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Journal

AAPI Nexus: Policy, Practice and Community, 12(1-2)

ISSN

1545-0317

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Publication Date

2014

DOI

10.17953/appc.12.1-2.g1251368p2710587

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Practitioners' Essay

Clinical Quality Indicators of Asian American, Native Hawaiian, and Other Pacific Islander Patients Seen at Health Resources and Services Administration-Supported Community Health Centers

Alek Sripipatana and Quyen Ngo-Metzger

Abstract

The Health Resources and Services Administration supports federally qualified health centers that provide health care services to more than 21.7 million low-income and medically underserved patients, the majority being racial/ethnic minorities. Nationally, Native Hawaiians and Pacific Islanders (NHPs) represent 1.3 percent of all health center patients; however, NHPs constitute more than half of the patients for some health centers. National data of health center clinical quality indicators were analyzed to explore potential differences between Native Hawaiian, Pacific Islander, and Asian American patients. Even among a group of medically underserved patients, health disparities were found in NHPs, illustrating the relevance of disaggregating data in identifying idiosyncratic differences deserving culturally appropriate interventions.

Background

The Health Resources and Services Administration (HRSA) provides support for federally qualified health centers (hereafter to referred to as health centers) that have provided comprehensive, culturally competent, quality primary health care services to medically underserved communities and vulnerable populations

for more than forty years (<http://www.bphc.hrsa.gov/about/index.html>). In 2013, health centers provided care to more than 21.7 million patients, of whom more than one-third were uninsured and nine out of ten had incomes at or below 200 percent of the federal poverty line (Uniform Data System, 2013). In addition to vulnerable and underserved populations, health centers provide services to a diversity of patients. In 2013, the majority (62 percent) of health center patients were racial/ethnic minorities and about 23 percent were best served in a language other than English (Uniform Data System, 2013). Native Hawaiians and Pacific Islanders (NHPIs) are among the groups that seek services at health centers.

Approximately 1.3 percent of all health center patients are Native Hawaiian or other Pacific Islander (Uniform Data System, 2013); however, the proportion of NHPI patients can be considerably higher for health centers nested in certain regions of the United States where there are pockets of NHPI communities. For example, in Hawai'i, NHPIs constitute more than half of the patients for some HRSA health centers in Honolulu and Maui Counties, and represent about 9 percent of patients for some health centers in Anchorage Municipality, Alaska, and San Mateo County, California (Uniform Data System, 2013).

Native Hawaiians and other Pacific Islanders are people who can trace their ancestry back to any of the original peoples of Hawai'i, Guam, Samoa, or other Pacific Islands (*Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity*, 1997). This definition includes k̄anaka maoli (Native Hawaiian), Chamorro, Samoan, Tongan, Tahitian, Fijian, Marshallese, Palauan, Pohnpeian, Chuukese, Yapese, Kosraen, and other groups in Polynesia, Micronesia, and Melanesia. These groups differ from other racial/ethnic groups in meaningful ways that impact their health and health care service use, such as sociodemographics, immigration experience, acculturation and assimilation into American society, environmental exposures (Harris, Simon, and Ibrahim, 2010; Takahashi et al., 2003; Takahashi et al., 1999), and familiarity and experience with the U.S. health care system. Given the important contributions the preceding factors have on health and health care, it is important to collect and analyze health-related data in ways that can detect these nuances, like disaggregating Asian Americans from Native Hawaiians and other Pacific Islanders.

An illustration of the importance of disaggregating Asian American, Native Hawaiian, and Pacific Islanders health data comes from analyzing HRSA's Uniform Data System (UDS) data. The UDS is an annual reporting requirement of all health centers receiving HRSA funding. The data collected by the UDS are used to ensure compliance with legislative and regulatory requirements, improve health center performance and operations, and report overall program accomplishments. The UDS collects data on patient demographics (e.g., age, race/ethnicity, language spoken, income, and insurance status), selected diagnoses and services (health and enabling), staffing and utilization, financing, and managed care enrollment and utilization. More detailed information on the UDS methodology and data collection protocol can be found online from HRSA's Bureau of Primary Health Care at <http://bphc.hrsa.gov/uds/>.

Although heterogeneous as illustrated in the preceding text, NHPs comprise a relatively numerically small population group, representing about 0.4 percent of the U.S. population (Hixson, Hepler, and Kim, 2012). In order to identify potential differences between Asian American, Native Hawaiian, and Pacific Islander patients served at HRSA-supported health centers, we analyzed clinical quality data that were collected by race/ethnicity in the 2013 UDS.

Table 1 summarizes clinical quality indicators that were captured by race/ethnicity in the 2013 UDS. The data in Table 1 reflect 1,202 HRSA grantees nationwide, in the Pacific Jurisdictions, and the Caribbean. The clinical quality indicators include the proportion of low and very low birthweight babies (<2,500 grams), the proportion of patients eighteen to eighty-five diagnosed with hypertension that had their last blood pressure reading of less than BP < 140/90, and the proportion of patients eighteen to seventy-five with diabetes that had HbA1c \leq 9 percent at their last test. Analysis of variance (ANOVA) was first performed to explore mean differences among race/ethnicities for each of the clinical quality indicators. Subsequent Scheffe's Tests were performed to compare clinical quality indicator means between two groups (e.g., between Asian Americans and Native Hawaiians, and between Asian Americans and other Pacific Islanders).

As illustrated in Table 1, NHPs performed markedly poorer on two of the three clinical quality indicators in comparison to

Table 1: Selected UDS Clinical Quality Indicators by Race and Ethnicity

Clinical Quality Indicators	Non-Hispanic White	Non-Hispanic Asian	Non-Hispanic Native Hawaiian	Non-Hispanic Other Pacific Islander	Non-Hispanic African American	Hispanic or Latino	Non-Hispanic American Indian/Alaska Native
No. of Patients	7,774,121	646,991	44,642	155,524	4,262,650	7,326,915	212,937
% Low and very low birth weight	8.4% (7.5, 9.2)	8.2% (6.9, 9.5)	6.2% (2.1, 10.4)	9.9% (7.1, 12.7)	11.4% (10.3, 12.4)	7.3% (6.5, 8.1)	7.4% (5.4, 9.4)
% Patients with controlled high blood pressure	64.6%* (63.9, 65.3)	64.7%* (63.0, 66.3)	59.3%* (55.4, 62.1)	62.5%* (59.9, 62.9)	56.6%* (55.6, 57.6)	64.7%* (63.8, 65.7)	62.1%* (60.1, 64.0)
% Patients with HbA1c ≤ 9%	69.7%* (68.9, 70.5)	74.4%* (72.7, 76.1)	58.8%* (53.9, 63.6)	66.2%* (63.4, 69.0)	66.4%* (65.3, 67.5)	64.9%* (63.8, 66.0)	65.6%* (63.3, 67.8)

Note: 688,678 Patients did not report or refused to provide race/ethnic information

Data Source: 2013 Uniform Data System

*Significant at p-value <0.05

their Asian American counterparts. The proportion of health center patients with controlled blood pressure was lower for Native Hawaiians (59.3 percent) and other Pacific Islanders (62.4 percent) than Asian Americans (64.7 percent). The proportion of patients with diabetes and a HbA1c ≤ 9 percent reading at their last visit was significantly lower for Native Hawaiians (58.8 percent) and other Pacific Islanders (66.2 percent) than for their Asian American counterparts (74.4 percent).

Discussion

The strategy of collecting racial/ethnic data with more granularity reveals meaningful differences among Asian Americans, Native Hawaiian, and Pacific Islanders, as presented in patients seen at HRSA-supported health centers. Even among a group of low-income and medically underserved patients, we found health-related disparities for NHPs. However, our finding that NHP patients with diabetes were less likely to have controlled blood glucose in comparison to Asian Americans and non-Hispanic whites is not unique to health centers. A study of patients from a private, non-profit, acute medical care facility in Hawai'i also found that NHP patients had significantly poorer blood glucose outcomes compared with their Asian American and non-Hispanic White counterparts, even though they did not find disparities in diabetes care (Lee et al., 2010). These data not only suggest that there may be unique trends in diabetes outcomes for NHPs, but more importantly, there may be idiosyncratic mechanisms driving these differences. For example, some researchers posit that how Native Hawaiians acculturate to mainstream American society is correlated with an increased likelihood of type 2 diabetes (Kaholokula et al., 2008).

Due to the numerically small nature of NHPs in the United States, data on these groups are routinely aggregated into an overall Asian and Pacific Islander category, or "other" category. Aggregating these data distorts the sociodemographic and health profile of NHPs and makes inferences about these populations impossible. Moreover, from a public health standpoint, the ability to flag important health issues and identify areas for early intervention are not possible without analyzing NHP data separately.

Meaningful differences become evident when health data on NHPs are analyzed separately from other racial and ethnic groups. National and regional data show that NHPs are dis-

advantaged in life expectancy in comparison to their Asian and non-Hispanic white counterparts (Panapasa et al., 2010; Park et al., 2009). Nationally, NHPs lead most other racial and ethnic groups in obesity (Pleis, Ward, and Lucas, 2010), and regional studies show that NHPs have difficulty managing obesity-related comorbidities like hypertension (Moy, Sallis, and David, 2010) and diabetes (Lee et al., 2010), and disproportionately suffer severe consequences from these comorbidities (Kanaya et al., 2011). Studies have also shown poorer perinatal health for NHPs. NHP mothers have been found to be less likely to access prenatal care or underuse it (Schempf et al., 2010; Kogan et al., 1998), which help explains disparities in NHP low birth weight babies and preterm births (“Maternal, Pregnancy, and Birth Characteristics of Asians and Native Hawaiians/Pacific Islanders—King County, Washington, 2003–2008,” 2011; Schempf et al., 2010). Analyses of national cancer surveillance data show that NHPs experience site-specific and gender disparities in comparison to Asian groups and non-Hispanic whites (Miller et al., 2008; Glanz et al., 2003). National data also suggest that cancer-related risk behaviors, such as cigarette smoking, are disproportionate among NHPs versus Asian Americans (Pleis, Ward, and Lucas, 2010).

In 1997, the U.S. Office of Management and Budget (OMB) officially acknowledged the diversity between Asian Americans and Pacific Islanders, and the importance of identifying health disparities within NHPs distinct from Asian American populations. Classification standards for collecting and reporting federal statistics on race and ethnicity were revised to establish two distinct groups: Asian Americans and Native Hawaiian and other Pacific Islanders (*Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity*, 1997). Panapasa and colleagues (2011) provide an overview of the status of implementation across six federal agencies of the revised OMB 15 standards since its adoption, as it relates to NHPs (Panapasa, Crabbe, and Kaholokula, 2011). On October 31, 2011, federal racial and ethnic data collection standards were again revisited by the U.S. Department of Health and Human Services (HHS) as required by Section 4302 of the Affordable Care Act (<http://minorityhealth.hhs.gov/templates/browse.aspx?lvl=2&lvlid=208>). The revised HHS racial and ethnic data collection strategies call for more granularity of NHP data, establishing separate categories for Native Hawaiian, Guamanian

or Chamorro, Samoan, and other Pacific Islander. The more detailed race and ethnic data collection and analyses will allow identification of health disparities within the NHPI umbrella that may not have been detected in the past. For instance, national surveys already collecting Native Hawaiian data separately from other Pacific Islanders, like the UDS and the National Immunization Survey, demonstrate that disparities indeed exist between Native Hawaiians and Pacific Islanders (Shaw, Santibanez, and Chu, 2008).

The ability to accurately collect race/ethnicity data helps guide the cultural relevance and effectiveness of public health intervention and policy for the populations they are intended. Successful public health practice begins with a more nuanced approach in data collection. This level of data collection and analysis enable tracking and accountability of achieving the Healthy People objective of reducing health disparities for all Americans (<http://www.healthypeople.gov/2020/about/disparitiesAbout.aspx>).

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