

Caring for the Underserved: The Role of Race-Ethnicity and Specialty

Kara Odom Walker, MD, MPH
Gerardo Moreno, MD
Kevin Grumbach, MD

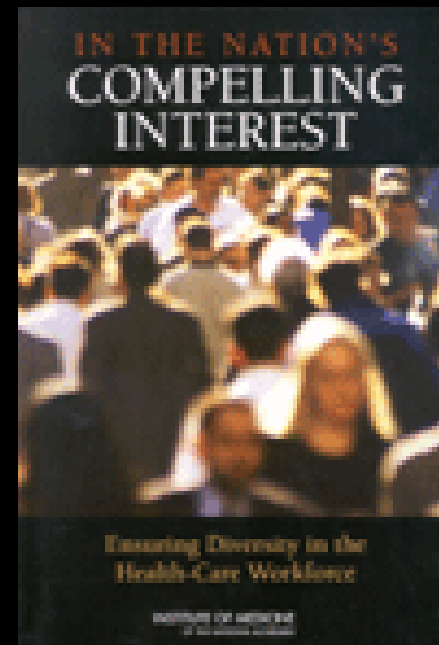
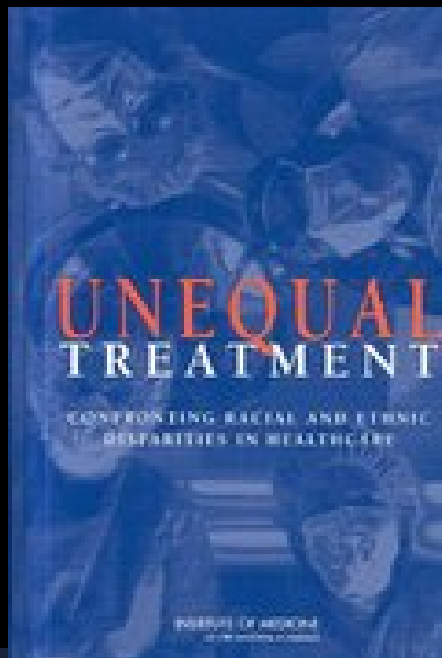
AAMC Workforce Meeting
April 30, 2009
Washington, DC

Background

- Minority physicians are more likely than their counterparts to work in underserved areas and care for minority, poor and uninsured patients
- Primary care physicians are also more likely to work in underserved areas
- Reducing health disparities will require both adequate supply of primary care physicians and greater physician diversity
- Prior research has rarely examined non-primary care physician and physicians of racial groups outside of White, African-American and Latino

Policy Implications

- Institute of Medicine:
Physician workforce diversity is a solution to eliminating health disparities



Underrepresentation of California's Minority Physicians

	California Physicians (%)	California Population (%)
White	61.7	46.7
African American	3.2	6.7
Latino	5.2	32.4
Asian/Pacific Islander	26.4	11.2
Native American	0.6	1.0

Study Objectives

- To explore the role of race-ethnicity in practice location across specialty designations
- To understand the role of race-ethnicity in practice location beyond African American and Latino race-ethnicities

Study Aims

- To determine whether:
 - Physicians from minority backgrounds are more likely than non-minority physicians to work in disadvantaged communities, regardless of specialty
 - Physicians from certain specialties are more likely than primary care physicians to work in minority and underserved communities, regardless of race-ethnicity

Sample

- California Medical Board Licensure Survey
 - Completed every two years
 - Total 109,763 physicians with active California license
 - Survey response rate: 83%

Survey Measures

- Specialty designation:
51 categories
 - Collapsed into primary care, facility-based, surgical, medical subspecialties, ob-gyn, psychiatry, and other
- Self-reported race-ethnicity:
27 categories
 - Collapsed into White, African-American, Latino, Asian, Pacific Islander, Native American, Other
- Additional items:
 - Patient care hours, practice zip code, training status

Inclusion Criteria

Active in Patient Care, in California
Not in Residency/Fellowship Training
N=61,138

N=3,757

Race/Ethnicity
Declined to state/missing

N=6,064

Specialty
Declined to state/missing

Sample
N=48,388

Outcome Measure: Practice Location

- Five measures to identify shortage areas in disadvantaged communities
 - Medically Underserved Area (MUA)
 - Primary Care Health Professional Shortage Area (HPSA)
 - Rural Medical Shortage Study Areas (MSSA)
 - Vulnerable population MSSA
(high African American/Latino populations)

Methods

- Cross tabulations for five designated locations:
 - Race-ethnicity and specialty
- Multiple logistic regression models for odds of:
 - Specialists compared to primary care physicians practicing in each of the locations
 - Working in designated locations for physicians of different race-ethnic groups relative to White counterparts
- Regression models included:
 - Race-ethnicity and specialty simultaneously as well as stratified analyses
 - Covariates for age, gender, practice hours, IMG status

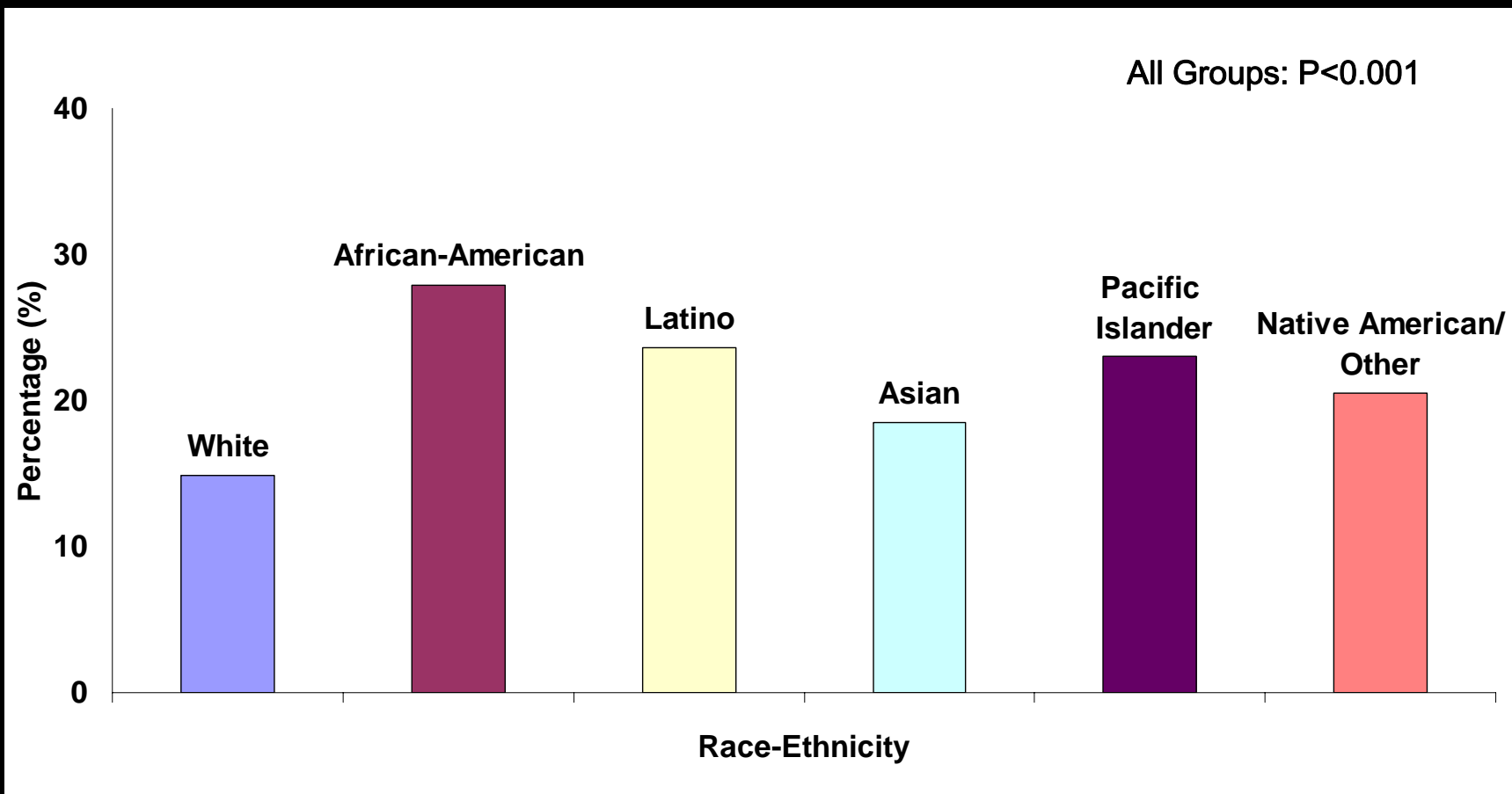
Results

Physician Characteristics: Specialties by Race-Ethnicity

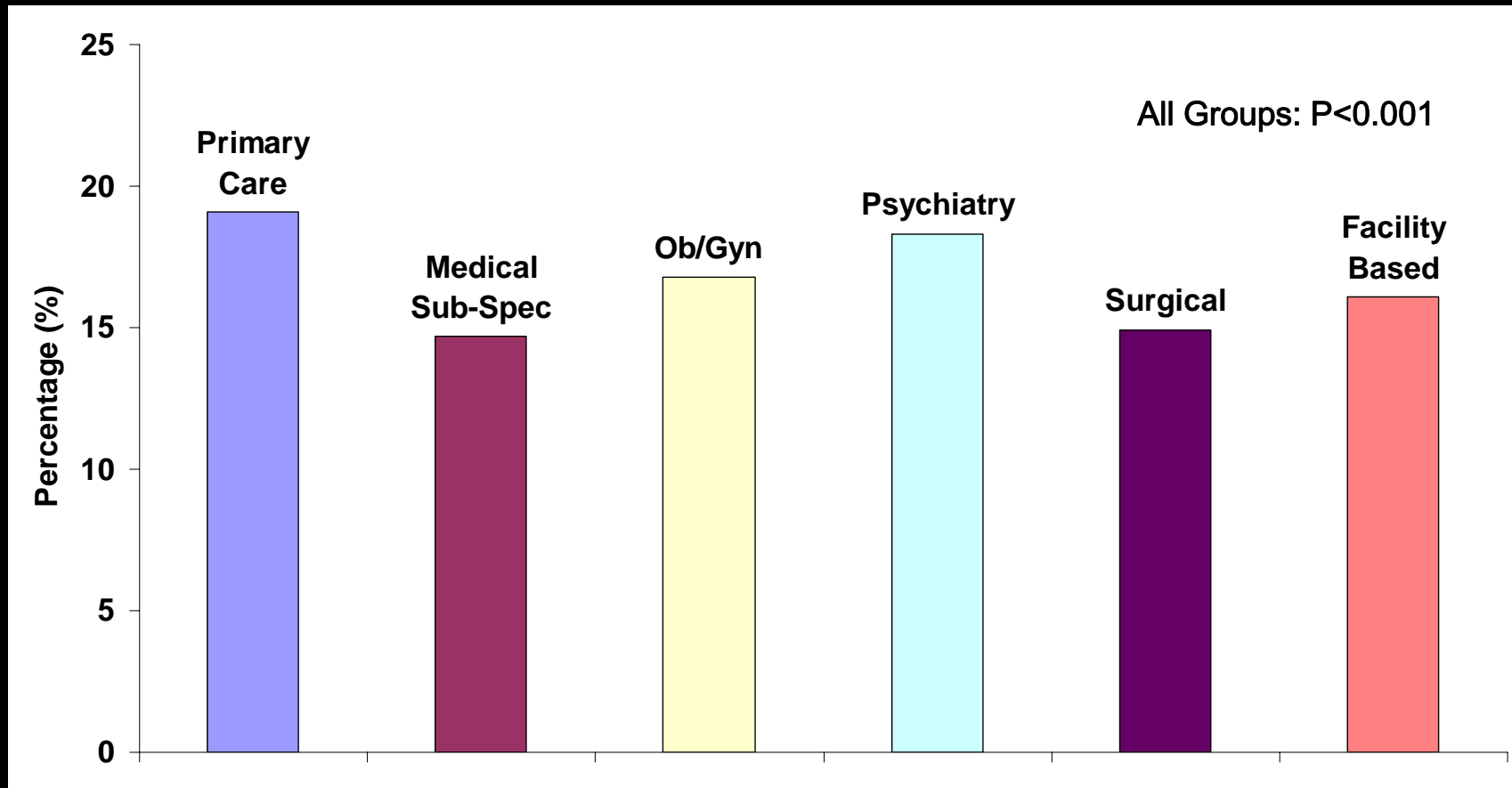
All Groups: P<0.001

N=48,388	African American (%) n=1555	Latino (%) n=2475	Asian (%) n=11303	Pacific Islander (%) n=1585	Native American (%) n=1673	White (%) n=29,797
Primary care	38.2	46.7	40.9	54.6	42.6	29.0
Medical subspecialties	8.0	9.5	13.6	8.6	11.9	11.2
Ob/Gyn	9.7	6.7	4.5	3.2	5.3	5.2
Psychiatry	6.4	6.5	4.4	9.5	6.0	8.2
Surgeons	13.1	11.0	12.1	7.1	10.4	17.6
Facility Based	7.8	6.6	11.2	7.9	10.4	10.8

Medically Underserved Areas: Unadjusted Percentages by Race-Ethnicity

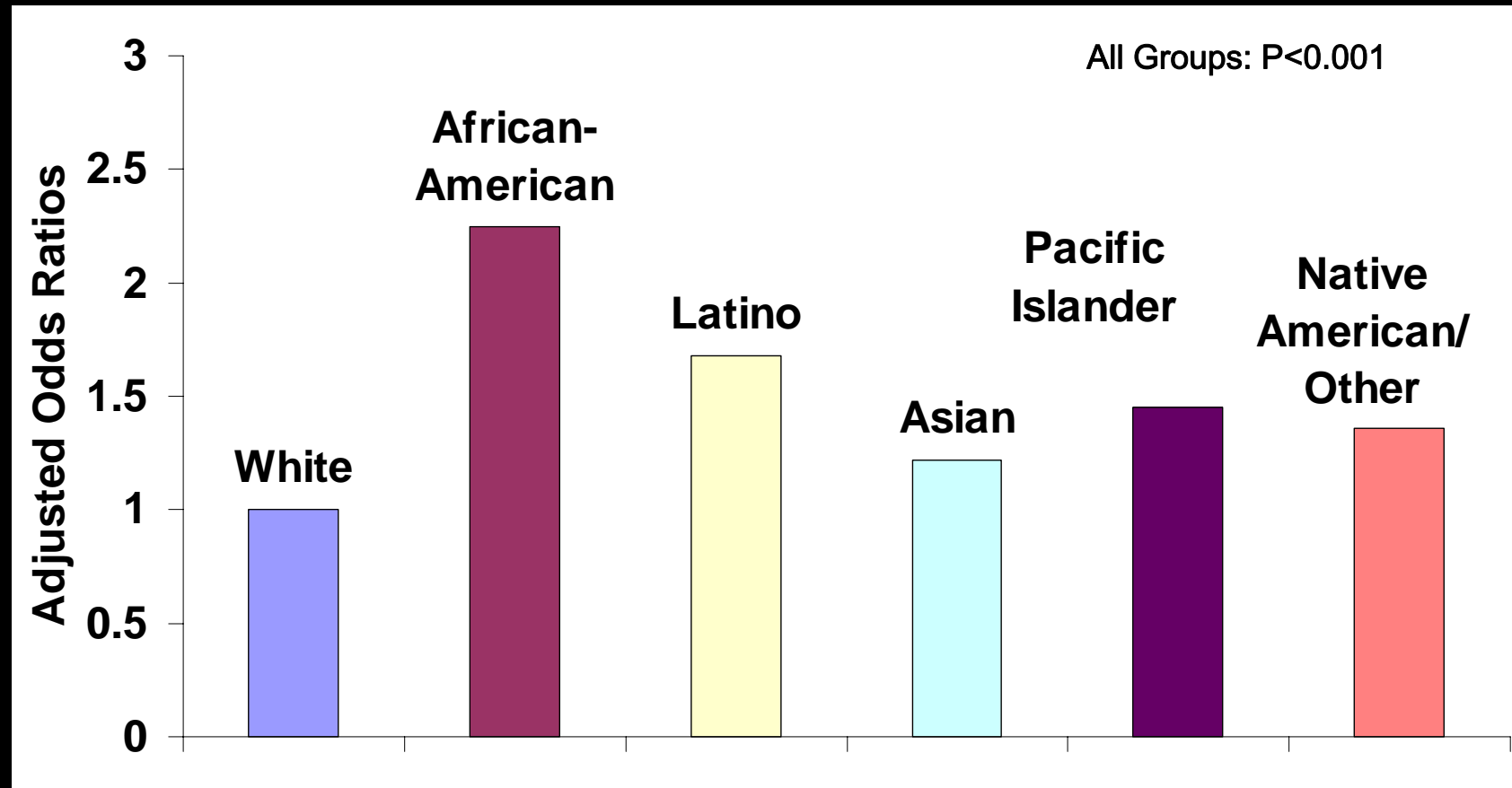


Medically Underserved Areas: Unadjusted Percentages by Specialty



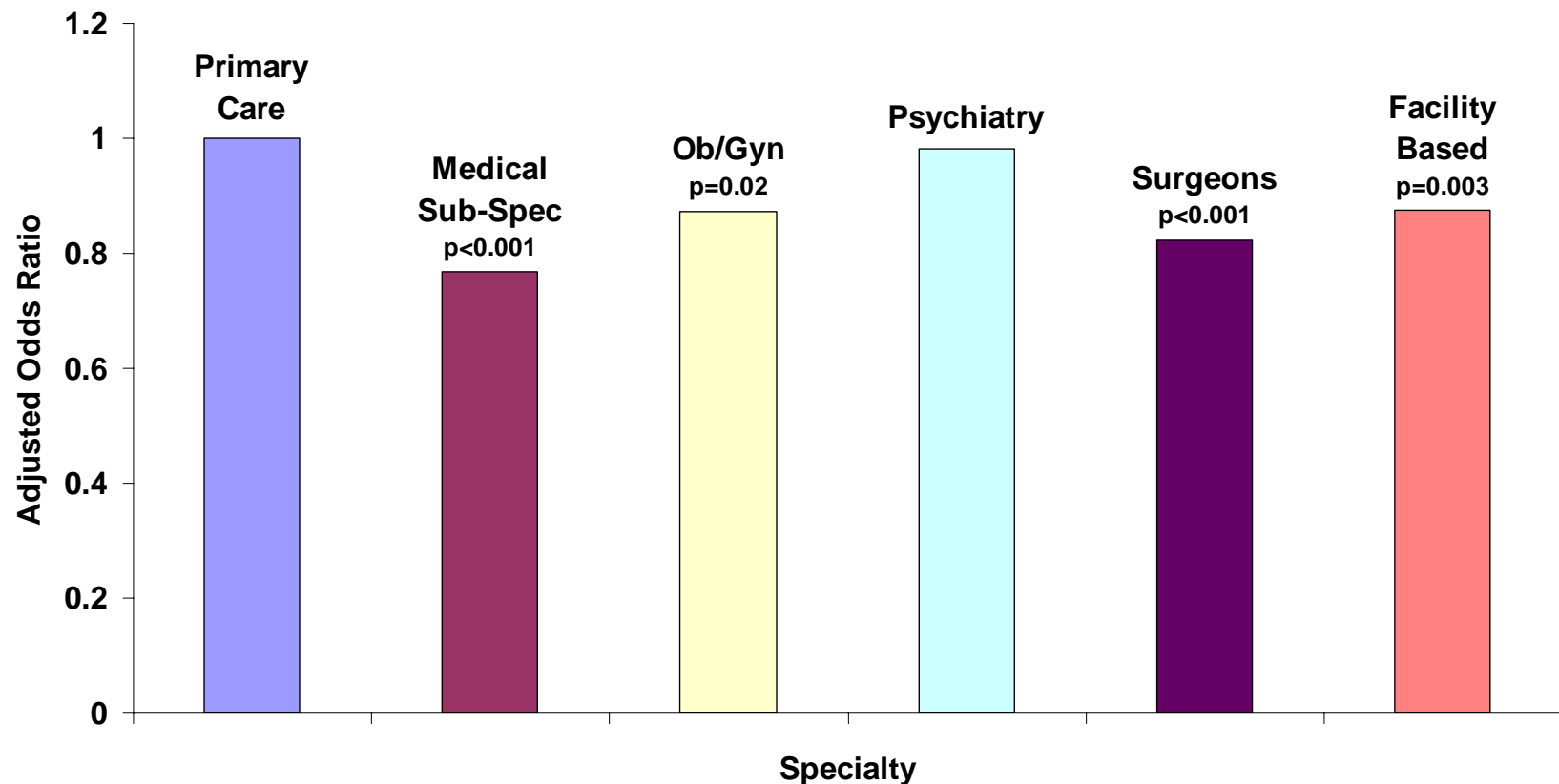
Primary care = family medicine, internal medicine, and pediatrics; Facility-based = anesthesiology, emergency medicine, and radiology

Medically Underserved Areas: Adjusted Odds Ratios by Race-Ethnicity



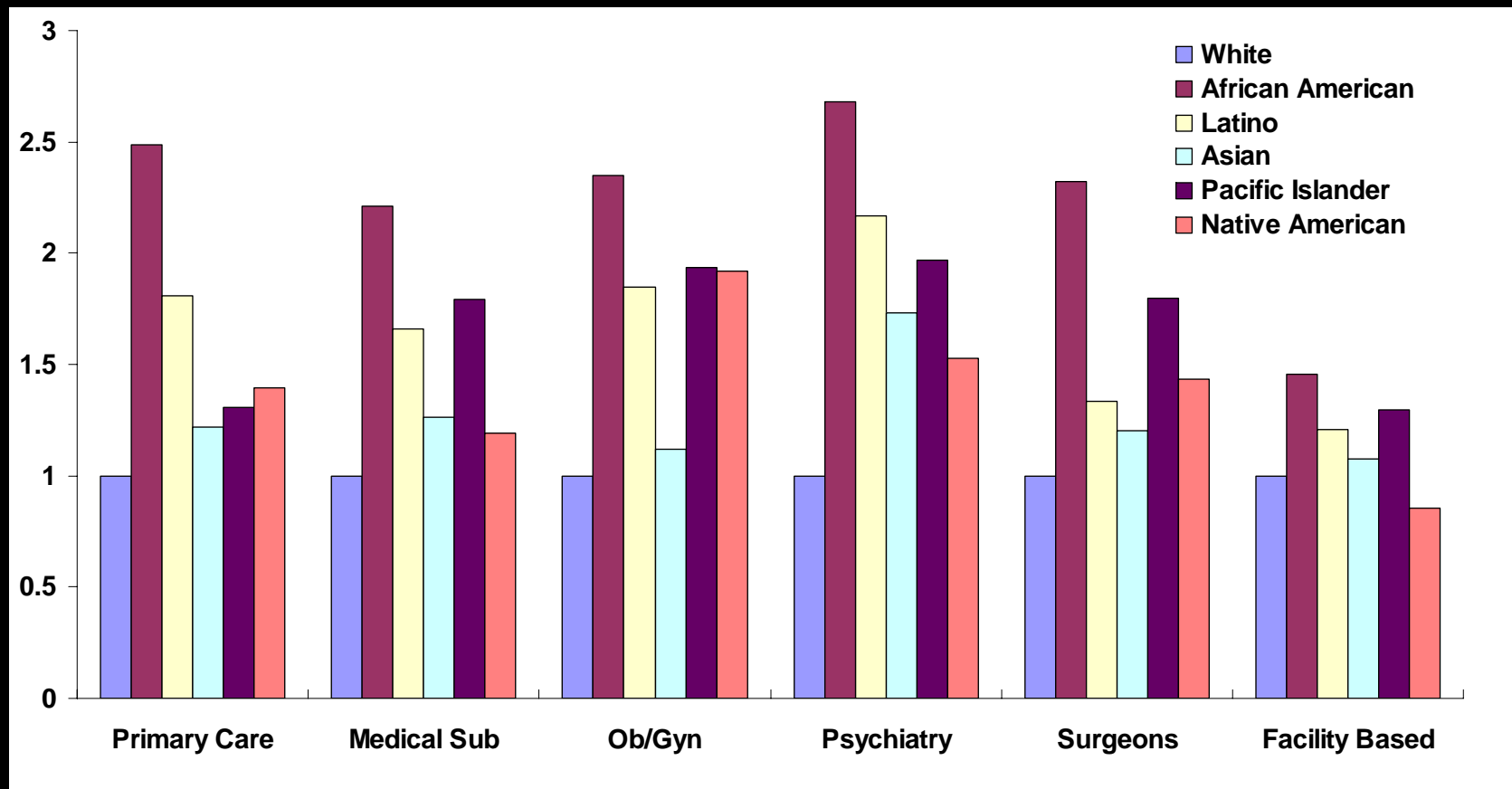
Adjusted for specialty, age, gender, board certification, IMG status, practice hours; All groups statistically significantly different from reference group (White) ($p < 0.001$)

Medically Underserved Areas: Adjusted Odds Ratios by Specialty



Adjusted for race, age, gender, board certification, IMG status, practice hours; Primary care = family medicine, internal medicine, and pediatrics; Facility-based = anesthesiology, emergency medicine, and radiology

Medically Underserved Areas: Adjusted Odds Ratios by Race-Ethnicity & Specialty



Adjusted for age, gender, IMG status, board certification, practice hours; Primary care = family medicine, internal medicine, and pediatrics; Facility-based = anesthesiology, emergency medicine, and radiology

Conclusions

- Minority physicians have greater odds than White physicians of working in most disadvantaged areas
- African Americans, Latino, and Pacific Islander physicians have the highest adjusted odds of working in MUA and HSPA regardless of specialty
- Primary care physicians also generally are more likely to work underserved areas

Study Strengths

- Sample size
- Greater reliability on:
 - Practice location
 - Race-ethnicity
 - Work hours

Limitations

- Cross sectional data from California
- Race-ethnicity was self-reported and optional
- Possible non-response bias

Policy Implications

- More evidence of the need for physician workforce diversity across specialties
- Supports current emphasis on increasing the primary care workforce
- Create policy that improves both through Title VII funding

Thank you!

Kara Odom Walker, MD, MPH
UCLA RWJ Clinical Scholar
kodom@mednet.ucla.edu
(215) 292-4963 (c)