

CDC USCDI Summary & Recommendations

Nedra Garrett, MS

Senior Informatics Health Scientist

Center for Surveillance, Epidemiology and Laboratory Science

Centers for Disease Control and Prevention

June 22, 2021



PROCESS

Clinical and public health priority data elements coordinated and prioritized across CDC programs

¹GTRI machine learning used to identify and categorize commonly used data elements

Recommendations on the process provided to ONC

¹ Georgia Tech Research Institute

CDC Coordinated Response

- Convened representatives from CDC programs to identify high priority data elements
- Worked with GTRI to identify frequently used data elements used across >1000 artifacts using machine learning tools
- Vetted with CSTE Data Harmonization Work Group and the PH Interoperability Task Force
- 106 data elements submitted, 77 were duplicates, and 18 accepted and published



CDC Data Elements Published by ONC (2021 USCDI v2 Submission Cycle Classification Levels)

Data Class	Data Element	Classification Level
Problem	Date of Diagnosis	Comment
Specimen	Specimen collection date	Level 2
Specimen	Specimen type	Level 2
Specimen	Specimen source site	Level 2
Patient Demographics	Mother's Maiden Name	Level 2
Patient Demographics	Next of Kin Name	Level 1
Patient Demographics	Next of Kin Relationship	Level 1
Patient Demographics	Patient's primary care provider	Level 1
Clinical Notes	Clinical Notes for Newborn	Comment
Clinical Notes	Cause of Death Information	Comment
Clinical Notes	Pregnancy History	Comment
Clinical Notes	Summarization of encounter note narrative	Comment
Clinical Notes	Initial evaluation note	Comment
Clinical Notes	Outpatient note	Comment
Observations	Last Menstrual Period (LMP)	Comment
Observations	Gestational Age	Comment
Immunizations	Vaccination Administration Date	Level 2
Immunizations	Vaccination Event Record Type	Level 2

Example of Other Priority Data Classes/Elements for Categorization

- Pregnancy Status
- Date Medication Administered and/or Date Medication Prescribed
- Patient Work History
- Specimen Type/Collection Date
- Patient Demographics
- Social Determinants of Health
- Travel History
- Newborn's Delivery Information
- Mother's Delivery Information
- Gender Identity



Recommendations and Next Steps



Consider expanding the number of accepted data elements.



Continue to build upon submissions to strengthen the use cases and continue to monitor standards and IGs.



Continue to promote the use of standards through Standards Management and Data Harmonization Workgroup at CDC.



Leveraged earlier coordinated efforts.



Work with GTRI on transitioning machine learning tools for future use.



Continue to engage CDC programs and public health partners on USCDI submissions and advocate for inclusion.

Thank you!

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

