

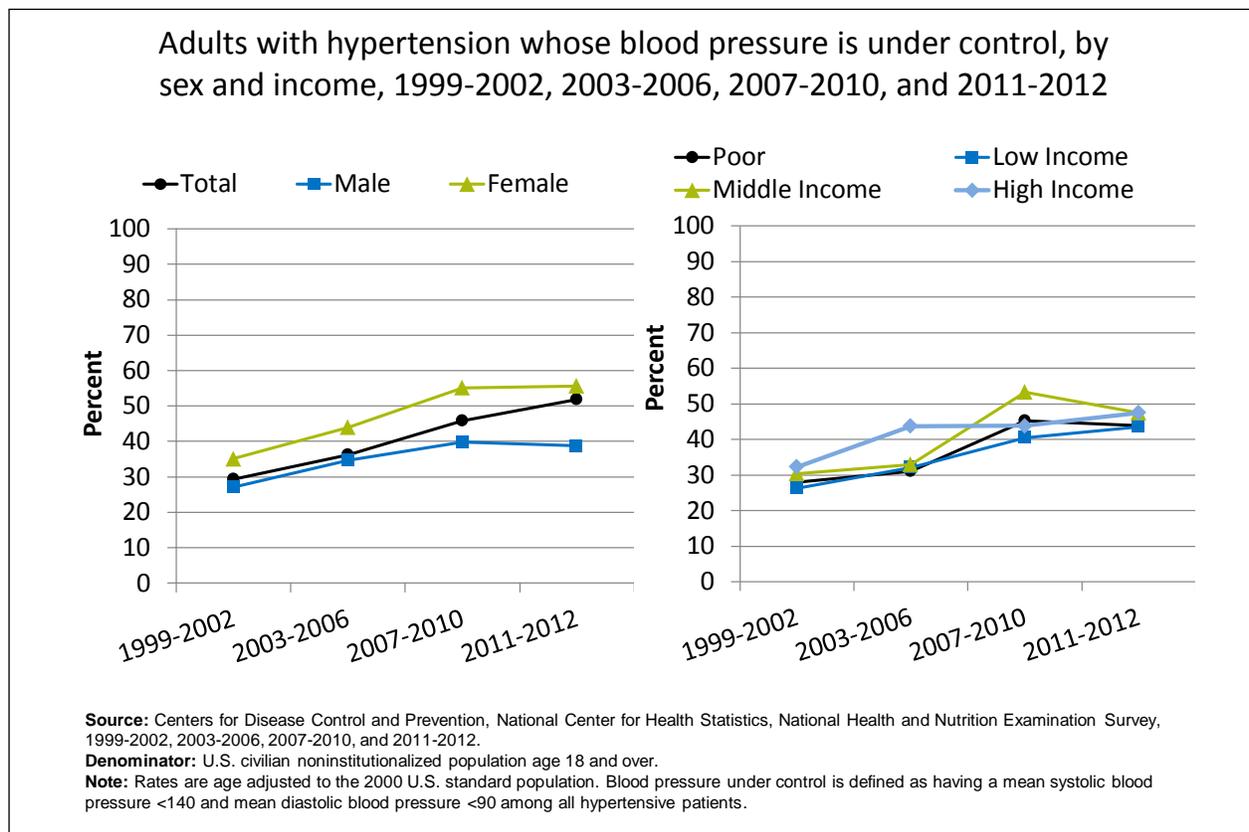
Cardiovascular Disease

Measures of Effective Treatment of Cardiovascular Disease

- Treatment of Hypertension
 - Outcome: Adults with hypertension whose blood pressure is under control
- Treatment of Heart Attack:
 - Process: Hospital patients with heart attack given fibrinolytic medication within 30 minutes of arrival
 - Outcome: Inpatient deaths per 1,000 adult hospital admissions with heart attack
- Treatment of Congestive Heart Failure
 - Outcome: Adult admissions for congestive heart failure per 100,000 population
 - Cost: Total national costs of hospitalizations for congestive heart failure
- Measures of screening for cardiovascular disease and risk factors are in the [Healthy Living chartbook](#).

Treatment of Hypertension

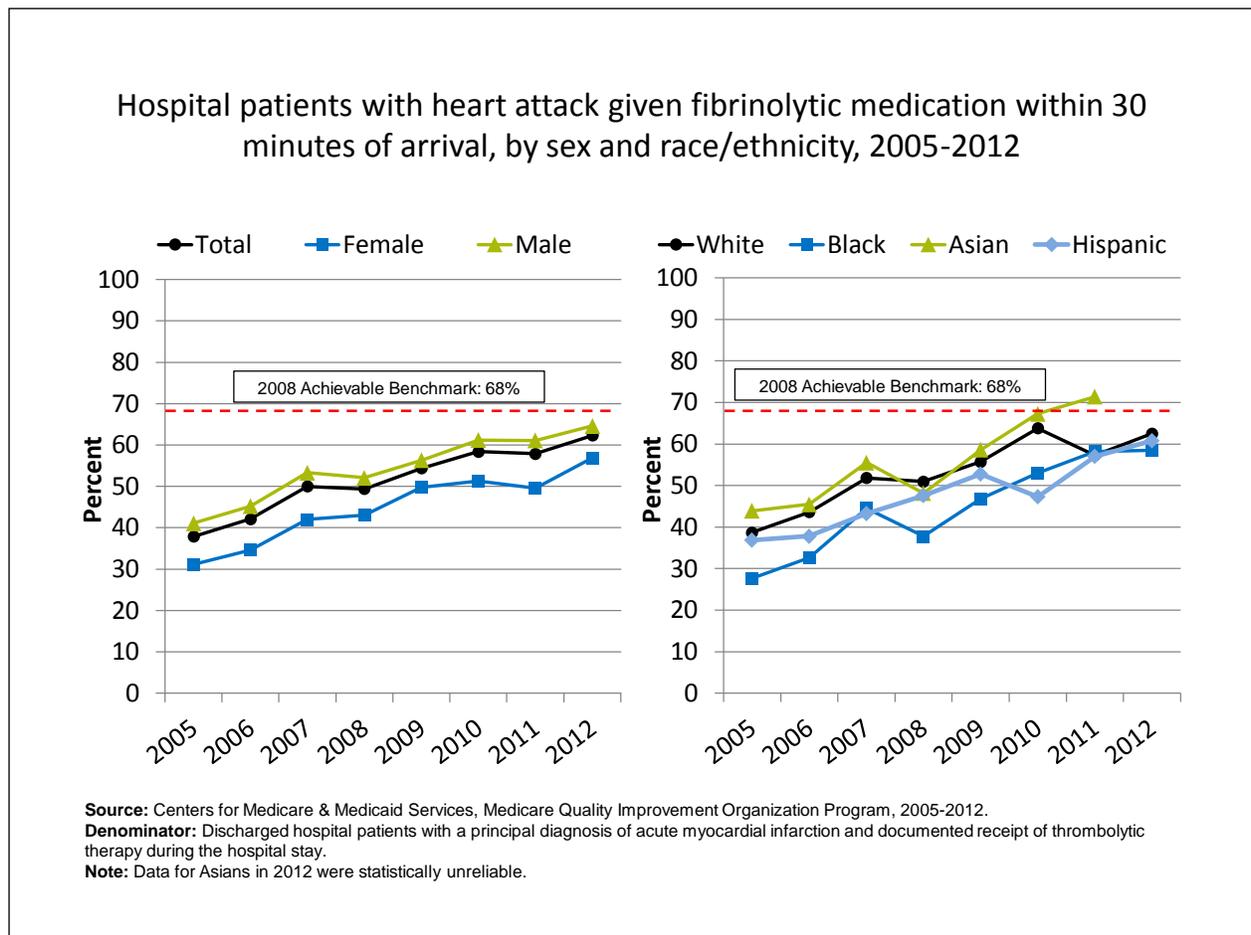
Adults Whose Hypertension Is Under Control



- **Importance:** Although progress has been made in raising awareness of blood pressure screening and monitoring, blood pressure control among people with diagnosed high blood pressure remains a problem.
- **Trends:** From 1999-2002 to 2011-2012, the percentage of adults with hypertension who had their blood pressure under control improved overall and for both sexes. The percentage also improved for all income groups except middle-income adults.
- **Groups With Disparities:** In all years, the percentage of adults with hypertension who had their blood pressure under control was lower for men than for women.

Treatment of Heart Attack

Fibrinolytic Medication



- **Importance:** Some heart attacks are caused by blood clots. Early actions, such as fibrinolytic medication, may open blockages caused by blood clots, reduce heart muscle damage, and save lives. To be effective, these actions need to be performed quickly after the start of a heart attack.
- **Trends:** From 2005 to 2012, the percentage of patients who received timely fibrinolytic medication improved overall, for both sexes, and for all racial/ethnic groups.

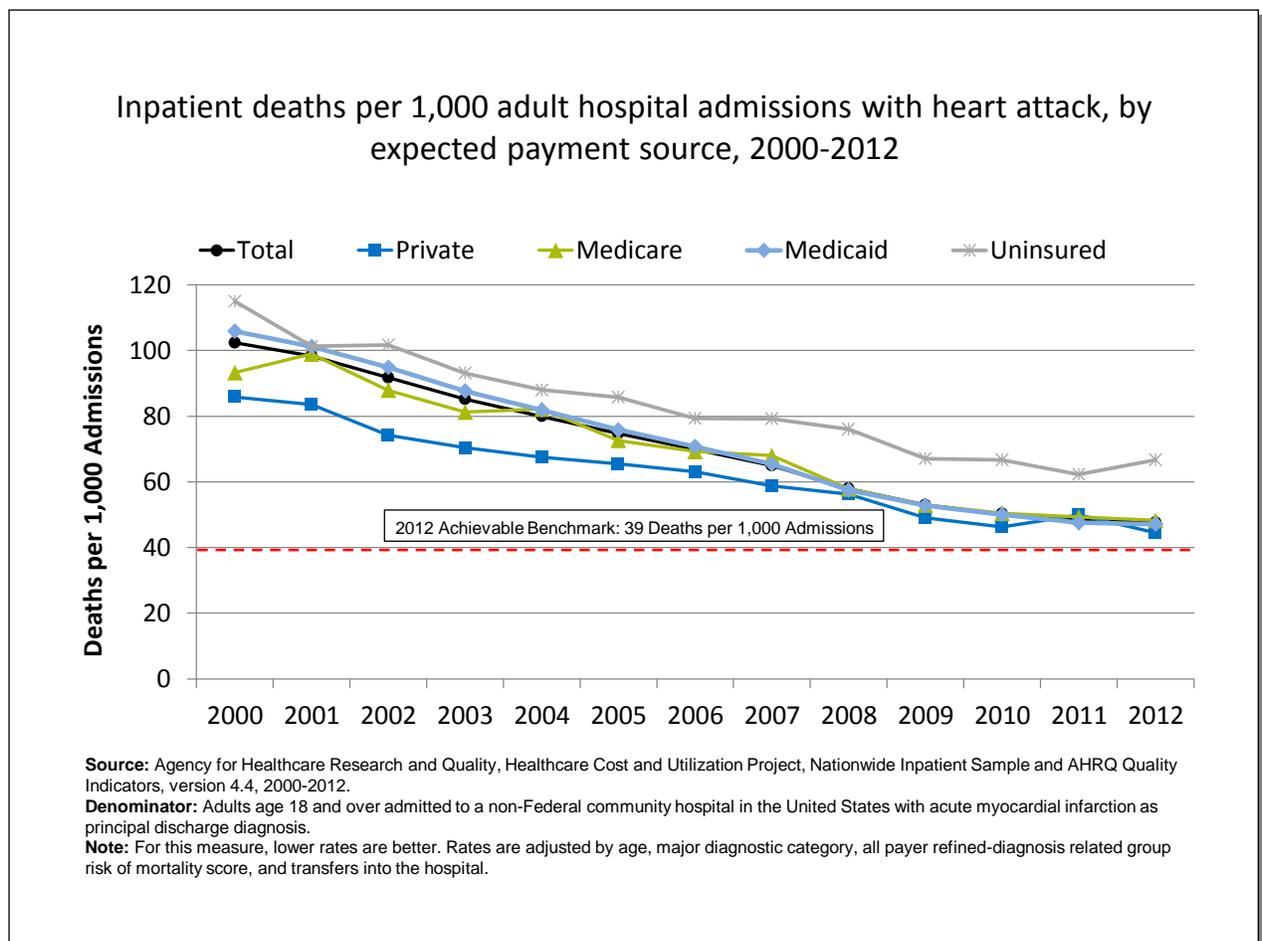
- **Groups With Disparities:**

- Until 2012, the percentage of patients who received timely fibrinolytic medication was significantly higher for males than for females.
- Until 2011, the percentage of patients who received timely fibrinolytic medication was significantly higher for Whites than for Blacks.

- **Achievable Benchmark:**

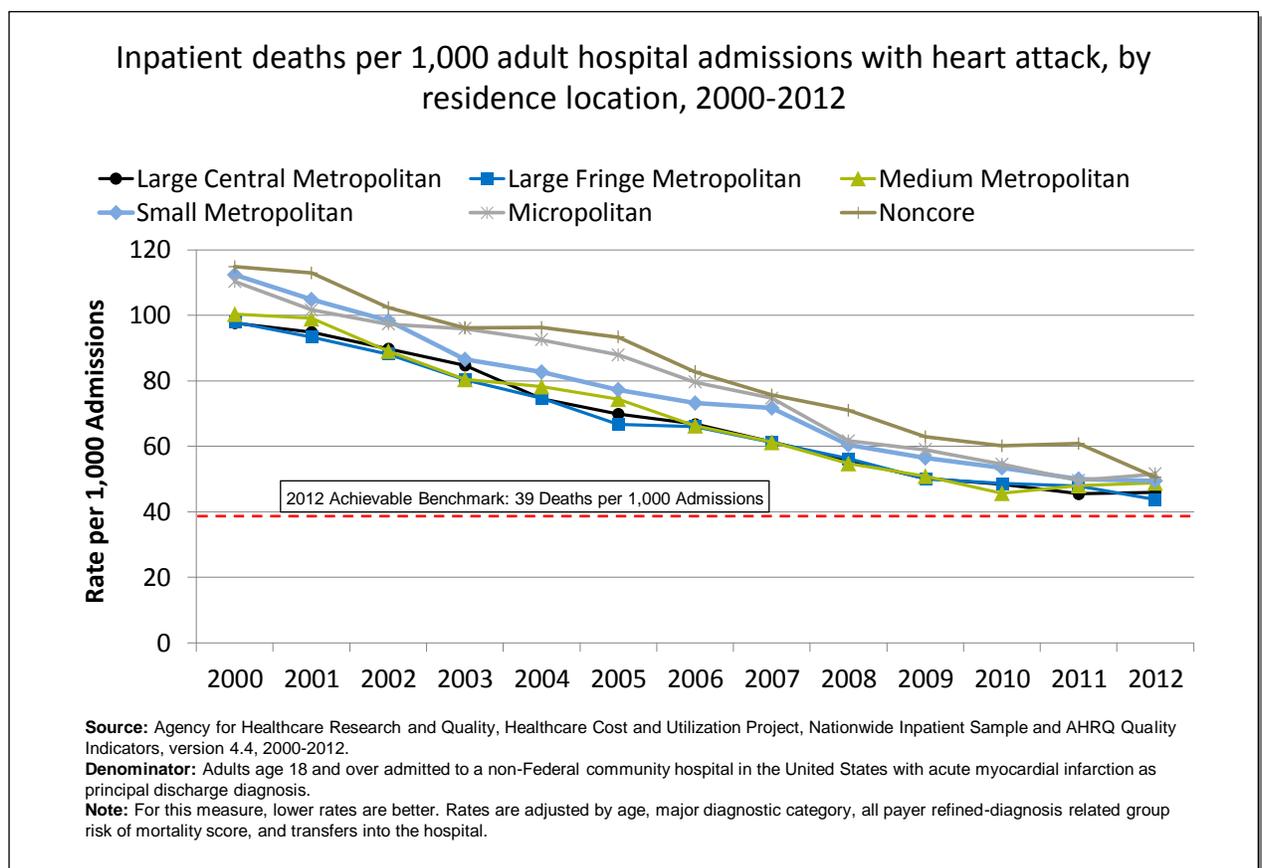
- The 2010 top 5 State achievable benchmark was 68%. The top 5 States that contributed to the achievable benchmark are Arkansas, California, Georgia, Mississippi, and Texas.
- Asian heart attack patients achieved the benchmark in 2011.
- At the current rate of improvement, the achievable benchmark could be attained overall in 2 years.
- Male heart attack patients should reach the achievable benchmark in 1 year and females in 3 years.
- White, Black, and Hispanic heart attack patients should reach the benchmark in 2 years.

Inpatient Deaths



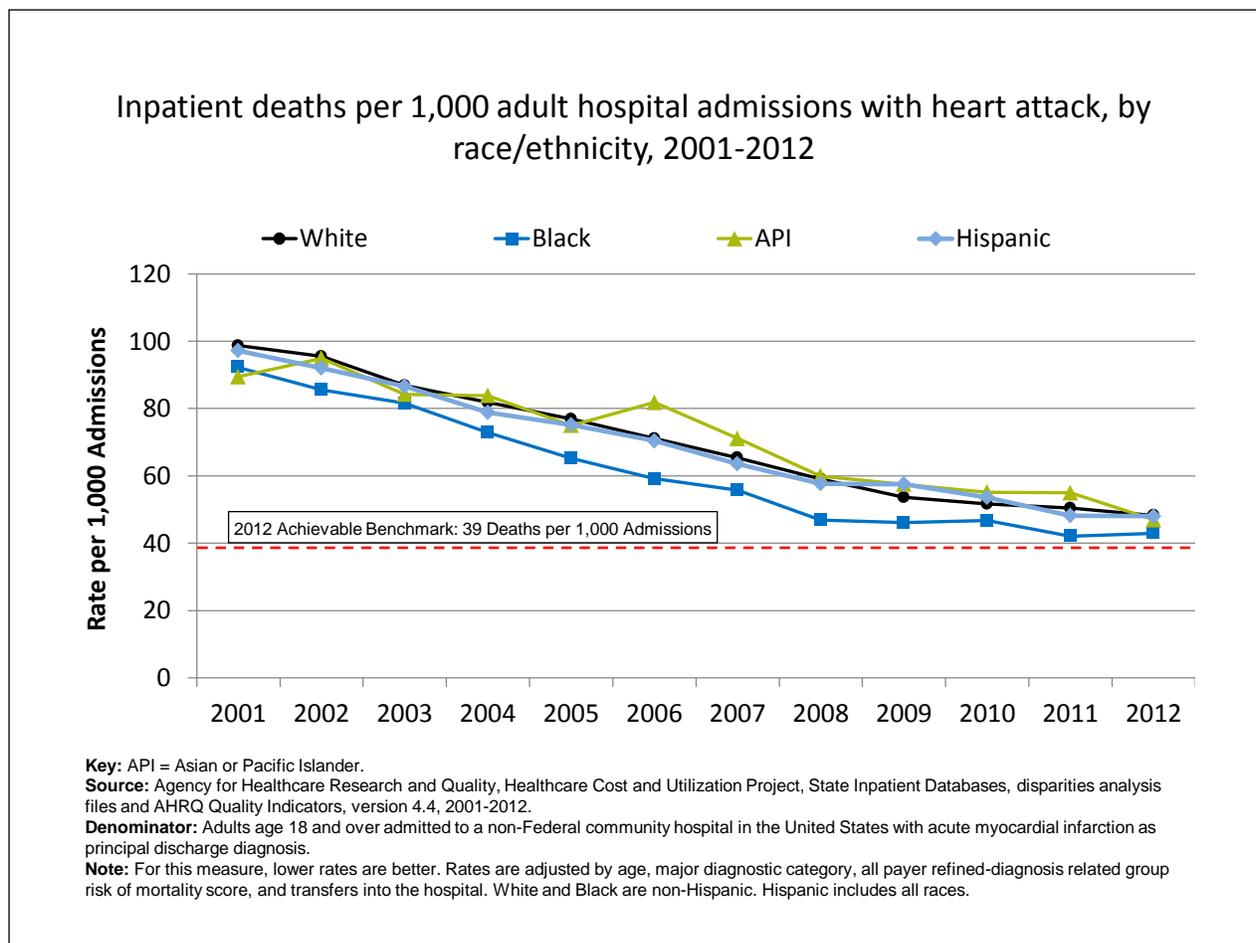
- **Importance:** Heart attack is a common life-threatening condition that requires rapid recognition and efficient treatment in a hospital to reduce the risk of serious heart damage and death.
- **Trends:** From 2000 to 2012, the risk-adjusted inpatient mortality rate for hospital admissions with heart attack decreased significantly overall and for all insurance groups.
- **Groups With Disparities:** In all years, uninsured patients had higher inpatient mortality rates for hospital admissions with heart attack than privately insured patients.
- **Achievable Benchmark:**
 - The 2008 top 4 State achievable benchmark for inpatient heart attack mortality was 48 deaths per 1,000 admissions. By 2012, this benchmark had been attained overall and for all insurance groups except uninsured patients.
 - Because the 2008 benchmark was achieved by the total population, a new 2012 top 4 State achievable benchmark was set at 39 deaths per 1,000 admissions. The top 4 States that contributed to the achievable benchmark are Alaska, Arizona, Michigan, and Rhode Island.
 - At the current rate of improvement, the 2012 benchmark could be met for the total population in approximately 2 years.
 - At current rates of improvement, uninsured patients could reach the 2012 benchmark in 7 years while other insurance groups could reach it in 2 years.

Inpatient Deaths



- **Importance:** Urban-rural disparities in cardiovascular mortality have been observed.
- **Trends:** From 2000 to 2012, the risk-adjusted inpatient mortality rate for hospital admissions with heart attack decreased significantly for all residence location groups.
- **Groups With Disparities:** In all years, residents of noncore areas had higher inpatient mortality rates for hospital admissions with heart attack than residents of large fringe metropolitan areas.
- **Achievable Benchmark:**
 - The 2008 top 4 State achievable benchmark for inpatient heart attack mortality was 48 deaths per 1,000 admissions. By 2012, this benchmark had been attained overall and for residents of large central and large fringe metropolitan areas.
 - Because the 2008 benchmark was achieved by the total population, a new 2012 top 4 State achievable benchmark was set at 39 deaths per 1,000 admissions. The top 4 States that contributed to the achievable benchmark are Alaska, Arizona, Michigan, and Rhode Island.
 - At current rates of improvement, the 2012 benchmark could be met for the total population and all residence location groups in approximately 2 years.

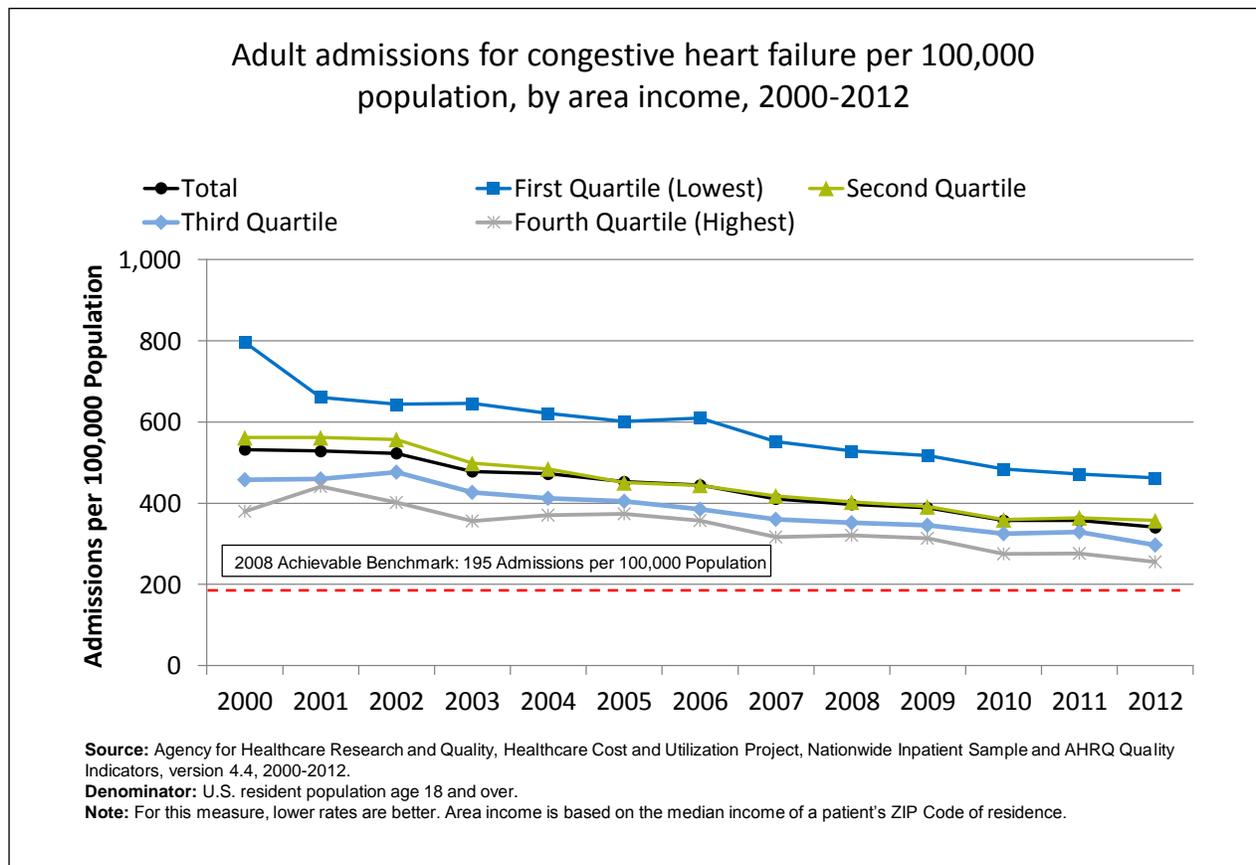
Inpatient Deaths



- **Importance:** Racial disparities in heart attack care have been observed.
- **Trends:** From 2001 to 2012, the risk-adjusted inpatient mortality rate for hospital admissions with heart attack decreased significantly for all racial/ethnic groups.
- **Groups With Disparities:** In 2012, Black patients had lower inpatient mortality rates for hospital admissions with heart attack than White patients.
- **Achievable Benchmark:**
 - The 2008 top 4 State achievable benchmark for inpatient heart attack mortality was 48 deaths per 1,000 admissions. By 2012, this benchmark had been attained for all racial/ethnic groups.
 - Because the 2008 benchmark was achieved by the total population, a new 2012 top 4 State achievable benchmark was set at 39 deaths per 1,000 admissions. The top 4 States that contributed to the achievable benchmark are Alaska, Arizona, Michigan, and Rhode Island.
 - At current rates of improvement, all racial/ethnic groups could reach the 2012 benchmark in approximately 2 years.

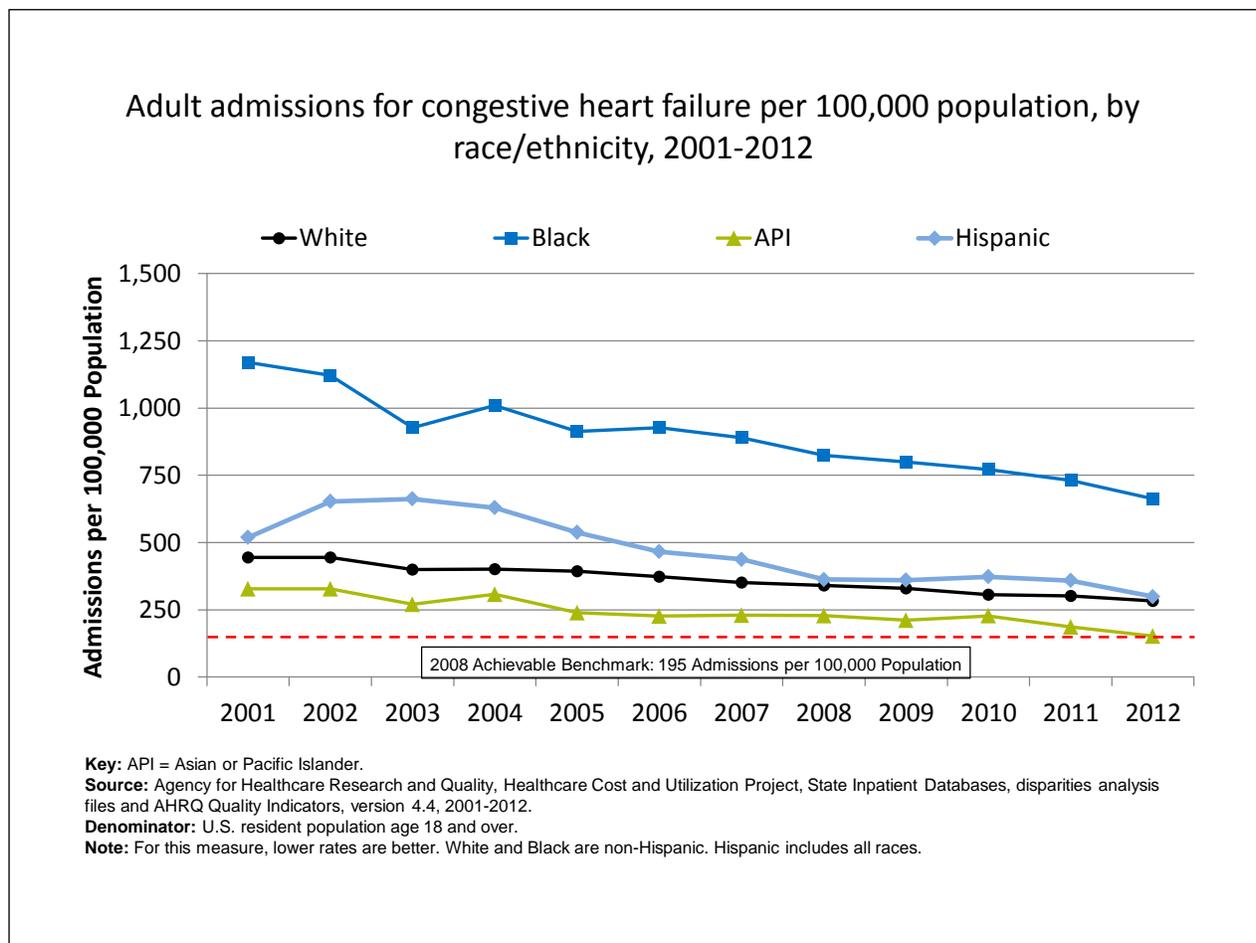
Treatment of Congestive Heart Failure

Adult Admissions for Congestive Heart Failure



- **Importance:** Some hospitalizations for heart failure are unavoidable, but rates of hospitalization can be influenced by the quality of outpatient care.
- **Trends:** From 2000 to 2012, the rate of admission for congestive heart failure among adults decreased significantly overall and for all area income groups.
- **Groups With Disparities:** In all years, compared with residents in the highest area income quartile, rates of admission for congestive heart failure were higher among residents in the lowest and second area income quartiles.
- **Achievable Benchmark:**
 - The 2008 top 4 State achievable benchmark for adult congestive heart failure admissions was 195 admissions per 100,000 population. The top 4 States that contributed to the achievable benchmark are Colorado, Oregon, Utah, and Vermont.
 - At current rates of improvement, residents in the highest area income quartile could achieve the benchmark in 5 years while residents in the lowest area income quartile would need 12 years.

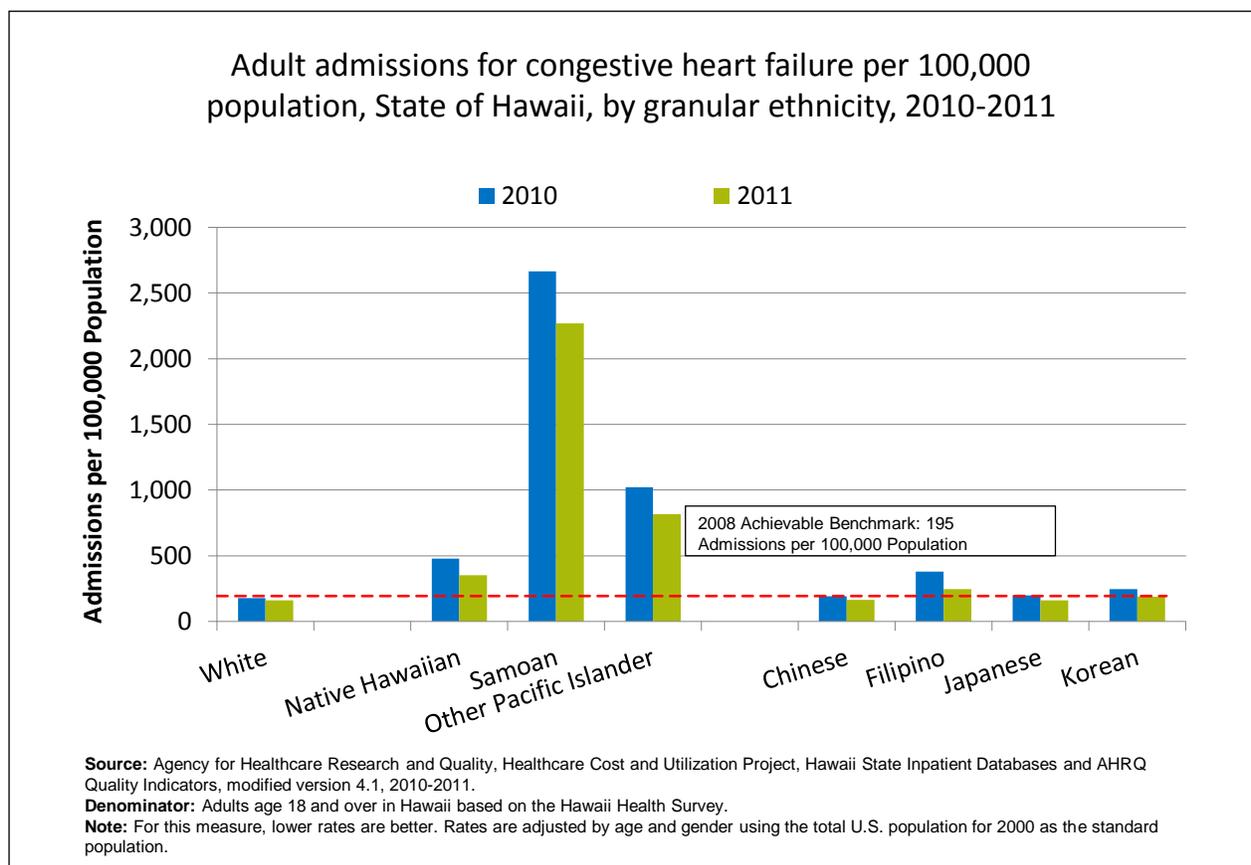
Adult Admissions for Congestive Heart Failure



- **Importance:** Racial disparities in care for congestive heart failure have been observed.
- **Trends:** From 2001 to 2012, the rate of admission for congestive heart failure among adults decreased significantly for all racial/ethnic groups.

- **Groups With Disparities:** In all years, compared with White patients, rates of admission for congestive heart failure were higher among Black patients and lower among API patients.
- **Achievable Benchmark:**
 - The 2008 top 4 State achievable benchmark for adult congestive heart failure admissions was 195 admissions per 100,000 population. The top 4 States that contributed to the achievable benchmark are Colorado, Oregon, Utah, and Vermont.
 - By 2012, Asian and Pacific Islander (API) patients had reached the benchmark.
 - At current rates of improvement, Hispanic patients could achieve the benchmark in 3 years and White patients could achieve it in 6 years. Black patients would need 12 years to achieve the benchmark.

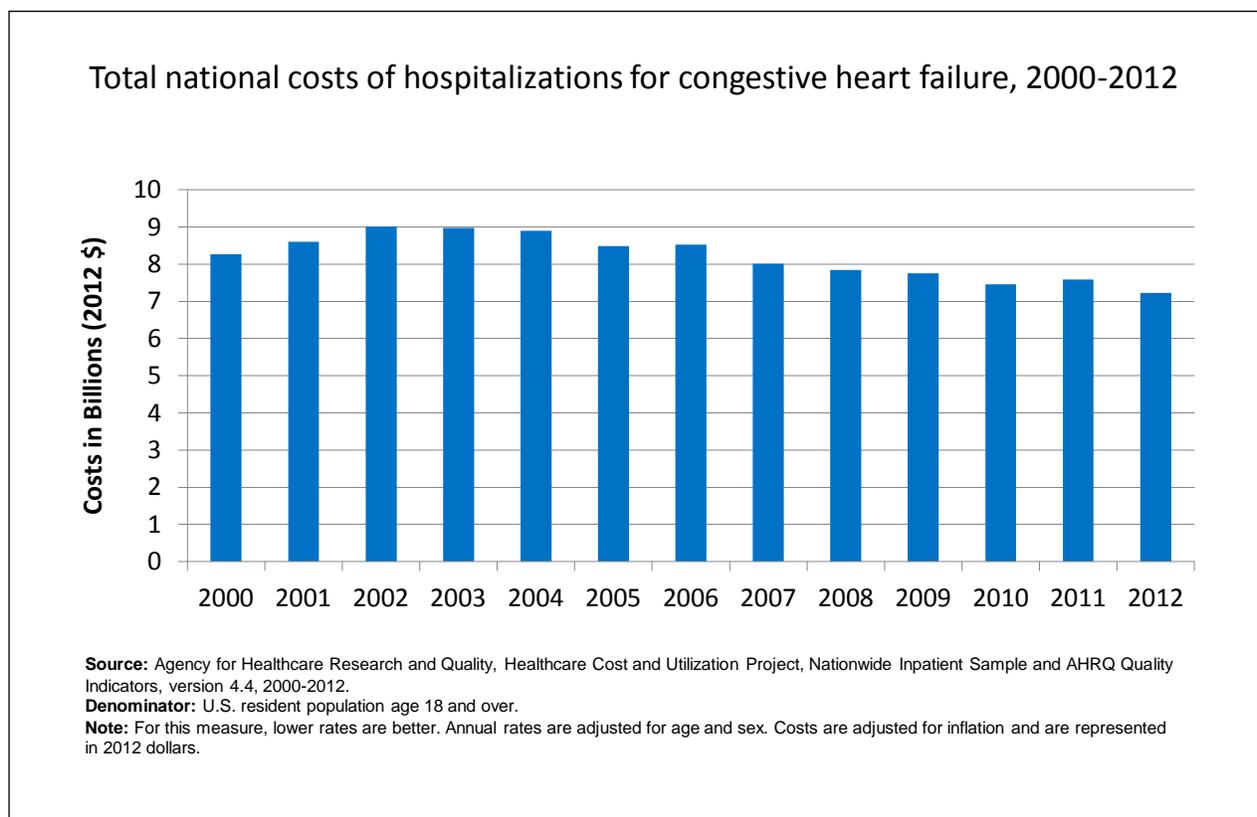
Adult Admissions for Congestive Heart Failure



- **Importance:**
 - The ability to assess disparities among Native Hawaiians and Other Pacific Islanders (NHOPIs) has been a challenge for two main reasons:
 - ◆ First, the NHOPi racial category is relatively new to Federal data collection. Before 1997, NHOPIs were classified as part of the API racial category and could not be identified separately in most Federal data. In 1997, the Office of Management and Budget promulgated new standards for Federal data on race and ethnicity and mandated that information about NHOPIs be collected separately from information

- about Asians. However, these standards have not yet been incorporated into all databases.
- ◆ Second, when information about this population was collected, databases often included insufficient numbers of NHOPIs to allow reliable estimates to be made.
 - Hawaii, home to more than half of Native Hawaiians in the United States, is a leader in collecting health information on NHOPI and Asian populations.
 - **Groups With Disparities:** In Hawaii, in both years, Native Hawaiians, Samoans, Other Pacific Islanders, and Filipinos had higher rates of hospital admission for congestive heart failure than Whites.
 - **Achievable Benchmark:**
 - The 2008 top 4 State achievable benchmark for adult congestive heart failure admissions was 195 admissions per 100,000 population. The top 4 States that contributed to the achievable benchmark are Colorado, Oregon, Utah, and Vermont.
 - In Hawaii, Whites, Chinese people, Japanese people, and Koreans have achieved the benchmark while Native Hawaiians, Samoans, Other Pacific Islanders, and Filipinos have not.

Costs of Hospitalizations for Congestive Heart Failure



- **Importance:** Congestive heart failure is one of the most costly conditions treated in U.S. hospitals.
- **Trends:** After peaking in 2002, costs have fallen from \$9.0 to \$7.2 billion in 2012 dollars.