Inequality in Quality: Addressing Socioeconomic, Racial, and Ethnic Disparities in Health Care

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Case Study

- Juana is a 54 year old woman with a history of back surgery who presents to the ED with severe low back pain. She has a limited history and physical exam. She is given a shot of IV Valium and discharged with the diagnosis of “chronic low back pain” with follow-up in one-week to her PCP.

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JUANA

08

EMERGENCY PHYSICIAN RECORD
Low Back Pain / Injury (5)

1/21/01 580552

TIME SEEN: ______ ROOM: ______ EMS Arrival

HISTORIAN: __patient __spouse __paramedics ______

__HX / __EXAM LIMITED BY: ______

HPI chief complaint: back pain / injury chronic back pain

started (occurred): ______

recent injury? __no __yes __possibly

how (context)? __lifting __turning / bending __fall / near-fall __trauma

when? __as above

where? __home __work __school

other injuries? __neck __head __other

__continues in E.D.
__better
__gone now
__intermittent
__worse

__Similar symptoms previously ______

__Recently seen / treated by doctor ______

ROS

GU

__trouble w/ urination ______

__frequent urination ______

__blood in urine ______

OTHER

__fever ______

subjective / to ______ °F

__chills ______

Women LNMP ______

__vaginal bleeding ______

NEURO

__head

__depr

ENT, P

__sore

__cough

__trou

__chest

GI

__abdo

__nause

__vomit

__diarrh

__black/

Case Study

- Follow-up: Juana comes to clinic the next morning screaming and crying in pain. She is carried in a chair by her sons to get upstairs to our clinic. Her physical exam reveals a L5 sensory deficit. She has urinary incontinence. She is sent in an ambulance with her children to local hospital. She required emergency back surgery for a herniated disc.

Overview

- Disparities in health: the big picture
- Voltage drops in achieving quality of care
- Implications and future directions

Overview

- **Disparities in health: the big picture**
- Voltage drops in achieving quality of care
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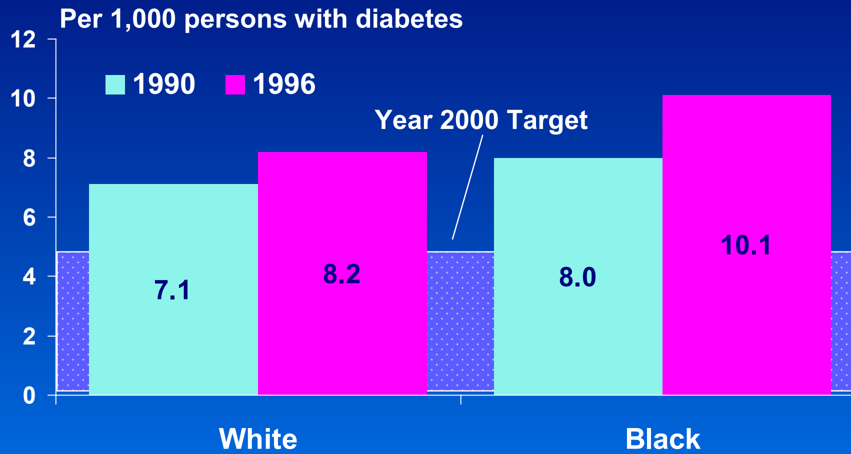
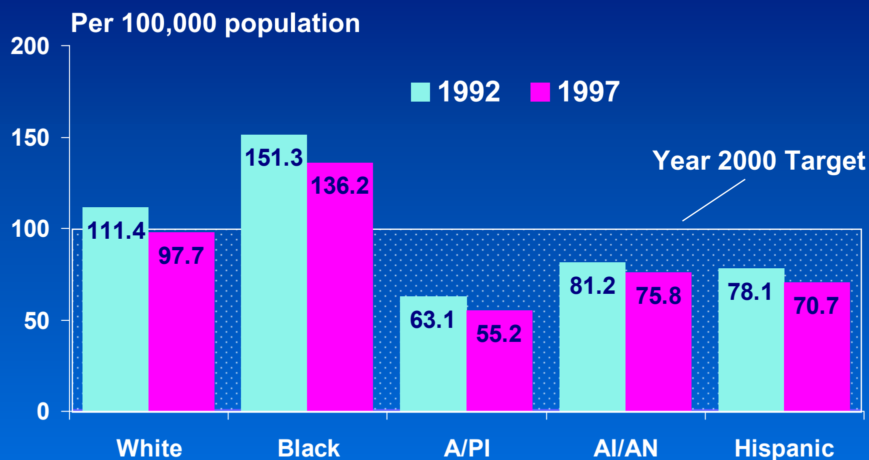
Lower Extremity Amputations Due to Diabetes



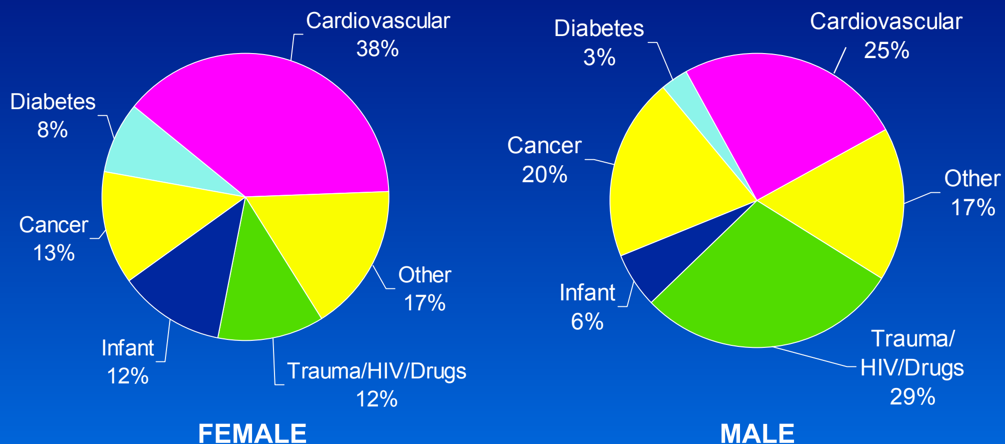
NOTE: Because of incomplete and inaccurate reporting of race, only white, black and "other" races are reported by the National Hospital discharge Survey.
SOURCE: CCD NCHS, National Health Inteview Survey and National Hospital survey.

Coronary Heart Disease Death Rates



NOTE: Death rates are age adjusted to 1940 standard million age distribution.
A/PI is Asian or Pacific Islander, AI/AN is American Indian or Alaska Native.
SOURCE: CCD NCHS, National Vital Statistics system

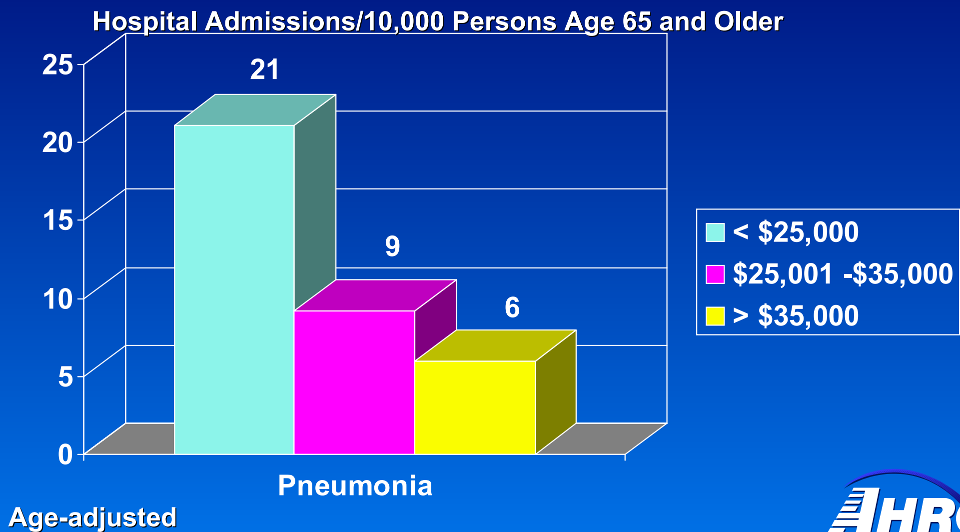
Causes of Excess Deaths Among African Americans

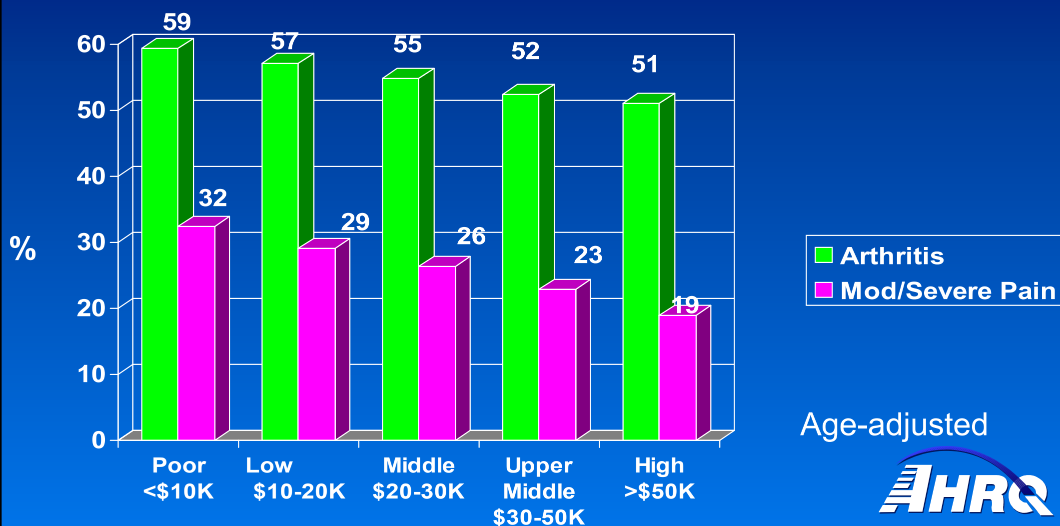


Source: Himmelstein & Woolhandler – Analysis of data from NCHS

Non-clinical Determinants of Health Outcomes

- Patient characteristics
- Practitioner characteristics
- Hospital or setting characteristics
- Patient preferences
- Reimbursement


Vaccine Preventable Pneumonia
Variation by Zip Code Income
Hospital Admissions/10,000 Persons Age 65 and Older
25
20
15
10
5
0
21
9
6
< $25,000
$25,001 -$35,000
> $35,000
Pneumonia
Age-adjusted
AHRQ


Income and Arthritis
%
60
50
40
30
20
10
0
59
32
57
29
55
26
52
23
51
19
Arthritis
Mod/Severe Pain
Poor
<$10K
Low
$10-20K
Middle
$20-30K
Upper
Middle
$30-50K
High
>$50K
Age-adjusted
AHRQ

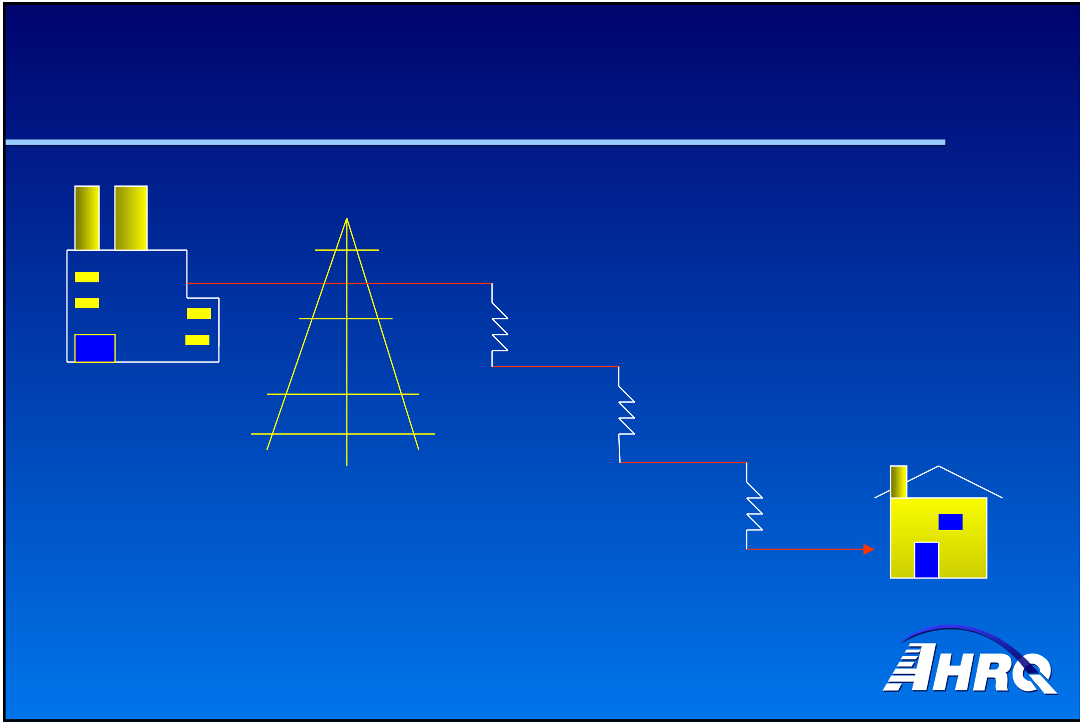
Reperfusion Therapy in Medicare Beneficiaries with Acute MI

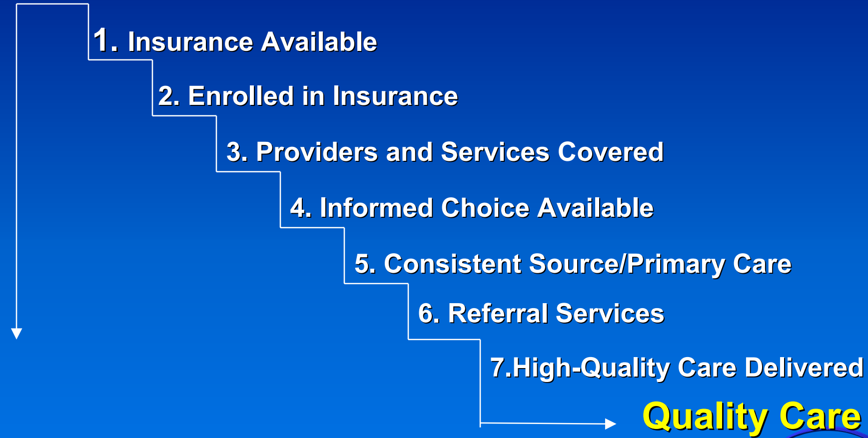
Group	% Eligible receiving reperfusion
White men	59%
White women	56%
Black men	50%
Black women	44%

Canto JG; Allison JJ; Kiefe CI; Fincher C; Farmer R, Sekar P; Person S; Weissman NW. Relation of rave and sex to the use of reperfusion therapy in Medicare beneficiaries with acute myocardial infarction. N Engl J Med 2000 Apr 13;342(15):1094-100.

Overview

- Disparities in health: the big picture
- **Voltage drops in achieving quality of care**
- Implications and future directions


AHRQ


Voltage Drops to Quality
Population
1. Insurance Available
2. Enrolled in Insurance
3. Providers and Services Covered
4. Informed Choice Available
5. Consistent Source/Primary Care
6. Referral Services
7.High-Quality Care Delivered
Quality Care
AHRQ

Population — 1. Offered insurance

Quality Care

AHRQ

Race/Ethnicity and Health Insurance

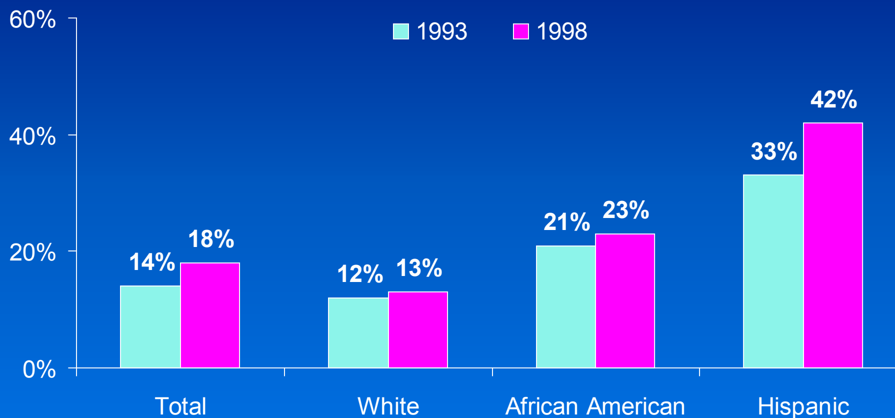
- Ethnic minorities are much more likely to be uninsured than non-Latino whites
  - 1/3 Latinos
  - 1/4 African Americans (AA)
  - 1/4 Asian Americans and Pacific Islanders (AAPI)
- Citizen status: 58% of Latino non-citizens are uninsured, 27% of Latino citizens
- Lower rates of job-based insurance
  - 73% whites, 43% Latinos, 53% of AA

AHRQ

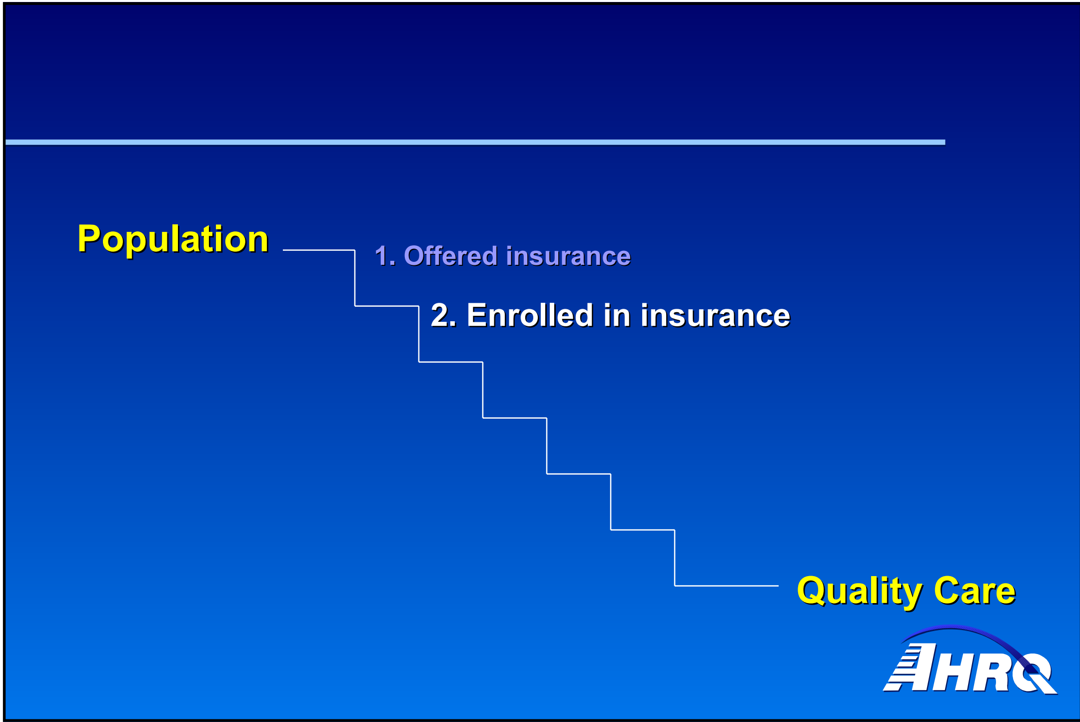
Working Uninsured: 1987 and 1996 (Under 65)

	1987	1996
Households WITH a working adult	76.9%	86.9%
NO working adult	23.1%	13.1%

Uninsured Trends by Race/Ethnicity, 1993-98
Women Ages 18-64



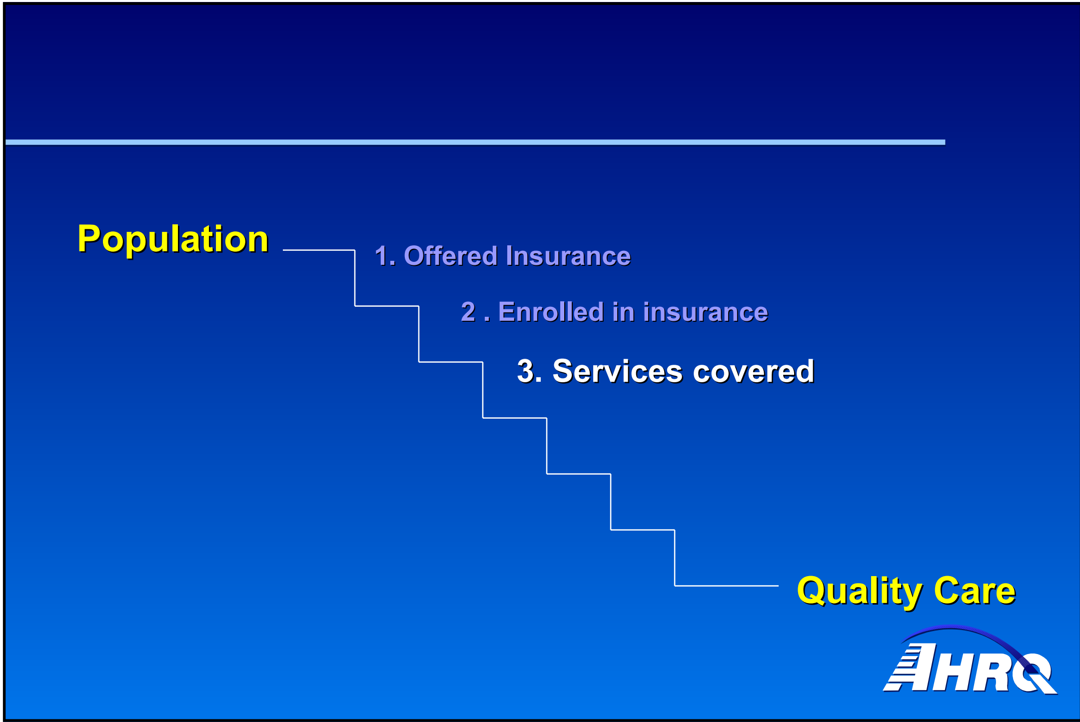
The Commonwealth Fund 1993 and 1998 Surveys of Women's Health



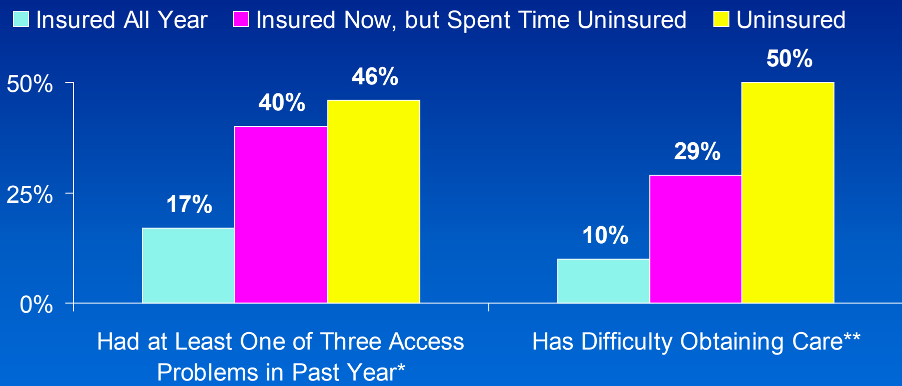
Estimates of Uninsured Children Eligible for CHIP

Eligibility criterion	Number of uninsured children
Federal maximum CHIP income thresholds	3.1 million
Income thresholds at 300% of poverty level	5.2 million
Thresholds in state plans as of August 1998	2.6 million

Source: T.M. Selden et al., 1999; *Health Affairs* 18:126-133



Access to Health Care by Insurance Status,1998
Women Ages 18-64



* Reported a time they did not get needed care or specialty care or did not fill a prescription because of cost.

** Reported getting care when needed is “extremely,” “very,” or “somewhat” difficult.

The Commonwealth Fund 1998 Survey of Women’s Health

Population

1. Offered insurance

2. Enrolled in insurance

3. Services covered

4. Usual care source

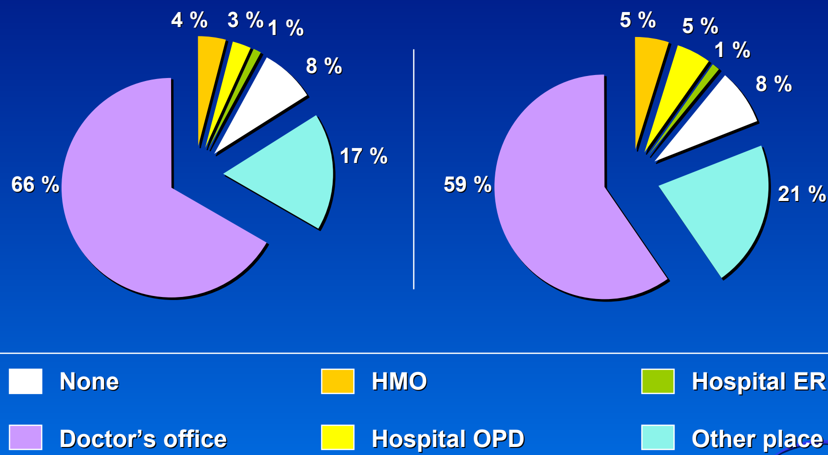
Quality Care

AHRQ

Regular Source of Care

- Regular source of care --> higher use of preventive services
- Women with no source die younger
- Multiple sources ---> higher use of preventive services, but increased opportunities for gaps and lack of coordination
- Women with a female source more likely to receive Pap smears, mammograms

AHRQ


Usual Source of Care for Adults, 1987 and 1992
4 %
3 %
1 %
8 %
17 %
66 %
5 %
5 %
1 %
8 %
21 %
59 %
None
HMO
Hospital ER
Doctor's office
Hospital OPD
Other place
Source: Moy E et al., J. Health Care for the Poor and Underserved 1998; 9:126

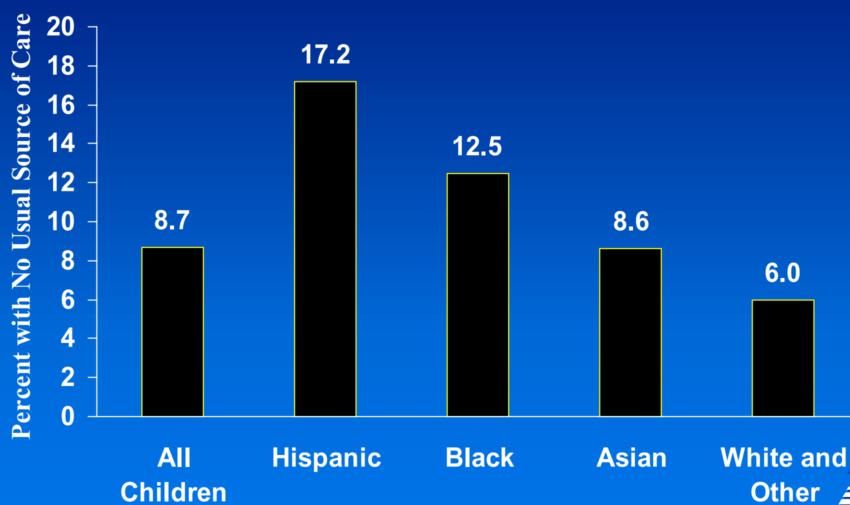
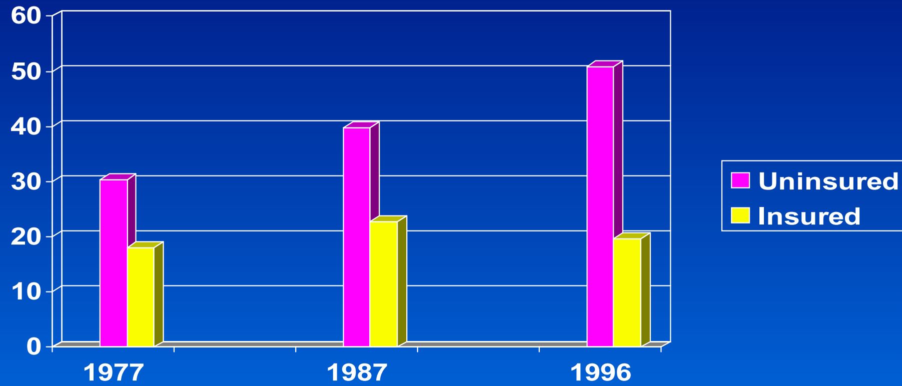


Figure 1. Percent of American Children with No Usual Source of Care by Race/Ethnicity, 1996
Percent with No Usual Source of Care
20
18
16
14
12
10
8
6
4
2
0
8.7
17.2
12.5
8.6
6.0
All Children
Hispanic
Black
Asian
White and Other

Percent of Hispanics With No Usual Source of Care, 1977-1996



Source: S.H. Zuvekas and R.M. Weinick, 1999; Health Services Research 34 (part II):271-279

Population

1. Offered insurance
2. Enrolled in insurance
3. Services covered
4. Usual care source
5. Referral services

Quality Care

Predictors of Referral for Cardiac Catheterization

Variable	Odds ratio
Male	1.0
Female	0.6
White	1.0
Black	0.6
White male	1.0
Black female	0.4

Source: K.A. Schulman et al., *New Eng J Med* 340:618, 1999

Population

1. Offered insurance

2. Enrolled in insurance

3. Services covered

4. Usual care source

5. Referral services

6. Choice of care

Quality Care

Patients' Choices and Health Care Delivery

- *Which* plan
- *Who* to see
- *When* to seek care
- *How* to respond
- *Where* to get information
- *What* to believe
- *How* to live with the illness(es)

Race and Treatment
n = 1832 Women Rx in 1994

	Blacks*	Whites
Stage 1	48%	56%
2a	37	34
2b	16	10
BCS+RT	20	25
BCS	12	10
MST	69	65
Area % 65+ < Poverty	15	12
Area % HS	64	68
Mean Age	74 yrs	75 yrs

* All Race Differences p <.05

Underuse of Appropriate Services: Nursing Home Residents

Percent with characteristic (unadjusted)

	White	African-American	Asian American	Hispanic
No visual aids	29	59	60	59
No communication devices	71	94	90	91
Untreated pain	27	39	39	41

Source: Zierler S., "Racial Disparities in the Quality of Nursing Home Care," final report, grant no. R03 HS09552

Racial and Ethnic Minority Views on Patient Safety

	Blacks (n=219)	Hispanics (n=208)	Whites (n=1492)
"Very concerned" about errors or mistakes happening when			
receiving health care in general	71%	45%	43%
receiving care at a hospital	62	57	44
Say the government should be involved in promoting, monitoring, or providing information about quality of care	79	69	60
Reporting of medical errors should be done on a voluntary basis to ensure the privacy of patients and staff involved	32	29	19

Source: Kaiser Family Foundation / Agency for Healthcare Research and Quality *National Survey on Americans as Health Care Consumers: An Update on The Role of Quality Information*, December 2000 (Conducted July 31-Oct. 13, 2000)

Contribution to Disparities

- Even if income and health insurance coverage were equalized, differences in access to and use of health services would not be eliminated
- One-half to three quarters of these disparities are not explained by these factors
- Difficult to identify a single factor that would resolve racial/ethnic disparities

Weinick and Zuvekas, Med Care Research and Review, 2000

Contribution to Disparities

- Job-related and nonfinancial barriers to access
- Lack of cultural and linguistic competency among providers
- Geographic distribution of providers
- Discrimination with health care system
- Perceptions of discrimination

Weinick and Zuvekas, Med Care Research and Review, 2000

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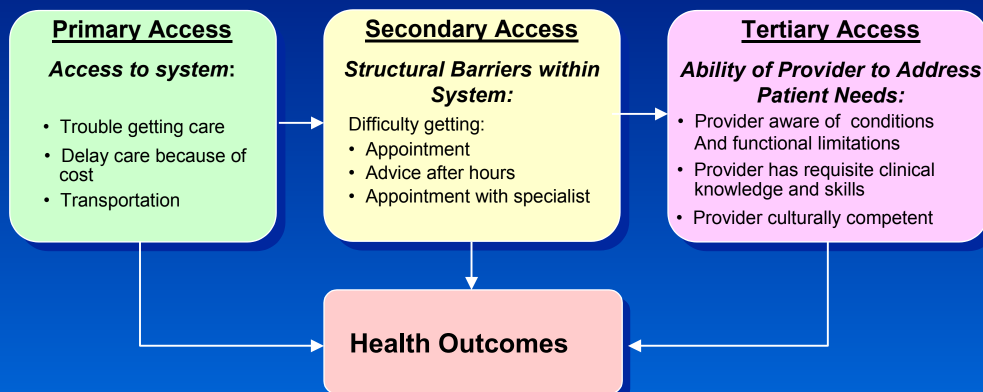
Four Levels of Interventions to Eliminate Inequalities in Health

- Improve the physical environment
- Address social and economic factors
- **Improve access to appropriate and effective health and social services**
- Reduce barriers to adopting healthy lifestyles changing behavioral risk factors

Benzaval et al, Tackling Inequalities in Health: an agenda for action. London: King's Fund, 1995

Access, Quality, and Outcomes



Bierman et al. JACM 1998

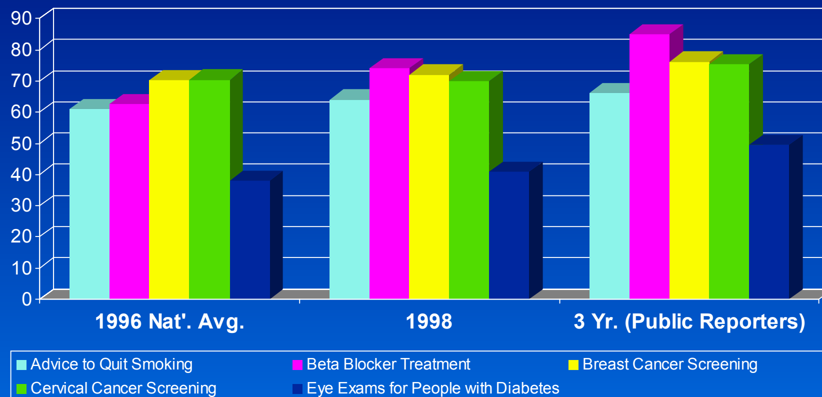
Inequality in Quality

- Growing emphasis on public reporting on clinical performance (process measures)
- Concern about perverse incentives
- Increased enrollment of publicly funded beneficiaries in managed care arrangements
- Disparities not widely perceived to be an essential component of poor quality

Inequality in Quality: Principles

- Disparities associated with socioeconomic position, race and ethnicity represent a critical quality opportunity
- Need for relevant and reliable data
- Performance measures should be *stratified*
- Population-wide measures should be *adjusted*
- Account for SEP **and** race / ethnicity

NCQA's State of Managed Care Quality



Source: NCQA, Washington, DC

Implementation Challenges

- Leadership (multifocal)
- Absence of data
- Privacy and data collection concerns and strategies
- Misuse of data
- Health care organization resistance and inertia

Public Reporting

- Is it possible?
- Is it meaningful?
- **Is it fair? (is it fair NOT to stratify by race, ethnicity and socioeconomic position?)**
- Is it feasible?

Public Reporting

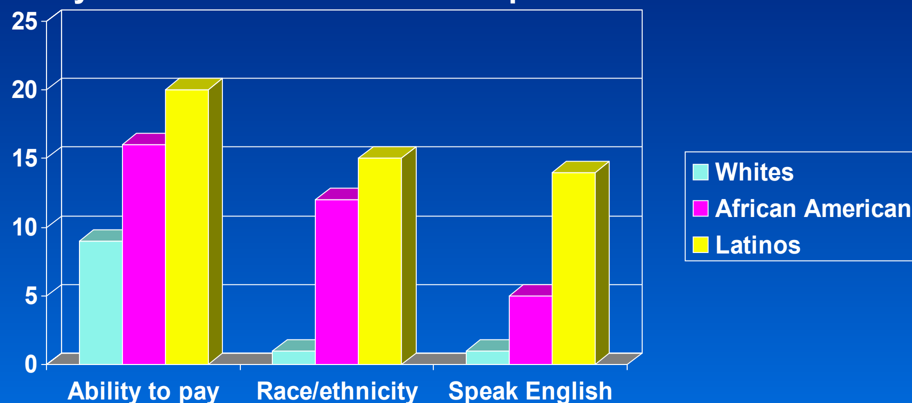
- Is it possible?
- Is it meaningful?
- Is it fair?
- **Is it feasible? (Efficient strategies for requisite data collection needed; "business case"; perceptions of fairness)**

Stakeholders' Interests

- Employers concerned about employees' quality of care (WBGH)
- Payors: want quality care -- at the lowest cost possible
- Providers (Aetna has recently joined public and private research organizations)
- Clinicians want to provide the best quality of care possible
- Patients / consumers

Patient Experiences with the Health Care System

Percent who say that they have felt that a doctor judged them unfairly or treated them with disrespect because of ….



Kaiser Family Foundation Survey of Race, Ethnicity, and Medical Care October 1999

Persistent Controversies

- What proportion of observed disparities are attributable to health *care*?
- Boundaries of accountability
- Is less more?
- Do we know enough to intervene?

Conclusions

- Disparities in health *care* = a critical quality improvement opportunity
- NOT considering disparities associated with race, ethnicity and SES may:
  - undermine quality measurement efforts
  - deprive us of scientific knowledge
  - result in mis-allocation of resources for improvement