An Assessment of the Availability and Quality of Race and Ethnicity Data Submitted to the Maine Health Data Organization

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Human Services Research Institute
Dani Saunders, MSW, MPH; Unda Iovna Chua, RN, Lauren Currie, MPH
Maine Health Data Organization
Karynne Harrington, Executive Director

Background

In 2017, the Office of Management and Budget established a minimum standard for the collection of race and ethnicity information for surveys. These standards include:

- Race options: 5 options
- Ethnicity options: 3 options + ‘Other Race’
- Self-identified
- Multiple selections
- 5 racial groups (American Indian or Alaskan Native, Asian, Black, Native Hawaiian or Pacific Islander, and White)
- 2 ethnicity groups (Hispanic and non-Hispanic)

Our analysis builds on efforts to assess progress toward collecting these data in Maine, codified in Public Law 2021 Chapter 34, and aims to understand the impact of differences in data submission requirements at the individual level.

Notes on MHDO Data Source

All-Payer Claims Data (APCD) includes medical, pharmacy, and dental claims data from commercial and public payers. Race and ethnicity data was a required element for eligible records starting with 2021 submissions to MHDO, and a roll-down to three race categories, three ethnicity categories, and a Hispanic indicator.

Hospital Inpatient and Outpatient Encounter Data includes inpatient and outpatient services of the hospital and services provided by hospital outpatient specialty clinics or a primary care practice. Race and ethnicity information has been largely updated by MHDO by using registries or self-identification as a decade. It allows inclusion of race value and an ethnicity value, with additional options to select from, race and ethnicity, and self-identified.

Study Design

Using a calculated index key (or PersonID) of the individual level, data in the MHDO APCD database was linked to MHDO Hospital Encounter data. Data availability and completeness was assessed and consistency for self-identified individuals was examined within and across data sources.

Consistency is defined as a self-identified PersonID having the same race value, 90% of the time after “unknown” or “refused to answer” options are eliminated. Since the Hospital Encounter submission layout does not currently have options to include multiple races, calculation was modified so at least one of the race options matched 100% of the time among individuals with multiple races included in the APCD.

Limitations & Implications

Although there is a large proportion of self-identified individuals with consistent data across data sources, this analysis was based on limited data reporting or data collection standards from commercial and public payers. Therefore, it is difficult to determine if gaps in the availability of racial categories is related to data reporting or data collection standards from commercial and public payers.

When assessing race and ethnicity, understanding data quality that is being used to examine demographic characteristics is essential. Systems should include and offer the ability to submit data based on the OMB or CDC standards with options to include multiple race.

Across MHDO Data Sources

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% Individuals with Race or Ethnicity

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Race</th>
<th>Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>APCD (n = 4,898,661)</td>
<td>36%</td>
<td>79%</td>
</tr>
<tr>
<td>Hospital (n = 1,612,455)</td>
<td>98%</td>
<td>99%</td>
</tr>
</tbody>
</table>

Conclusions

Less than half of the people in the MHDO APCD have race or ethnicity information available (36%), of which a majority comes from Medicaid data (79%).

Looking across MHDO data sources to obtain supplemental demographic information appears to be a suitable and feasible approach.

Data was consistent for individuals within and across MHDO data sources, suggesting data accuracy. However, there appears to be differences when looking at specific racial groups with less consistency among Native Hawaiian or Pacific Islander and Alaska Native data.

Research suggests that a large-scale initiative at the policy or organization level is most helpful in encouraging race and ethnicity data collection throughout the health care systems.

Finding Within Data Source

Demographic Breakdown by MHDO Data Source Among Individuals in Both Data Sets

Consistency of Race Classification Within Each MHDO Data Source Among Individuals With Reported Racial Group at Least Once

Legend for both graphs

- White
- Black
- Hispanic
- AI AN
- Multiple Races
- Other Race

Individuals can fall into one or more race or ethnic categories, as a result, values will add up to 100%.