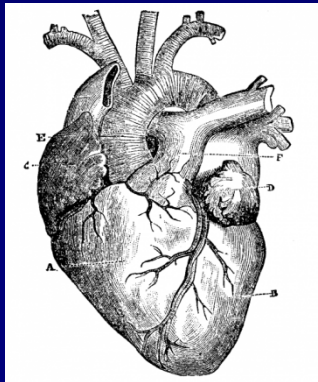


The Role of Insurance in Providing Access to Cardiac Care in Maryland



Samuel L. Brown, Ph.D.
University of Baltimore
College of Public Affairs

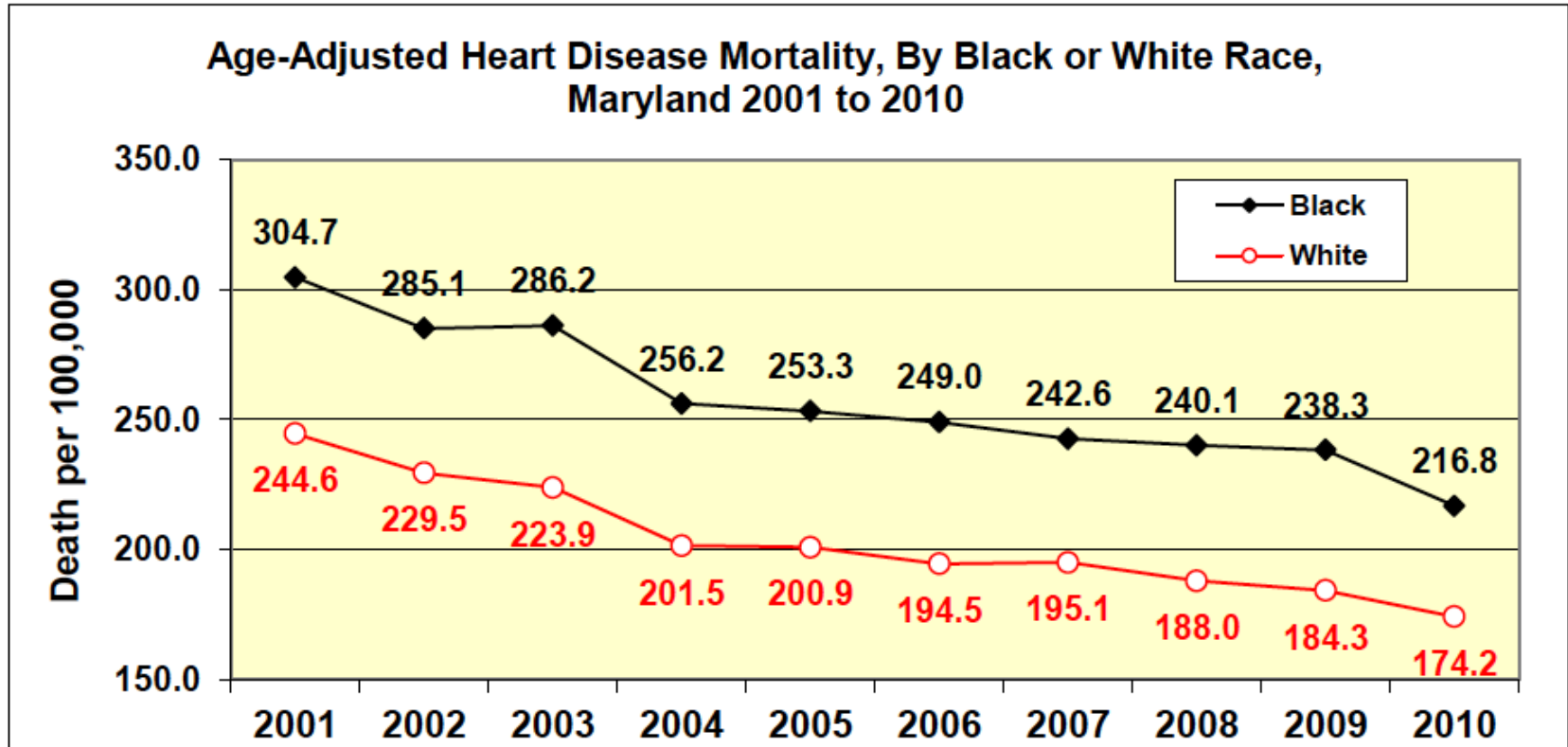
Heart Disease

- ❖ Heart Disease is the leading cause of death in Baltimore City, the State of Maryland, and in the nation.
- ❖ Coronary Heart Disease (CHD) is the number one killer in America affecting more than 15 million, and responsible for around half of deaths for all diseases of the heart.
- ❖ In the past decade, mortality rate for heart disease have decreased, however disparities remain.



State of Maryland

Figure 28. Age-adjusted Heart Disease Mortality Rate by Black or White Race, Maryland 2001-2010



Source: Maryland Vital Statistics Annual Report 2010 [3]



Research Questions

- ❖ Are sociodemographic characteristics likely predictors for undergoing invasive cardiac procedures for CHD hospitalized patients living in Maryland?
- ❖ What is the impact of dual health coverage (Medicare and Medicaid) in reducing the gap for treating CHD?



Hypotheses

- ❖ There will be racial and gender differences in the use of treatments for CHD by insurance status.
- ❖ Medicare/Medicaid patients are more likely to be treated for cardiac care compared to Medicaid and privately insured patients by race, gender, and socioeconomic status.

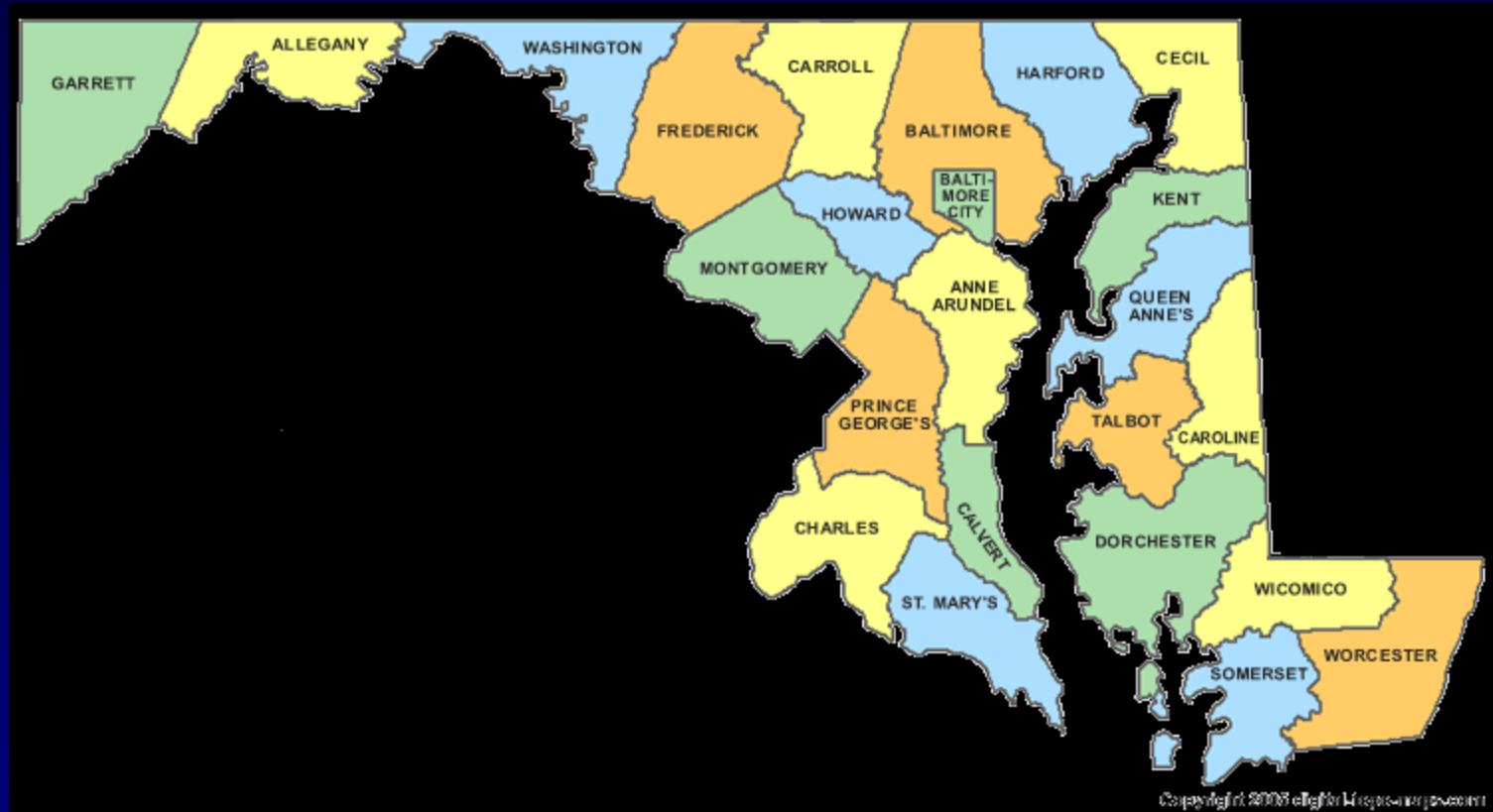


Data Sources and Analysis

- ❖ Health Services Cost Review Commission (HSCRC) Hospital Discharge Data from CY 2012
- ❖ All Patients admitted for Acute Myocardial Infarction based ICD-9-CM Diagnosis Codes (ICD-9-CM 410.0 through 410.9)
- ❖ 13,681 patients were included in the study



❖ Maryland Counties



Social and Economic Characteristics: Baltimore City and Howard County

❖ 29.6 % White

❖ 63.7% Black

❖ \$40K median
income

❖ 23.4% below
poverty

❖ 24% uninsured

❖ 26% college
educated

❖ 61.4% White

❖ 18.4% Black

❖ \$108k median
income

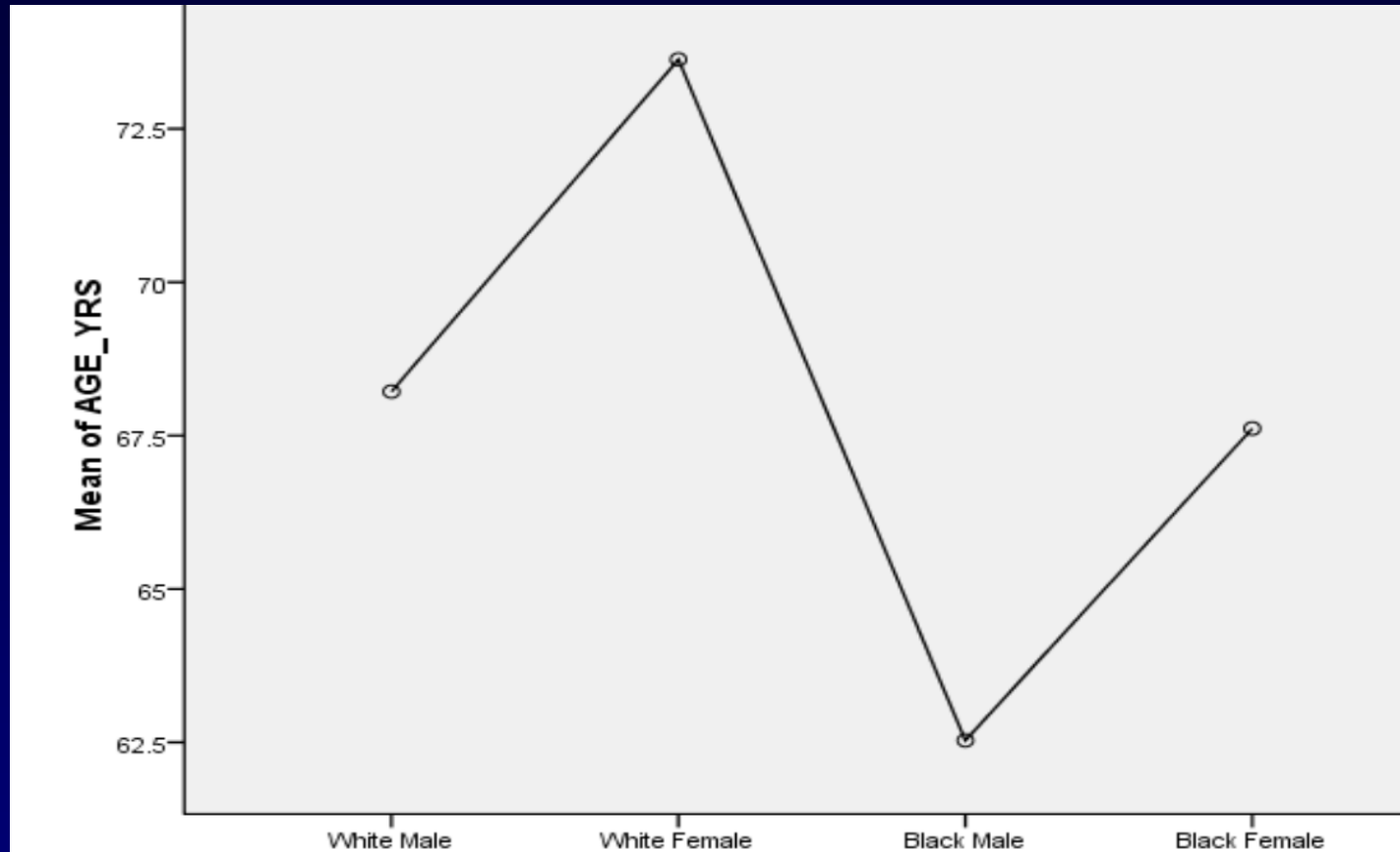
❖ 4.4% below poverty

❖ 0.8% uninsured

❖ 59.5% college
educated

Race, Age and Sex of Maryland AMI Patients, 2012

| | Age 18-39 | 40-49 | 50-64 | 65-74 | 75+ | Total |
|--------------|-----------|-------|-------|-------|-------|--------|
| White Male | 1.8% | 7.7% | 31.6% | 22.4% | 36.1% | 5,316 |
| White Female | 1.1% | 4.7% | 20.4% | 19.8% | 53.9% | 4,332 |
| Black Male | 4.0% | 14.2% | 37.9% | 21.4% | 22.6% | 2,000 |
| Black Female | 3.1% | 8.9% | 29.4% | 23.0% | 35.6% | 2,033 |
| Total | 289 | 1,078 | 3,922 | 2,943 | 5,449 | 13,681 |



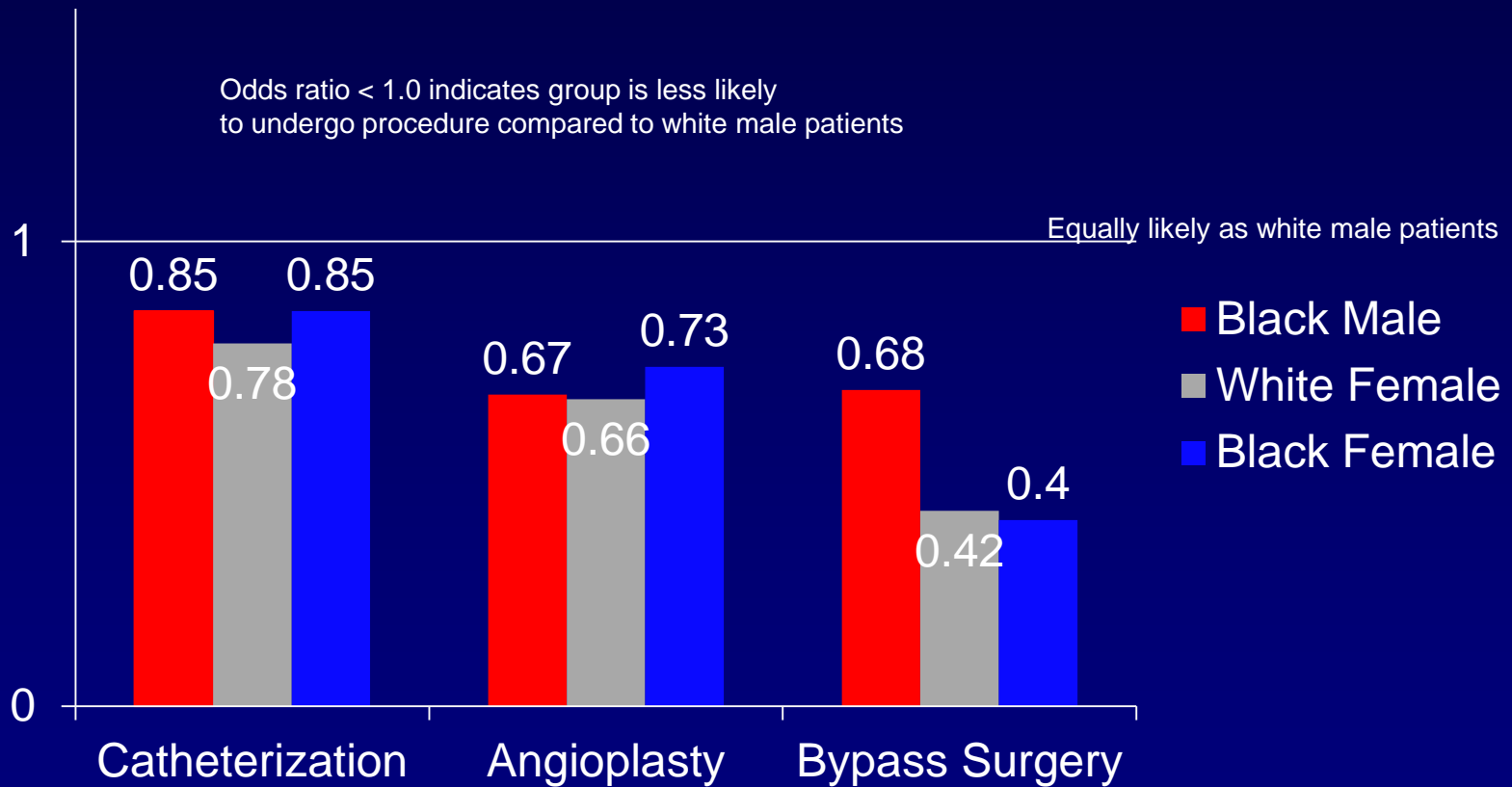
Mean Age of Maryland AMI Patients

African American males experience heart attacks at younger ages.

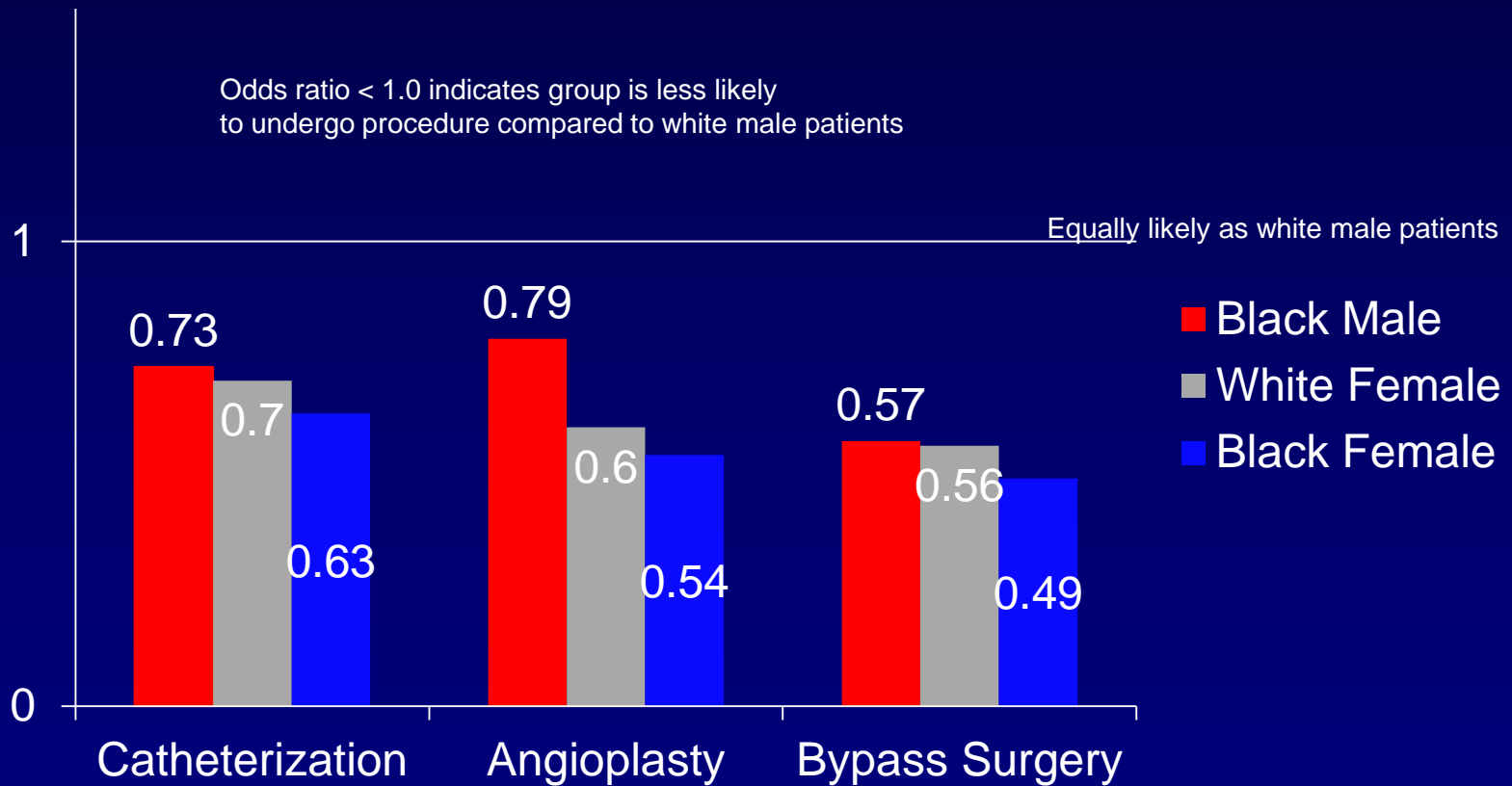
Insurance Coverage Among Maryland AMI Patients, 2012

| | Medicare | Medicaid | Private | Uninsured | Private HMO | Medicare HMO |
|---------------|----------|----------|---------|-----------|-------------|--------------|
| White Males | 56.7% | 2.5% | 20.6% | 4.0% | 9.7% | 2.5% |
| White Females | 70.3% | 2.1% | 4.9% | 2.4% | 5.9% | 3.8% |
| Black Males | 46.8% | 7.2% | 15.3% | 8.4% | 8.9% | 4.0% |
| Black Females | 58.1% | 4.6% | 12.1% | 4.1% | 5.6% | 7.3% |

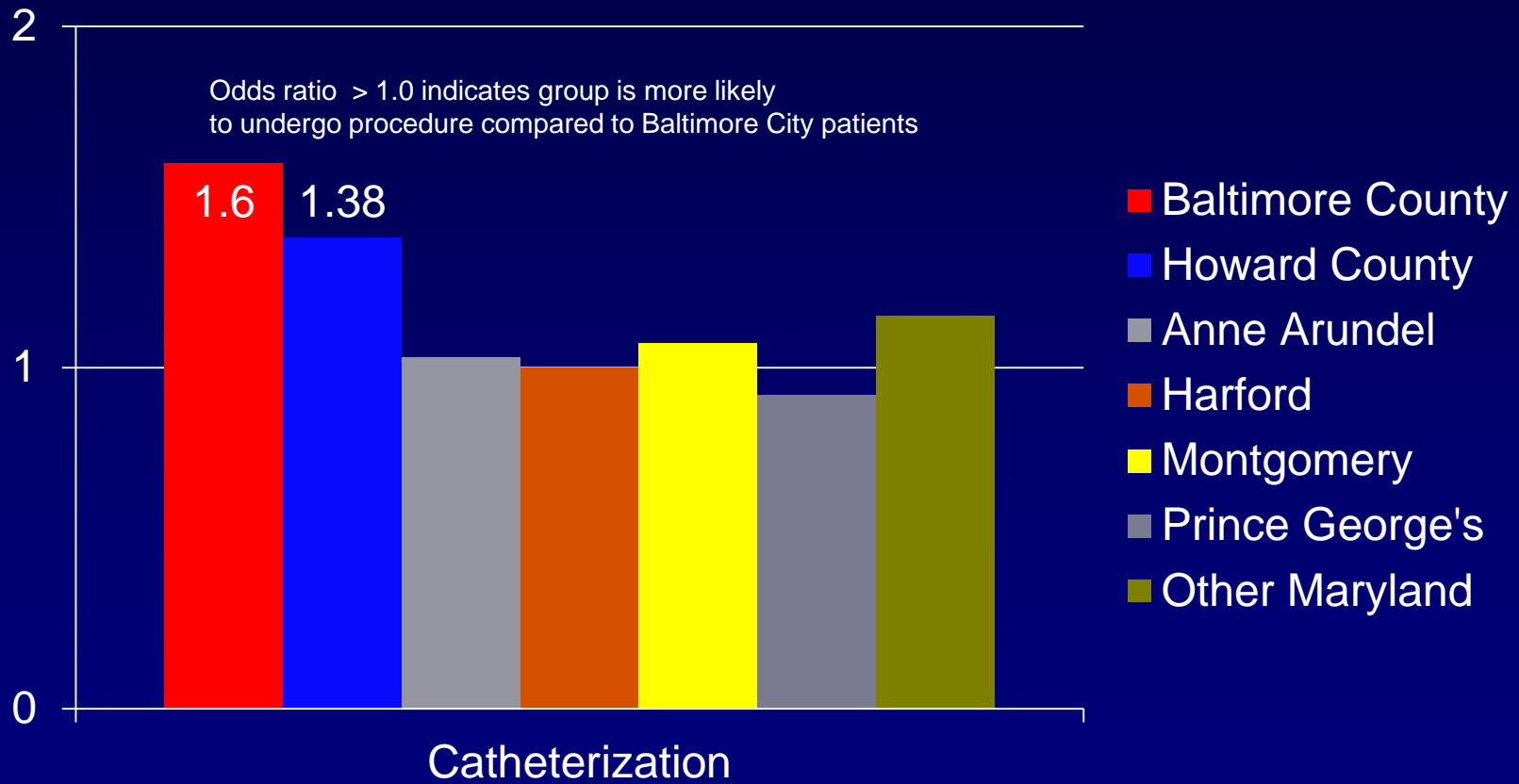
Rate of Cardiac Interventions Among Baltimore Patients Hospitalized with an Acute Myocardial Infarction, by Race/Sex, 2012



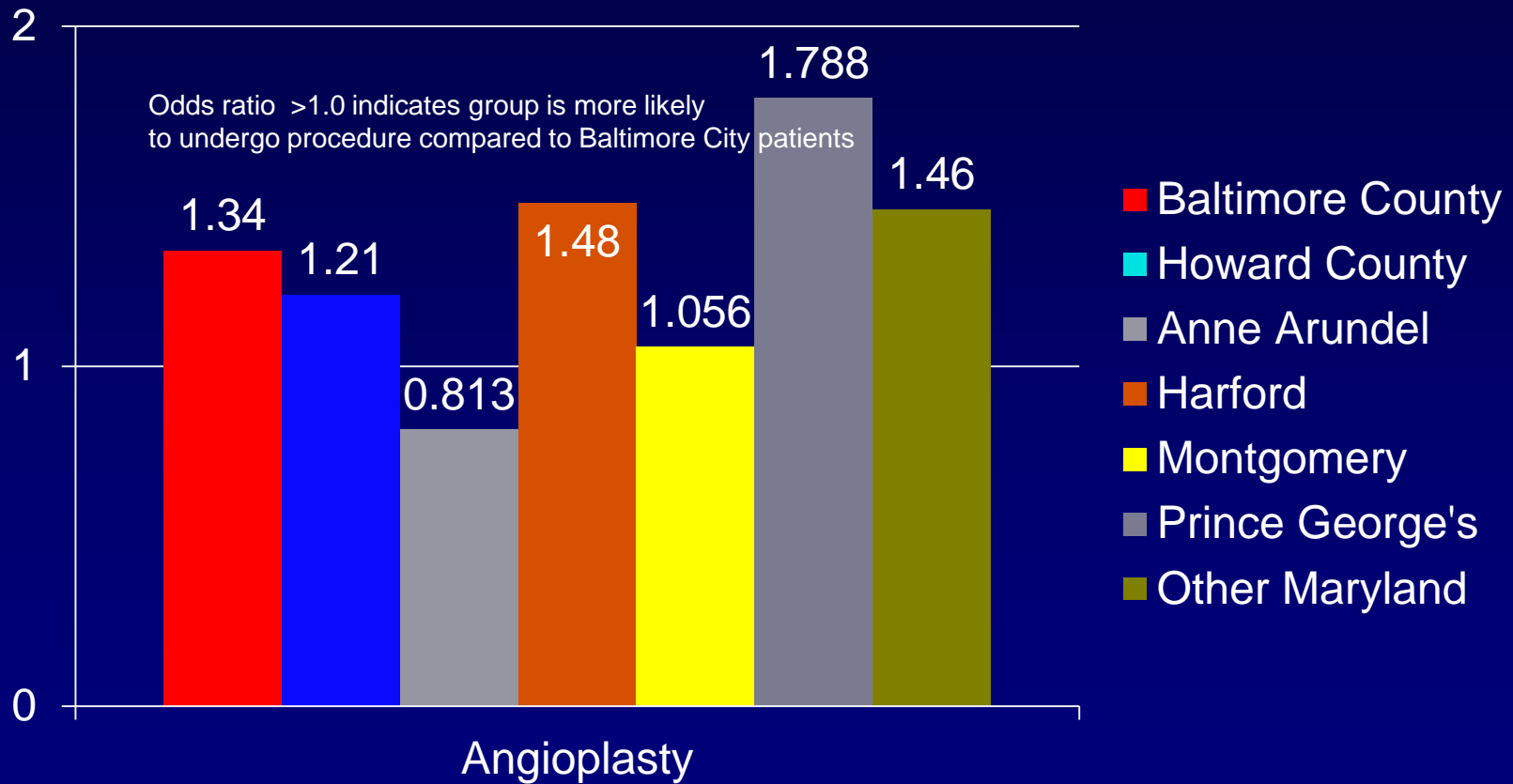
Rate of Cardiac Interventions Among Maryland Patients Hospitalized with an Acute Myocardial Infarction, by Race/Sex, 2012



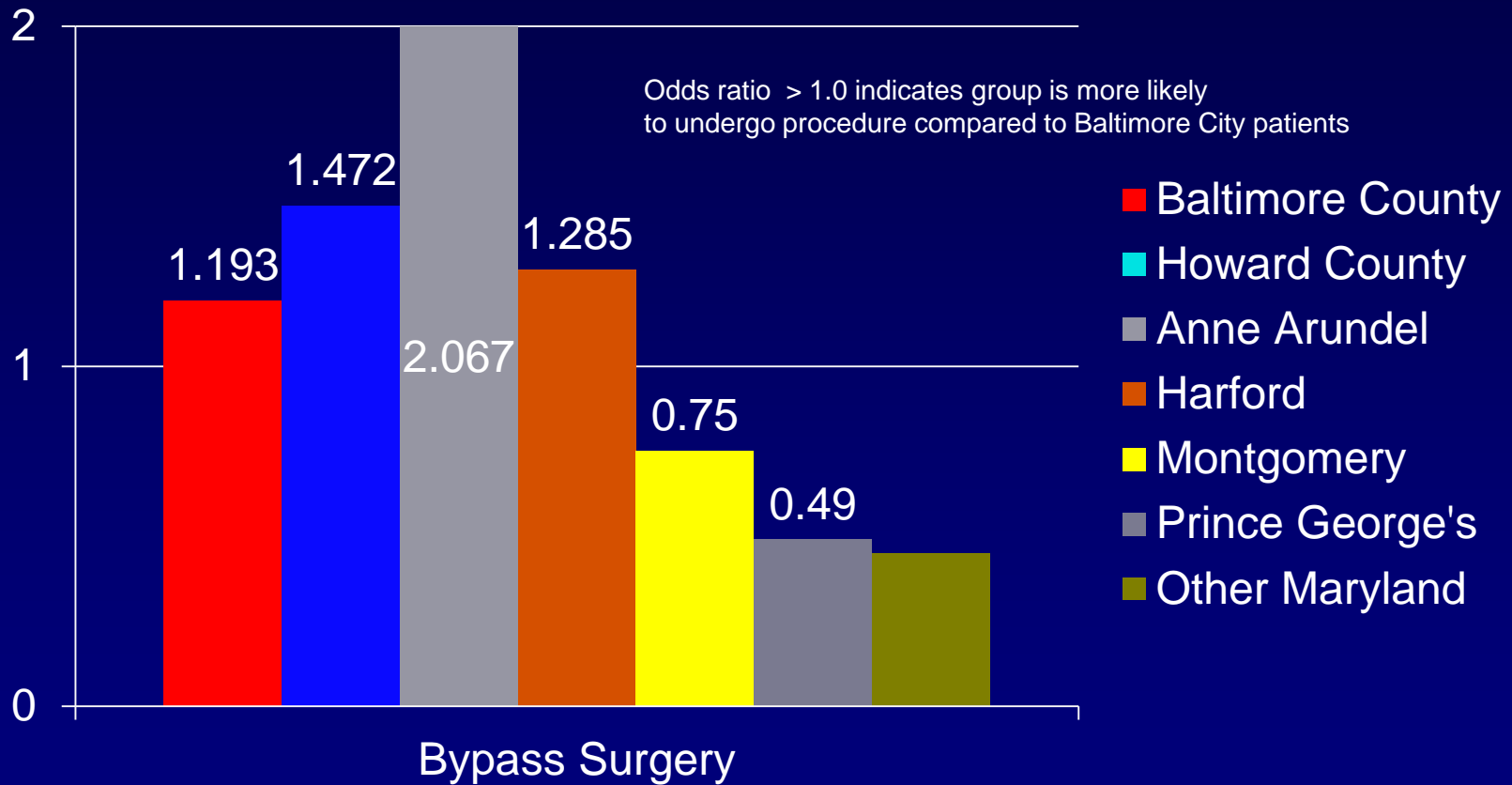
Rate of Cardiac Interventions Among Maryland Patients Hospitalized with Acute Myocardial Infarction, by City/County, 2012



Rate of Cardiac Interventions Among Maryland Patients Hospitalized with Acute Myocardial Infarction, by City/County, 2012



Rate of Cardiac Interventions Among Maryland Patients Hospitalized with Acute Myocardial Infarction, by City/County, 2012



Findings

- ❖ Based on the discharge data, white men with AMI are more likely to receive access to care compared to women and minorities.
- ❖ African-American women are at high risk for not receiving treatment for CHD in comparison to other groups.
- ❖ Medicare and Medicaid patients are just as likely to be treated as privately insured patients.



Conclusions

- ❖ There were clear differences in access across Maryland Counties.
- ❖ Even with controls for age, gender, co morbidities, blood pressure, and diabetes, there is little difference in access between Medicare and commercial fee for service insurers.
- ❖ It appears that racial differences in insurance coverage does not explain much of the racial difference in access to care.
- ❖ Large gaps in access across all insurance comparisons remain—insurance matters, but not very much.



Conclusion

- ❖ More extensive research is imperative in understanding the disparities in terms of access and outcomes especially with the implementation of health care reform that will expand health coverage for more Americans.
- ❖ It remains to be seen whether being insured guarantees positive health outcomes.

