Office of the Secretary
Patient-Centered Outcomes
Research Trust Fund (OS-PCORTF)

**Building Data Capacity for Patient-Centered Outcomes Research: An Agenda for 2021 to 2030** 

May 3, 2021

U.S. Department of Health and Human Services





## Agenda

- 1. Welcome and Introductions
- 2. OS-PCORTF Background
- 3. OS-PCORTF Current Activities





# Welcome and Introductions





## **ASPE Office of Health Policy**

- Benjamin Sommers, MD, PhD, Deputy Assistant Secretary for Health Policy, ASPE
- Nancy De Lew, MA, Associate Deputy Assistant Secretary for Health Policy, ASPE
- Scott R. Smith, PhD, Director, Division of Healthcare Quality and Outcomes, ASPE





## OS-PCORTF Background

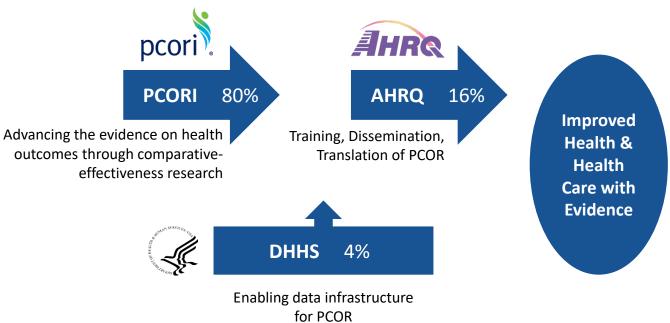




## Office of the Secretary PCOR Trust Fund (OS-PCORTF)

- Between 2003 and 2010, three laws were enacted that authorized research and funding to expand research on the outcomes and effectiveness of treatments and interventions used in health care
  - MMA 2003, ARRA 2009, ACA 2010
- In 2019, the PCOR Trust Fund was reauthorized for 10 years

### 3 streams of work and funding:







## PCORTF Reauthorization Through 2029 Invites Reflection, Reconsideration



The Secretary of HHS is to "provide for the coordination of relevant Federal health programs to build data capacity for comparative clinical effectiveness research, including the development and use of clinical registries and health outcomes research data networks, in order to develop and maintain a comprehensive, interoperable data network to collect, link, and analyze data on outcomes and effectiveness from multiple sources, including electronic health records."

Affordable Care Act, Section 6301



- Explicit additions: intellectual/developmental disabilities, maternal mortality
- Expansion: "Full Range of Outcomes Data," including economics





### **HHS OS-PCORTF Portfolio Coordination**

- 1. Administration for Children and Families (ACF)
- 2. Administration for Community Living (ACL)
- 3. Assistant Secretary for Preparedness and Response (ASPR)
- 4. Agency for Healthcare Research and Quality (AHRQ)
- 5. Centers for Disease Control and Prevention (CDC)
- 6. Centers for Medicare and Medicaid Services (CMS)
- 7. Food and Drug Administration (FDA)
- 8. Health Resources and Services Administration (HRSA)
- 9. Indian Health Service (IHS)
- 10. National Institutes of Health (NIH)
- 11. Office of the Chief Technology Officer (CTO)
- 12. Office of the National Coordinator for Health Information Technology (ONC)
- 13. Substance Abuse and Mental Health Services Administration (SAMHSA)
- 14. Assistant Secretary for Planning and Evaluation (ASPE) Coordinator







## **Key Components of Strategic Planning**



#### **Initial Listening Session**

Principal Stakeholder Group:
"The Field": Including health
services researchers, policy analysts
and other PCOR producers, users of
PCORTF products



Completion: August 2020



#### **External Engagements**

Principal Stakeholder Group: External government and nongovernmental organizations and actors involved with producing, using data for PCOR and other health care and systems research, policy and practice purposes Completion: January 2022

The National Academies of Academies of MEDICINE



#### **HHS Internal Engagements**

Principal Stakeholder Group: HHS agencies that produce, use PCOR data and conduct/participate in PCOR activities

Completion: March 2022





#### **Public Request for Information**

Principal Stakeholder Group: Active but not necessarily affiliated organizations and individuals involved with producing, using PCOR data for PCOR and other health care and systems research, policy and practice purposes Completion: TBD





## HHS OS-PCORTF Leadership Council Engagement

Principal Stakeholder Group: Decision/advisory entity for ASPE, Secretary Completion: Ongoing







# **OS-PCORTF Current Activities**





### **OS PCORTF Vision -- First Decade**

**Goal:** To build data capacity in HHS that supports research on patient health outcomes.

- PCOR is intended to provide decision makers with objective, scientific evidence on the <u>effectiveness</u> of treatments, services, and other interventions used in health care.
- This research is frequently focused on analyzing existing data to study
  questions and provide objective information for the purposes of <u>informing</u>
  <u>real world health care decisions.</u>





### PATIENT-CENTERED OUTCOMES RESEARCH

#### **USERS**

Patients Consumers Researchers
Payers and Purchasers
Providers & Health Systems

Public Health Federal Agencies

#### THE "SUPPORT"

Users of the data infrastructure and contributors to PCOR.

#### **FUNCTIONALITIES**



Use of Clinical Data for Research



Standardized Collection of Standardized Clinical Data



Linking Clinical and Other Data for Research



Collection of Participant-Provided Information



Use of Publicly-Funded Data Systems for Research

#### THE "PILLARS"

Core research functions and HHS focus areas for enhancing and improving data infrastructure.

#### COMPONENTS

Services

Standards

**Policies and Governance** 

#### THE "BUILDING BLOCKS"

Data sources and components are necessary for ensuring that electronic data is usable for research.

#### THE "DATA SOURCE"

These building blocks are used to address collecting, linking, and analyzing of data to support the five core research functionalities.

#### **DATA SOURCES**

Primary Data Collected for Clinical Care Primary Data Collected for Research Patient Contributed Data Payer-Admin Data Federal Data Social Determinants of Health [data source]

## Addressing the Opioid Crisis through Better Data and Data Infrastructure—An Example of a Use Case



Improving Timeliness and Quality of Outcomes Data

Understanding impact of opioid epidemic on maternal and infant outcomes

CDC (2019): MAT-LINK is a surveillance network that collects data, monitors maternal, child, and infant health outcomes





**Building Capacity for Collection** of Patient-Reported Outcomes

Collecting patient-reported outcomes not available in the clinical record.

NIH/NIDA (2018): The project is exploring the feasibility of collecting PROs related to opioid use after an ED visit through a patient-friendly app



Building Linkages to Address Co-Morbidities

Linking human services data with health data.

ASPE, ACF (2019): Pilot testing a linkage between state Medicaid records and child welfare records into a single, harmonized dataset



## Addressing COVID through Better Data and Data Infrastructure—An Example of a Use Case



#### **Use of Clinical Data for Research**

 ONC: Using Machine Learning Techniques to Enable HIE Data Sharing to Support COVID-19 Focused PCOR



## Collection of Participant Provided Information

 NIH-AHRQ: Understanding COVID-19 Risks, Course, and Outcomes in the Context of MCC (Multiple Chronic Conditions) Through e-Care Plan Development





### Linking Clinical Data and Other Data for Research

- NIH-CMS-ASPE: A National COVID-19 Longitudinal Research Database Linked to CMS Data
- ASPE-ACL: Dataset on Intellectual and Developmental Disabilities (DIDD): Linking Data to Enhance Patient-Centered Outcomes



## **Standardized Collection of Standardized Clinical Data**

 FDA: CURE ID: Aggregating and Analyzing COVID-19 Treatments from EHRs and Registries Globally



#### **Use of Federal Data for Research**

 CDC: Building Infrastructure and Evidence for COVID-19 Related Research, Using Integrated Data from NCHS Data Linkage Program



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## **Illustrative Examples of OS-PCORTF Products**



#### **Datasets**

- CDC-CMS: Linked NHCS and CMS Medicare
   Master Beneficiary Summary File (MBSF) data
- CDC-NHCS: NDI linked with the National Vital Statistics System mortality files on drug overdose deaths (NVSS-M-DO) file



#### **Software**

- CMS: Blue Button 2.0 Application Programming Interface (API) Developer Sandbox
- FDA: MyStudies App





#### **Data Elements and Information Models**

- NIH: NIH Common Data Elements Repository
- AHRQ: Libraries of Clinical Definitions for Outcome Measures



#### **Tools and Guides**

- FDA: Data Quality Metrics (DQM)
   Tool
- CMS: Source Data Capture From EHRS: Using Standardized Clinical Research Data



- ONC: Patient Reported Outcomes FHIR Implementation Guide
- FDA: Women's Health Technology CRN FHIR Implementation Guide



#### **Stakeholder Engagement**

- User, TEP, or workgroup engagement documentation
- Training





## Questions?



