# Analysis of PHAB Population Health Outcomes Reporting Data

**June 2020**

The Public Health Accreditation Board (PHAB) seeks to advance and transform the quality and performance of governmental public health agencies. By strengthening health departments capacities—including those related to collaboration, quality improvement, and evidence-based practice, among others—PHAB's logic model anticipates that the work entailed in becoming accredited and maintaining accreditation status will ultimately contribute to improved community health indicators and increased health equity.[1] In part to better understand the relationship between accreditation and health outcomes, PHAB introduced a requirement in reaccreditation that health departments report on the population health outcomes they are tracking in their community.

This is the first report about the data generated through the population health outcomes reporting process. It begins with a description of the requirement and the analysis of the data. It then shares findings about the topics that health departments are tracking in their communities. Finally, it provides information about a subset of those outcomes about which health departments provided greater details.

## Section 1: Reporting Requirement and Methodology

As part of the documentation submission process for reaccreditation, health departments are required to report on the population health outcomes they are tracking in their communities. There are three reasons why this requirement was established:

- To establish a national database of selected health outcomes and their associated objectives that accredited health departments have chosen to monitor.
- To document how the ongoing work of maintaining accreditation can contribute to better health outcomes.
- To further encourage health departments and their communities to track and use data in a systematic way.

PHAB selected the model of population health developed by David Kindig and colleagues as the organizing framework for the requirement.[2] Based on that model, PHAB identified seven broad areas for population health outcomes: mortality, health related quality of life, preventive health care, individual behavior, social environment, physical environment, and genetics. PHAB lists specific topics under each area. As part of the reaccreditation requirement, health departments select all the topics that they are tracking in their communities. Section 2 of this report provides findings on which topics were selected.

In addition, health departments select five to ten topics for which they provide more detailed information including the specific objective and target; baseline and more recent data; source of their

data and benchmark data; whether the measure is included in their community health assessment (CHA), community health improvement plan (CHIP), or strategic plan; and whether the health department is addressing the measure as part of their work related to a particular reaccreditation standard. Section 3 of this report provides findings related to these measures that health departments provide additional details about.

After they complete the reaccreditation process, health departments are required to provide updates on the population health outcomes in their Annual Reports. In addition to updating the list of topics they are tracking, health departments are asked to report an additional year of data for the objectives for which they provided more details during reaccreditation. They are also asked to select one of the objectives to provide a narrative account of the work they have done with their communities to address that measure. This is an opportunity for health departments to tell their story of progress, challenges, etc., as they tackle population health issues. (While health departments are encouraged to continue to report on the same measures each year, it is understood that priorities may change and therefore the health department may switch one or more measures if necessary.) None of this detailed information from the Annual Reports is included in this report because no health department had completed the Annual Report requirement as of June 2020.

It should be noted that the reaccreditation requirement is for health departments to report this information. They are not assessed on the content of what they report. In other words, there is no assessment of whether health departments selected appropriate objectives or targets, nor are they penalized for not making progress towards those objectives in Annual Reports.

This report analyzes data from health departments that submitted their reaccreditation population health outcomes report between 2018 (when the first cohort of health departments began the reaccreditation application process) and June 2020. Health departments enter the data in e-PHAB, PHAB's electronic accreditation system. Then data were downloaded, cleaned and coded in Excel, and analyzed in SAS.

Section 2 of the report provides information on the broad areas and topics that health departments are most commonly tracking in their communities. Health departments have the ability to create custom topics if they do not find a topic that they feel correspond to what they were tracking. PHAB staff reviewed all custom topics and recoded them to an existing topic if appropriate. For example, if a health department created a custom topic for "childhood obesity" it was recoded to the topic of "obesity."[3]

Please note that data from the population health outcomes reporting requirement are also available in the PHAB Data Portal (http://phabdata.org). Individuals can explore these data on the portal and filter to get additional information about differences in outcomes being tracked based on health department characteristics.

Section 3 of the report focuses on the 5-10 objectives that health departments about which health departments provided additional details. In addition to recoding topics, as described above, PHAB cleaned the information provided about the source of data and benchmark data. For example, if health departments provided the name of their state version of the Behavioral Risk Factor Surveillance System

(BRFSS or the youth version -YBRFSS), it was recoded to a broader category for BRFSS/YBRFSS. In addition, the objectives were coded to identify if the objective was focused on a particular demographic category (for example, if it was focused on older adults, or African Americans). PHAB developed a guidance document to ensure the coding is conducted consistently.

Future analyses will include an examination of the data provided in the Annual Reports. When a greater number of health departments have fulfilled this reporting requirement, PHAB will also examine different patterns based on health department characteristic (e.g., size of population served). In addition, once the Healthy People 2030 objectives are released, the topics from the population health outcomes reporting requirement will be crosswalked to those objectives. This will allow for presentation of the findings through the Healthy People 2030 lens.

## Section 2: Broad Areas and Topics Tracked in Communities

This analysis focuses on 57 health departments that provided complete population health outcomes reporting information as of June 2020. Of the seven broad areas in the PHAB framework, almost all health departments reported tracking at least one topic within each, except for Genetics. (See Table 1.)

**Table 1. Number of Health Departments Reporting Tracking at Least One Topic In Each Broad Area**

| Broad Area | Number of HDs |
|---|---|
| Health Related Quality of Life | 57 |
| Individual Behavior | 56 |
| Mortality | 56 |
| Preventive Health Care | 55 |
| Social Environment | 53 |
| Physical Environment | 50 |
| Genetics | 8 |

Table 2 shows all the topics that are being tracked by at least 25 of the 57 health departments, organized by Broad Area. The following topics are being tracked by at least 50 health departments: addiction and other substance use-related mortality; tobacco use; poverty; and access to healthy food.

**Table 2. Number of Health Departments Reporting Tracking Common Topics**

| **Mortality** | |
|---|---|
| **Topic** | **Number of HDs** |
| Addiction and other substance use-related mortality | 51 |
| Infant mortality | 49 |
| Suicide | 49 |
| Cancer mortality (e.g., breast and cervical cancer) | 46 |
| Cardiovascular mortality (e.g., heart disease) | 41 |
| Automobile mortality (e.g., alcohol impaired driving) | 37 |
| Homicides and violence mortality | 37 |
| Nonviolent injury mortality (accidental/unintentional injuries) | 33 |
| Life expectancy (e.g., years of potential life lost) | 29 |
| Maternal mortality | 26 |
| **Health Related Quality of Life** | |
| **Topic** | **Number of HDs** |
| Diabetes | 49 |
| Obesity | 49 |
| Sexually acquired infections/sexually transmitted diseases | 49 |
| Self-reported mental health (e.g., poor mental health days) | 43 |
| HIV | 41 |
| Cancer | 38 |
| Hypertension | 37 |
| AIDS | 36 |
| Asthma | 36 |
| Self-reported health and well-being (e.g., self-reported poor health status) | 36 |
| Self-reported physical health (e.g., poor physical health days) | 36 |
| Depression/Anxiety | 35 |
| Chronic lung disease | 28 |
| Other cardiovascular diseases | 25 |
| **Individual Behavior** | |
| **Topic** | **Number of HDs** |
| Tobacco use | 55 |
| Physical activity/inactivity levels | 49 |
| Teen pregnancy | 44 |
| Alcohol dependence/abuse | 41 |
| Healthy eating patterns | 38 |
| Breastfeeding | 37 |
| Smokeless tobacco use | 37 |
| Illicit drug use | 36 |
| Opioid addiction | 32 |
| Sexual activity (risky sexual behavior) | 32 |
| Prescription drug abuse/addiction | 29 |
| Other drug use/dependence | 27 |
| Injury prevention (e.g., falls prevention) | 26 |

| **Preventive Health Care** | |
|---|---|
| **Topic** | **Number of HDs** |
| Access to health insurance | 41 |
| Access to primary care | 38 |
| Access to childhood immunization | 35 |
| Access to dentists and related oral health care providers | 35 |
| Access to mental health providers | 35 |
| Access to influenza immunizations | 34 |
| Access to prenatal care | 33 |
| Access to mammography | 31 |
| Access to breast cancer screening | 29 |
| Access to colorectal cancer screening | 27 |
| Preventable hospitalization rate | 26 |
| **Social Environment** | |
| **Topic** | **Number of HDs** |
| Poverty | 50 |
| Employment/unemployment | 47 |
| High school graduation/dropout rate | 46 |
| Housing/homelessness (affordability, stability) | 40 |
| Violent crime (e.g., street and neighborhood violence) | 31 |
| Children in single-parent households | 30 |
| Domestic violence | 28 |
| Child abuse | 27 |
| Driving alone to work/long commute | 27 |
| Income inequality | 27 |
| **Physical Environment** | |
| **Topic** | **Number of HDs** |
| Access to healthy food | 50 |
| Air quality (including smoke-free policies) | 39 |
| Access to exercise opportunities (e.g., parks, recreational facilities) | 38 |
| Community walkability/bikeability | 33 |
| Drinking water quality | 29 |
| Access to public transportation | 28 |
| Housing (aging housing stock, overcrowding, pest and lead exposure) | 25 |

## Section 3: Detailed Reporting

This analysis looks at the 384 objectives for which health departments provided more detailed information.[4] (Each health department reported on between 5-10 objectives.) Of those 384 objectives, the most common broad area was mortality, followed by health related quality of life and individual behavior. (See Table 3) The most common topic was tobacco use. (See Table 4 for all the topics that were included 10 or more times in the detailed reporting.)

**Table 3. Number of Times each Broad Area was Included in Detailed Reporting of Objectives**

| Broad Area | Frequency |
|---|---|
| Mortality | 99 |
| Health Related Quality of Life | 89 |
| Individual Behavior | 80 |
| Preventive Health Care | 49 |
| Social Environment | 44 |
| Physical Environment | 23 |

**Table 4. Number of Times Common Topics were Included in Detailed Reporting of Objectives**

| Topic | Frequency |
|---|---|
| Tobacco use | 39 |
| Obesity | 28 |
| Addiction and other substance use-related mortality | 25 |
| Infant mortality | 24 |
| Suicide | 21 |
| Sexually acquired infections/sexually transmitted diseases | 17 |
| Access to childhood immunization | 16 |
| Poverty | 11 |
| Housing/homelessness (affordability, stability) | 10 |

When examining if these objectives were focused on a particular demographic group, approximately half referenced an age category, including infants and children (70 objectives), youth/young adults (57), adults (55), and older adults (13). A total of 17 objectives referenced racial or ethnic groups, with Blacks appearing most frequently (12 objectives).

The sources of benchmark data were also reviewed to identify ones referenced most frequently. Healthy People was listed as a benchmark for 63 objectives, followed by BRFSS/YBRFSS (39 objectives). Table 5 shows the sources of benchmark data that were referenced in at least 10 objectives.

**Table 5. Number of Times Common Sources of Benchmark Data were Referenced in Detailed Reporting of Objectives**

| Source of Benchmark Data | Frequency |
|---|---|
| Healthy People 2020 | 63 |
| BRFSS/YBRFSS | 39 |
| Other CDC sources (e.g., Wonder, CDC National Vital Statistics System) | 24 |
| State registry | 24 |
| U.S. Census | 18 |
| State vital records system | 17 |
| County Health Rankings | 13 |

Health departments are asked whether these objectives appear in several core documents. More than three-quarters of the objectives (294) were included in the community health assessment, while

approximately 65% (248) objectives were in the community health improvement plan, and 40% (153) of the objectives were in the strategic plan.

Finally, health departments could report whether their agencies' work in this area would help demonstrate conformity with any of the reaccreditation Standards and Measures. The most commonly selected measure is 1.3 (Public health data are collected, analyzed, shared, and fully utilized to increase knowledge and inform policy and program decisions), followed by 4.1 (Cross-sector collaboration is routine and community health-enhancing networks are fostered to promote the public's health). Table 6 shows the measures cited at least 25 times. One objective could be tied to multiple measures. We will learn more about the work health departments are doing in these areas when they complete their Annual Reports.

The box at the end of this section provides some additional insights about the objectives for which health departments are providing detailed reporting.

**Table 6. Number of Times Common Reaccreditation Measures were Referenced in Detailed Reporting of Objectives**

| Reaccreditation Measure | Frequency |
|---|---|
| 1.3: Public health data | 80 |
| 4.1: Cross sector collaboration | 70 |
| 3.1: Health education and promotion | 64 |
| 5.2: Community health improvement plan | 53 |
| 4.2: Engagement of target population in public health strategy/intervention development | 39 |
| 1.1: Community health assessment | 38 |
| 5.3: Strategic plan | 28 |

**Observations about Opportunities for Improvement in Data Tracking**

One of the purposes of the population health outcomes reporting requirement is to encourage health departments to track outcomes in their communities as a means to drive improvement. To that end, as PHAB staff review the objectives submitted by health departments, we have noted several potential opportunities for health departments to strengthen their health outcomes tracking.

First, much of the data being reported are several years old. Health departments provide the year of their most recent data for the objective. In 30% of the objectives, that year is 3 or more years prior to the date the population health outcomes are reported to PHAB. If these data are meant to help health departments gauge progress towards community goals, having more recent data will be key.

Second, some health departments could use additional guidance in selecting meaningful targets. In several cases, the health department has already exceeded their target. There may be some topics for which this is appropriate—if, for example, the community is striving to maintain their current rates of opioid overdose in the face of worsening national or regional trends. In most circumstances, however, health departments might be better served with targets that require improvement over baseline. Other health departments have selected targets that are overly ambitious.

PHAB has provided guidance to health departments on these and similar topics through the following mechanisms:

- feedback to individual health departments that provide a sample objective in an Annual Report prior to reaccreditation;
- a webinar for accredited health departments that featured tips from two health departments that had completed the population health outcomes reporting requirement;
- a tipsheet available to all accredited health departments; and
- a presentation at NACCHO Annual.

Third, relatively few of the objectives provided information disaggregated by race or ethnicity. In order to provide interventions tailored to the communities who might benefit most from them, it is important to track disaggregated data. While it is possible that health departments may be collecting such data for objectives they did not report as part of this requirement, it may be beneficial to further encourage tracking data by subpopulation.

PHAB will continue to provide technical assistance and support to health departments regarding effective tracking of population health outcomes data.

## Looking Forward

As more health departments complete the population health outcomes reporting, PHAB will develop a richer picture of the outcomes that are being tracked by accredited health departments. Gathering longitudinal data through the Annual Reports process will begin to tell the story of how collaborative efforts advance health and equity in communities throughout the country.

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[1] https://phaboard.org/wp-content/uploads/2019/01/Accreditation-LogicModel-201706.pdf

[2] https://www.improvingpopulationhealth.org/blog/what-is-population-health.html

[3] Based on the custom topics that were created in the first nine months of the requirement, PHAB added some new topics to the list, so that all health departments completing the reporting requirement after that point had the option to select those topics as well. For example, "Alzheimer's mortality" was not on the original list of topics from which a health department can select. It has since been added. Because it was not an option for all health departments, it is unlikely to be one of the most commonly selected topics.

[4] This section includes a total of 60 health departments, as 3 additional health departments provided information on health departments that are being tracked.