

Implementing Expanded Demographic Data Standards

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April 29, 2025



NEVADA DIVISION of PUBLIC
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ABOUT DPBH

MISSION

To protect, promote, and improve the physical and behavioral health and safety of all people in Nevada, equitably and regardless of circumstances, so they can live their safest, longest, healthiest, and happiest life.

VISION

A Nevada where preventable health and safety issues no longer impact the opportunity for all people to live life in the best possible health.

PURPOSE

To make everyone's life healthier, happier, longer, and safer.



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ABOUT DCPHR

MISSION

The Immunization Branch works to reduce the incidence of vaccine-preventable disease (VPD) and ensure access to vaccine services for all people in Colorado.

VISION

The Immunization Branch believes that all people - no matter their race, ethnicity, gender identity, sexual orientation, education level, age, language, religion, ability or geographic location - should have the opportunity to live healthy lives free of vaccine-preventable disease.



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INTRODUCTIONS



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David Crowell

HL7 Interface Manager – NV WebIZ
Nevada State Immunization Program (NSIP)



Kim Gulliver, MS

CIIS and Data Operations Manager - Immunization
Branch
Division of Disease Control and Public Health
Response (DCPHR)

TODAY'S PURPOSE



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Explore Nevada and Colorado's Journey in Adding Sexual Orientation, Gender Identity, Disability, and expanded Race and Ethnicity to an IIS.

Learn How We Designed and Implemented our Solutions

See User Interface Changes and HL7 Code Utilized

Lessons Learned and Work to Come

NEVADA SENATE BILL 109

81st Nevada Legislative Session (2021)



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- **NRS 239B.026** Request by governmental agency for certain information related to sexual orientation or gender identity or expression: Confidentiality of information; provision of information optional; denial of services prohibited; limitation on use of information; annual report to Legislature.
 1. **A governmental agency that requests from a person information related to the person's race or ethnicity shall also request information related to the person's sexual orientation and gender identity or expression.** Except as otherwise provided in this section, all information related to a person's sexual orientation or gender identity or expression that is received by a governmental agency is confidential.
 2. No person shall be:
 - a. Required to provide to a governmental agency any information related to the person's sexual orientation or gender identity or expression; or
 - b. Denied services or assistance from a governmental agency for failure to provide to the governmental agency any information related to the person's sexual orientation or gender identity or expression.
 3. A governmental agency that receives information related to a person's sexual orientation or gender identity or expression may only use such information for carrying out the duties of the governmental agency, demographic analysis, coordination of care and services, improvement of care and services, conducting research, fulfilling a reporting requirement pursuant to federal or state law or informing policy or funding decisions.
 4. On or before December 31 of each year, a governmental agency shall submit to the Director of the Legislative Counsel Bureau for transmittal to the Legislature or, if the Legislature is not in session, to the Legislative Commission, a summary of the information received by the governmental agency related to sexual orientation or gender identity or expression, including, without limitation, the number of people who identify as lesbian, gay, bisexual or transgender, according to race and gender. All information must be reported in the aggregate and must not include any personally identifiable information.

COLORADO HOUSE BILL 22-1157



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- HB22-1157: Utilization of Demographic Data by Colorado Department of Public Health and Environment
 - Collect public health information from data sources and data provided to the department, including information concerning race, ethnicity, disability, sexual orientation and gender identity, to the extent permissible under applicable federal and state data privacy laws, rules and regulations and federal contracts; and
 - Provide direction and technical assistance relating to public health information
 - Conduct an assessment and publish a report concerning health disparities and inequities in Colorado

Note: The act clarifies that no person is required to provide demographic information concerning race, ethnicity, disability, sexual orientation, or gender identity.

PLANNING & EXPLORATION



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Planning Partners

- **Office of Minority Health & Equity (Nevada) and Data Advisory Work Group or DAWG (Colorado)**
What information is to be requested?
- **Envision Technology Partners (IIS Vendor)**
What information can be captured?
- **Bureau Chief and Department Administrators**
Do plans align with Departments Intentions?
- **IIS/IZ Leadership teams**
How to we develop and launch new functionality?

FINDINGS: GENDER IDENTITY



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State Value Description	HL7 Value Mapped	HL7 Code Type	HL7 Value Description
Transgender Man/Trans Male	407377005	SNOMED	Female-to-Male
Transgender Women/Trans Female	407376001	SNOMED	Male-to-Female
Gender Queer/Gender Non-Conforming	44613100012410 2	SNOMED	Identifies as Non-Conforming Gender
Different Identity: Please Specify	OTH	HL7 2.5.1	Blank Field
Prefer not to Disclose	ASKU	HL7 2.5.1	Asked but Unknown

FINDINGS: SEXUAL ORIENTATION



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State Value Description	HL7 Value Mapped	HL7 Code Type	Code Value Description
Straight or Heterosexual	20430005	SNOMED	Heterosexual
Gay	76102007	SNOMED	Male Homosexual
Lesbian	89217008	SNOMED	Female Homosexual
Bisexual	42035005	SNOMED	Bisexual
Not Listed: Please Specify	OTH	HL7 2.5.1	Blank Field
Prefer Not to Disclose	ASKU	HL7 2.5.1	Asked but Unknown

FINDINGS: IIS UPDATES – SOGI (NV)

Create Sexual Orientation Code Table Add SNOMED Codes

Add SOGI Values to HL7 Engine and Fields to UI

Update Existing “sex” Field to Sex-At-Birth and update all Reports and Forms

Create/Run Script to Update Patient’s Sex-At-Birth to Blank if not Male, Female, Prefer Not to Disclose

Update Implementation Guides and Onboarding processes

Add Delete Functionality for Staff



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FINDINGS: IIS UPDATES – DISABILITY and R/E (CO)



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Create Disability Code
Table and Expand
Race Code Table

Add Disability & R/E
Values to UI
Add Expanded Race to
HL7 Engine

Incorporate Ethnicity
into Race Field in UI
Remove Ethnicity Field
from UI

Create/Run Script to
Remove Unknown
Race Values

Allow Select R/E on
Combine Patient
Screen (only 5)

Add Delete
Functionality for Staff

SECURITY & PRIVACY: SOGI & DISABILITY



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Security Parameters

- Data Protected by Assignable Privileges
- True for HL7 Module and User Interface
- Data currently only for internal use – data available in separate backend tables

Data Exchange

- Data is not returned in an ACK or RSP message

Visibility

- Data “disappears” From Patient Demographic Page upon saving
- With permissions “View SOGI History” or “Disability History” appears
- Does Not Appear on any Patient Report
- Not Displayed during Patient Merge Process

FUNCTIONALITY CHANGES: USER INTERFACE



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Patient Demographics ? i

Cancel Links ⚙ Update ▾

Sex at Birth * ▾ **DOB *** 📅 **Birth Time** 🕒

Sexual Orientation and Gender Identity (SOGI)

If your patient has elected to provide you with answers to Sexual Orientation and/or Gender Identity (SOGI) questions (see "View SOGI Questions" button), please enter the values using the dropdown fields (and free text field, as needed) in this section- SOGI data is not required. Upon clicking "Update" on this Demographics screen, the fields will appear blank, but a banner at the top of the screen will indicate the entry has been saved.
Please note: SOGI data collected in NV WebIZ is for Nevada State Department of Health & Human Services (governmental) use only and will be kept confidential (See Nevada Revised Statute (NRS) 239B.026).

[View SOGI Questions](#)

Gender Identity ▾ **Sexual Orientation** ▾

SOGI Questions

- What sex were you assigned at birth, such as on your original birth certificate? (Mark One Answer)
- How do you describe yourself? (Mark One Answer)
- Which of the following best represents your sexual orientation identity? (Mark one Answer)

OK

Gender Identity ▾ **Please Specify *** **Sexual Orientation** ▾

RACE/ETHNICITY (COLORADO ONLY)



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Edit Race Codes

Id	Race Code	Race Desc	Status Code	Display Order	Cdcstd Code	HI7 Code	Parent Race Code Id	Ethnicity HI7 Code	
20	10	White	Active ▼	999	4	2106-3		2186-5	?
60	390	English	Active ▼	999		2110-5	20	2186-5	?
61	400	German	Active ▼	999		2112-1	20	2186-5	?
62	410	Irish	Active ▼	999		2113-9	20	2186-5	?
63	420	Italian	Active ▼	999		2114-7	20	2186-5	?
64	430	Polish	Active ▼	999		2115-4	20	2186-5	?
65	440	Scottish	Active ▼	999		2116-2	20	2186-5	?

RACE/ETHNICITY (COLORADO ONLY)



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Ethnicity / Race

Choose up to 5 values: *

- American Indian or Alaskan Native
- Asian
 - Asian Indian
 - Chinese
 - Filipino
 - Japanese
 - Korean
 - Vietnamese
- Black or African American
 - African American
 - Ethiopian
 - Haitian
 - Jamaican
 - Nigerian
 - Somali
- Hispanic or Latino
 - Cuban
 - Dominican
 - Guatemalan
 - Mexican
 - Puerto Rican
 - Salvadoran
- Middle Eastern/North African
 - Egyptian
 - Iranian
 - Iraqi
 - Israeli
 - Lebanese
 - Syrian
- Native Hawaiian or Other Pacific Islander
 - Chamorro
 - Fijian
 - Marshallese
 - Native Hawaiian
 - Samoan
 - Tongan
- White
 - English
 - German
 - Irish
 - Italian
 - Polish
 - Scottish
- Other
- Prefer Not to Answer

DISABILITY QUESTIONS (COLORADO ONLY)



Edit Disability Question ? i

Cancel Update

Question Type *

DROPDOWN

Question required

Question Text *

Are you D/deaf, or do you have serious difficulty hearing?

Status *

ACTIVE

Display Order *

1

Min Age Years

Max Age Years

Min Length of Answer

Max Length of Answer

Min Value of Answer

Max Value of Answer

Min Date of Answer

Max Date of Answer

Answer Choices

Question Type requires Answer Choices

Id	Answer Text	Status	Display Order	Audit	
1	YES	ACTIVE	1	?	Add Edit
2	NO	ACTIVE	2	?	Edit
3	PREFER NOT TO ANSWER	ACTIVE	3	?	Edit

DISABILITY QUESTIONS (COLORADO ONLY)



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Disability Information

If your patient has chosen to provide you with answers to Disability questions, enter the values using the dropdown fields in this section. Reporting Disability data is required by providers. Upon clicking "Update" on this Demographics screen, the fields will appear blank, but a banner at the top of the screen will indicate the entry has been saved.

Please note: Disability data collected in CIIS is for authorized Colorado Department of Public Health and Environment (CDPHE) use only and will be kept confidential (See Colorado Revised Statute 25-1.5.101(j)(1)(A)).

Question 1: Are you Deaf, or do you have serious difficulty hearing? *

Disability History

Question 2: Are you blind, or do you have serious difficulty seeing, even when wearing glasses?

Disability History

Question 3: Because of a physical, cognitive, or emotional condition, a substance use disorder, or an intellectual disability, do you have serious difficulty concentrating, remembering, reading, learning, or making decisions?

Disability History

Question 4: Do you have serious difficulty walking or climbing stairs or use a walker or wheelchair for moving outside?

Disability History

Question 5: Do you have difficulty dressing or bathing?

Disability History

Question 6: Using your usual (customary) language, do you have serious difficulty communicating (for example, understanding or being understood by others?)

Disability History

Question 7: Because of a physical, cognitive, or emotional condition, a substance use disorder, or an intellectual disability, do you have serious difficulty doing errands alone such as visiting a doctor's office or shopping?

Disability History

DISABILITY QUESTIONS

(COLORADO ONLY)



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Question 1: Are you D/deaf, or do you have serious difficulty hearing? *

Question 2: Are you blind, or do you have serious difficulty seeing, even when wearing glasses?

Note: Code Table allows designation of required field

DISABILITY HISTORY (COLORADO ONLY)



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Patient Disability Question History ×

Question. Are you D/deaf, or do you have serious difficulty hearing?

Changed By: KIM GULLIVER (03/18/2025 07:02 AM)
Effective Date: 03/18/2025
Current Answer: PREFER NOT TO ANSWER Delete

Changed By: KIM GULLIVER (01/14/2025 05:39 AM)
Effective Date: 01/14/2025
Answer: YES Delete

Changed By: KIM GULLIVER (01/14/2025 05:39 AM)
Effective Date: 01/14/2025
Answer: NO Delete

SOGI
History
Screen
Uses
Similar
Format

HL7 FUNTIONALITY

RACE, ETHNICITY, & DISABILITY (CO ONLY)



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Expanded Race (PID-10)

- PID|1||000000002^^CO9999^MR||TEST^MultiRace^^^^L||20041222|F||2106-3^White^CDCREC~2072-7^Jamaican^CDCREC~2148-5^Mexican^CDCREC|456 MultiRace Place^^Denver^CO^80246^^P||^PRN^^^^864^1309701|

Disability

Currently there is no HL7 solution for electronic submission of Disability categories.

FUNCTIONALITY CHANGES: HL7



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Nevada and WebIZ use OBX segments for accepting Sexual Orientation and Gender Identities electronically. (AIRA Messaging Guidance)

Reporting Sexual Orientation Only

```
OBX|6|CWE|76690-7^Sexual orientation^LN|4|20430005^Heterosexual^SCT|||||F|||20220404|
```

Reporting Gender Identity Only

```
OBX|6|CWE|76691-5^Gender Identity^LN|4|446131000124102^Genderqueer^SCT^LA22882-7^Identifies as nonconforming^LN|||||F|||20220404|
```

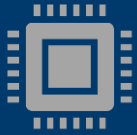
Reporting Several Patient Level Concepts Together

```
OBX|2|CWE|76690-7^Sexual orientation^LN|2|OTH^Other^NULLFL^^^^questioning sexuality| |||||F|||20220404|  
OBX|3|CWE|76691-5^Gender Identity^LN|3|446141000124107^Female identity^SCT^LA22879-3^Identifies as female^LN|||| |F|||20220404|
```

LESSONS LEARNED



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**How do EHR Vendors
Manage and Send
SOGI and Disability
Values.**



**New Space for IIS –
Add in Extra Planning
Time**



**Build Flexibility into
Solutions**



**Lack of Developed
Governance Process for
accessing sensitive
information**



**Think through all
areas of system
impacted by
changes**

QUESTIONS?



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CONTACT INFORMATION



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ACRONYMS



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AIRA – American Immunization Registry Association
DAWG – Data Advisory Work Group
EHR – Electronic Health Record
GI – Gender Identity
HB – House Bill
HL7 – Health Level Seven
IIS – Immunization Information System
NRS – Nevada Revised Statutes
NSIP – Nevada State Immunization Program
OBX – Observation
R/E – Race and Ethnicity
SB – Senate Bill
SNOMED - Systematized Nomenclature of Medicine – Clinical Terms
SO – Sexual Orientation
SOGI – Sexual Orientation and Gender Identity
UI – User Interface
ZDP – Customizable Patient Demographics



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