



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

ASTHO Center for Population Health Strategies

Priyanka Surio, Director, Data Analytics & Public Health Informatics

December 4, 2018

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

HOW DOES THE CENTER FOR POPULATION HEALTH STRATEGIES HELP PUBLIC HEALTH AGENCIES?

As a health official, you can advance population health improvement as a core function of your agency's programs and partnerships with other stakeholders by developing state and territorial public health agency capabilities and leadership around these three pillars.

ASTHO'S CENTER FOR POPULATION HEALTH STRATEGIES THREE PILLARS



**CLINICAL TO
COMMUNITY
CONNECTIONS**



**HEALTH EQUITY
AND SOCIAL
DETERMINANTS
OF HEALTH**



**DATA
ANALYTICS AND
PUBLIC HEALTH
INFORMATICS**

← **POPULATION HEALTH LEADERSHIP,
CAPACITY BUILDING, AND POLICY** →

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

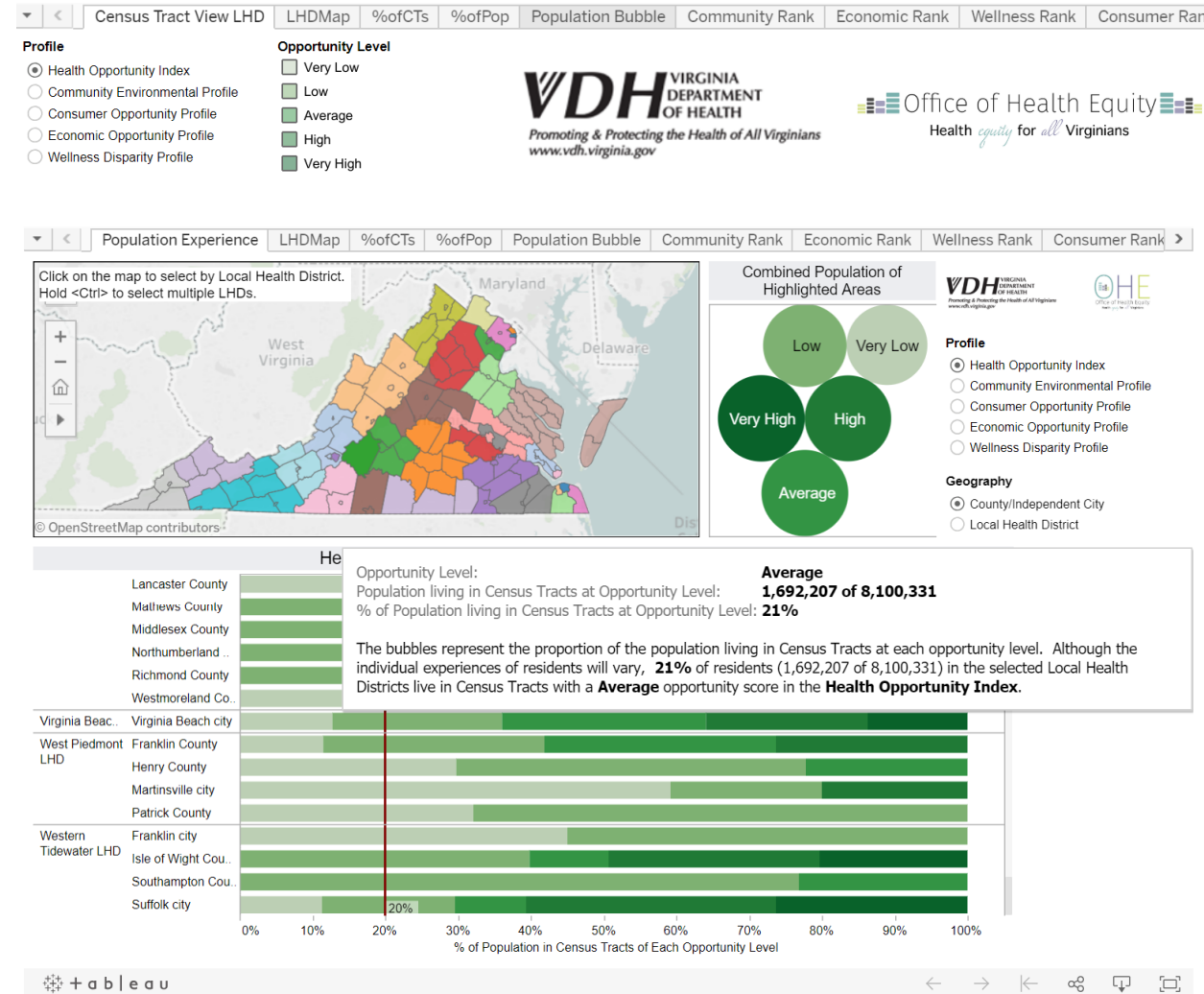
- **States use informatics and analytics tools on SDOH data to make decisions for population health management and disseminate information to partners, lawmakers, and the public**
- **Tools**
 - Health Opportunity Index
 - ESRI's ArcGIS (geographic and regional information)
 - Dashboards (Tableau, R-Shiny, 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



Project ECHO

Virtual Learning Community



Leadership Roundtables

Recommendations and Engagement Opportunities



Training Modules

ASTHO Leadership Institute and ASTHO*Connects*