

By Leah Frerichs, Ronny Bell, Kristen Hassmiller Lich, Daniel Reuland, and Donald Warne

DOI: 10.1377/hlthaff.2019.00076
HEALTH AFFAIRS 38,
NO. 9 (2019): 1542–1549
©2019 Project HOPE—
The People-to-People Health
Foundation, Inc.

Regional Differences In Coverage Among American Indians And Alaska Natives Before And After The ACA

Leah Frerichs (leahf@unc.edu) is an assistant professor of health policy and management at the Gillings School of Global Public Health, University of North Carolina at Chapel Hill (UNC-CH).

Ronny Bell is a professor of public health at East Carolina University, in Greenville, North Carolina.

Kristen Hassmiller Lich is an associate professor of health policy and management at the Gillings School of Global Public Health, UNC-CH.

Daniel Reuland is a professor of medicine at the School of Medicine, UNC-CH.

Donald Warne is director of the School of Medicine and Health Sciences, University of North Dakota, in Grand Forks.

ABSTRACT Understanding regional variation in the effect of the Affordable Care Act (ACA) on health insurance coverage among vulnerable populations such as American Indian and Alaska Native adults has important policy implications. We used American Community Survey data for the period 2010–17 to examine unadjusted trends in health insurance coverage among American Indians and Alaska Natives across ten US regions. In each region we also used multivariate regression to evaluate the effects of the ACA on insurance coverage among American Indians and Alaska Natives and differences in effects between that group and non-Hispanic whites. In the West we observed significant improvements in public insurance among American Indians and Alaska Natives, and disparities compared to non-Hispanic whites were reduced following the ACA. Although there were unadjusted increases in insurance coverage across most regions, regression analyses suggested that there were no significant post-ACA changes in public or private health insurance coverage among American Indians and Alaska Natives in the Oklahoma, Bemidji, or Alaska regions. In sum, health insurance among American Indians and Alaska Natives increased after the ACA, but improvements were not consistent across regions. More attention is needed to improve insurance coverage among American Indians and Alaska Natives in midwestern regions.

Health disparities between American Indians and Alaska Natives and non-Hispanic whites are well documented.^{1,2} American Indians and Alaska Natives have some of the highest rates of poverty, illness, and death among racial/ethnic groups in the United States.^{3,4} The factors that contribute to these health disparities are complex. Health care access among American Indians and Alaska Natives is one important factor that is largely misunderstood.

Compared to non-Hispanic whites, American Indians and Alaska Natives are less likely to report having health care coverage or a provider.⁵

There are many barriers to health insurance coverage for them, including low employment rates and low trust in health care institutions.^{6,7} Prior estimates of uninsurance rates in this population have ranged between 18 percent and 35 percent, and differences by region have not been explored.⁸ Despite evidence of poor access, a common misunderstanding persists that the Indian Health Service (IHS), the federally funded system of clinics and hospitals for American Indians and Alaska Natives, meets their health care needs and fills insurance coverage gaps. However, the majority of American Indians and Alaska Natives live in urban areas not served by the IHS.^{9,10} Furthermore, the IHS is not a health in-

insurance program and is severely underfunded.¹¹

Per capita spending for the IHS in 2014 was \$3,107 compared to \$8,097 per person for health care spending nationally.¹² Because of this underfunding, public and private health insurance coverage has been increasingly viewed as necessary to improve American Indian and Alaska Native health care access. However, many barriers have prevented American Indians and Alaska Natives from obtaining health insurance, including stigma, controversy about participating in government-funded programs, limited and culturally insensitive outreach, and burdensome enrollment and eligibility requirements.^{13–17}

The Affordable Care Act (ACA) is a potential avenue to improve American Indian and Alaska Native health care access via public insurance. In states that expanded eligibility for Medicaid under the ACA, American Indians and Alaska Natives whose incomes meet eligibility guidelines can enroll in the program. This has the potential to improve access to health care services for this population and improve funding for IHS facilities through increased Medicaid-generated revenue.¹⁸ The ACA also included provisions to overcome enrollment barriers. For example, Section 2901c of the ACA made IHS facilities “express lane” agencies to simplify Medicaid enrollment for American Indians and Alaska Natives.

The ACA also included provisions for American Indians and Alaska Natives that have the potential to increase their rates of private health insurance coverage. Specifically, American Indians and Alaska Natives are allowed to enroll in private insurance plans through state or federal Marketplaces at any time rather than only during open enrollment periods, and those who purchase qualified health plans through a Marketplace have zero cost sharing for essential health benefits. However, one ACA provision exempted American Indians and Alaska Natives with access to the IHS from the shared responsibility payment, also known as the individual mandate. Because of the higher costs of private insurance compared to public insurance, the exemption has the potential to dissuade American Indians and Alaska Natives from enrolling in a private insurance plan. This provision was implemented because of the federal Indian trust responsibility to provide health care.¹⁹ Of note, the shared responsibility payment was recently fully repealed for all Americans and expired in 2019.

A study by Molly Frean and colleagues recently documented that the ACA decreased the uninsurance rate among American Indians and Alaska Natives at a national level, mostly the result of increased Medicaid coverage in Medicaid expan-

sion states.²⁰ These findings are promising, but the effectiveness of outreach programs regarding the ACA and insurance coverage has not been consistent across the US, and differences by region are unknown.¹⁷ Regional differences are especially relevant for American Indians and Alaska Natives because there are historically distinct regional differences in their relationships with the US government.

Amid ongoing debates about health care reform, it is critical to identify how the ACA has influenced changes in public and private health insurance coverage among American Indians and Alaska Natives across regions. This research is an important step toward identifying areas where successful outreach and enrollment practices were likely used, and areas where more resources should be targeted. The objective of this study was to evaluate differences across all US regions in health insurance coverage among American Indian and Alaska Native adults before and after the ACA went into effect. Specifically, our aims were to evaluate how public and private health insurance rates changed among the American Indian and Alaska Native and the non-Hispanic white adult populations across major IHS service area regions after implementation of the ACA, and to determine whether disparities in coverage between American Indians and Alaska Natives compared to non-Hispanic whites were reduced after the ACA.

Study Data And Methods

DATA Data for this study came from the American Community Survey (ACS) for the years 2010–17. The ACS is conducted by the US Census Bureau,²¹ consists of repeated cross-sections of about three million people per year, and is designed to be representative at the national and state levels. Our study sample included all adults ages 19–64 who identified themselves as American Indian or Alaska Native alone or as non-Hispanic white alone. Our total sample size was 140,182 for American Indians and Alaska Natives and 9,999,034 for non-Hispanic whites across the study years, with an average of 17,523 American Indians and Alaska Natives and 1,249,879 non-Hispanic whites per year. The ACS sample reflected sociodemographic differences between the two groups. Specifically, in 2017, 26.9 percent of American Indians and Alaska Natives were ages 19–29, 26.0 percent had incomes below 100 percent of the federal poverty level, and 60.1 percent were employed, compared to 22.5 percent, 11.8 percent, and 74.9 percent of non-Hispanic whites, respectively.

MEASURES We measured three dependent variables of insurance coverage among American

Indians and Alaska Natives:²⁰ having any insurance (public or private), public insurance, and private insurance.

► **ANY INSURANCE:** The ACS asks about current health care coverage and provides a list of possible sources, including the IHS. Respondents were defined as having any health insurance if they answered “yes” when asked if they had coverage from any one of the following sources: insurance through a current or former employer or union; insurance purchased directly from an insurance company; Medicare; Medicaid, Medical Assistance, or any kind of government assistance insurance plan for people with low incomes or a disability; TRICARE or other military health care; and health care provided by the Department of Veterans Affairs (VA). People who did not indicate at least one of the sources were considered uninsured. The IHS is not an insurance program, and it was not considered as such in this analysis.

► **PUBLIC INSURANCE:** Respondents were defined as having public insurance if they answered “yes” when asked if they had any one or of the following sources: Medicare; Medicaid, Medical Assistance, or any kind of government assistance plan for people with low incomes or a disability; TRICARE or other military health care; and VA health care. Respondents who indicated both a public and a private insurance source were categorized as publicly insured.

► **PRIVATE INSURANCE:** Respondents were defined as having private insurance if they indicated having coverage from any one of the following sources: insurance through a current or former employer or union or insurance purchased directly from an insurance company.

ANALYSES Descriptive and analytical analyses were run on repeated cross-sectional ACS data by year (2010–17). All analyses were conducted using SAS, version 9.4. We chose the regions based on IHS service areas, an important administrative unit for the IHS budget formulation process.²² We matched the service areas to the Public Use Microdata Areas (PUMAs) employed by the Census Bureau. There are twelve IHS areas, but we could not distinguish among the Phoenix, Navajo, and Tucson IHS regions using PUMAs because their boundaries did not align with PUMA boundaries. Thus, we collapsed the Navajo and Tucson regions into the Phoenix region so that the states of Arizona, Utah, and Nevada were in a single region. In sum, ten regions were used for our study.

For descriptive analyses, we examined the percentages of people who had any insurance, public insurance, and private insurance in each year in the period 2010–17. We compared American Indians and Alaska Natives to non-Hispanic

American Indians and Alaska Natives in midwestern regions remain in critical need of resources to improve health care access.

whites for each year, using sampling weights to provide representative estimates for the defined regions. Within this analysis we calculated the unadjusted change in the percentages with any, public, and private insurance coverage from 2013 to 2017.

For analytical purposes, we used an interrupted time-series design by implementing a level change impact model that used sampling weights and domain analyses to provide representative estimates across the defined US regions.²³ We estimated the level change impact model for each of the insurance variables. The models included a variable to represent the time elapsed since 2010 (in years), which we used to estimate a coefficient that represented the underlying time trend; and a variable that indicated either the pre-ACA (2010–13) or the post-ACA (2014–17) period, to estimate a coefficient that represented the ACA effect.²³ We also included a variable to adjust for early, 2014, or late Medicaid expansion status for each state. Finally, the models included a vector of covariates to adjust for the following sociodemographic factors: age, sex, income, employment status, marital status, residence in a rural or an urban area, and self-reported IHS coverage.

We first used the data on the American Indian and Alaska Native sample only, to estimate the effect of ACA provisions on insurance coverage in this population. To estimate the differential impact of ACA on American Indians and Alaska Natives compared to non-Hispanic whites, we used data from both racial/ethnic groups and the same regression model with an additional interaction term between race/ethnicity and the pre- or post-ACA variable. In all models, robust standard errors were adjusted for clustering using jackknife estimation.

LIMITATIONS This study had limitations. First, the ACS data are cross-sectional, and we were

not able to assess for causation or within-person effects.

Second, while our findings are representative of national and regional estimates, they cannot be extrapolated to specific tribes or smaller areas within those regions. Multiple years of data would need to be aggregated to obtain estimates for smaller areas, and using such data would have limited our ability to adjust for underlying time trends.

Third, there are limitations in the self-reported nature of the ACS data. People self-report their race, and it is not possible to determine whether American Indians and Alaska Natives in the sample were enrolled members of any tribe and, if they were, whether the tribe was recognized by the federal or state government. The ACA provisions for American Indians and Alaska Natives may differentially affect people based on their tribal enrollment status. For example, the shared responsibility payment exemption was more likely to be available to people enrolled in federally recognized tribes, compared to people in state-recognized tribes. People were also asked to self-report insurance coverage and may have interpreted *coverage* differently.

Study Results

Exhibits 1–3 show the estimated changes in the percentages of American Indians and Alaska Natives with any, public, and private health insurance coverage, respectively, from 2013 to 2017 (major ACA provisions were implemented between those two years). Figures depicting the trends in insurance coverage from 2010 to 2017 among American Indians and Alaska Natives and non-Hispanic whites for each region are in the online appendix.²⁴

All regions except Oklahoma had increases in insurance coverage from 2013 to 2017 (exhibit 1). American Indians and Alaska Natives in the Billings, Great Plains, and Albuquerque regions had the lowest baseline rates of insurance coverage (see the appendix).²⁴ Following the ACA, American Indians and Alaska Natives in the Billings and Albuquerque regions had the most substantial gains in any insurance coverage (exhibit 1). Specifically, insurance coverage rates increased from 37.3 percent in 2013 (standard error: 2.7) to 64.0 percent in 2017 (SE: 2.6) in the Billings region, and from 51.0 percent (SE: 1.6) to 73.9 percent (SE: 1.5) in the Albuquerque region (see the appendix).²⁴ By 2017 the Albuquerque region had a relatively high rate of insurance coverage compared to other regions, while the rate remained relatively low in Billings.

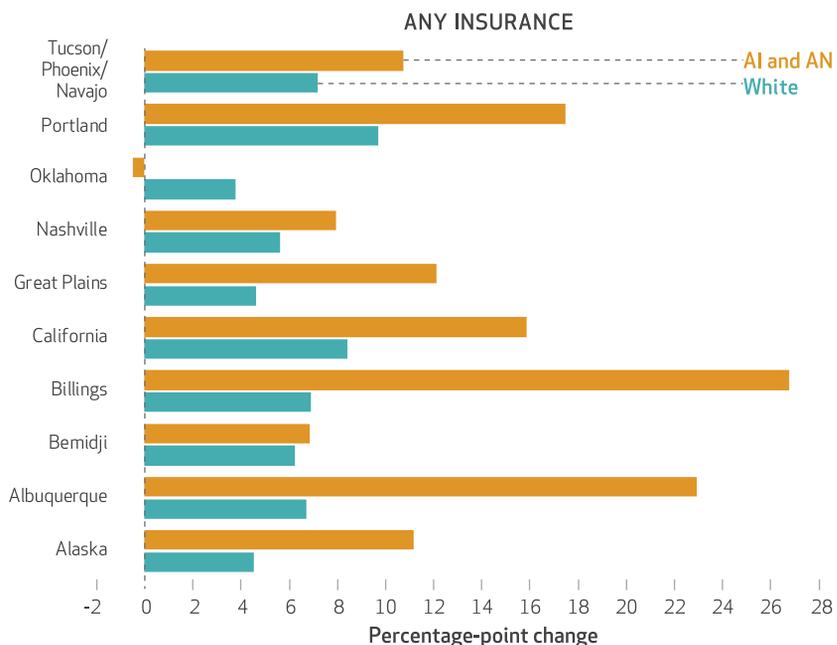
American Indians and Alaska Natives in the Southwest (Albuquerque and Tucson/Phoenix/

Navajo regions), West Coast (California and Portland regions), Billings, and Alaska regions had the most substantial increases in public insurance coverage from 2013 to 2017 (exhibit 2). Those in the Albuquerque region had the greatest increase, from 23.5 percent (SE: 1.4) to 44.4 percent (SE: 1.6) (see the appendix).²⁴ Across regions, gains in private insurance coverage were less substantial (exhibit 3). American Indians and Alaska Natives in the Billings region had the greatest increase in private insurance coverage (13.4 percentage points) from 2013 to 2017.

The interrupted time-series analysis suggests that the ACA affected public insurance coverage in regions of the West Coast and the Southwest (exhibit 4). Among American Indians and Alaska Natives in Albuquerque, although private insurance coverage did not increase significantly in the post-ACA period, the ACA had an estimated effect on public insurance coverage of 6.8 percentage points (SE: 2.3). In contrast, public insurance coverage among American Indians and Alaska Natives in the Billings region did not change with statistical significance after the ACA, but private insurance coverage did. Besides Billings, the only other region where American Indians and Alaska Natives experienced a significant post-ACA increase in private insurance cov-

EXHIBIT 1

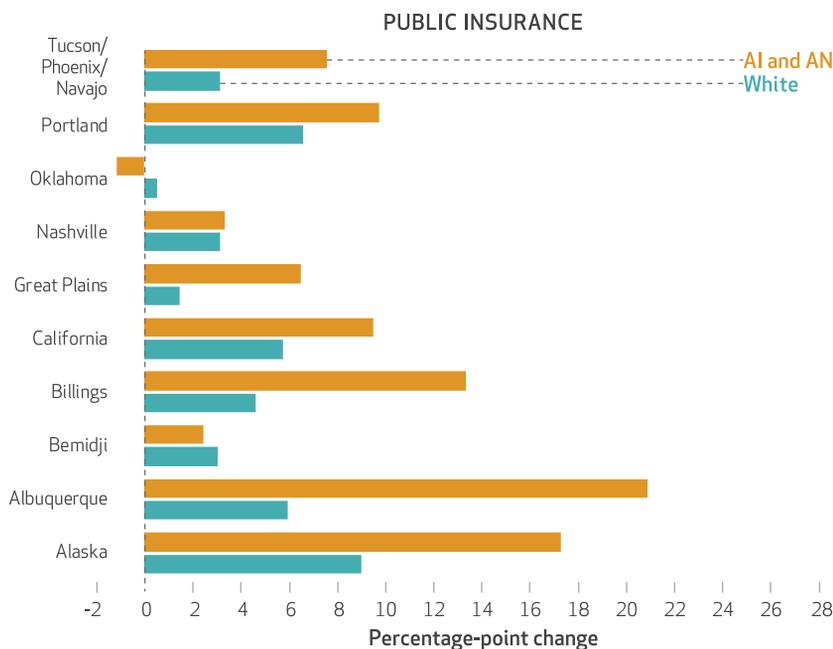
Unadjusted percentage-point changes from 2013 to 2017 in the American Indian and Alaska Native (AI and AN) and non-Hispanic white populations with any health insurance coverage, by Indian Health Service region



SOURCE Authors' analysis of data for 2013–17 from the American Community Survey.

EXHIBIT 2

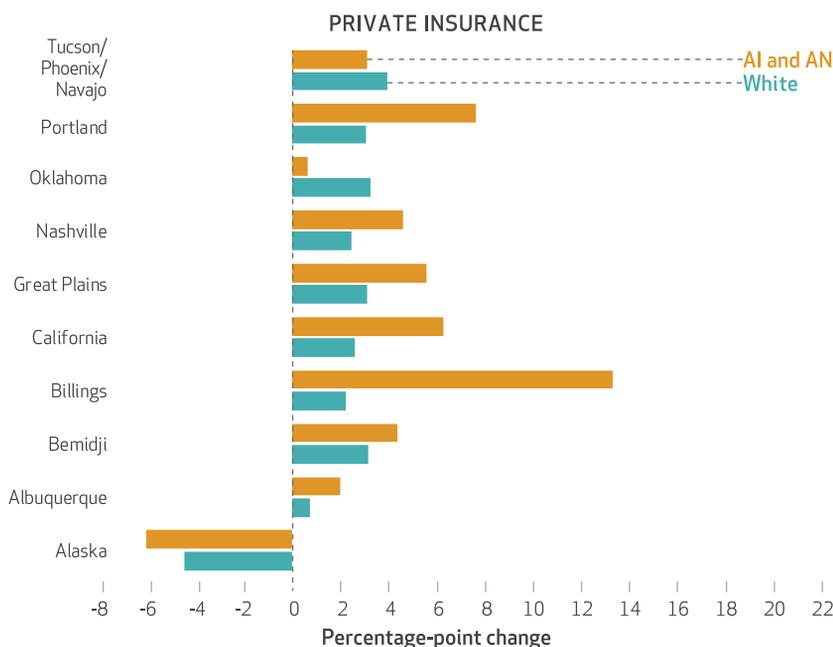
Unadjusted percentage-point changes from 2013 to 2017 in the American Indian and Alaska Native (AI and AN) and white populations with public health insurance coverage, by Indian Health Service region



SOURCE Authors' analysis of data for 2013–17 from the American Community Survey.

EXHIBIT 3

Unadjusted percentage-point changes from 2013 to 2017 in the American Indian and Alaska Native (AI and AN) and white populations with private health insurance coverage, by Indian Health Service region



SOURCE Authors' analysis of data for 2013–17 from the American Community Survey.

erage was Nashville.

In all but one case, the rates of having any, public, or private insurance did not increase significantly after the ACA among American Indians and Alaska Natives in the Alaska and Midwest (Bemidji, Great Plains, and Oklahoma) regions. The one exception was an estimated 7.0-percentage-point decrease (SE: 3.3) in public insurance coverage in the Great Plains. In contrast, private insurance coverage increased in the Great Plains after the ACA, although the effect was of marginal significance ($p = 0.08$).

Across the entire US, the post-ACA effects were greater for American Indians and Alaska Natives than for non-Hispanic whites from 2010 to 2017. However, there was variation by region. Compared to other regions, American Indians and Alaska Natives in the Albuquerque region had the highest increase in public insurance coverage, relative to non-Hispanic whites. Specifically, American Indians and Alaska Natives had an 11.3-percentage-point (SE: 1.1) greater relative increase in public insurance coverage after the ACA. Post-ACA increases in public insurance coverage were also significantly greater for American Indians and Alaska Natives than for non-Hispanic whites in the Alaska, Tucson/Phoenix/Navajo, California, and Nashville regions. Private insurance coverage did not increase significantly more among American Indians and Alaska Natives than among non-Hispanic whites in any region. In fact, there was a significant post-ACA relative decrease in private insurance coverage among American Indians and Alaska Natives in Alaska.

Discussion

Our study contributes new evidence about regional differences in health insurance coverage among American Indians and Alaska Natives in the US. We found evidence that insurance coverage among this population has improved, but the estimated impact of the ACA on the changes (once other demographic factors were accounted for) has not been wholly positive or equitable across regions. Interrupted time-series analyses suggested that regions including Albuquerque, California, Nashville, and Portland regions generally had greater improvements in any coverage and public insurance coverage, and coverage disparities between American Indians and Alaska Natives and non-Hispanic whites in these same regions decreased. Conversely, although some regions with the lowest baseline levels (and greatest opportunity for improvement) had significant increases in insurance coverage (for example, Albuquerque), other regions did not have proportionately consistent changes. Thus, re-

gions in the Midwest (Billings and the Great Plains) continued to have persistently low insurance coverage rates, and disparities did not diminish significantly there.

The ACA has been lauded as an unprecedented opportunity to reduce racial/ethnic health disparities along a variety of dimensions.^{25,26} Several studies have documented improvements in insurance coverage among African American and Hispanic adults, compared to non-Hispanic white adults.²⁷⁻²⁹ Our study documented similar reductions in insurance disparities between the American Indian and Alaska Native and the non-Hispanic white populations, but it also showed that the effect of the ACA differed by region. Although studies of African American and Hispanic populations have not examined regional differences, they have noted differences in coverage changes based on state Medicaid expansion status.²⁷⁻²⁹ Changes in public insurance coverage among American Indians and Alaska Natives have been shown to be influenced by Medicaid expansion,²⁰ and variability in Medicaid expansion status across states likely contributed to our findings. However, we also found evidence that suggested differential effects of Medicaid expansion across regions. For example, there were clear post-ACA increases in public insurance in regions that encompassed states that expanded Medicaid (California, Portland, Tucson/Phoenix/Navajo, and Albuquerque). Conversely, public insurance coverage did not increase after the ACA among American Indians and Alaska Natives in Alaska, a Medicaid expansion state, and there was a significant post-ACA decrease in public insurance in the Great Plains region, which contains two Medicaid expansion states. This finding highlights the importance of considering how insurance policies are implemented and their potential to interact with contextual influences across regions (for instance, differences in culture and historical relationships with governmental institutions).

We found regional differences in insurance coverage among American Indians and Alaska Natives that parallel the results of studies documenting regional differences in health outcomes. Studies have found that American Indians and Alaska Natives living in coastal regions have better health outcomes compared to those living in midwestern regions of the US and in Alaska for cancer,³⁰ all-cause mortality,³¹ and heart disease.³² Conversely, non-Hispanic whites in midwestern regions, including those with lower incomes, tend to have better health outcomes, such as lower all-cause mortality, than those in coastal regions.^{33,34} Our finding that the regions with most health disparities between the American Indian and Alaska Native and the non-

EXHIBIT 4

Estimated effects of the Affordable Care Act on health insurance coverage for the American Indian and Alaska Native (AI and AN) population and differential effects on AI and AN coverage relative to non-Hispanic white coverage from 2010 to 2017, by Indian Health Service (IHS) region

	Insurance		
	Any	Public	Private
Percentage-point effect on coverage			
All US	4.2****	2.0****	2.2***
IHS region			
Alaska	0.3	2.1	-1.7
Albuquerque	8.0****	6.8****	1.2
Bemidji	2.7	-1.5	4.2
Billings	3.9	-4.1	8.1**
California	6.8***	4.2**	2.6
Great Plains	-1.5	-7.0**	5.5
Nashville	4.4****	0.6	3.8**
Oklahoma	2.7	-0.3	3.0
Portland	8.6****	7.4****	1.2
Tucson/Phoenix/Navajo	3.7**	5.4****	-1.7
Percentage-point differential effect on AI and AN population, compared to non-Hispanic white population			
All US	3.4****	2.9****	0.5
IHS region			
Alaska	2.2	6.2****	-4.0**
Albuquerque	13.4****	11.3****	2.1
Bemidji	0.6	-0.5	1.1
Billings	5.9****	2.6	3.3
California	4.9****	5.1****	-0.2
Great Plains	1.2	0.5	0.7
Nashville	2.7***	1.4**	1.3
Oklahoma	-0.7	-0.2	-0.5
Portland	3.9****	2.6	1.3
Tucson/Phoenix/Navajo	0.4	2.1**	-1.8

SOURCE Authors' analysis of data for 2010-17 from the American Community Survey. **NOTE** The percentage-point effects on coverage are from an interrupted time-series analysis that adjusted for time trends and sociodemographic covariates. **p < 0.05 ***p < 0.01 ****p < 0.001

Hispanic white populations had the lowest baseline coverage rates and smallest improvements in insurance coverage is concerning, and it highlights a need to bolster efforts to improve health care access in these geographic areas. However, it is positive to note the increases in coverage in the West Coast, Phoenix/Tucson/Navajo, and Nashville regions, where there are high numbers of American Indians and Alaska Natives living in urban areas who likely have limited access to IHS services.³⁵

Our study has several important implications. Our findings highlighted several regions of greatest need. First, it is concerning that American Indians and Alaska Natives in the Oklahoma region had little improvement in insurance coverage and are falling behind those in other regions. Second, our findings suggest that improving insurance coverage among American Indians and Alaska Natives in midwestern regions is im-

portant. Compared to the coastal regions, the midwestern regions have had fewer states expand Medicaid. Notably, state funds are not used to pay for Medicaid-covered services in IHS facilities (either federal or tribally operated) because states are reimbursed at 100 percent (through the federal medical assistance percentage) for those services.^{19,36} In addition, states may now develop Care Coordination Agreements in which the 100 percent federal medical assistance percentage can follow the American Indian or Alaska Native patient into private-sector facilities.³⁷ Because of these federal reimbursement policies, states could consider expanding Medicaid for American Indians and Alaska Natives alone, since that would be cost-neutral to state budgets. However, the on-the-ground implementation of these policies (including billing procedures) must be closely monitored because variation in local historical relationships between tribes, states, the federal government, and health care institutions may influence their ultimate implementation and impact.

Health insurance coverage among American Indians and Alaska Natives is underresearched, and future work should expand understanding of not only how policies improve insurance coverage, but also how they affect health outcomes. Qualitative research to retrospectively examine

factors that led to the improvements in private insurance coverage among American Indians and Alaska Natives in the Billings region would be helpful to increase understanding of successful outreach and enrollment practices that could be replicated in other regions. Finally, prior research has found that American Indians and Alaska Natives with insurance continue to report barriers to health care services, such as additional out-of-pocket expenses, transportation, and language and cultural issues.^{6,7} Thus, more research is also needed to understand how changes in insurance coverage influence health care access, quality of care, and health outcomes for American Indians and Alaska Natives.

Conclusion

We found that there have been improvements in insurance coverage among American Indians and Alaska Natives following implementation of the major provisions of the ACA. However, disparities remain, and American Indians and Alaska Natives in midwestern regions remain in critical need of resources to improve health care access. As the nation continues to debate health care reform, data on American Indians and Alaska Natives need to be included in the conversation. ■

NOTES

- Blue Bird Jernigan V, Peercy M, Branam D, Saunkeah B, Wharton D, Winkleby M, et al. Beyond health equity: achieving wellness within American Indian and Alaska Native communities. *Am J Public Health*. 2015;105(Suppl 3):S376–9.
- Jones DS. The persistence of American Indian health disparities. *Am J Public Health*. 2006;96(12):2122–34.
- Indian Health Service. Disparities [Internet]. Rockville (MD): IHS; 2018 Apr [cited 2019 May 22]. Available from: <https://www.ihs.gov/newsroom/factsheets/disparities/>
- Sarche M, Spicer P. Poverty and health disparities for American Indian and Alaska Native children: current knowledge and future prospects. *Ann N Y Acad Sci*. 2008;1136:126–36.
- Cobb N, Espey D, King J. Health behaviors and risk factors among American Indians and Alaska Natives, 2000–2010. *Am J Public Health*. 2014;104(Suppl 3):S481–9.
- Call KT, McAlpine DD, Johnson PJ, Beebe TJ, McRae JA, Song Y. Barriers to care among American Indians in public health care programs. *Med Care*. 2006;44(6):595–600.
- Zuckerman S, Haley J, Roubideaux Y, Lillie-Blanton M. Health service access, use, and insurance coverage among American Indians/Alaska Natives and whites: what role does the Indian Health Service play? *Am J Public Health*. 2004;94(1):53–9.
- Johnson PJ, Blewett LA, Call KT, Davern M. American Indian/Alaska Native uninsurance disparities: a comparison of 3 surveys. *Am J Public Health*. 2010;100(10):1972–9.
- Rutman S, Phillips L, Sparck A. Health care access and use by urban American Indians and Alaska Natives: findings from the National Health Interview Survey (2006–09). *J Health Care Poor Underserved*. 2016;27(3):1521–36.
- Indian Health Service. Urban Indian Health Program [Internet]. Rockville (MD): IHS; 2018 Oct [cited 2019 May 22]. Available from: <https://www.ihs.gov/newsroom/factsheets/uihp/>
- Warne D, Frizzell LB. American Indian health policy: historical trends and contemporary issues. *Am J Public Health*. 2014;104(Suppl 3):S263–7.
- National Congress of American Indians. Fiscal year 2017 Indian Country budget request: upholding the promises, respecting tribal governance: for the good of the people [Internet]. Washington (DC): NCAI; 2016 [cited 2019 May 22]. Available from: <http://www.ncai.org/resources/ncai-publications/NCAI-2017-BudgetReport-Layout-FINAL.pdf>
- Lurie N, Zhan C, Sangl J, Bierman AS, Sekscenski ES. Variation in racial and ethnic differences in consumer assessments of health care. *Am J Manag Care*. 2003;9(7):502–9.
- Miranda J, Duan N, Sherbourne C, Schoenbaum M, Lagomasino I, Jackson-Triche M, et al. Improving care for minorities: can quality improvement interventions improve care and outcomes for depressed minorities? Results of a randomized, controlled trial. *Health Serv Res*. 2003;38(2):613–30.
- Schneider EC, Zaslavsky AM, Epstein AM. Racial disparities in the quality of care for enrollees in Medicare managed care. *JAMA*. 2002;287(10):1288–94.
- Weech-Maldonado R, Elliott MN, Morales LS, Spritzer K, Marshall GN, Hays RD. Health plan effects on patient assessments of Medicaid managed care among racial/ethnic minorities. *J Gen Intern Med*. 2004;19(2):136–45.
- Willging CE, Sommerfeld DH, Jaramillo ET, Lujan E, Bly RS,

- Debenport EK, et al. Improving Native American elder access to and use of health care through effective health system navigation. *BMC Health Serv Res*. 2018;18(1):464.
- 18 Artiga S, Ubri P, Foutz J. Medicaid and American Indians and Alaska Natives [Internet]. San Francisco (CA): Henry J. Kaiser Family Foundation; 2017 Sep 7 [cited 2019 May 22]. Available from: <https://www.kff.org/medicaid/issue-brief/medicaid-and-american-indians-and-alaska-natives/>
- 19 Skinner D. The politics of Native American health care and the Affordable Care Act. *J Health Polit Policy Law*. 2016;41(1):41–71.
- 20 Frean M, Shelder S, Rosenthal MB, Sequist TD, Sommers BD. Health reform and coverage changes among Native Americans. *JAMA Intern Med*. 2016;176(6):858–60.
- 21 Census Bureau. American Community Survey (ACS) [Internet]. Washington (DC): Census Bureau; [last revised 2018 Jun 17; cited 2019 May 22]. Available from: <https://www.census.gov/programs-surveys/acs/about.html>
- 22 Indian Health Service. Locations [Internet]. Rockville (MD): IHS; [cited 2019 May 16]. Available from: <https://www.ihs.gov/locations/>
- 23 Bernal JL, Cummins S, Gasparrini A. Interrupted time series regression for the evaluation of public health interventions: a tutorial. *Int J Epidemiol*. 2017;46(1):348–55.
- 24 To access the appendix, click on the Details tab of the article online.
- 25 Abdus S, Mistry KB, Selden TM. Racial and ethnic disparities in services and the Patient Protection and Affordable Care Act. *Am J Public Health*. 2015;105(Suppl 5):S668–75.
- 26 Sealy-Jefferson S, Vickers J, Elam A, Wilson MR. Racial and ethnic health disparities and the Affordable Care Act: a status update. *J Racial Ethn Health Disparities*. 2015;2(4):583–8.
- 27 Buchmueller TC, Levinson ZM, Levy HG, Wolfe BL. Effect of the Affordable Care Act on racial and ethnic disparities in health insurance coverage. *Am J Public Health*. 2016;106(8):1416–21.
- 28 Chen J, Vargas-Bustamante A, Mortensen K, Ortega AN. Racial and ethnic disparities in health care access and utilization under the Affordable Care Act. *Med Care*. 2016;54(2):140–6.
- 29 McMorrow S, Long SK, Kenney GM, Anderson N. Uninsurance disparities have narrowed for black and Hispanic adults under the Affordable Care Act. *Health Aff (Millwood)*. 2015;34(10):1774–8.
- 30 White MC, Espey DK, Swan J, Wiggins CL, Ehemann C, Kaur JS. Disparities in cancer mortality and incidence among American Indians and Alaska Natives in the United States. *Am J Public Health*. 2014;104(Suppl 3):S377–87.
- 31 Kunitz SJ, Veazie M, Henderson JA. Historical trends and regional differences in all-cause and amenable mortality among American Indians and Alaska Natives since 1950. *Am J Public Health*. 2014;104(Suppl 3):S268–77.
- 32 Veazie M, Ayala C, Schieb L, Dai S, Henderson JA, Cho P. Trends and disparities in heart disease mortality among American Indians/Alaska Natives, 1990–2009. *Am J Public Health*. 2014;104(Suppl 3):S359–67.
- 33 Case A, Deaton A. Mortality and morbidity in the 21st century. *Brookings Pap Econ Act*. 2017;2017(1):397–476.
- 34 Murray CJ, Kulkarni SC, Michaud C, Tomijima N, Bulzacchelli MT, Iandiorio TJ, et al. Eight Americas: investigating mortality disparities across races, counties, and race-counties in the United States. *PLoS Med*. 2006;3(9):e260.
- 35 Centers for Disease Control and Prevention. American Indian and Alaska Native metro populations [Internet]. Atlanta (GA): CDC; [last reviewed 2018 Dec 21; cited 2019 May 22]. Available from: <https://www.cdc.gov/tribal/tribes-organizations-health/tribes/metro-populations.html>
- 36 Warne D, Delrow D, Angus-Hornbuckle C, Shelton BL. Impact of ACA repeal on American Indians and Alaska Natives [Internet]. Fargo (ND): North Dakota State University; 2017 Mar [cited 2019 Jun 18]. Available from: <https://www.shvs.org/wp-content/uploads/2017/04/State-Network-AIAN-Report-Donald-Warne-April-2017.pdf>
- 37 Wachino V. Federal funding for services “received through” an IHS/tribal facility and furnished to Medicaid-eligible American Indians and Alaska Natives [Internet]. Baltimore (MD): Centers for Medicare and Medicaid Services; 2016 Feb 26 [cited 2019 May 22]. Available from: <https://www.medicaid.gov/federal-policy-guidance/downloads/sho022616.pdf>