



Comprehensive CVD Screening GPRAMA Measure Information for Providers

Indian Health Service
National GPRA Support Team

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CVD : Comprehensive Assessment GPRAMA Measure

- Measures the percentage of eligible patients who have had a comprehensive assessment for four CVD-related risk factors
- Eligible patients are men and women ages 22 and older with active coronary heart disease (CHD)
- Has been a GPRA measure since FY 2007
- A GPRAMA measure since FY 2013



Measure Logic

- **Denominator:**
- Active CHD patients ages 22 and older, defined as all Active Clinical patients diagnosed with CHD prior to the report period, and at least two visits during the report period, and two CHD-related visits ever
- **Numerator:**
- Patients with comprehensive CVD assessment, defined as having blood pressure and tobacco use assessed, BMI calculated, and lifestyle counseling



What is Comprehensive CVD Assessment?

Comprehensive CVD includes ***all*** of the following:

1. Blood pressure documented at least **twice** in past **2 years**
2. Tobacco use screening during the ***report period***
3. BMI calculated
4. Lifestyle adaptation counseling during ***report period***

*Note: this measure no longer requires LDL assessment



BMI Calculations

- CRS calculates BMI at the time report is run, using NHANES II
- For patients age 19-50, height and weight must be recorded within last 5 years, not required to be on the same day
- For patients over age 50, height and weight must be recorded within last 2 years, not required to be on same day



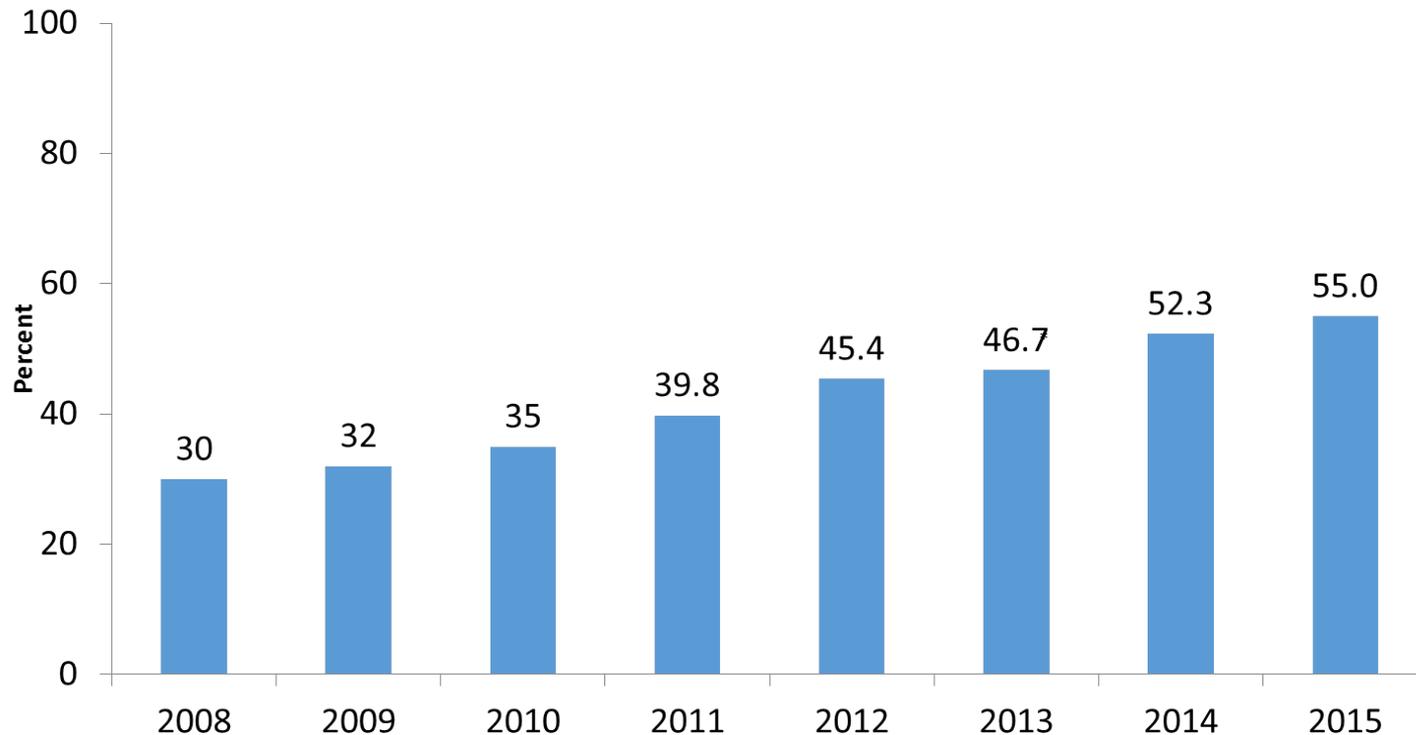
Comprehensive Assessment

- Only patients with **ALL FOUR** assessments will be counted in the numerator for CVD Comprehensive Screening.
- Accuracy and timeliness of data entry is particularly important for comprehensive measures.



IHS National (Federal and Tribal) GPRA CVD: Comprehensive Assessment Rates

CVD Prevention: Comprehensive Assessment
Active CHD patients ages 22 and older with a comprehensive assessment



Prior to FY 2013, this measure tracked the percentage of active IHD patients ages 22 and older with a comprehensive assessment and included patients with an LDL in the previous five years (beginning in FY 2013, LDL required during report period to meet measure).



Why do CVD Assessment?

- Cardiovascular disease (CVD)- mainly heart disease and stroke- is the leading cause of death for both men and women among all racial and ethnic groups.
- Heart disease and stroke are the first and third leading causes of death for both men and women in the United States, accounting for nearly 34.3% of all deaths.
- More than 2,600 Americans die each day of CVD, which amounts to one death every 33 seconds.



CVD Includes:

- coronary heart disease (CHD)
- stroke
- arteriosclerosis
- angina
- high blood pressure
- high cholesterol
- arrhythmia



CVD Statistics

- More than 80 million Americans (about 1 in 3 adults) have some form of cardiovascular disease.
- Coronary heart disease (CHD) is a leading cause of premature, permanent disability among adults.



CHD/Heart Attacks

- Coronary heart disease (CHD) is the leading cause of death in the United States.
- The lifetime risk of having a CHD event is estimated to be 49% for men and 32% for women in the United States.



CVD in the AI/AN Populations

- Heart disease and stroke are the first and seventh leading causes of death, respectively, among AI/AN people.
- CVD mortality is increasing among AI/ANs but decreasing in the general population.



Coronary Heart Disease in the AI/AN Populations

- At present, CHD rates in American Indians exceed rates in other US populations and may more often be fatal.
- Unlike other ethnic groups, American Indians appear to have an increasing incidence of CHD, likely due to the high prevalence of diabetes.



Disparities and Misclassification

- Previous data suggested that cardiovascular disease mortality rates were *lower* for American Indians and Alaska Natives than for the general US population.
- However, researchers have discovered that this data may have been flawed due to racial misclassification.

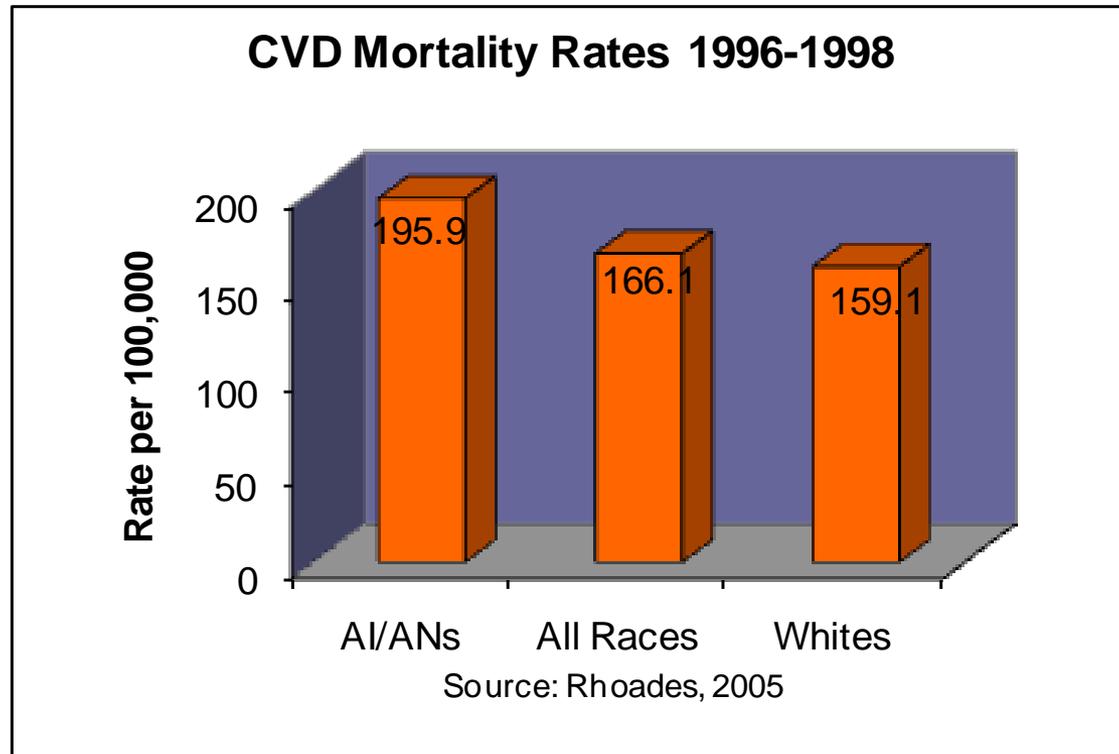


Adjusting for Misclassification

- A recent study that has adjusted data for misclassification shows a growing disparity between CVD mortality rates among AI/AN people compared to the US All Races and white populations.
- From 1996 to 1998, the age and misclassification-adjusted number of CVD deaths among AI/AN people was 195.9 per 100,000, compared with rates of 166.1 among US All Races, and 159.1 among whites.



CVD Mortality Rates





CVD Rates Among American Indians Compared to Non-Indians

- One study comparing American Indians (n=1000) with non-Indians (n=905) in Montana found a higher prevalence of CVD among American Indians.
- Within this group, American Indians age 45 and older reported a significantly higher prevalence of CVD compared to non-Indians (18% vs. 10%).



More Risk Factors Among AI/ANs

- In the same Montana study, among persons aged 18-44 years, American Indians reported higher rates of hypertension (15% vs. 10%), obesity (29% vs. 12%), and smoking (42% vs. 24%) than non-Indians.
- Among people age 45 or older, American Indians reported higher rates of diabetes (24% vs. 9%), obesity (38% vs. 16%), and smoking (32% vs. 13%) than non-Indians.



More Risk Factors Among AI/Ans (cont.)

- In a 2003 BRFSS survey, the prevalence of having two or more risk factors for CVD was highest among blacks (48.7%) and American Indians/Alaska Natives (46.7%) compared to other groups.
- Risk factors include: high blood pressure, high cholesterol, diabetes, current smoking, physical inactivity, and obesity.



Diabetes Increases Risk

- determinant of CVD. American Indians and most individuals with diabetes have a high prevalence of insulin resistance syndrome, which is a strong predictor of CHD.
- Among American Indians in the Strong Heart Study, diabetes was the strongest



Strong Heart Study Findings

- The Strong Heart Study investigated CVD and its risk factors in American Indians in 13 communities in Arizona, Oklahoma, and South and North Dakota.
- CVD morbidity and mortality rates were higher in men than in women and were similar in the 3 geographic areas.



Strong Heart Study Findings (cont.)

- 56% of the CVD events in men and 78% of CVD events in women occurred in those with diabetes.
- Although diabetes is known to increase CVD risk factors, it has also been found to be a strong ***independent*** effect after adjustment for other risk factors.



Blood Pressure and CVD

- Data from the past 20 years on blood pressure has confirmed that high blood pressure is associated with cardiovascular risk.
- Effects of high blood pressure include coronary heart disease, stroke, and cardiac abnormalities.



Hypertension

- Most people above the age of 35 have systolic (SBP)/diastolic (DBP) above optimal (< 120/< 80 mm Hg); and are therefore at increased CVD risk.
- During 1999–2002, nearly 29% of U.S. adults had high blood pressure (hypertension), and only 29% of these adults had the condition under control.

Blood Pressure and CVD Risk

- According to the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure:
 - The risk of CVD, beginning at 115/75 mm Hg, doubles with each increment of 20/10 mm Hg.
 - Individuals with a systolic BP of 120 to 139 mm Hg or a diastolic BP of 80 to 89 mm Hg should be considered as pre-hypertensive and require health-promoting lifestyle modifications to prevent CVD.



BP Reduction

- A 12-13 point reduction in blood pressure can reduce:
 - heart attacks by 21%
 - strokes by 37%
 - and all deaths from CVD by 25%



Tobacco and CVD risk

- Smokers' risk of developing coronary heart disease is 2–4 times that of nonsmokers.
- Smokers have twice the risk of heart attack as nonsmokers.
- One-fifth of the annual deaths from CVD are attributable to smoking.



Smoking and CVD

- Cigarette smoking is a powerful independent risk factor for sudden cardiac death in patients with coronary heart disease.
- Cigarette smoking also acts with other risk factors to greatly increase the risk for coronary heart disease.
- Exposure to other people's smoke increases the risk of heart disease even for nonsmokers.



Weight and CVD

- People with excess body fat, especially around the waist, are more likely to develop heart disease and stroke even if they have no other risk factors.
- Excess weight also raises blood pressure and blood cholesterol and triglyceride levels, and lowers HDL cholesterol levels.



Physical Activity and CVD

- Regular physical activity decreases the risk of cardiovascular disease mortality in general and of coronary heart disease mortality in particular.
- Regular physical activity prevents or delays the development of high blood pressure, and exercise reduces blood pressure in people with hypertension.



Lifestyle Counseling

- The CDC recommends that risk factors for heart disease and stroke, including diabetes, tobacco use, physical inactivity, poor nutrition, and overweight and obesity, be addressed through lifestyle changes and appropriate use of medications.



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