Vocabulary Standard(s)

- Logical Observation Identifiers Names and Codes (LOINC®) version 2.71
- SNOMED International, Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT®) U.S. Edition, January 2022 Release

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Data Element Information

Rationale for Separate Consideration

The Assessment is focused on risks specific to SDOH and uses constrained code systems and value sets to express specific risks using the structured assessments. The ability to document and communicate this element is essential to establishing and communicating the exact assessment questions and answers to provide detailed information on the nature of a specific SDOH risk across the various involved entities (e.g., providers, payers, social services, community-based organizations, etc.).

Use Case Description(s)

Use Case Description

- Documentation and exchange SDOH data related to (1)
 assessments of risks, (2) the declaration of problems/health
 concerns, problems, and diagnoses, (3) the establishment of
 specific goals, (4) the identification of interventions, (5) tracking
 outcomes, and (6) recording and exchanging consent, where
 needed, to share the SDOH-related data.
- Specifically, the Gravity Project is establishing specific value sets for (1) assessments, (2) problems/health concerns, (3) goals, (4) interventions, (5) outcomes, and (6) consent to facilitate appropriate coding for each with respect to the following SDOH domains: (1) Food Insecurity, (2) Housing Instability and Homelessness, (3) Inadequate Housing, (4) Transportation Insecurity, (5), Financial Strain, (6) Social Isolation, (7) Stress, (8) Interpersonal Violence, (9) Education, (10) Employment, and (11) Veteran Status, in conjunction with the patient encounter By supporting these data elements and specific domains, we will be able to communicate the SDOH risks of an individual to all of the stakeholders in a structured, unambiguous way that will facilitate interventions to address them and tracking outcomes. https://confluence.hl7.org/display/GRAV/Gravity+Use+Case+Package

Representing Financial Resource Strain

71	Standard / Implementation Specification		Implementation Maturity	•	Federally required		Test Tool Availability
Standard	LOINC®	Final	Production	•0000	Yes	Free	N/A

Limitations, Dependencies, and Preconditions for Consideration	Applicable Value Set(s) and Starter Set(s)
 A single-item question used to determine the patient's overall financial resource strain developed from the Coronary Artery Risk Development in Young Adults (CARDIA) study is best suited for this interoperability need. See LOINC projects in the Interoperability Proving Ground. 	 Overall financial resource strain (CARDIA) LOINC® code 76513-1 LOINC® answer list ID LL3266-5



Representing Food Insecurity

Туре	Standard / Implementation Specification	Standards Process Maturity	Implementation Maturity	Adoption Level	Federally required	Cost	Test Tool Availability
Standard	LOINC®	Final	Production	Feedback Requested	No	Free	No
Standard	SNOMED CT®	Final	Production	Feedback Requested	No	Free	No
Standard	ICD-10-CM	Final	Production	Feedback Requested	No	Free	No
Standard	CPT-4	Final	Production	Feedback Requested	No	\$	N/A
Standard	HCPCS	Final	Production	Feedback Requested	No	Free	N/A

 The Hunger Vital Sign [HVS] is a 2-question food insecurity screening tool based on the US Household Food Security Scale developed by Children's Health Watch. Centers for Medicare & Medicaid Services uses the HVS in the Accountable Health Communities screening tool. SNOMED CT® is used to represent conditions, observations, and non-medical interventions related to Social Determinants of Health. ICD-10 Z55-Z65 is used to capture diagnoses related to certain Social Determinants of Health. ICDT-4 and HCPCS is used to capture medical and non-medical procedures and interventions related to Social Determinants of 	Limitations, Dependencies, and Preconditions for Consideration	Applicable Value Set(s) and Starter Set(s)
Health.	tool based on the US Household Food Security Scale developed by Children's Health Watch. Centers for Medicare & Medicaid Services uses the HVS in the Accountable Health Communities screening tool. SNOMED CT® is used to represent conditions, observations, and non-medical interventions related to Social Determinants of Health. ICD-10 Z55-Z65 is used to capture diagnoses related to certain Social Determinants of Health. CPT-4 and HCPCS is used to capture medical and non-medical procedures and interventions related to Social Determinants of	 LOINC® 88122-7 Within the past 12 months we worried whether our food would run out before we got money to buy more [U.S. FSS] LOINC® 88123-5 Within the past 12 months the food we bought just didn't last and we didn't have money to get more [U.S. FSS] LOINC® 88124-3 Food insecurity risk [HVS] LOINC® 93025-5 Protocol for Responding to and Assessing Patients'

Representing Housing Insecurity

Туре	Standard / Implementation Specification	Standards Process Maturity	Implementation Maturity	Adoption Level	Federally required	Cost	Test Tool Availability
Standard	LOINC®	Final		Feedback Requested	No	Free	No
Standard	SNOMED CT®	Final		Feedback Requested	No	Free	No
Standard	ICD-10-CM	Final		Feedback Requested	No	Free	No
Standard	CPT-4	Final		Feedback Requested	No	\$	N/A
Standard	HCPCS	Final		Feedback Requested	No	Free	N/A

Limitations, Dependencies, and Preconditions for Consideration

Housing situation screening question is part of the Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences [PRAPARE] screening instrument licensed by the National Association of Community Health Centers (NACHC).

- LOINC® is used to represent screening assessments related to Social Determinants of Health.
- SNOMED CT® is used to represent conditions, findings and observations related to Social Determinants of Health.
- ICD-10 Z55-Z65 codes are used to capture diagnoses related to certain Social Determinants of Health.
- CPT-4 and HCPCS are used to capture medical and non-medical procedures and interventions related to Social Determinants of Health.

Applicable Value Set(s) and Starter Set(s)

What is your current housing situation? (LOINC® code 71802-3)

- Answer list (LOINC® code LL5350-5)
 - I have housing
 - I do not have housing (staying with others, in a hotel, in a shelter, living outside on the street, on a beach, in a car, or in a park)
 - I choose not to answer that question

Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences [PRAPARE] Panel (LOINC® code 93025-5)

Representing Level of Education

71	Specification .		•	•	Federally required		Test Tool Availability
Standard	LOINC®	Final	Production	•0000	Yes	Free	N/A

Limitations, Dependencies, and Preconditions for Consideration	Applicable Value Set(s) and Starter Set(s)
 A single question, "current educational attainment" used to determine the highest grade or level of school completed or highest degree received, developed as part of the National Health and Nutrition Examination Survey (NHANES) is best suited for this interoperability need. See LOINC projects in the Interoperability Proving Ground. 	 Current educational attainment (NHANES) LOINC® code 63504-5 LOINC® answer list ID LL1069-5



Representing Social Connection and Isolation

71	Standard / Implementation Specification		Implementation Maturity		Federally required		Test Tool Availability
Standard	LOINC®	Final	Production	•0000	Yes	Free	N/A

Limitations, Dependencies, and Preconditions for Consideration	Applicable Value Set(s) and Starter Set(s)
 The Social connection and isolation panel is a set of five questions used to assess the number of types of social relationships on which a patient is connected and not isolated. It was developed for the National Health and Nutrition Examination Survey (NHANES), and is best suited for this interoperability need. See LOINC projects in the Interoperability Proving Ground. Identification of loneliness and isolation is assessed in PAC assessments and included in the CMS Data Element Library and mapped to health IT standards. 	 Social connection and isolation panel LOINC® code 76506-5 Member codes: LOINC® code 63503-7 (with LOINC answer list ID LL1068-7) LOINC® code 76508-1 LOINC® code 76509-9 LOINC® code 76510-7 LOINC® code 76511-5 (with LOINC answer list ID LL963-0) Social isolation score LOINC® code 76512-3 LOINC® code 93159-2

Representing Stress

31	Specification	Standards Process Maturity	•	•	Federally required		Test Tool Availability
Standard	LOINC®	Final	Production	•0000	Yes	Free	N/A

Limitations, Dependencies, and Preconditions for Consideration	Applicable Value Set(s) and Starter Set(s)
 A single-question stress measure primarily tested in Scandinavian populations is part of the Occupational Stress Questionnaire™ (Q41) developed by the Finnish Institute of Occupational Health is best suited for this interoperability need. See LOINC projects in the Interoperability Proving Ground. 	 Occupational Stress Questionnaire™ Q41 LOINC® code 76542-0 LOINC® answer list LL3267-3



Representing Transportation Insecurity

Туре	Standard / Implementation Specification	Standards Process Maturity	Implementation Maturity	Adoption Level	Federally required	Cost	Test Tool Availability
Standard	LOINC®	Final	Production	••••	No	Free	No
Standard	SNOMED CT®	Final	Production	Feedback Requested	No	Free	No
Standard	ICD-10-CM	Final	Production	Feedback Requested	No	Free	No

Limitations, Dependencies, and Preconditions for Consideration	Applicable Value Set(s) and Starter Set(s)
 Transportation insecurity screening question is part of the screening Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences [PRAPARE] screening instrument licensed by the National Association of Community Health Centers (NACHC). SNOMED CT® is used to represent conditions, findings and observations related to Social Determinants of Health. ICD-10 Z55-Z65 codes are used to capture diagnoses related to certain Social Determinants of Health. Transportation insecurity screening is collected in CMS Post-acute Care assessments, included in the CMS Data Element Library and mapped to LOINC 93030-5. 	 Has lack of transportation kept you from medical appointments, meetings, work, or from getting things needed for daily living? [PRAPARE] (LOINC® code 93030-5) Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences [PRAPARE] Panel (LOINC® code 93025-5)

Social Determinants of Health: NACHC Comment

NACHC believes social determinants or drivers of health are critical to understanding patients' life situations, barriers to wellness, health risks and unmet needs. Health centers have as part of their mission providing patient-centered care and meeting patients' needs with essential services. Well-specified SDOH data is crucial to shared accountability for meeting patient needs and addressing these in the context of quality of care and community barriers to health.

NACHC strongly supports a requirement to share SDOH data; however, we believe the current requirements in USCDIv2 and v3 are inadequate to support SDOH data capture, patient needs and most importantly, interventions to meet these needs. NACHC proposes instead that ONC reference specific SDOH domains using coded data element identifiers and value sets for coded responses linked to validated tools. There is a critical need for an SDOH data model that includes appropriate metadata and links to intervention/referral loops and care plans.





Social Determinants of Health: NACHC Comment

We propose advancing the SDOH domains of:

- Financial Resource Strain
- Food Insecurity
- Housing Insecurity
- Level of Education
- Social Connection and Isolation
- Stress
- Transportation Insecurity

NACHC believes that much more work is indicated in this data class and is actively participating in standards and terminology efforts to advance this class including OHDSI, Gravity and a health-center effort on SDOH Harmonization. However, the domains listed here have been used in EHRs across the country for more than 5 years and are used in all 50 states by health centers and other social and healthcare organizations and are certainly mature enough for promotion given the critical role of SDOH data in health equity and reducing health disparities.



Goals

https://www.healthit.gov/isa/taxonomy/term/1836/draft-uscdi-v3

Data Element

Additional Information

SDOH Goals

Identifies a future desired condition or change in condition related to an SDOH risk in any domain and is established by the patient or provider. (e.g., Has adequate quality meals and snacks, Transportation security-able to access health and social needs). SDOH data relate to conditions in which people live, learn, work, and play and their effects on health risks and outcomes.

Applicable Vocabulary Standard(s)

- SNOMED International, Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT®) U.S. Edition, January 2022 Release
- Logical Observation Identifiers Names and Codes (LOINC®) version 2.71

SDOH Goals: NACHC Comment

NACHC is strongly supportive of the use of the Goals concept already present in UCSDI and does not agree with the proposal to break up goals into multiple data elements based on the domain of the care plan. The intent of the Care Plan DAM is to normalize problem list items with other health concerns and social needs on a relatively equal footing and to refocus the care plans around the patient's stated goals. The effect of creating a separate concept for SDOH goals undoes the intent of Goals as described by the DAM. While it seems that coded elements would improve interoperability, in fact coded goals in the sense of social services and health concerns reduces the patient-centered nature of the Goals concept and instead encourages care team members to document a generic "goal" which is not the one stated by the patient but instead the closest coded concept. The use of coded terms should not be prohibited, but the emphasis of the goals field should be on the patient's stated goals in addition to those which might be added by care team members (e.g. increased ROM to 90* or Hba1c <7)



Social Interventions



















Social Interventions =

Non-clinical services that

address non-medical, healthrelated social determinant of
health needs

-Adapted from National Academies of Sciences, Engineering, and Medicine report, 2019



Social interventions include enabling services and other non-clinical interventions







Challenges for Social interventions





- Little data available
- No reimbursement
- No funding by payers
- Sustainability of social interventions & programs



PRAPARE 2.0: Social Interventions

Code	Name
RE001	Racial/Ethnic Support Services
FW001	Farmworker Support Services
VN001	Veteran Support Services
IN001	Interpretation Services
HS001	Housing Support Services
FC001	Financial Counseling/Eligibility Assistance
ED001	Education Support Services
EM001	Employment Support Services
FD001	Food Support Services
UT001	Utilities Support Services
CC001	Child Care Support Services
MH001	Medicine or Health Care Support Services

Code	Name
CL001	Clothing Support Services
PH001	Phone Support Services
OM001	Other Material Security Support Services
MT001	Medical Transportation Services
NMT001	Non-Medical Transportation Services
SI001	Social Integration Support Services
ST001	Mental Health Support Services
IN001	Incarceration Support Services
RE001	Refugee Support Services
ST001	Safety Support Services
DV001	Domestic Violence Support Services
OT001	Other Social Intervention Service

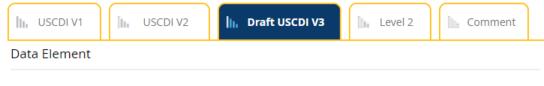






Procedures

An activity that is performed with or on a patient as part of the provision of care.



SDOH Interventions

A service offered to a patient to address identified Social Determinants of Health concerns, problems, or diagnoses (e.g., Education about Meals on Wheels Program, Referral to transportation support programs). SDOH data relate to conditions in which people live, learn, work, and play and their effects on health risks and outcomes.

Additional Information

Applicable Vocabulary Standard(s)

- SNOMED International, Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT®) U.S. Edition, January 2022 Release
- Current Procedural Terminology (CPT®) 2021, 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.

Social Interventions: NACHC Comment

NACHC believes social determinants or drivers of health are critical to understanding patients' life situations, barriers to wellness, health risks and unmet needs. Health centers have as part of their mission providing patient-centered care and meeting patients' needs with essential services. Well-specified SDOH data is crucial to shared accountability for meeting patient needs and addressing these in the context of quality of care and community barriers to health.

NACHC believes that the reference at the code system level does not add to interoperability for SDOH Interventions and instead encourages ONC to point to specific value sets and data element codes for the specific interventions that would be used to respond to SDOH domains.





Social Determinants of Health



0%	0%	0%	
Fully Agree with proposed comments	Agree with modifications	Disagree	

Upcoming NACHC Virtual Event

Learning Collaborative on Using Data to Improve Care Sessions 3 & 4

May 9 & 13, 12:00-1:30 PM Eastern



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#ThankYouCHCs

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