Racial Misclassification

of American Indian/Alaska Native Patients in New Mexico Emergency Departments

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Efforts to reduce health disparities faced by American Indians/Alaska Natives (AI/ANs) are hindered by a lack of accurate health data. One challenge is misclassifying AI/ANs as another race. The Albuquerque Area Southwest Tribal Epidemiology Center (AASTEC) estimated the extent of racial misclassification of AI/AN patients in Emergency Departments (ED) in New Mexico (NM) and its impact on nonfatal opioid overdose rates.

Misclassification

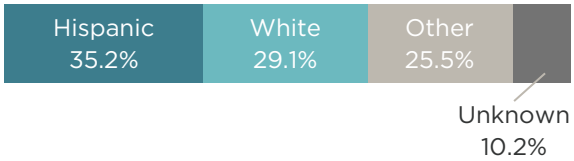
AI/AN patients were racially misclassified in 3 out of 10 (29.5%) ED encounters in NM between 2008 and 2021. During this period, 17.4% of AI/AN patients were not correctly classified during any ED encounter, which is comparable to misclassification of AI/AN patients observed in other regions of the US.[1] Of those misclassified, AI/AN patients were most often classified as Hispanic (35.2% of encounters) or non-Hispanic White (29.1% of encounters).

Impact on overdose rates

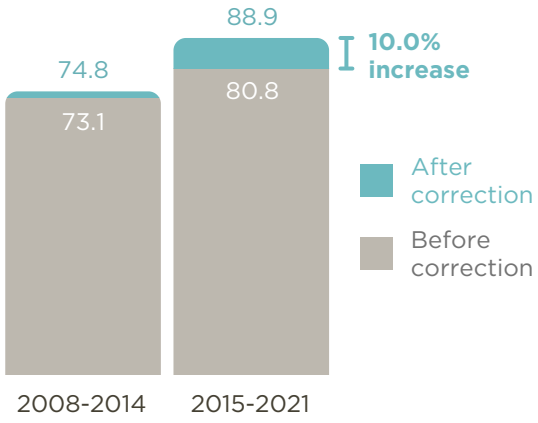
Correcting misclassified records increased the nonfatal opioid overdose rate among AI/ANs by 10.0% from 2015 to 2021 and 2.3% from 2008 to 2014.

AI/AN patients were racially misclassified in 3 in 10 ED encounters
from 2008 to 2021, NM

Misclassified AI/AN patients were most frequently classified as Hispanic or White
Percentage of ED encounters
from 2008 to 2021, NM



Nonfatal opioid overdose rates among AI/AN increase after correcting race data
Per 100,000 population, NM



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AASTEC's mission is to collaborate with the 27 American Indian Tribes in the Albuquerque Area to provide high quality health research, surveillance and training to improve the quality of life of American Indians. AASTEC is one of 12 Tribal Epidemiology Centers in the US.

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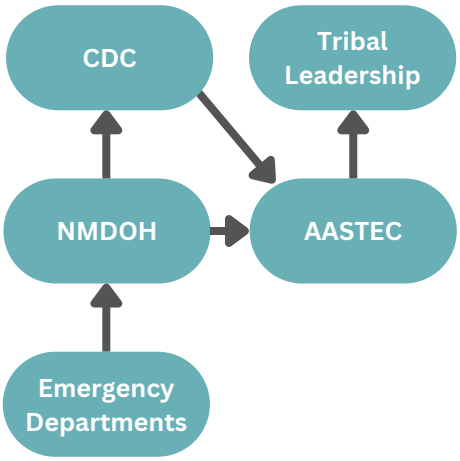
How is race & ethnicity data used?

ED data, including race and ethnicity data, are reported to the NM Department of Health (NMDOH) and the Centers for Disease Control and Prevention (CDC) through the Syndromic Surveillance System. AASTEC epidemiologists use data from this system to assess health issues in AI/AN communities. We share this information with Tribal Leadership for **public health planning and response efforts**. Your healthcare facility can also use race and ethnicity data to provide culturally-sensitive care, match clinicians and patients through panel management, and develop an equity dashboard to track progress towards health equity.

Data Flow
Syndromic Surveillance System to Tribal Leadership



How to address misclassification

Allow patients to self-report their race and ethnicity as much as possible [2]

Educate staff and patients[2]

- Train staff on the importance of race and ethnicity and best practices for collecting it
- Develop a script for collecting race and ethnicity information
- Create flyers that teach patients why race and ethnicity data

Adjust the Electronic Health Record (EHR)[2]

- Ask for race and ethnicity in one question
- Allow the selection of multiple races/ethnicities
- Replace the "Unknown" option with "Refused/Don't know" to get an accurate measure of missing data
- Integrate EHR reminders to collect race and ethnicity data for new patients

Methods

Data from the NMDOH Syndromic Surveillance System were corrected for AI/AN racial misclassification through a linkage with Indian Health Service Epidemiology Data Mart (EDM) data. After linkage, 45.9% of individuals in EDM had a unique match in the Syndromic Surveillance System, resulting in 89,540 unique matched AI/AN patients. Crude incidence rates were calculated for nonfatal opioid overdoses using the corrected data and the ICD-9/ICD-10 codes for opioid-related overdose. Limitations: AI/AN patients who do not use Indian Health Service, Tribal, or Urban Indian Health facilities could not be matched and were not included in the analysis.

References: 1. Jim MA, Arias E, Seneca DS, et al. Racial Misclassification of American Indians and Alaska Natives by Indian Health Service Contract Health Service Delivery Area. Am J Public Health. 2014;104(S3):S295-S302. doi:10.2105/AJPH.2014.301933. 2. Lee WC, Veeranki SP, Serag H, Eschbach K, Smith KD. Improving the Collection of Race, Ethnicity, and Language Data to Reduce Healthcare Disparities: A Case Study from an Academic Medical Center. Perspect Health Inf Manag. 2016;13(Fall):1g.