

NCHS Board of Scientific Counselors Meeting: Director's Update

Brian C. Moyer, Ph.D., NCHS Director

Board of Scientific Counselors Meeting (BSC)

Agenda

- Using NCHS Surveys to Measure Discrimination
- Long COVID Tracking at NCHS
- Upcoming Changes to NHAMCS and NAMCS
- NCHS Website Modernization
- Program Updates: NHANES, Rapid Surveys, NVSS

Board Membership

<u>Thank You to our committed board members for extending their time on the BSC and service on the Workgroup!</u>



Kristen Olson, Ph.D.



Helen Levy, Ph.D.

We are interested in your suggestions for candidates for nomination

NCHS Staff Updates





CDC Moving Forward Initiative



Share scientific findings and data faster

Release scientific
findings and data more
quickly in response to
the need for information
and action as well as
being transparent about
the agency's current
level of understanding



Translate science into practical, easy to understand policy

As we share our scientific findings and data faster, implement a standardized policy development process for implementation guidance documents and other public health communications



Prioritize public health communications

Prioritize and enhance public-facing health communication practices and staff expertise



Promote results-based partnerships

Work more effectively with our public health partners to accomplish results-oriented goals and work to address the limitations of a siloed approach to solving major public health problems



Develop a workforce prepared for future emergencies

With a focus on DEIA, strengthen the CDC workforce in responding to infectious and noninfectious public health emergencies, including new skills, training, and capabilities, and aligning incentives for commitment to these efforts

Evidence Act Implementation

One Hundred Fifteenth Congress of the United States of America

AT THE SECOND SESSION

Begun and held at the City of Washington on Wednesday, the third day of January, two thousand and eighteen

An Act

To amend titles 5 and 44, United States Code, to require Federal evaluation activities, improve Federal data management, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

- (a) Short Title.—This Act may be cited as the "Foundations for Evidence-Based Policymaking Act of 2018".
- (b) Table of Contents.—The table of contents for this Act is as follows:
- Sec. 1. Short title; table of contents.

TITLE I—FEDERAL EVIDENCE-BUILDING ACTIVITIES

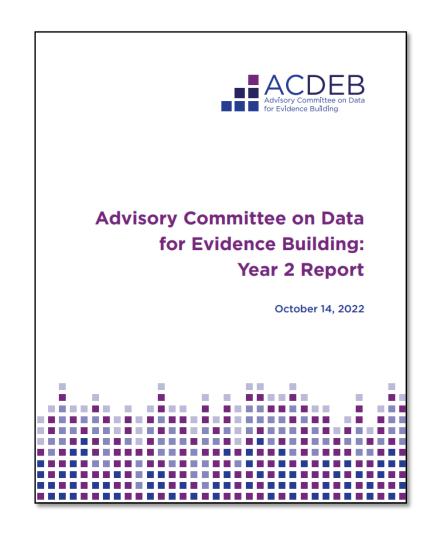
Sec. 101. Federal evidence-building activities.

TITLE II-OPEN GOVERNMENT DATA ACT

Sec. 201. Short title.

Sec. 202. OPEN Government data.

TITLE III—CONFIDENTIAL INFORMATION PROTECTION AND STATISTICAL EFFICIENCY

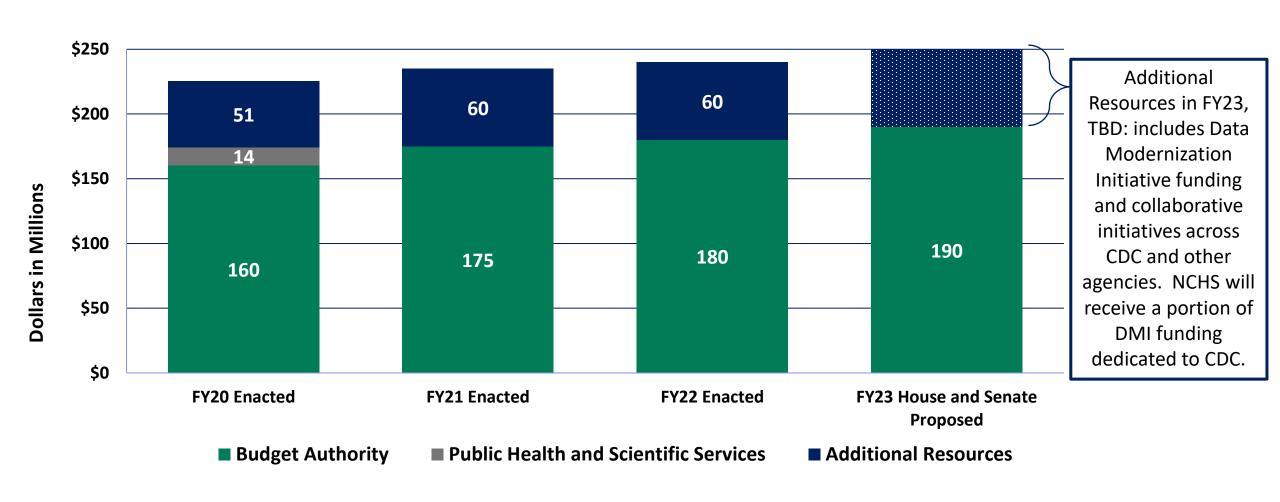


Advisory Committee on Data for Evidence Building – Year 2

The Committee's <u>Year 2 Report</u> lays out recommendations for carrying out the Evidence Act, including that OMB:

- Adopt a risk-utility framework as part of securing access to CIPSEA data assets
- Promote use of privacy-preserving technologies within government in coordination with the Interagency Council on Statistical Policy (ICSP)
- Adopt a clear statement of purpose for the National Secure Data Service (NSDS) including recommendations to define its core functions:
 - Coordination
 - Communication
 - Research and Development
 - Data Standardization

NCHS Budget Update



NCHS New Reports and Data



- Provisional Numbers and Rates of Suicide by Month and Demographic Characteristics: United States, 2021 (9/30)
- Cause-of-Death Data From the Fetal Death File, 2018–2020 (10/19)



- Telemedicine Use Among Adults: United States, 2021 (10/13)
- COVID-19 Mortality Among Adults Aged 65 years and Over: United States, 2020 (10/14)



- COVID-19 Death Rates in Urban and Rural Areas: United States,
 2020 (10/25)
- Quarterly Provisional Estimates for Selected Causes of Death: Q1 2019 – Q1 2022 (10/26)
- COVID-19 Mortality by Usual Occupation and Industry: 46 States and New York City, United States, 2020 (10/28)

Phases of the DMI Strategic Roadmap

Today

Phase 1: Plan & Define

- Established the DMI program
- Designed North Star Architecture (NSA)
- Established DMI consortium
- Developed measurements of success (I-Plan 2.0 & CIO Metrics)

Phase 2: Design, Develop, & Test

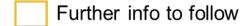
- Make and communicate enterprise decisions
 - Build core DMI capabilities
 - Test ideas with key use cases
 - Identify decisions to make in order to scale

Phase 3: Scale & Release

Deploy validated solutions across the agency

Phase 4: Iterate & Improve

- Establish 'flywheel' of public health-drive use cases
 - Maintain and evolve solutions



NCHS Data Linkage Program: Sources

Survey Data

Sampling frame Known inference







Health Conditions





Socioeconomic Status





Healthcare Access & Utilization





Administrative Data

Program participation/vital status
Not meant for research purposes

Housing and Urban Development



Geocoded Addresses



Medicare and Medicaid





End Stage Renal Disease



Mortality



Department of Veterans Affairs



DMI: Linking NCHS Data to New Sources

The linkage of NCHS survey data to Department of Veterans Affairs (VA) administrative data was funded through DMI

 The linkage utilized state-of-the-art methodologies to link data (including machine learning techniques)

First time NCHS survey data were linked to VA data

- Invaluable resource on this population
- Marks the beginning of on-going collaboration between the agencies

Can be used to answer key policy questions, such as:

 What are the health characteristics and outcomes for Veterans within and outside the VA health system?



NCHS Metadata Updates

Travis Hoppe Associate Director for Data Science and Analytics

NCHS Board of Scientific Counselors

NCHS Metadata



F.A.I.R.

- Findability
- Accessibility
- Interoperability
- Reuse



NCHS Strategic Plan

Maintain and enhance core data systems and improve integration of data



Data Modernization Initiative

Move from siloed and brittle public health data systems to connected, resilient, adaptable, and sustainable systems

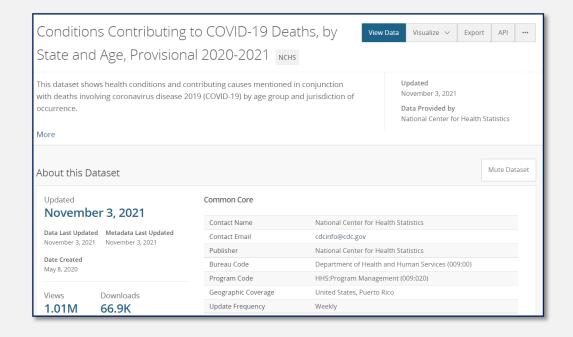


Discoverability

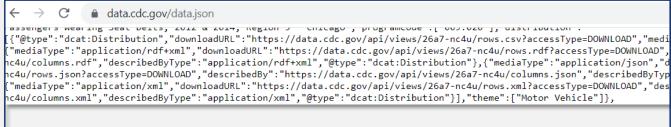
Improve discoverability as data "federates" to external locations

NCHS Metadata Examples

Metadata Website



Machine Readable Output





healthdata.gov, data.gov, Google, Kaggle...

NCHS Metadata Standards

Establish a consistent set of dataset level standards for data.cdc.gov

- Consistent with CDC and Federal standards
- Started with 820 CDC / 88 Federal errors
- Currently at **zero** validation errors

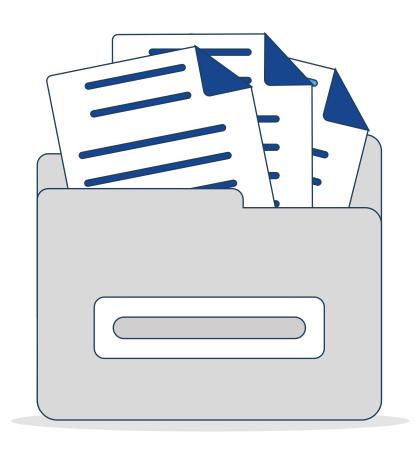
Formalize two projects with metadata

- Restricted datasets / Standard Application Process
- Social Determinants of Health tags (in progress)



Restricted Metadata

Response to Standard Application Process (SAP), a catalog for all restricted datasets from federal statistical agencies



RDC

NCHS catalog for major restricted access datasets available on the Research Data Center (RDC)

Example 1

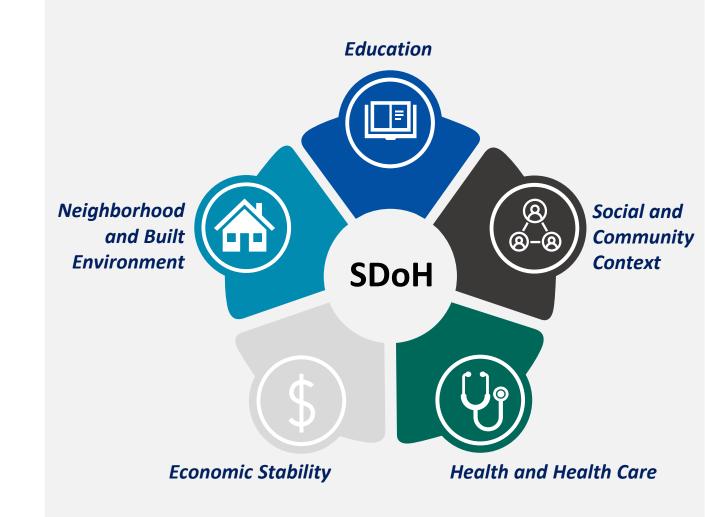
NCHS Survey Data Linked to Centers for Medicare & Medicaid Services (CMS) Medicare Data Files

Example 2

NCHS Survey Data Linked to National Death Index (NDI) Mortality Files

Social Determinants of Health (SDoH) Tags

- Create dataset level tags centered around SDoH
- Use Healthy People 2030 as a starting framework for tags
- Improve discoverability through "catalogs" of SDoH topics
- Coordinate with CDC CIOs for agency adoption and beyond



Discussion and Questions

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.

