States’ Capacity for Using Social Determinants of Health Data for Population Health Management

ASTHO Center for Population Health Strategies

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DISCLOSURE STATEMENT

• No potential conflict of interest.
OVERVIEW

• ASTHO Background
• Discussion Topics
• State-level Social Determinants of Health Data
• Population Health Management
• ASTHO State/Territorial Health Official (S/THO) Leadership Resources
DISCUSSION TOPICS

• What are the most common sources of SDOH data? How is it collected, stored, and shared?
• What is the current status of SDOH standards
• How are states and IDSs using SDOH data for population health management? What tools are being used?
• What are the biggest challenges in accessing, collecting, storing, and analyzing this data? What are some challenges to national scale-up (e.g., lack of access to SDOH data sources, lack of standardization)?
• What are some solutions to address these challenges?
STATE-LEVEL SOCIAL DETERMINANTS OF HEALTH DATA

- State public health agencies have access to many data sources, but may still need to establish data sharing agreements to gain access to additional SDOH data

- Challenges
  - Training
  - Resources (i.e., templates, datasets, open-source platforms)
  - Lack of standards
  - Legal (i.e., data sharing and use agreements, HIPAA compliance)

Data
- Demographics
- Poverty gradient (rural & urban)
- Education (on-time graduation)
- Unemployment rate
- Air quality index
- Walkability index
- Social vulnerability index

Sources
- Environmental Protection Agency
- Bureau of Labor Statistics
- American Housing Survey
- Behavioral Risk Factor Surveillance System
- Census Bureau
- Demographics USA
- Census of Governments
- Medicaid Data
- Emergency Department Data
- Electronic Health Records
- Electronic Lab Reports
- Electronic Case Reporting
- Health Information Exchanges
POPULATION HEALTH MANAGEMENT

• States use informatics and analytics tools on SDOH data to make decisions for population health management and disseminate information to partners, lawmakers, and the public

• Tools
  • Health Opportunity Index
  • ESRI’s ArcGIS (geographic and regional information)
  • Dashboards (Tableau, R-Shiny, Power BI, OASIS)
  • Health Level 7 (HL7) Admission, Discharge, Transfer (ADT) messaging (patient demographic and visit information)

Solutions

- Prioritizing health equity (i.e., programming, planning)
- Measures and standard data practices
- Policies (laws and regulations)
- Organizational infrastructure
- Align with State and Community Health Improvement Plans
- Align with State Health Assessments and Accreditation
HEALTH OPPORTUNITY INDEX: Virginia State Example

- VA’s Health Opportunity Index (HOI) has 13 indicators based on 3 criteria
  - Influence on health as expressed in the literature
  - Input from Local Health Districts and other stakeholders
  - Availability of data of consistent quality at the Census Tract level for all Census Tracts in Virginia

- VA develops profile information (community environment, economic opportunity, consumer opportunity, and wellness disparity)

- VA’s use of the data
  - Show that place matters
  - Identify impact of SDOH on statewide health landscape
  - Identify HOI indicators most influential on local health
  - Identify areas and populations vulnerable to adverse health outcomes
  - Build cross-sector collaboration to promote health equity
S/THO LEADERSHIP RESOURCES

2019 President’s Challenge
Database, Analytics Tools and Resources, Annual Meetings

Leadership Roundtables
Recommendations and Engagement Opportunities

Project ECHO
Virtual Learning Community

Training Modules
ASTHO Leadership Institute and ASTHO Connects