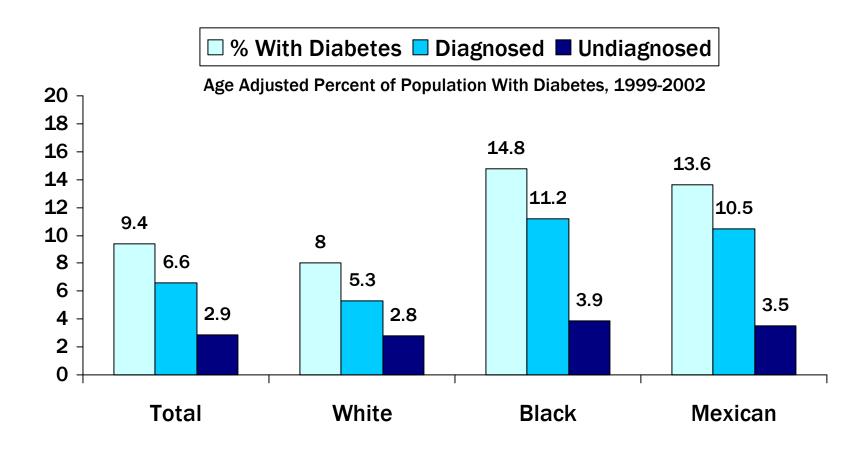
October 2009

Addressing Low Health Literacy to Achieve Racial and Ethnic Health Equity

Anne Beal, MD, MPH President Aetna Foundation, Inc.



Minorities Are More Likely to Have Diabetes

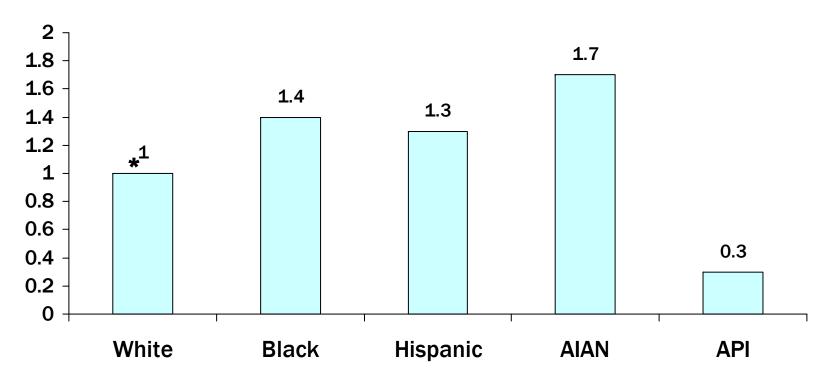




Source: Centers for Disease Control and Prevention, National Center for Health Statistics National Health and Nutrition Examination Survey. Health, United States, 2005

Minorities Have More Complications Resulting from Diabetes

Relative Risk of Amputation Resulting from Diabetes, 1998



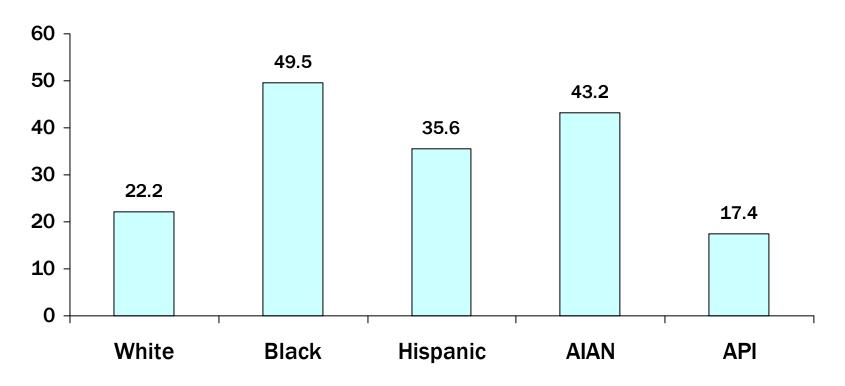
^{*} Whites Are Referent Group



Source: Young et al. Effects of Ethnicity and Nephropathy on Lower-extremity Amputation Risk Among Diabetic Veterans. Diabetes Care, 2003; 26:495-501

Minorities Have Higher Death Rates Due to Diabetes

Age Adjusted Death Rate per 100,000





Source: Centers for Disease Control and Prevention, National Vital Statistics System Health, United States, 2005

What Causes Health Disparities?

Patient Literacy

Co-Morbid Conditions

Ease of Lifestyle Changes

Quality of Healthcare

Cultural Factors

Physiologic Response to Meds

Environmental Factors

Patient Adherence

Access To Care/Coverage

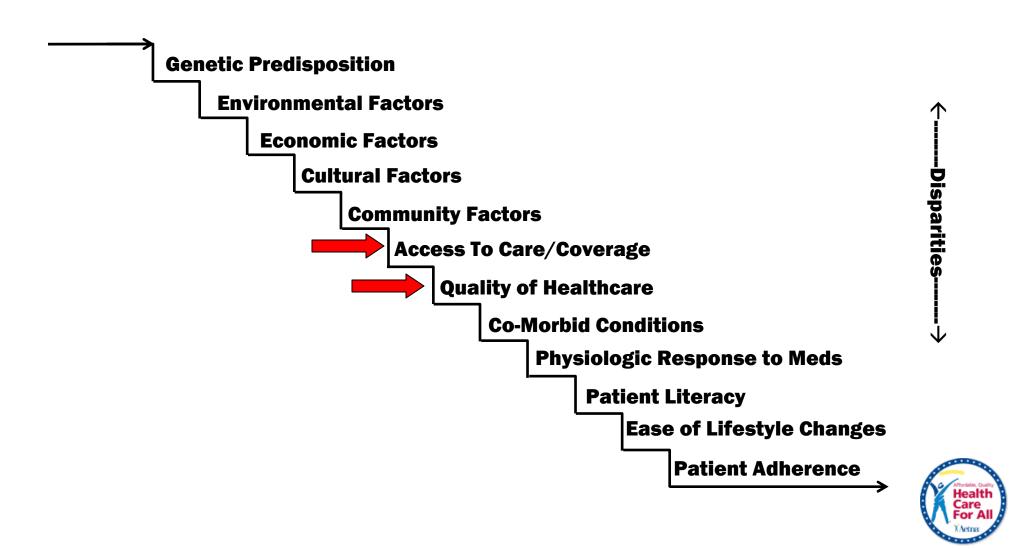
Economic Factors

Community Factors

Genetic Predisposition



What Causes Health Disparities?

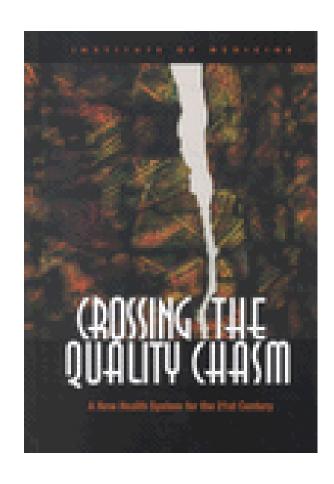


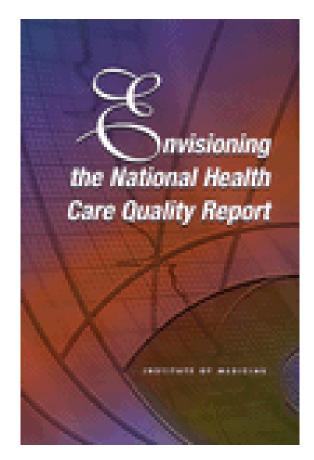
Disparities in Healthcare and Quality of Care

- Measures of healthcare disparities are essentially quality measures.
- Disparities in health is not a marginal or special interest issue.
- There is a larger quality movement; use their tools, language and techniques.
- Calls upon quality movement to address quality for vulnerable patients.



IOM Framework for Health Care Quality









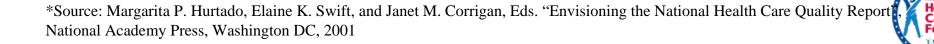
Disparities in Healthcare and Quality of Care

IOM Healthcare Quality Domains*					
Safety	Effectiveness	Patient Centeredness	Timeliness		
 Diagnosis Treatment Medication Follow-up Health care environment 	1. Preventive care 2. Acute, chronic, and end-of-life 3. Appropriate procedures	 Experience of care Effective partnership 	 Access to care Timeliness in getting care Timeliness within and across episodes of care 		



Disparities in Healthcare and Quality of Care

IOM Healthcare Quality Domains*				
Safety	Effectiveness	Patient Centeredness	Timeliness	
 Diagnosis Treatment Medication Follow-up Health care environment 	1. Preventive care 2. Acute, chronic, and end-of-life 3. Appropriate procedures	1. Experience of care 2. Effective partnership	 Access to care Timeliness in getting care Timeliness within and across episodes of care 	



Safety and Quality for Vulnerable Populations

Problem: Medical Errors

Communication is Often Root Cause

Solution: Improve Communication

- Limited English Proficiency
- Low Health Literacy





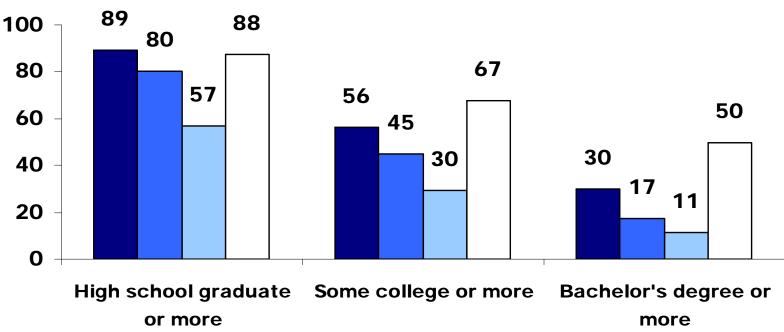
Who Is at Risk for Low Health Literacy?



Blacks and Hispanics Have Lower Levels of Educational Attainment

Percentage of population age 25 and older by education level achieved, 2003





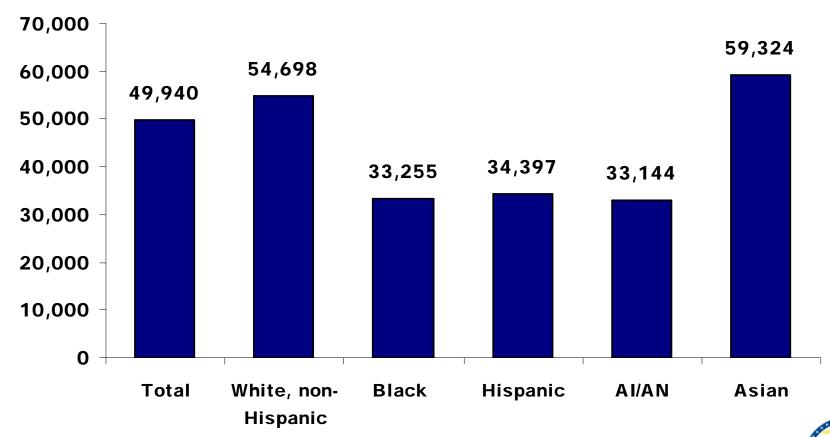
Note: "Some college" includes respondents who had completed some college but had not completed a degree and those who had completed an associate's degree.

Source: Racial and Ethnic Disparities in US Health Care: A Chartbook. The Commonwealth Fund United States Census Bureau. Current Population Survey, Annual Social and Economic Supplement. 2003.



Median Family Income Is Higher for Whites and Asians Than for Other Groups

Median family income in U.S. dollars, 1999



AI/AN = American Indian/Alaska Native.

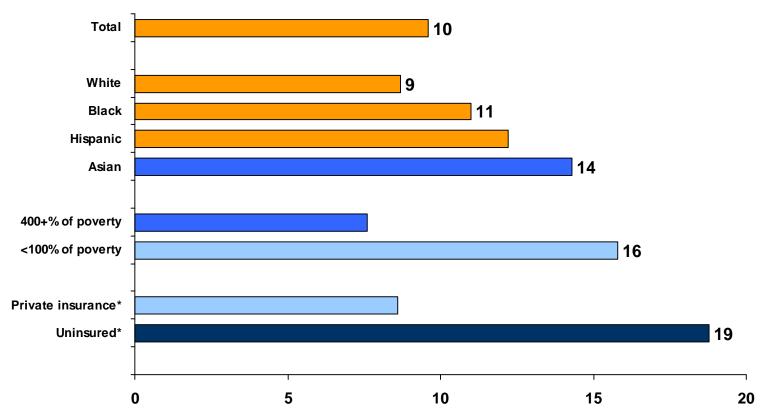
Source: Racial and Ethnic Disparities in US Health Care: A Chartbook. The Commonwealth Fund United States Census Bureau. Census 2000.

Do Minority Patients Experience Poorer Communication?



Doctor-Patient Communication by Race/Ethnicity, Family Income, and Insurance, 2004

Percent of adults (ages 18+) reporting health providers "sometimes" or "never" listen carefully, explain things clearly, respect what they say, and spend enough time with them



^{*} Insurance for people ages 18–64. ** Urban refers to metropolitan area \geq 1 million inhabitants; Rural refers to noncore area <10,000 inhabitants.

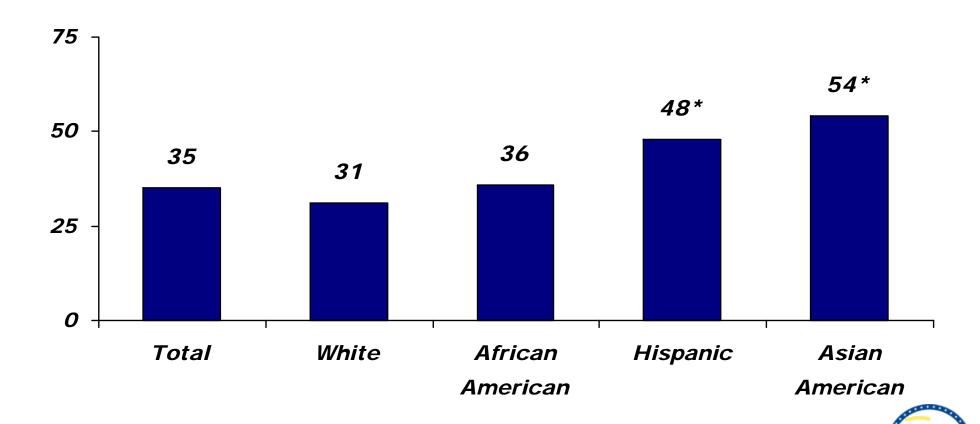
Data: Medical Expenditure Panel Survey (AHRQ 2007b).

Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2008



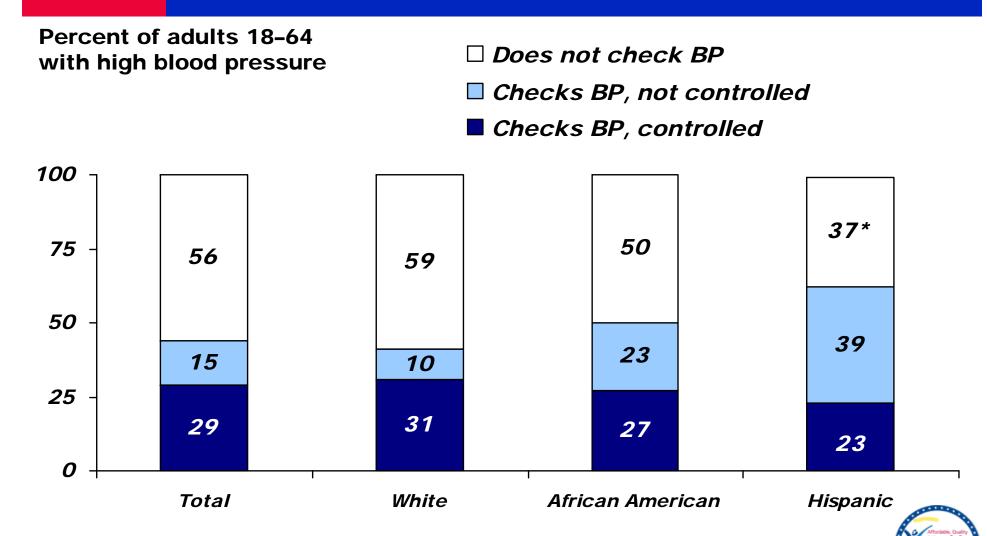
About Half or More of Hispanics and Asian Americans with Chronic Conditions Were Not Given Plans to Manage Their Condition at Home

Percent of adults ages 18-64 with any chronic condition who were not given a plan from a doctor or nurse to manage condition at home



^{*} Compared with whites, differences remain statistically significant after adjusting for income or insurance. Source: Commonwealth Fund 2006 Health Care Quality Survey.

Opportunities for Improving Hypertension Management Exist Across All Groups, Especially Hispanics

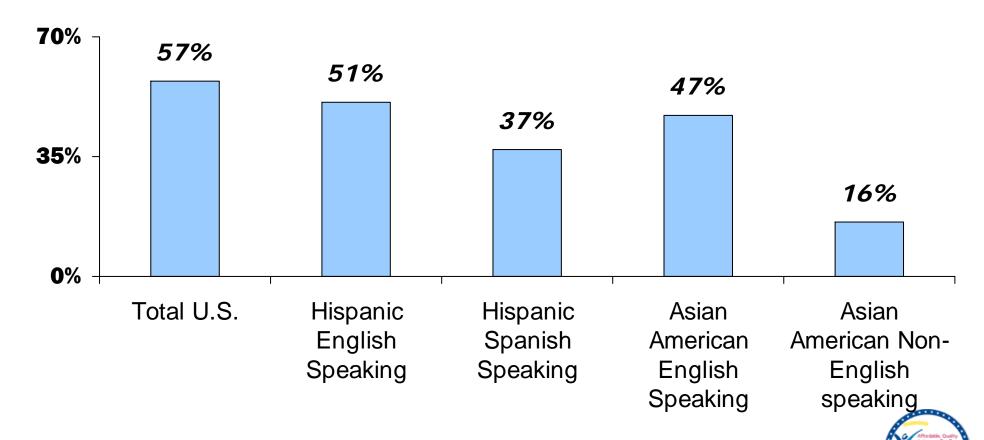


^{*} Compared with whites, differences remain statistically significant after adjusting for income and insurance.

Source: Commonwealth Fund 2006 Health Care Quality Survey.

Non-English* Speakers Have More Difficulty Understanding Instructions from Doctor's Office

Percent of adults reporting it's very easy to understand information from doctor's office



^{*} English is not primary language spoken at home.

Source: The Commonwealth Fund 2001 Health Care Quality Survey.

Can Addressing Low Health Literacy Reduce Disparities?



Multivariate Regression Analysis for Non-Adherence to HIV Medication Regimen

	Model w/o Literacy	Model w/ Literacy
	AOR (95% CI)	AOR (95% CI)
Black	2.40 (1.14-5.08)	1.80 (0.51-5.85)
Low Literacy		2.12 (1.93-2.32)



Similar Findings for Other Conditions

Choosing Aggressive End-of Life Therapies

Stage of Diagnosis for Prostate Cancer

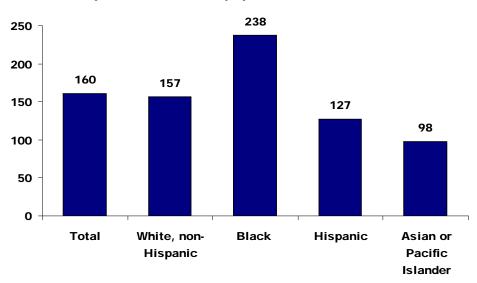


Black Men Are 50% More Likely to Have Prostate Cancer and Over 200% More Likely to Die From It

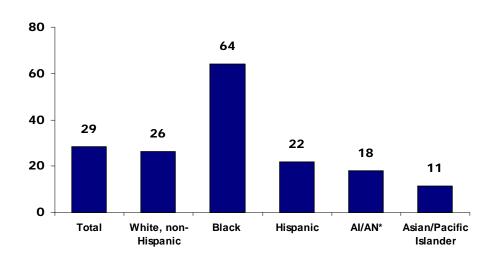
Incidence

Mortality

New cases per 100,000 male population, 2003



Deaths per 100,000 male population, 2000-2003



Al/AN = American Indian/Alaska Native.

Note: Data are age adjusted.

Source: National Center for Health Statistics. *Health, United States, 2006: With Chartbook on Trends in the Health of Americans.* 2006.



What Causes Health Disparities?

