



## Indian Health Service and Health Care Affordability Issues Among American Indian/Alaska Native People by Rurality

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### Key Findings

- American Indian/Alaska Native (AI/AN) rural residents were more likely to receive Indian Health Service (IHS) care than AI/AN urban residents (47.3% vs 9.1%,  $p < 0.01$ ).
- Around 50% of AI/AN residents from both rural and urban areas reported worry about paying medical bills, with around 15% reporting problems paying medical bills and around 10% reporting being unable to pay medical bills entirely.
- AI/AN individuals who were both uninsured and not receiving IHS care were most likely to report worrying about paying medical bills when compared to any other health service provider/insurer category, in both rural (80.0%) and urban (80.1%) areas. In rural areas, those privately insured and not receiving IHS care were least likely to report worry (41.1%,  $p < 0.001$ ), while in urban areas, those receiving IHS care were the least likely to report worry (36.8%,  $p < 0.001$ ).
- Rural AI/AN residents who were both uninsured and not receiving IHS care were most likely to report problems paying medical bills (24.1%) and being unable to pay medical bills entirely (16.7%), while those receiving IHS care were least likely to report problems paying medical bills (8.8%,  $p < 0.05$ ) or being unable to pay medical bills entirely (6.5%,  $p < 0.05$ ). Among urban AI/AN residents, there was no difference by health service provider/insurer status in reports of these issues.

### Purpose

The Indian Health Service (IHS) provides comprehensive free health services to eligible individuals, and may alleviate health care affordability issues for American Indian and Alaska Native (AI/AN) people; however, the IHS operates overwhelmingly in rural areas, and data on rural/urban differences in IHS use and health care affordability issues among AI/AN people are lacking. In this policy brief, we examine rural/urban differences in rates of health care affordability and IHS use among AI/AN people, as well as within rural AI/AN residents.

### Background

According to the 2020 U.S. Census, there are about 3.7 million individuals who identify solely as American Indian or Alaska Native (AI/AN) living in the U.S. In addition, there are an estimated 5.9 million individuals who identify as AI/AN and another race, which results in a combined population of about 9.7 million AI/AN people (2.9% of the population).<sup>1</sup> The majority (54%) of AI/AN people live in rural areas, with 68% living either on or near their tribal homelands.<sup>2</sup>

As part of the treaties with the federal government, the U.S. government has a trust responsibility to provide for health care for tribal citizens. This includes the Indian Health Service (IHS), which was started in 1955 with the responsibility for providing comprehensive health services to enrolled members of federally recognized Native nations.<sup>3-5</sup> The IHS is not insurance, however those eligible for IHS services -such as enrolled members of federally recognized Native nations and their spouses and dependents-<sup>5</sup> do not have to pay for the care they receive from an IHS facility. The IHS provides two types of health care services through a network of reservation-based and contracted hospitals and clinics: direct health care services, which are

provided directly by an IHS facility; and purchased/referred care (PRC), which are provided by non-IHS facilities via contracts with the IHS.<sup>6-8</sup> Any enrolled member of a federally recognized Native nation is eligible for direct care at any IHS facility provided that the facility has the staff and capability to provide the care.<sup>8</sup> Eligibility for PRC is stricter than for direct care; PRC-eligible individuals must either 1) reside on the reservation of any federally recognized Native nation, or 2) reside within the PRC delivery area (PRCDA) for their nation.<sup>6,8</sup> If an eligible individual moves away from their home reservation/PRCDA, IHS will provide PRC for 180 days following the move, after which the individual is no longer eligible for PRC services.<sup>6</sup>

Native nations may choose to contract with the IHS to plan, conduct, and administer programs and services (Title I - federally administered), or compact with the IHS to assume full funding and control of programs and services (Title V - tribally administered).<sup>9-11</sup> These tribally administered programs may choose to restrict services to enrolled citizens of their own nation.<sup>6</sup> Additionally, the IHS is mandated by Congress to provide contract support costs (CSC) to nations that choose to self-administer health care programs, and these nations are also permitted to bill outside insurers directly, although they are required to spend resultant revenue on health care.

Rural residents experience poorer access to health care and poorer health outcomes due to geographic and sociodemographic obstacles such as longer transportation times, lower average household income, and older population age. Rural AI/AN people experience even more poorer outcomes for a myriad of reasons, including those listed above.<sup>12-17</sup> Less is known, however, about how access to care – including affordability issues – differs by rurality for AI/AN people. This addresses that gap by examining three measures of health care affordability and how they correlate with IHS usage and insurance status for rural and urban AI/AN adults.

## Approach

In this study, we used data from the 2019 – 2022 National Health Survey (NHIS), accessed through IPUMS USA at the University of Minnesota.<sup>18</sup> We

limited the data to respondents who identified as American Indian/Alaska Native (AI/AN), including those who identified with one or more other racial/ethnic groups, for a total sample size of  $N = 1,920$ , and further restricted to rural respondents for the within-rural analysis ( $N = 634$ ). Rural was defined using the publicly available National Center for Health Statistics (NCHS) definition as living in a nonmetropolitan area.<sup>19</sup>

Health care service provider/insurer was categorized as: receiving IHS care, insured but not receiving IHS care (including Medicare only, Medicaid/Medicare, or other government insurance such as VA, which were coded as public insurance; and private insurance), and not possessing any insurance nor receiving IHS care. If an individual reported receiving IHS care and one or more additional types of servicer/insurer, we measured them as receiving IHS care. If an individual reported receiving both public and private insurance, we measured them as receiving public insurance. (*Note: the annual report on the U.S.' health status<sup>20</sup> presented to the President and Congress considers individuals who use IHS and no other health service provider/insurer as uninsured, as IHS is not technically insurance.*)

Health care affordability issues were measured using survey respondents' answers to three questions. The first question, "If you get sick or have an accident, how worried are you that you will be able to pay your medical bills?", had response options of "very", "somewhat", and "not at all" which we dichotomized to "yes" ("very" or "somewhat") and "no" ("not at all"). The second and third questions, "In the past 12 months, did you or anyone in the family have problems paying or were unable to pay any medical bills?", and "Do you/does anyone in your family have any medical bills that you are unable to pay at all?" already had dichotomized responses. Respondents were only asked the last question if they answered "yes" to the second question.

We used chi-square tests to determine statistically significant ( $p < 0.05$ ) differences in use of IHS services and in health care affordability issues between and among rural and urban AI/AN respondents. We employed survey weights to generate nationally representative estimates.

## Results

Figure 1 shows differences in health service provider/insurer among AI/AN adults by rurality. Health service provider/insurer differed significantly by rurality. Almost one-half (47.3%) of rural AI/AN adults reported receiving IHS care compared to only 9.1% of urban AI/AN adults ( $p<0.01$ ). A lower percentage of rural AI/AN adults reported having public insurance (26.1%) or private insurance (15.7%) and not receiving IHS care compared to 39.3% and 35.2% of urban AI/AN adults (public insurance  $p<0.05$ ; private insurance  $p<0.01$ ). Similarly, a lower percentage of rural AI/AN adults reported being uninsured and not receiving IHS care (10.8%) than urban AI/AN adults (16.5%;  $p<0.01$ ).

Figure 2 shows differences in health care affordability issues by rurality. There were no statistically significant differences in health care affordability issues between rural and urban AI/AN people; however, around 50% from both areas reported worrying about medical bills, around 15% reported problems paying medical bills, and around 10% reported being unable to pay medical bills entirely.

Table 1 shows the associations between health care affordability issues and insurance categories among rural and urban AI/AN people. Among rural AI/AN residents, health care affordability issues differed significantly between the service provider/insurer categories. Similar proportions of people receiving IHS care (45.3%), publicly insured people not receiving IHS care (41.3%), and privately insured people not receiving IHS care (47.5%) reported worry about medical bills, while four-fifths (80.0%) of uninsured people not receiving IHS care reported worry ( $p<0.001$ ). Only 8.8% of people receiving IHS care reported problems paying medical bills, compared to 18.6% of publicly-insured and 16.4% of privately insured people not receiving IHS care and 24.1% of uninsured people not receiving IHS care ( $p<0.05$ ). Only 6.5% of people receiving IHS care reported being unable to pay medical bills, compared to 11.4% of publicly insured and 12.4% of privately insured people not receiving IHS care and 16.7% of uninsured people not receiving IHS care ( $p<0.05$ ).

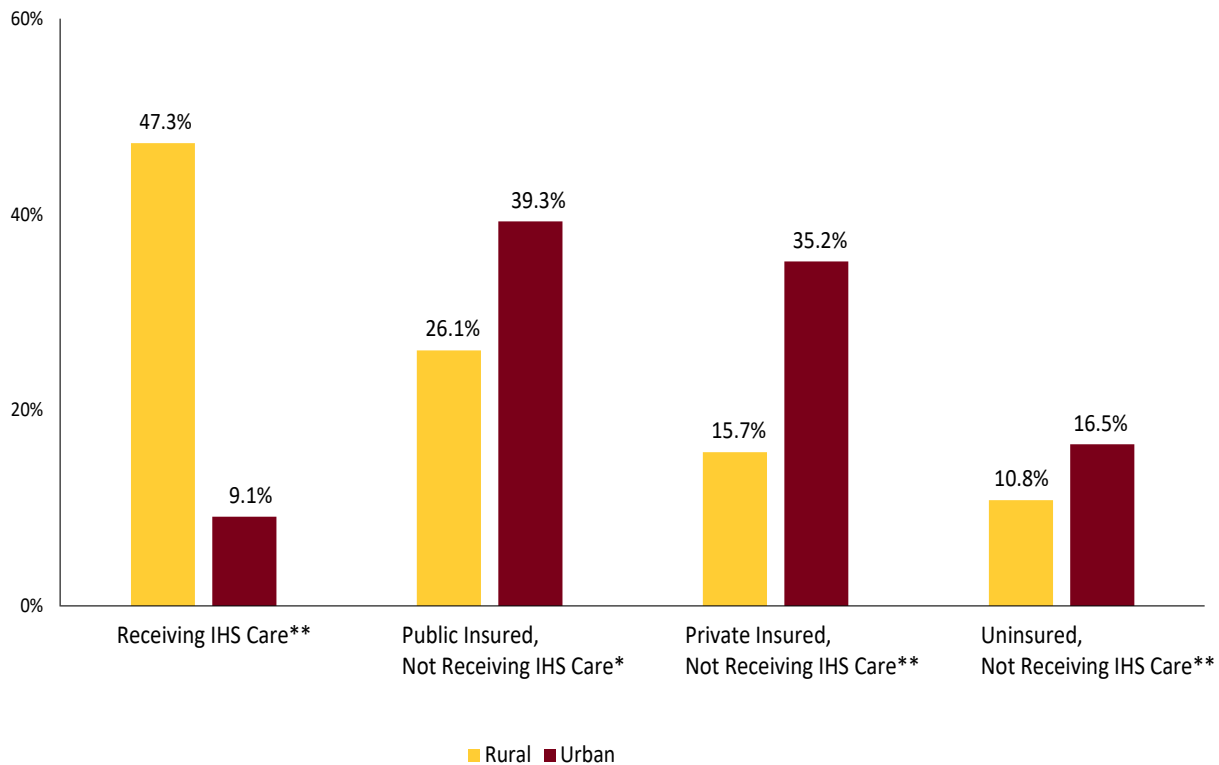
Among the urban AI/AN population, worries about medical bills differed significantly between the service provider/insurer categories. A lower percentage of people receiving IHS care (36.8%) reported worry about medical bills, compared to 44.1% of publicly insured and 47.9% of privately insured people not receiving IHS care and 80.1% of uninsured people not receiving IHS care ( $p<0.001$ ). Problems paying medical bills and inability to pay medical bills did not differ significantly between the service provider/insurer categories in the urban AI/AN population. Rates of having problems paying medical bills or being unable to pay medical bills were notably higher among urban residents receiving IHS care than among rural residents receiving IHS care.

## Discussion and Implications

Rural AI/AN adults were more likely to receive IHS care, and less likely to be insured but not receiving IHS care, than urban AI/AN adults. These results are unsurprising as almost all IHS facilities are located in and serve rural areas, including reservations, and are often the only nearby choice for health care.<sup>21</sup> Additionally, rural residents were less likely than urban residents to have employer-sponsored (private) health insurance, consistent with prior research.<sup>22</sup> Rural AI/AN adults were less likely than urban AI/AN adults to be uninsured and not receiving IHS care, which is surprising; previous research points to rates of uninsurance as higher in rural counties than urban counties, despite the gap narrowing in recent years.<sup>23</sup> Health insurance coverage among AI/AN people by rurality is an understudied topic, and future research should investigate whether the overall patterns of rural/urban uninsurance are applicable for AI/AN people.

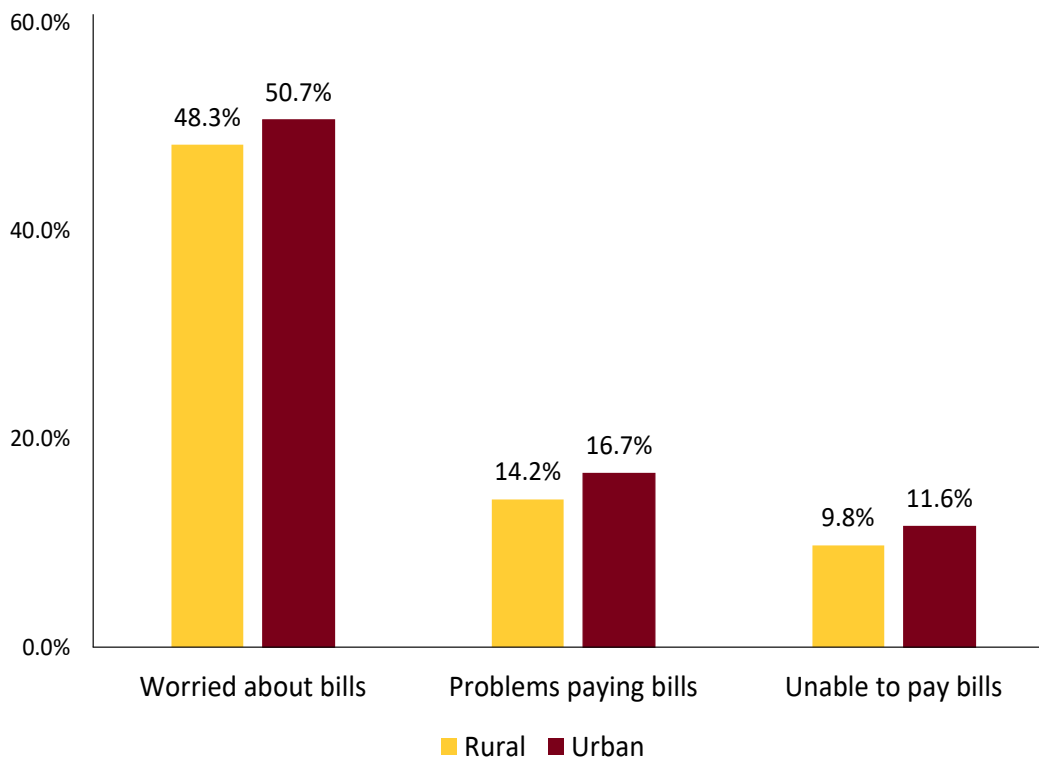
Among AI/AN rural residents, people receiving IHS care and publicly- and privately- insured people not receiving IHS care were less likely to report being worried about medical bills than uninsured people not receiving IHS care. These trends persisted among AI/AN urban residents; people receiving IHS care were least likely to report being worried about medical bills, followed by publicly- and privately- insured people. Notably, over 35% of urban and over 40% of rural AI/AN individuals in all health service provider/insurer

Figure 1. Health service provider/insurer among AI/AN adults, by rurality



\*indicates  $p < 0.05$ , \*\*indicates  $p < 0.01$

Figure 2. Health care affordability issues among AI/AN adults, by rurality



\*indicates  $p < 0.05$ , \*\*indicates  $p < 0.01$ , no significant differences detected in this analysis



**Table 1. Health care affordability issues by service/insurer among rural and urban AI/AN adults**

		Rural	p-value	Urban	p-value
Worried about bills			<0.001		<0.001
	Receiving IHS care	45.3%		36.8%	
	Public insured, not receiving IHS care	41.1%		44.1%	
	Private insured, not receiving IHS care	47.5%		47.9%	
	Uninsured, not receiving IHS care	80.0%		80.1%	
Problems paying bills			<0.05		0.534
	Receiving IHS care	8.8%		20.0%	
	Public insured, not receiving IHS care	18.6%		15.4%	
	Private insured, not receiving IHS care	16.4%		15.8%	
	Uninsured, not receiving IHS care	24.1%		20.0%	
Unable to pay bills			<0.05		0.264
	Receiving IHS care	6.5%		14.3%	
	Public insured, not receiving IHS care	11.4%		11.3%	
	Private insured, not receiving IHS care	12.4%		9.3%	
	Uninsured, not receiving IHS care	16.7%		15.8%	

categories reported worry about medical bills, consistent with prior research showing that rural residents and AI/AN people are both known to experience barriers to care.<sup>13-15</sup>

Among AI/AN rural residents, people receiving IHS care were less likely than both insured and uninsured people not receiving IHS care to report problems paying medical bills or inability to pay medical bills, likely due to IHS's policy of providing free health care to eligible populations. This trend did not persist among urban residents. These results show that IHS is having some success addressing certain health care affordability issues in rural areas. However, affordability is different than quality of care. Researchers have cited chronic underfunding of the IHS,<sup>12,24</sup> and the dataset from which we derive our results is limited in its information about quality of care. Future research should explore whether affordability is correlated with quality of care for rural and urban AI/AN people.

Reports of inability to pay medical bills did not differ significantly between the service provider/insurer categories for rural or urban residents, however, among rural individuals who reported inability to pay medical bills, people receiving IHS care made up the

smallest percentage (6.5%), and among urban individuals who reported inability to pay medical bills, privately-insured people not receiving IHS care made up the smallest percentage (9.3%), with uninsured people not receiving IHS care making up the largest percentage in both areas (rural: 16.7%; urban: 15.8%).

## Conclusion

Rural AI/AN residents were more likely to receive IHS care than urban AI/AN residents. Among rural AI/AN residents, people receiving IHS care and insured people not receiving IHS care were less likely than uninsured people not receiving IHS care to report worries about medical bills, and people receiving IHS care were least likely of all the health service/insurance statuses to report problems paying medical bills or inability to pay medical bills. Health care affordability issues remain prevalent among rural and urban AI/AN adults of all service provider/insurer categories, although we identified some variation. Greater investment in IHS and an expansion of eligibility may help to confer benefits on AI/AN people in both rural and urban areas.

## References

1. Jones N, Marks R, Ramirez R, Rios-Vargas M. Improved Race and Ethnicity Measures Reveal U.S. Population Is Much More Multiracial. U.S. Census. August 21, 2021. Accessed July 1, 2024. <https://www.census.gov/library/stories/2021/08/improved-race-ethnicity-measures-reveal-united-states-population-much-more-multiracial.html>
2. Dewees S, Marks B. Twice Invisible: Understanding Rural Native America. First Nations Development Institute. Published online April 2017. Accessed July 1, 2024. <https://www.niwr.org/resources/journal-article/twice-invisible-understanding-rural-native-america>
3. Indian Health Service. Legislation. Accessed July 1, 2024. <https://www.ihs.gov/aboutihs/legislation/>
4. Indian Health Service. Agency Overview. Accessed July 1, 2024. <https://www.ihs.gov/aboutihs/overview/>
5. Indian Health Service. Eligibility for Services. In: Indian Health Manual. Indian Health Service; 2017. Accessed July 1, 2024. <https://www.ihs.gov/ihs/pc/part-2/chapter-1-eligibility-for-services/>
6. Indian Health Service. Frequently Asked Questions. Accessed September 24, 2024. <https://www.ihs.gov/forpatients/faq/>
7. Locations. Indian Health Service. Accessed September 24, 2024. <https://www.ihs.gov/locations/>
8. Indian Health Service. Purchased/Referred Care (PRC). Accessed September 24, 2024. <https://www.ihs.gov/prc/>
9. Indian Health Service. Differences Between Title I Contracting and Title V Compacting Under the Indian Self-Determination Education Assistance Act (ISDEAA). Accessed July 1, 2024. [https://www.ihs.gov/sites/selfgovernance/themes/responsive2017/display\\_objects/documents/TitleIandV.pdf](https://www.ihs.gov/sites/selfgovernance/themes/responsive2017/display_objects/documents/TitleIandV.pdf)
10. Adams A. The Road Not Taken: How Tribes Choose between Tribal and Indian Health Service Management of Health Care Resources Am Indian Cult Res J.2000; 24(3): 21-38
11. Public Law 93-638 Indian Self Determination and Education Assistance Act, as Amended. Bureau of Indian Affairs; Department of the Interior; Indian Health Service; Department of Health and Human Services. Published online August 23, 1996. Accessed July 8, 2024. [https://www.bia.gov/sites/default/files/dup/assets/bia/ots/ots/pdf/Public\\_Law93-638.pdf](https://www.bia.gov/sites/default/files/dup/assets/bia/ots/ots/pdf/Public_Law93-638.pdf)
12. Warne D, Frizzell LB. American Indian Health Policy: Historical Trends and Contemporary Issues. *Am J Public Health*. 2014;104(S3):S263-S267. doi:10.2105/AJPH.2013.301682 doi:10.2105/AJPH.2013.301682
13. Henning-Smith C, Hernandez AM, Ramirez M, Hardeman R, Kozhimannil KB. Dying Too Soon: County-level Disparities in Premature Death by Rurality, Race, and Ethnicity. Published online March 2019. Accessed May 2, 2024.
14. Henning-Smith C, Hernandez AM, Hardeman RR, Ramirez MR, and Kozhimannil KB. Rural Counties with Majority Black or Indigenous Populations Suffer the Highest Rates of Premature Death in the US. *Health Aff*. 2019;38(12):2019-2026 <https://rhrc.umn.edu/publication/dying-too-soon-county-level-disparities-in-premature-death-by-rurality-race-and-ethnicity/>
15. Probst JC, Ajmal F. Social Determinants of Health among Rural American Indian and Alaska Native Populations. Published online July 2019. Accessed July 1, 2024.
16. Blue Bird Jernigan V, Peercy M, Branam D, et al. Beyond Health Equity: Achieving Wellness Within American Indian and Alaska Native Communities. *Am J Public Health*. 2015; doi:10.2105/AJPH.2014.302447
17. Indian Health Service. Trends in Indian Health-2014 Edition. U.S. Department of Health and Human Services; 2015. Accessed July 1, 2024. [https://www.ihs.gov/sites/dps/themes/responsive2017/display\\_objects/documents/Trends2014Book508.pdf](https://www.ihs.gov/sites/dps/themes/responsive2017/display_objects/documents/Trends2014Book508.pdf)
18. IPUMS NHIS. Accessed November 14, 2023. IPUMS NHIS, University of Minnesota [www.ipums.org](http://www.ipums.org)
19. NCHS Urban-Rural Classification Scheme for Counties. Published online 2014. Accessed November 14, 2023. <https://www.cdc.gov/nchs/>
20. Health, United States, Annual Perspective, 2020-2021; 2022. doi:10.15620/cdc:122044
21. Indian Health Service: A Quick Look. Published online April 2017. Accessed July 14, 2024. [https://www.ihs.gov/sites/newsroom/themes/responsive2017/display\\_objects/documents/factsheets/QuickLook.pdf](https://www.ihs.gov/sites/newsroom/themes/responsive2017/display_objects/documents/factsheets/QuickLook.pdf)
22. McBride T, Barker A, Hernandez E, Jost E, Kemper L, Mueller K. An Insurance Profile of Rural America: Chartbook. RUPRI. Published online October 2022. Accessed July 15, 2024. <https://rupri.public-health.uiowa.edu/publications/other/Rural%20Insurance%20Chartbook.pdf>
23. Cheeseman Day J. Rates of Uninsured Fall in Rural Counties, Remain Higher than Urban Counties; 2019. Accessed July 24, 2024. <https://www.census.gov/library/stories/2019/04/health-insurance-rural-america.html>

24. Lofthouse JK. Increasing Funding for the Indian Health Service to Improve Native American Health Outcomes. Published online January 31, 2022. Accessed July 15, 2024. <https://www.mercatus.org/research/policy-briefs/increasing-funding-indian-health-service-improve-native-american-health>

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