

Ten-year Trends in the Quality of Care and Racial Disparities after the VA Organizational Transformation

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Background

- Importance of linking quality measurement to disparities
- VA organizational transformation in 1990's associated with improvements in quality
- Impact on disparities is not known

Objectives

- To assess trends in the quality of care and racial disparities in the VA from 2000-2009
- To determine the relative contributions of within-facility and between-facility disparities
 - **Within-facility:** disparities in care among black and white veterans receiving care in the same VA medical center
 - **Between-facility:** disparities that arise from concentration of black veterans in lower-performing VA medical centers

Methods – Source of Data

- VA External Peer Review Program (2000-2009)
- Medical SAS data (race and ZIP code)
- US Census (sociodemographic variables)
- Total sample size: 866,629 white and 143,335 black veterans
- Rate of missing race data <2.5%

Methods – EPRP Indicators

Diabetes

Eye Exams

LDL Testing

LDL Below 100 mg/dl

HbA1c Testing

HbA1c Controlled Below
9.0%

Cardiovascular

LDL Testing After MI

LDL < 100 mg/dl After MI

Blood Pressure < 140/90mmHg

Cancer Screening

Mammography

Colorectal Cancer
Screening

Methods - Analyses

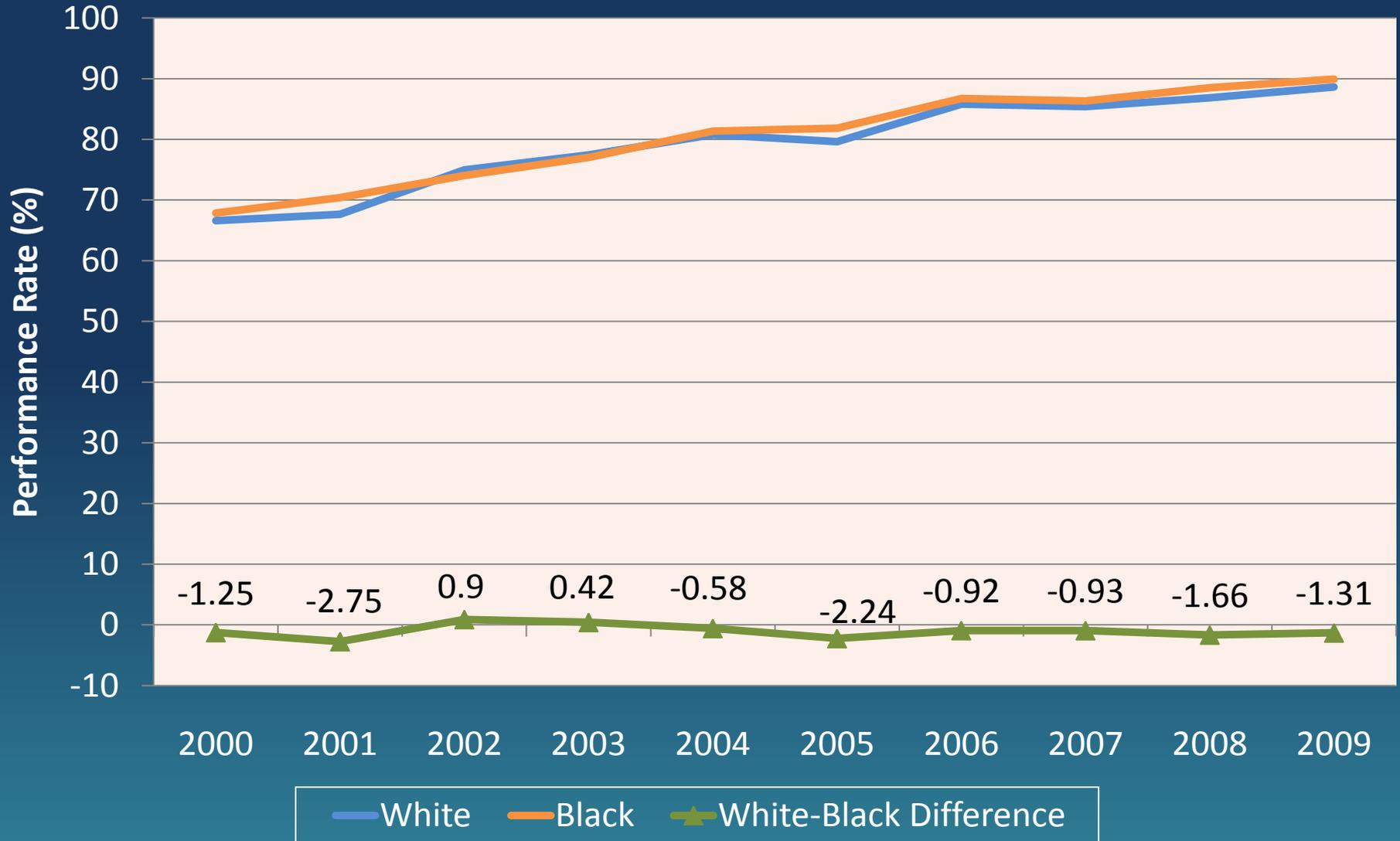
- Compared characteristics of white and black veterans eligible for each EPRP indicator and unadjusted performance trends
- Constructed sequential regression models predicting adherence to each indicator
 - Model 1: age, race, year, race-year interaction
 - Model 2: Model 1 plus fixed effect for VA medical center
 - Model 3: Model 2 plus area-level income and education

Characteristics of VA Cohort Eligible for Diabetes Care Measures, 2000-2009

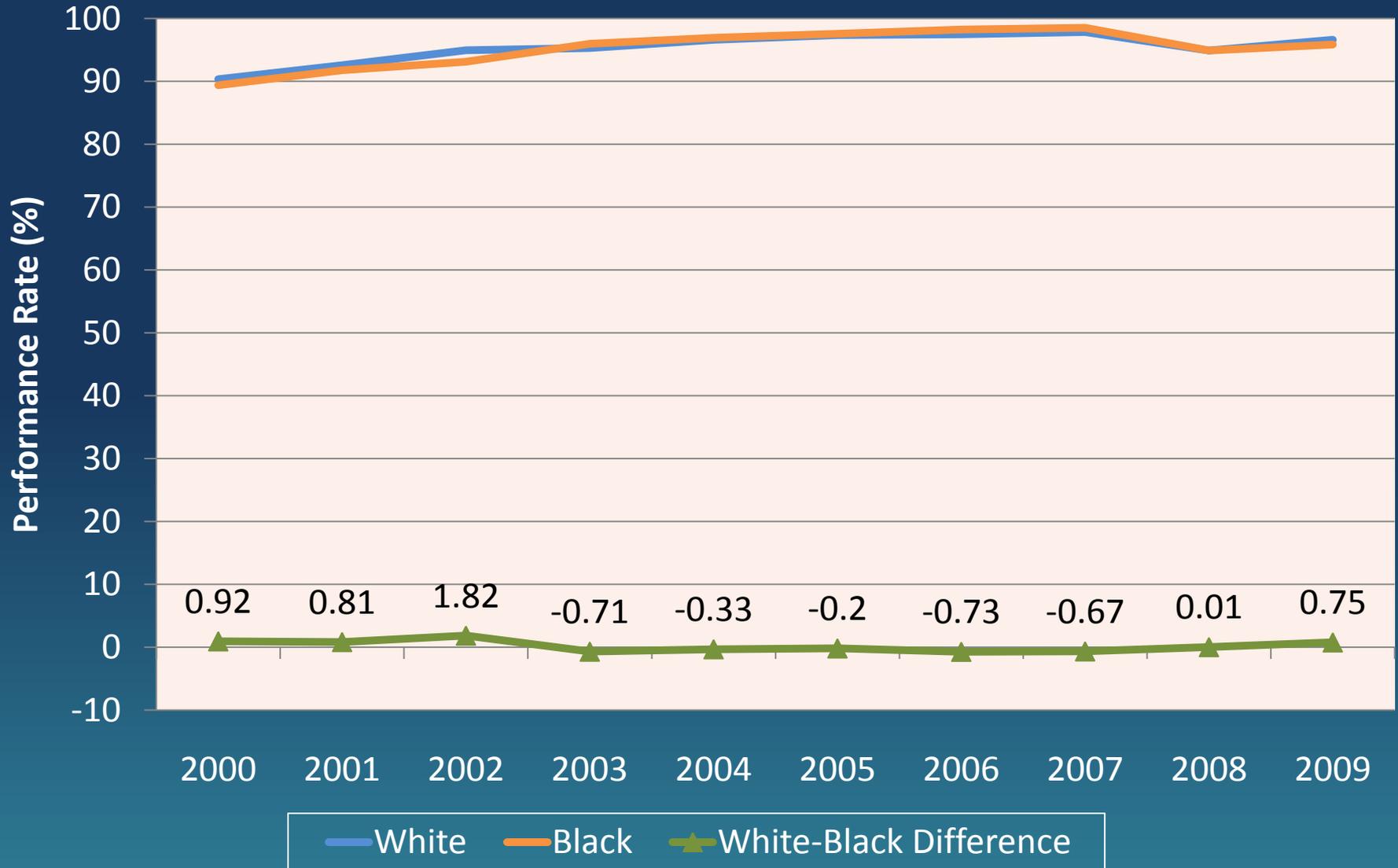
	Whites	Blacks
Sample size	454,481	78,654
Mean age (years)	68.1	64.7
Below poverty (%)	10.0	14.9
Some college or above (%)	30.0	28.4
Census Region		
Northeast	19.8	15.4
Midwest	26.4	19.6
South	33.1	53.3
West	20.7	11.8

Note: P-values < 0.01 for all white-black comparisons

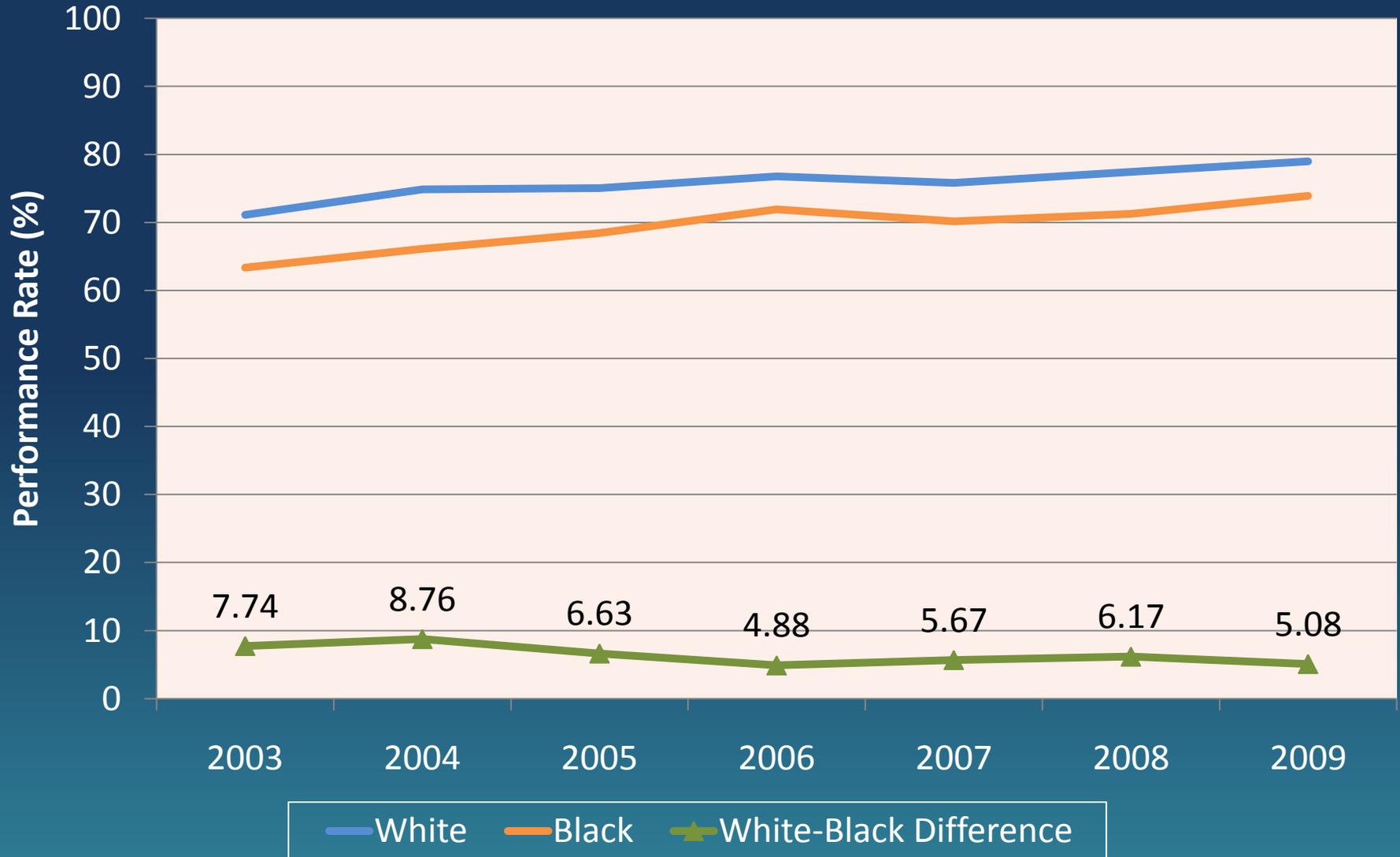
Diabetes: Retinal Eye Exams



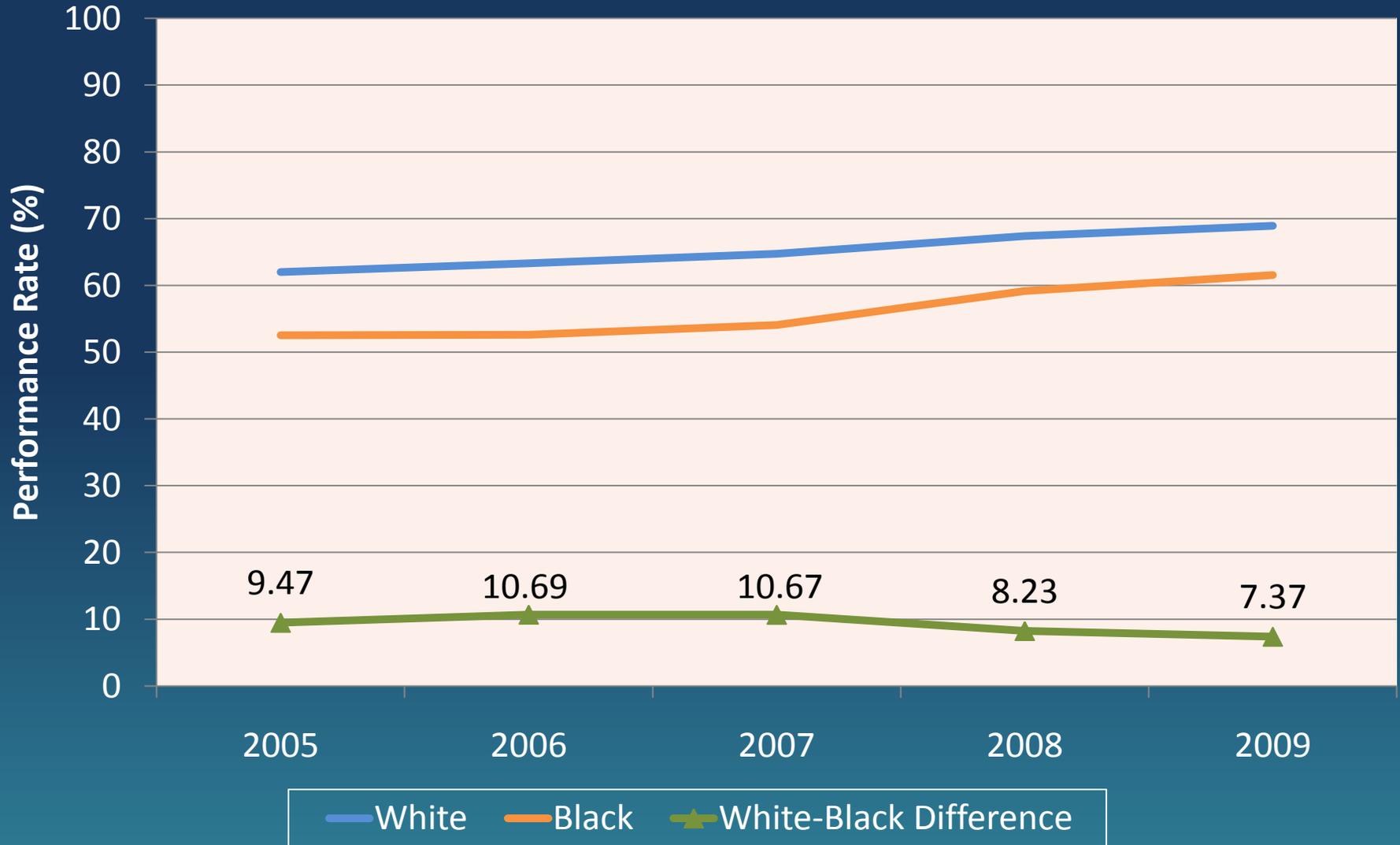
Diabetes: LDL Screening



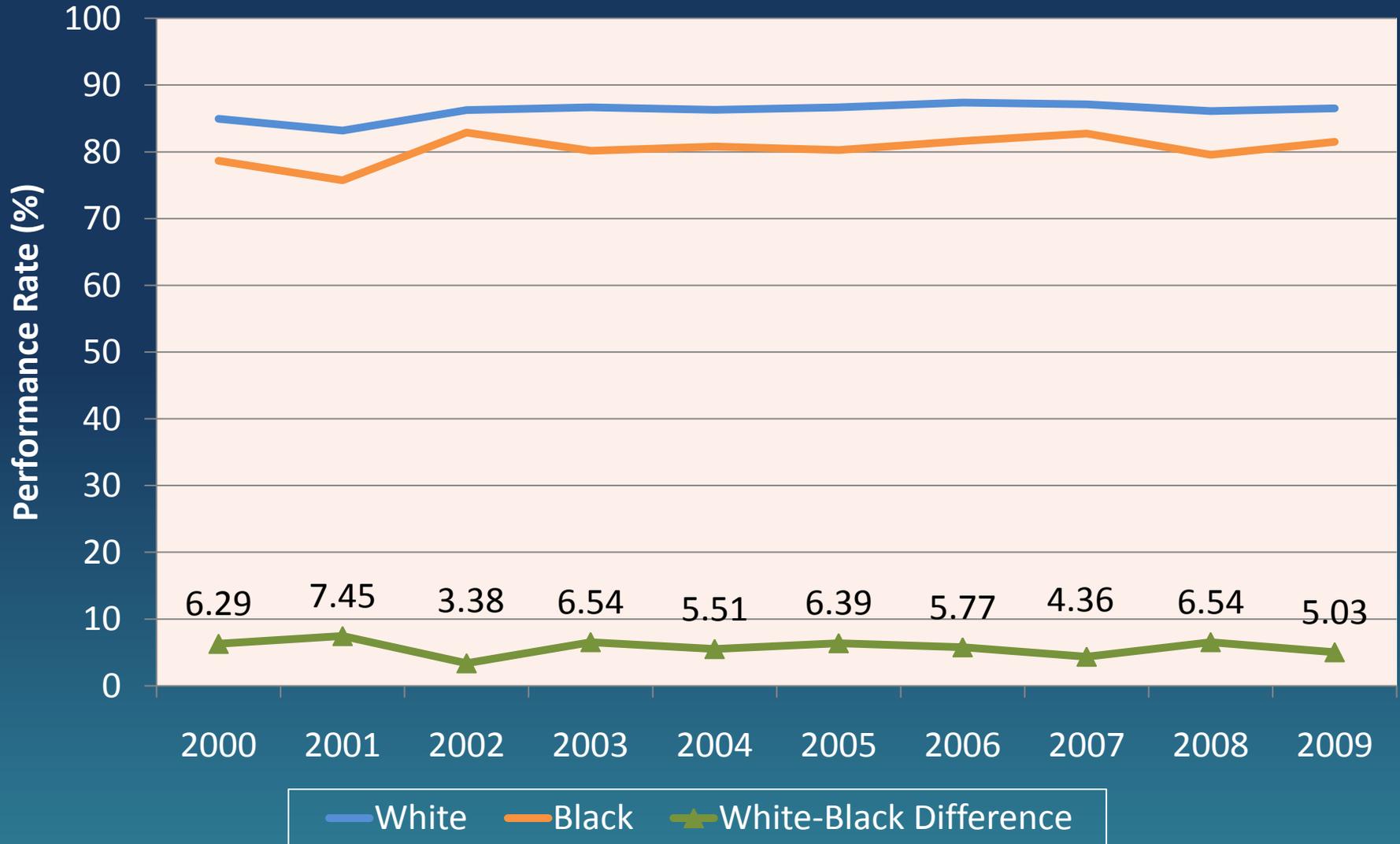
Controlled Blood Pressure < 140/90mmHg



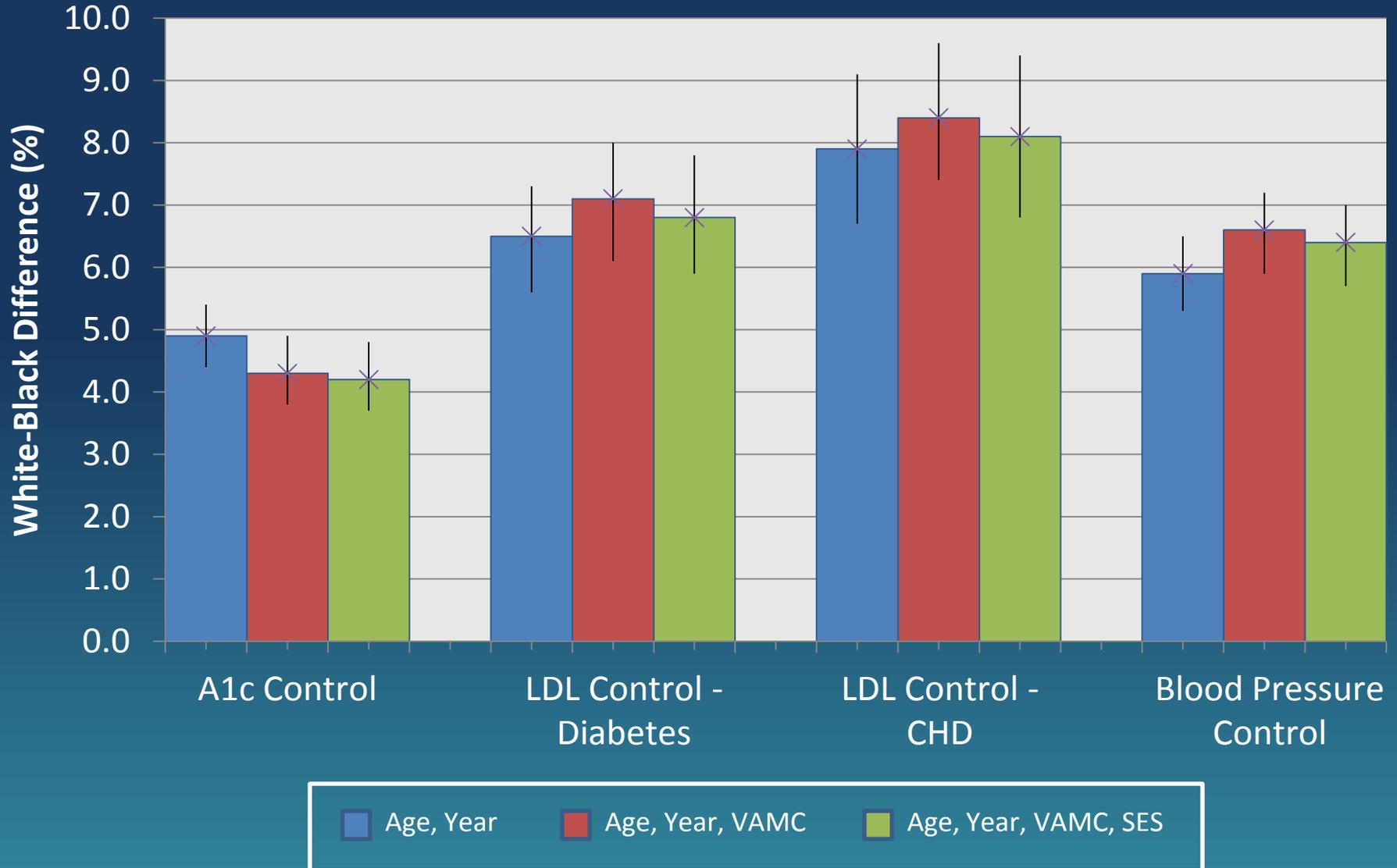
Cholesterol Management After Acute Coronary Event: LDL<100



Diabetes: Cholesterol Management (LDL <100)



Adjusted Racial Disparities



Conclusion

- Improvements in clinical performance for both white and black veterans for most measures from 2000 to 2009
- Minimal disparity for 5 of 6 process measures
- Larger and persistent disparities for all intermediate outcomes
- Disparities in intermediate outcomes largely driven by within-facility differences

Limitations

- Limited to 10 measures of quality
- Did not account explicitly for dual utilization
- Lack data on providers and prescribing practices

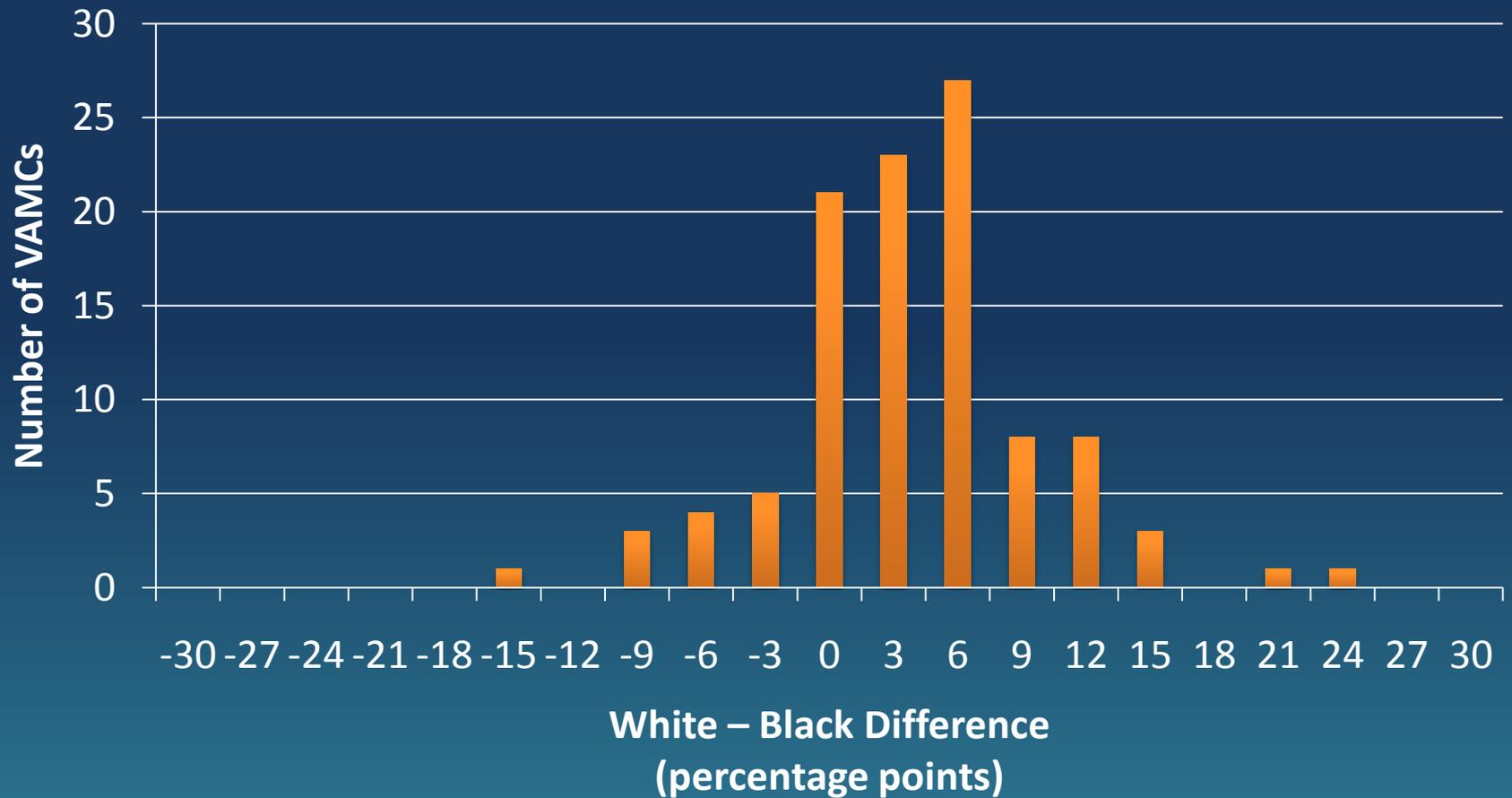
Implications

- Despite extensive QI efforts, no evidence of meaningful reduction of racial disparity in intermediate outcomes
- Continued focus on many existing process indicators unlikely to be of much benefit
- Findings support measurement racial equity at the VAMC-level

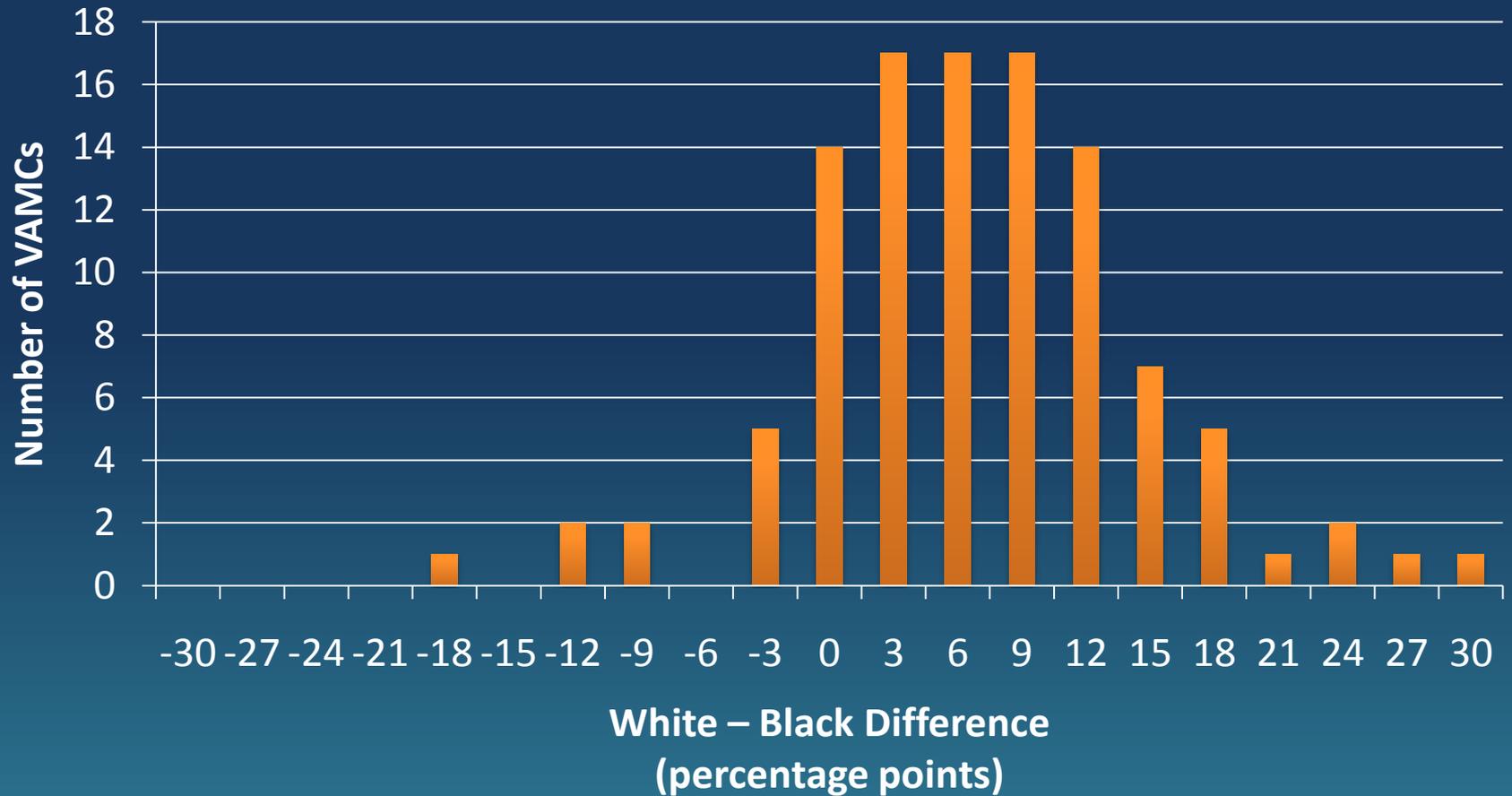
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 - Dan Berlowitz

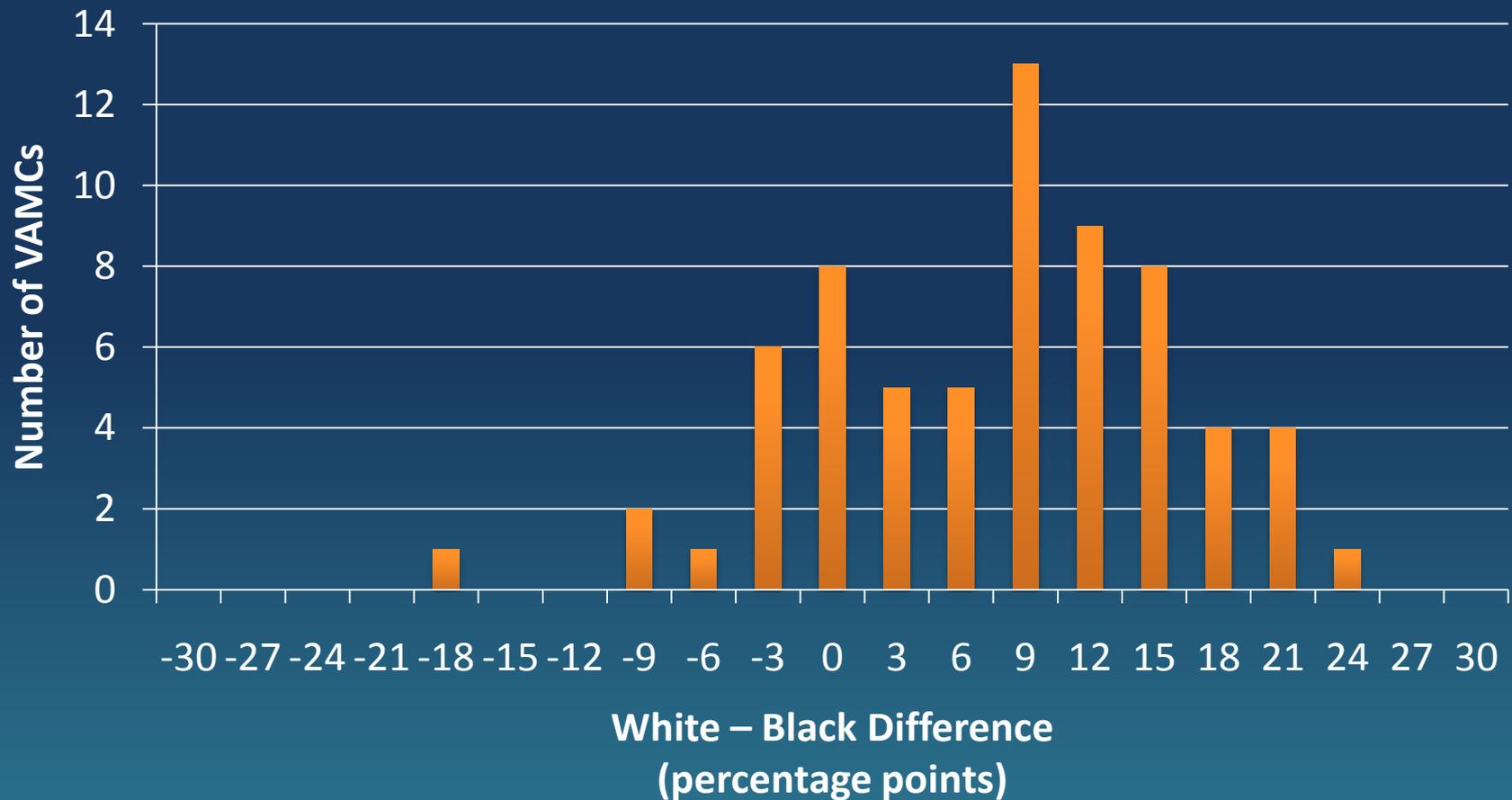
Controlled Diabetes (HbA1c <9.0%)



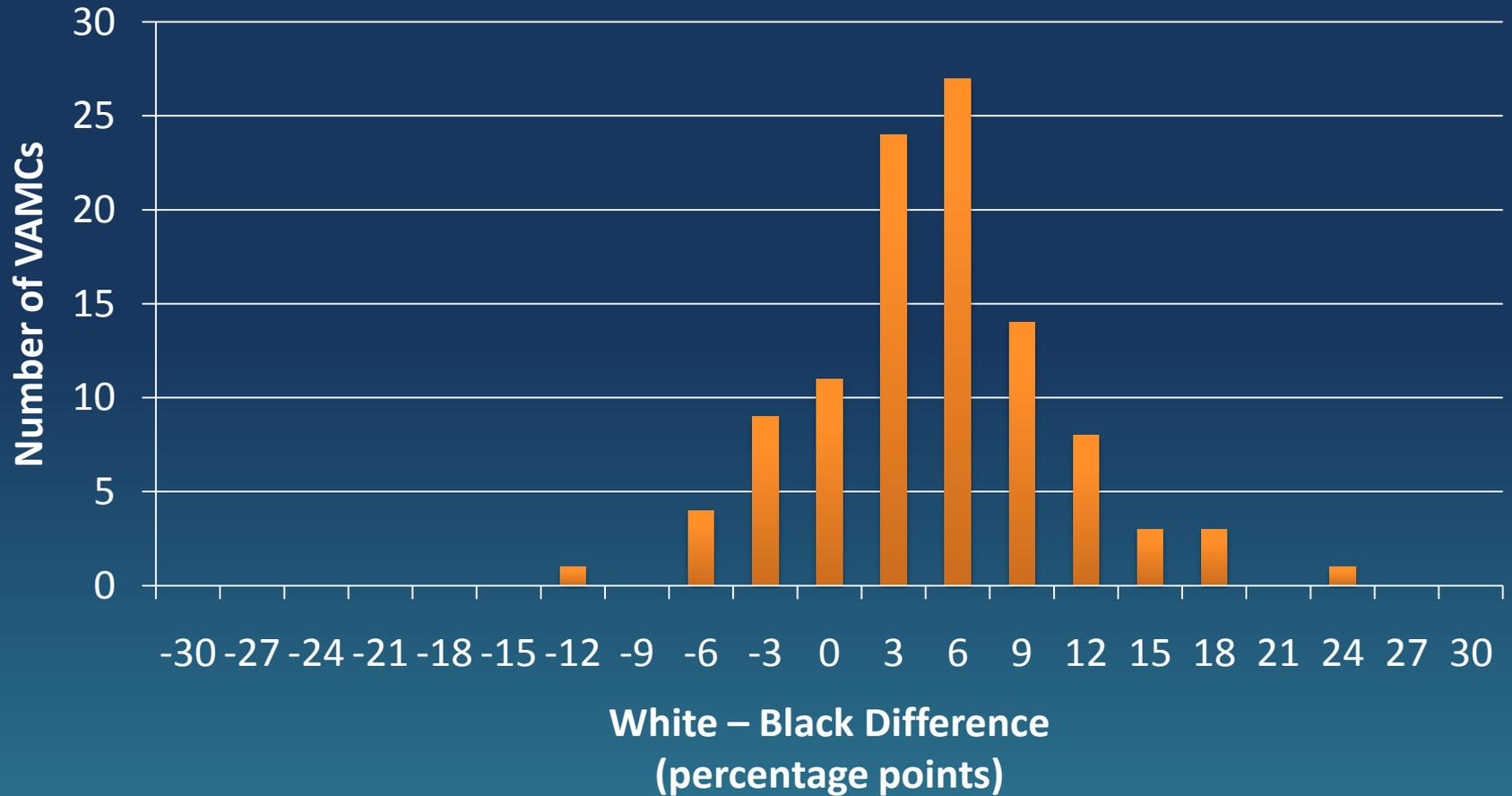
Diabetes: Cholesterol Management (LDL <100)



Cholesterol Management After Acute Coronary Event: LDL<100



Controlled Hypertension



Colorectal Cancer Screening

