

CMS Tribal Technical Advisory Group Data Project

The Burden of Diabetes among American Indians and Alaska Native Medicare Enrollees

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TTAG Data Project 2014 Medicare Findings

Why this Matters ?



Information on the health status, service utilization, and Medicare payments for AIAN Medicare enrollees with diabetes may be used to guide efforts to:

1. Enhance existing services,
2. Develop policies, and
3. Assess payment mechanisms,

to meet the needs of the AIAN Medicare population.

Project Population

Medicare enrollees in 2010

IHS AIAN: AIAN registered to use IHS services,
number = 121,323

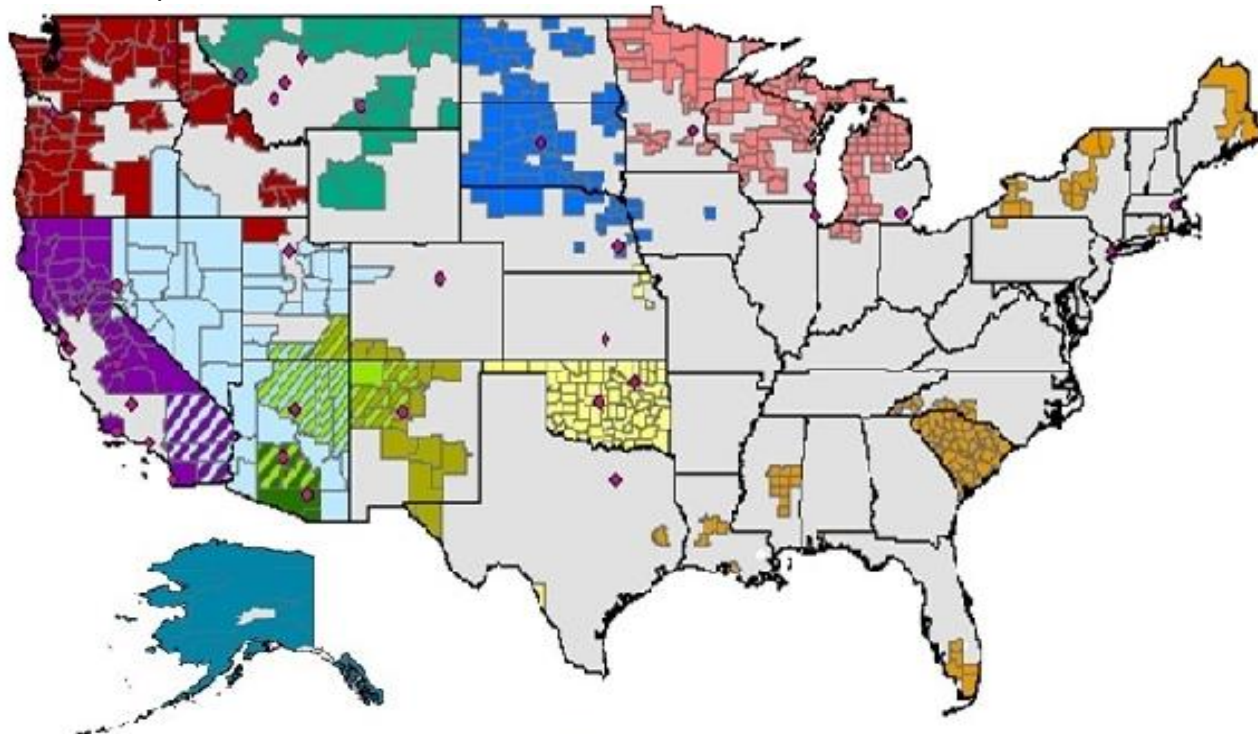
White: non-Hispanic white enrollees,
number = 5,915,119, reference population

Other:

- Lived in IHS Contract Health Service Delivery Areas (CHSDAs)
- No Medicare capitated coverage, no managed care
- Coverage for inpatient and outpatient services (that is Medicare Part A and Part B coverage) during 2010

Project Population by 12 IHS Areas

IHS Areas represented by Contract Health Service Delivery Areas (CHSDAs)

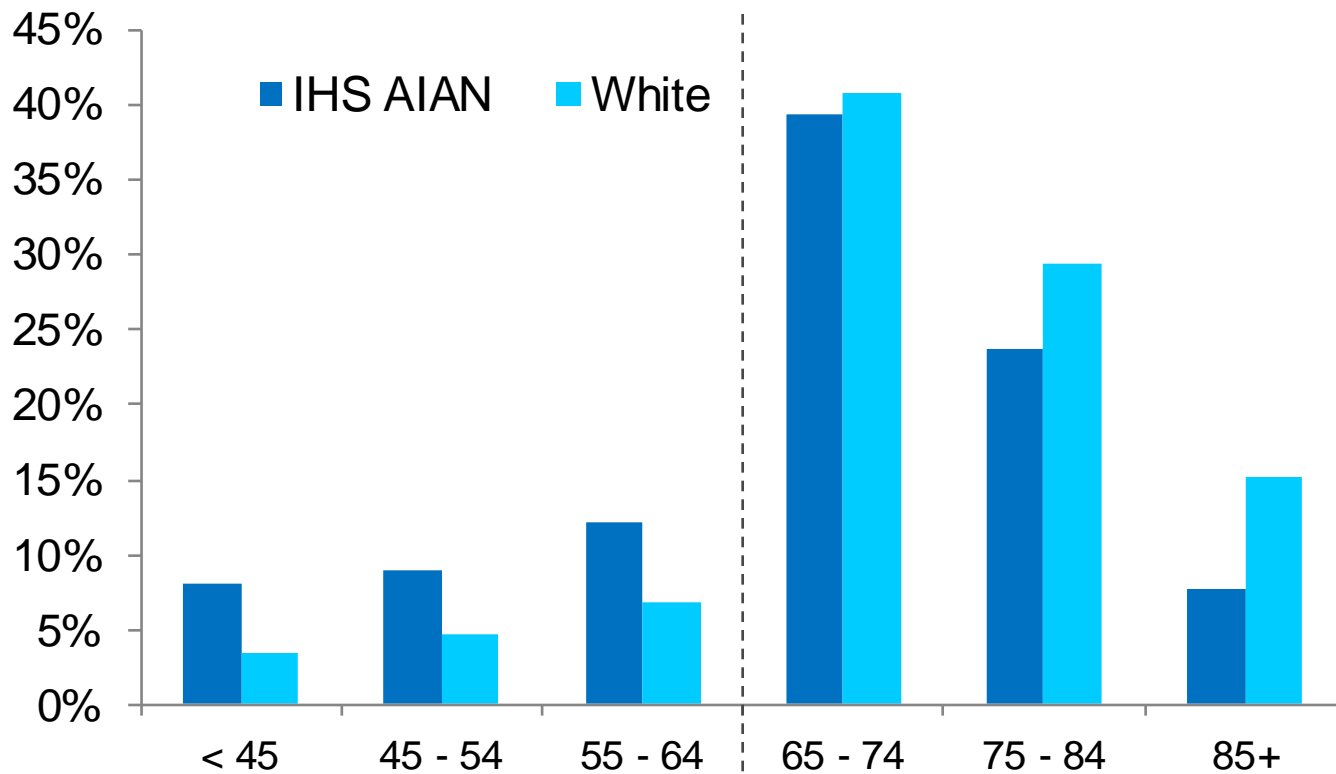


- | | | | |
|------------|--------------|---------------|-----------|
| ■ Aberdeen | ■ Alaska | ■ Albuquerque | ■ Bemidji |
| ■ Billings | ■ California | ■ Nashville | ■ Navajo |
| ■ Oklahoma | ■ Phoenix | ■ Portland | ■ Tucson |

Results: AIAN age and disability

Nearly twice as many IHS AIAN (29%) as White enrollees (15%) were eligible for Medicare due to a disability – that is they were younger than 65 years old.

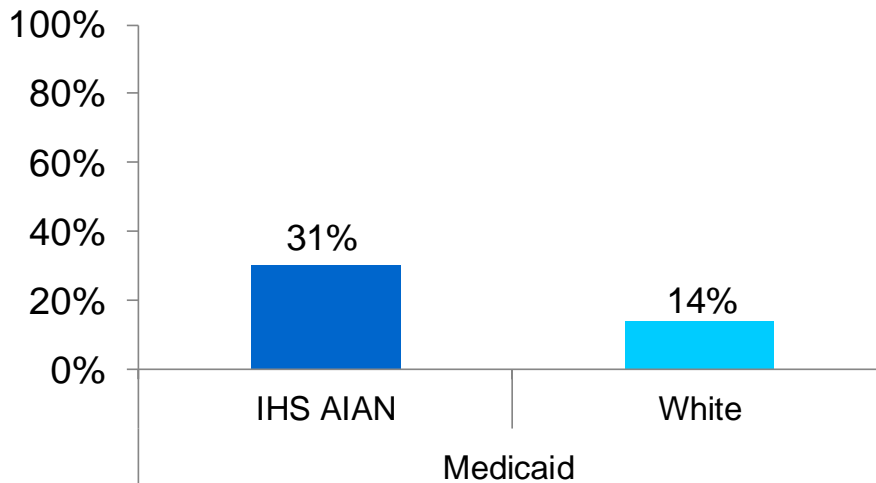
Age distribution of IHS AIAN and White Medicare enrollees. 2010.



Results: Geographic Location and Medicaid Enrollment

Within the Contract Health Service Delivery Areas, 57% of IHS AIAN lived in rural areas as compared to 24% of the White enrollees.

Percent of IHS AIAN and White Medicare enrollees enrolled in Medicaid. 2010.

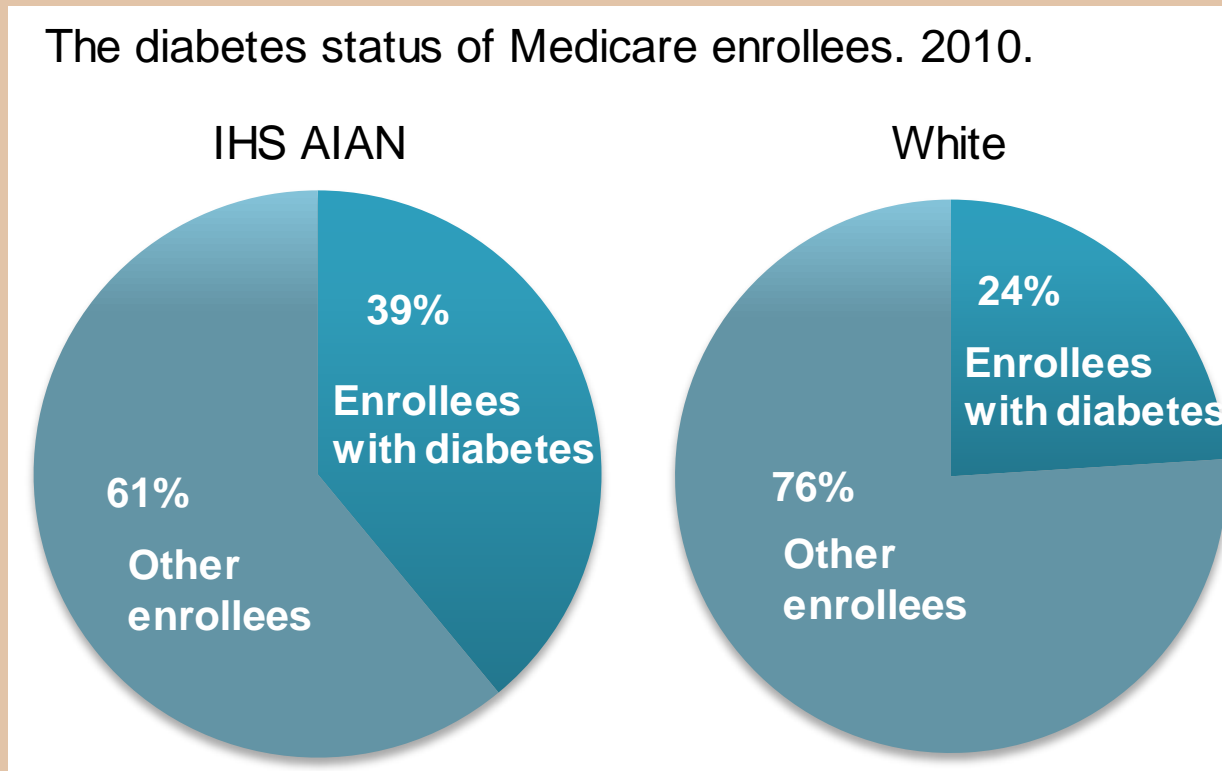


Twice as many IHS AIAN as White enrollees were also enrolled in Medicaid.

A rural area was defined using the U.S. Office of Management and Budget categories for metropolitan and non-metropolitan areas.

Results: Health status

The prevalence of diabetes among IHS AIAN was 1.6 times* that for White enrollees.



The IHS AIAN prevalence rates were adjusted to the age and gender distribution of the White enrollees.

Results: Health status of persons with diabetes

Diabetes and Cardiovascular Disease (CVD)

Approximately half of IHS AIAN with diabetes had CVD.

Prevalence of both diabetes and CVD:

IHS AIAN: 20% * Whites: 13%

Diabetes and End-Stage Renal Disease (ESRD)

Prevalence of ESRD among IHS AIAN with diabetes was 3 times higher than that for White enrollees.

IHS AIAN: 6% * Whites: 2%

* The IHS AIAN prevalence rates were adjusted to the age and gender distribution of the White enrollees.

Health status: IHS AIAN mortality

During 2010:

IHS AIAN died at younger ages.

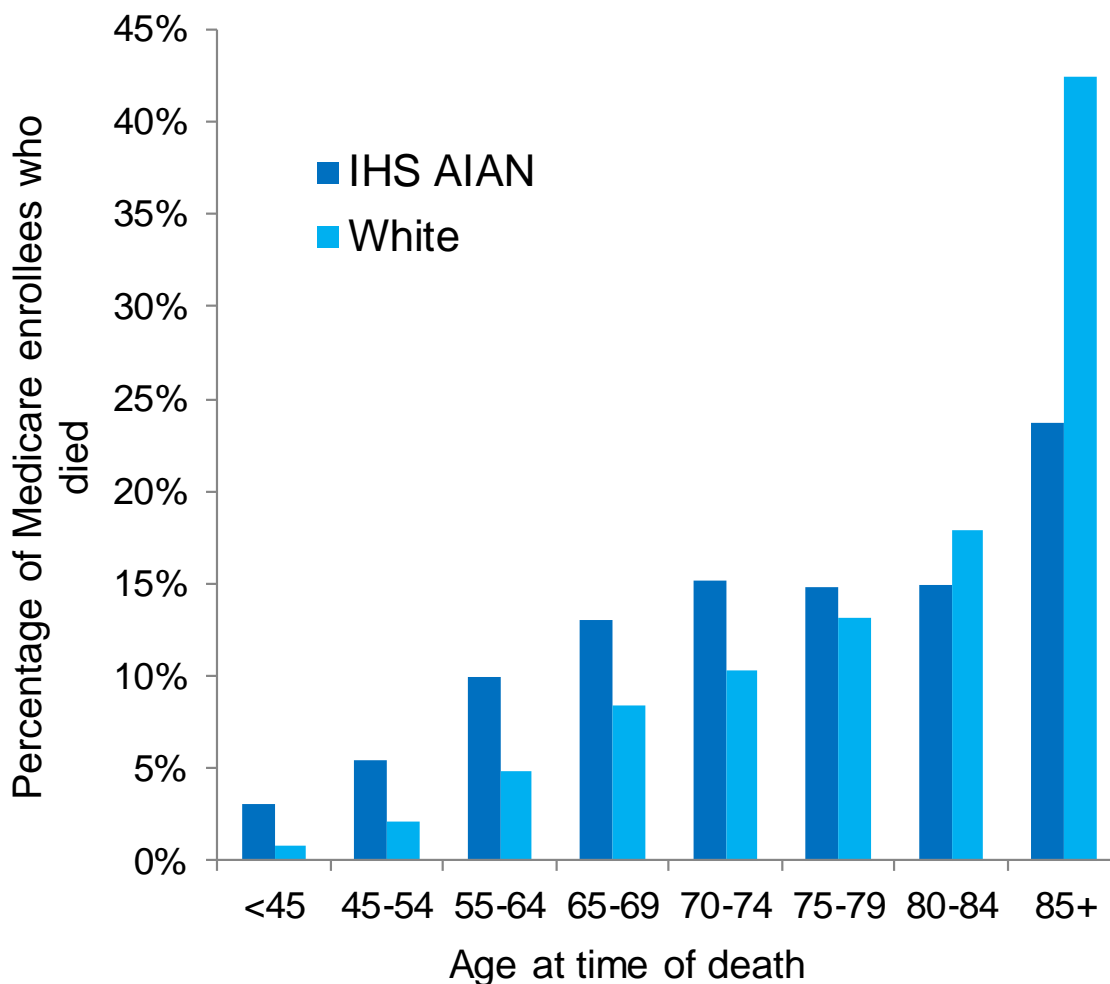
The annual mortality rate among IHS AIAN was 20% higher than mortality among White enrollees:

IHS AIAN: 6.0%*

White: 5.0%

*Rate adjusted to age and gender distribution of White enrollees.

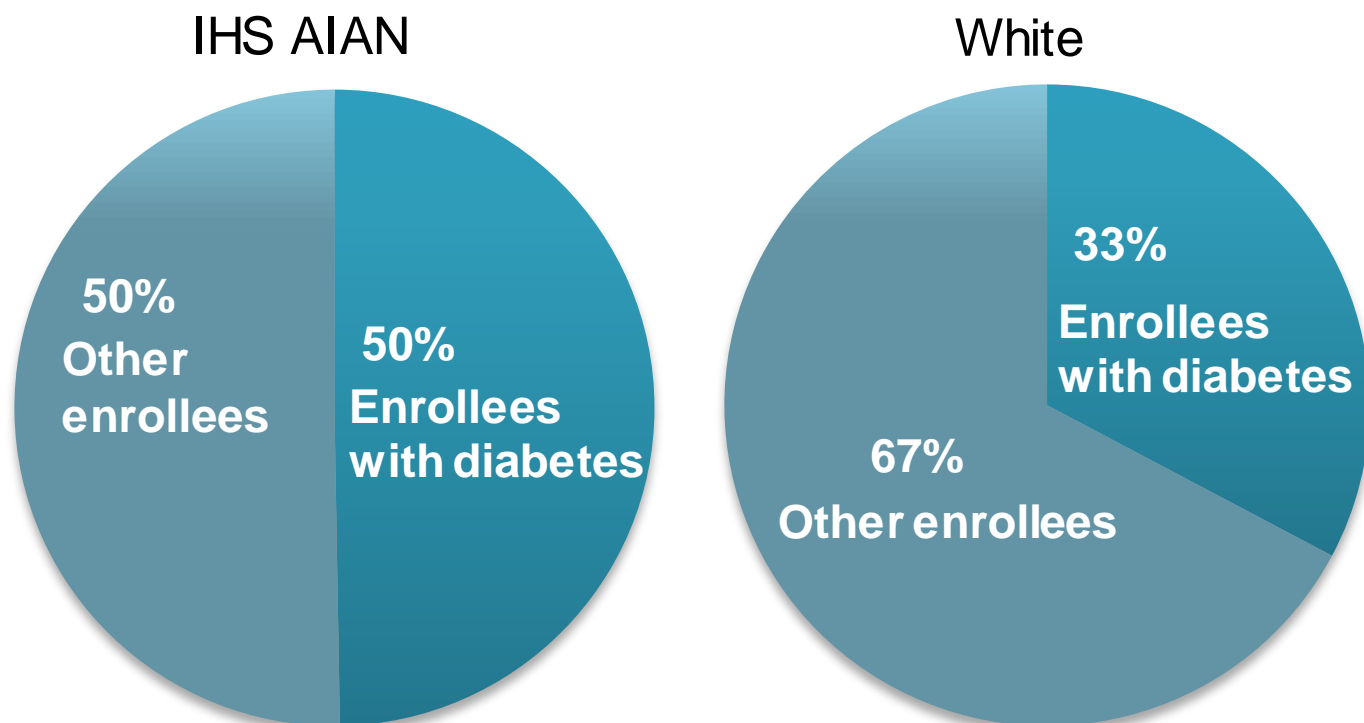
Age distribution of Medicare enrollees who died in 2010.



Health status: IHS AIAN mortality

Higher mortality among IHS AIAN is explained in part by their higher prevalence of diabetes and related chronic conditions.

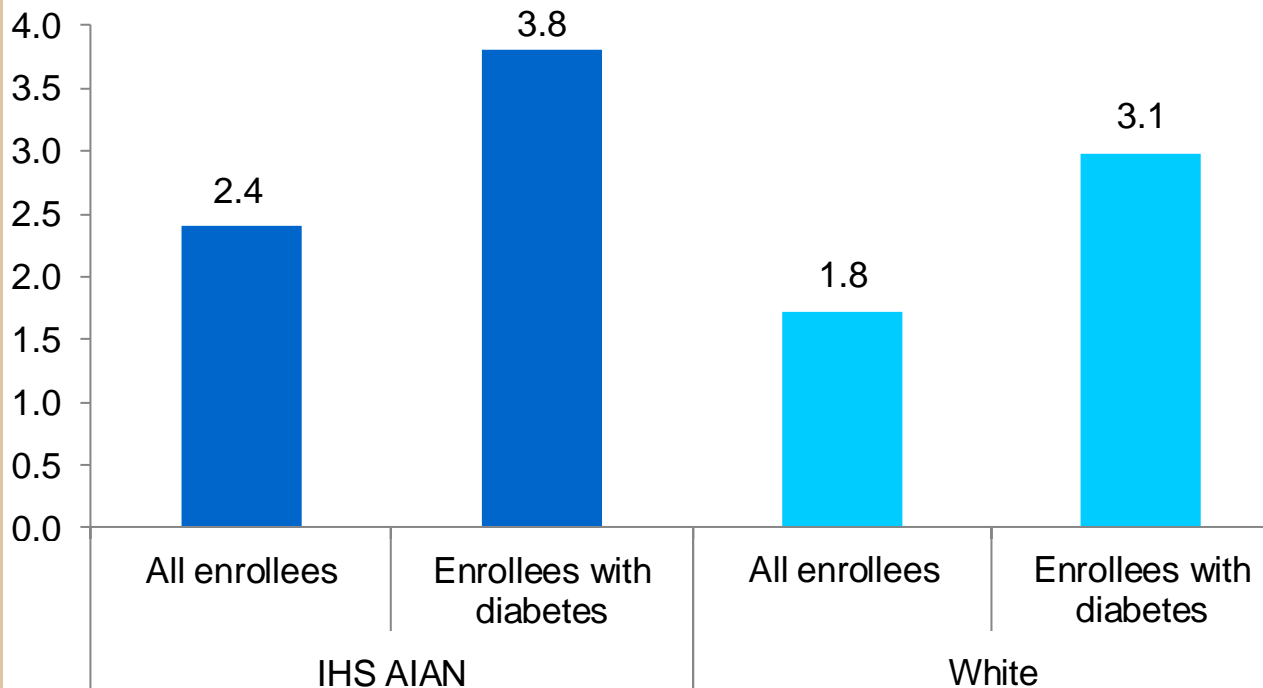
Diabetes status of Medicare enrollees who died in 2010.



Service use: Hospital inpatient services

Diabetes is associated with higher use of hospital inpatient services.

Average annual number of hospital inpatient days per person among IHS AIAN and white Medicare enrollees. 2010.

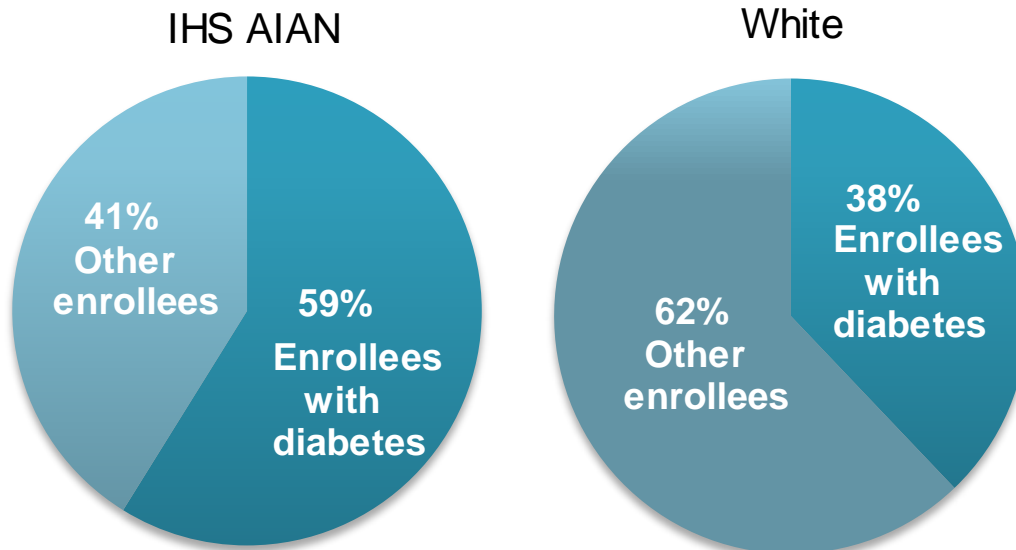


61% of IHS AIAN hospital inpatient days were by persons with diabetes.

Medicare payments: The influence of diabetes and related conditions on Medicare payments

Nearly 40% of IHS AIAN had diabetes.
They accounted for 59% of all Medicare payments for IHS AIAN.

Percent of total Medicare payments attributed to enrollees with diabetes.



Medicare payments: The influence of diabetes and related conditions on Medicare payments

The average annual Medicare payment for all IHS AIAN enrollees was higher than for White enrollees. However, health status influenced spending.

Average annual Medicare payments. 2010.

	IHS AIAN	White
All persons	15,021	12,261
Persons with diabetes (regardless of other comorbidities)	22,751	19,502
Among persons with diabetes		
No CVD or ESRD	10,658	10,141
CVD no ESRD	26,539	25,081
ESRD	78,559	85,282

Medicare payments: The influence of diabetes and related conditions on Medicare payments

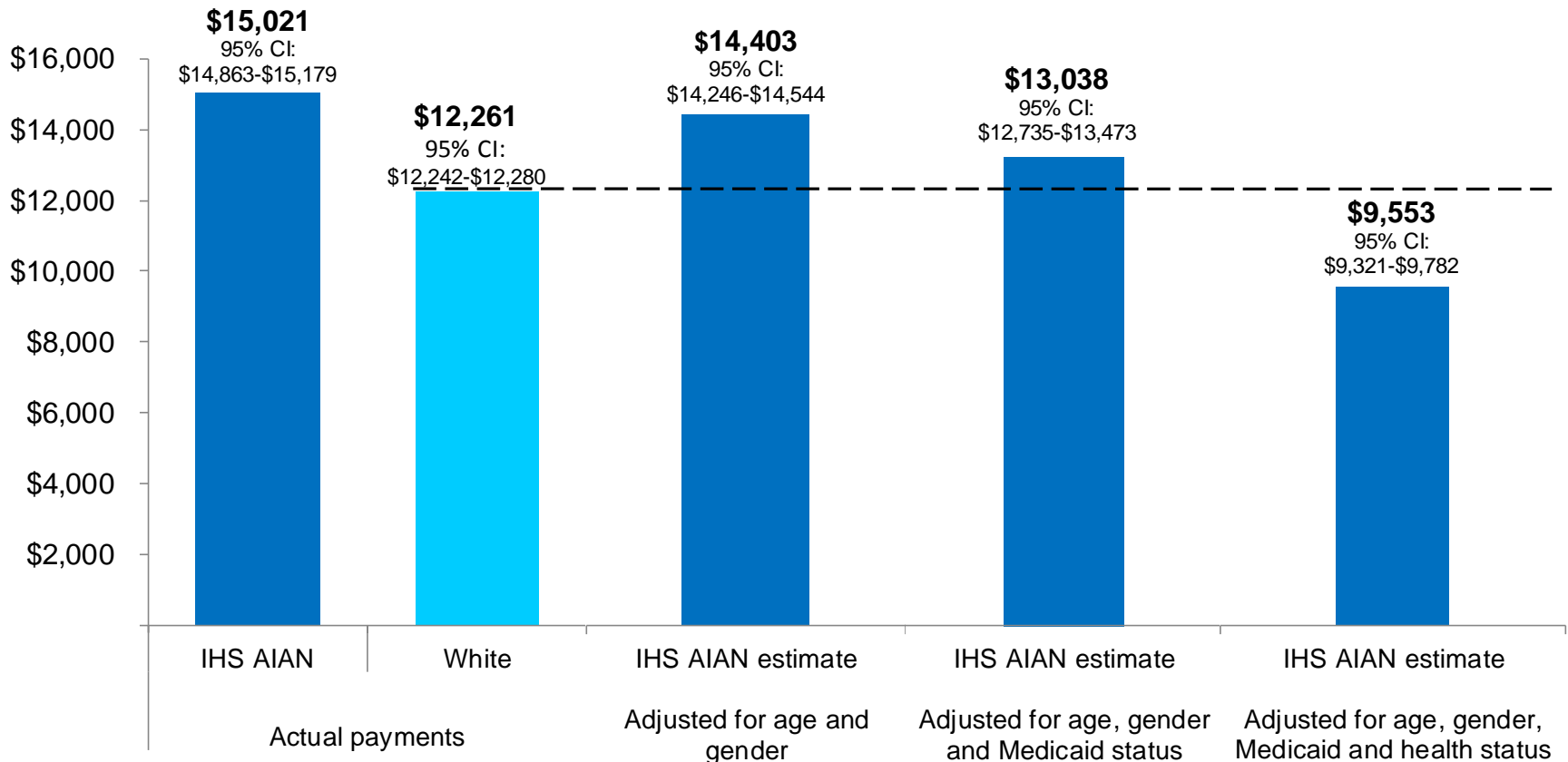
Diabetes influenced the IHS AIAN Medicare payments in five important ways:

1. Diabetes is expensive to treat.
2. The costs of treating diabetes with complications (such as CVD and ESRD), is especially expensive.
3. More IHS AIAN had diabetes than Whites.
4. More IHS AIAN with diabetes had complications.
5. IHS AIAN with diabetes were more likely to be dually enrolled in Medicare and Medicaid, and dual enrollment was associated with high Medicare payments.

Medicare payments

When differences between IHS AIAN and White enrollees in age, gender, Medicaid enrollment, and health status were controlled for, the estimated IHS AIAN payment was lower than that of the White enrollees.

Actual and estimated average annual Medicare payments for IHS AIAN and White enrollees. 2010.



95% CI: 95% confidence estimates. All estimates were adjusted for geographic location.

Policy Implications

Preventing the onset of diabetes among AIAN is key to reducing identified disparities.

Programs implemented to prevent diabetes or prevent the onset of complications among those with diabetes must address AIAN specific needs:

- Living in rural areas,
- Having lower household incomes,
- Diabetes onset at younger age, and
- High rates of diabetes-related complications.

Policy Implications

Specific information on AIAN who use IHS services can inform efforts to improve IHS AIAN health outcomes.

Examples:

Medicare and Medicaid reimbursement policies and programs that support increased IHS AIAN access to evidenced-based and best practices that effectively and efficiently use resources to prevent diabetes and diabetes-related complications.

The **Special Diabetes Program for Indians (SDPI)** increases access to services that prevent the onset of diabetes, and prevent and treat complications among those with diabetes. Information on the burden of diabetes may be used to assess sustained funding for this program.

TTAG Data Project

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