Chronic Conditions 101

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Agency for Healthcare Research and Quality

Rising Rates of Chronic Conditions: What Can Be Done?

Washington, DC – July 31, 2008

Global Magnitude of Chronic Disease Challenge

- Chronic diseases often go ignored because they are not as dramatic as infectious diseases
- More people die every year from cardiovascular disease than AIDS, tuberculosis and malaria combined*
- Chronic diseases account for 60% of global deaths now and will account for about 75% of all deaths by 2020*

* World Health Organization

Chronic Conditions in the U.S.

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Health Highlights: May 28, 2008

Wednesday, May 28, 2008; 12:00 AM

Here are some of the latest health and medical news developments, compiled by editors ofHealthDay:

60 Percent of U.S. Adults Have at Least One Chronic Condition

In the United States, 60 percent of people aged 18 and older have at least one chronic medical condition, defined as one expected to last at least one year and result in limitations or the need for ongoing care.

The latestNews and Numberssummary from the Agency for Healthcare Research and Quality looked at 2005 data, finding that:

Nearly 40 percent of Americans aged 18 to 34 had at least one chronic condition, as did 90 percent of people aged 65 and older.About 77 percent of those aged 65 and older had two or more chronic conditions, compared with 14 percent of those aged 18 to 34.Treatment of chronic conditions accounted for nine of every 10 dollars spent for medical care on American adults, excluding costs for dental care, medical equipment, and supplies.About 22 million adults received medical care for osteoarthritis and related conditions, 49 million for asthma or chronic obstructive pulmonary disease, 17 million for diabetes, 45 million for high blood pressure, and 19 million for heart disease.

AHRQ News & Numbers

- In 2005, about 60% of the adult U.S. population 18 and older had at least one chronic condition, and $3 of every $4 spent on prescriptions were for treatment of chronic conditions
- Nearly four in 10 Americans between 18 and 34 had at least one chronic condition, as did nine of every 10 aged 65 and older
- About 77% of Americans aged 65 and older had two or more chronic conditions, and about 14% of those 18 to 34 had two or more conditions

Medical Expenditure Panel Survey (MEPS)

Disparities and the Overall Quality of Care

Relationship Between Quality of Care and Racial Disparities in Medicare Health Plans

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Context Overall quality of care and racial disparities in quality are important and related problems in health care, but their relationship has not been well studied. In the Medicare managed care program, broad improvements in quality have been accompanied by reduced racial gaps in processes of care, but substantial disparities in outcomes have persisted.

Objectives To assess variations among Medicare health plans in overall quality and racial disparity in 4 Health Plan Employer and Data Information Set (HEDIS) outcome measures, to determine whether high-performing plans exhibit smaller racial disparities, and to identify plans with high quality and low disparity.

Design, Setting, and Patients We assessed the relationship between quality and racial disparity using multilevel multivariable regression models. The study sample included 491 573 individual-level observations in 151 Medicare health plans from 2002 to 2004.

Main Outcome Measures Hemoglobin A_{1c} of less than 9.5% or less than 9.0% for enrollees with diabetes; low-density lipoprotein cholesterol level of less than 130 mg/dL for enrollees with diabetes or after a coronary event; and blood pressure of less than 140/90 mm Hg for enrollees with hypertension.

Results Clinical performance on HEDIS outcome measures was 6.8% to 14.4% lower for black enrollees than for white enrollees ($P<.001$ for all). For each measure, more than 70% of this disparity was due to different outcomes for black and white individuals enrolled in the same health plan rather than selection of black enrollees into lower-performing plans. Health plans varied substantially in both overall quality and racial disparity on each of the 4 outcome measures. Adjusted correlations between overall quality and racial disparity were small and not statistically significant, ranging from 0.01 (blood pressure control) to −0.21 (cholesterol control in diabetes). Only 1 health plan achieved both high quality and low disparity on more than 1 measure.

Conclusions In Medicare health plans, disparities vary widely and are only weakly correlated with the overall quality of care. Therefore, plan-specific performance reports of racial disparities on outcome measures would provide useful information not currently conveyed by standard HEDIS reports.

JAMA. 2006;296:1998-2004 www.jama.com

ELIMINATING DISPARITIES IN health care is a fundamental component of the agenda to improve quality.[1] In a landmark 2001 report, the Institute of Medicine affirmed this principle by defining equity as 1 of 6 essential dimensions of quality of care.[2] This report recommended that the nation strive for "care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status." The importance of equity is supported by numerous studies that have documented worse quality of care for black Americans relative to white Americans across a broad array of medical conditions.[3-9]

Several performance reporting systems now report publicly on aspects of quality such as surgical outcomes,[1] adherence to evidence-based quality measures,[9,10] and patients' assessments of care,[11] but few public reports about the quality of health care organizations have also assessed the equity of care provided by those organizations. Since 2003, the National Healthcare Disparities Report has provided information on the quality of care by race and ethnicity, but this report has not assessed racial disparities in the quality of clinical care within health plans or health care delivery organizations.[12]

The Medicare managed care program (Medicare Advantage) offers an opportunity to study whether and how equity in the delivery of clinical care is related to the quality of care provided by health plans. Since 1997, all health plans participating in Medicare have reported on the quality of care using Health Plan Employer and Data Information Set (HEDIS) performance measures developed by the National Committee for Quality Assurance.[8] In a prior analysis of these data, we found both improvement in the quality of care and narrowing of racial disparities in adherence to HEDIS process-of-care indicators. For 2 outcome measures assessing control of glucose and cholesterol, however, racial disparities remained substantial and statistically unchanged from 1997 to 2003.[13]

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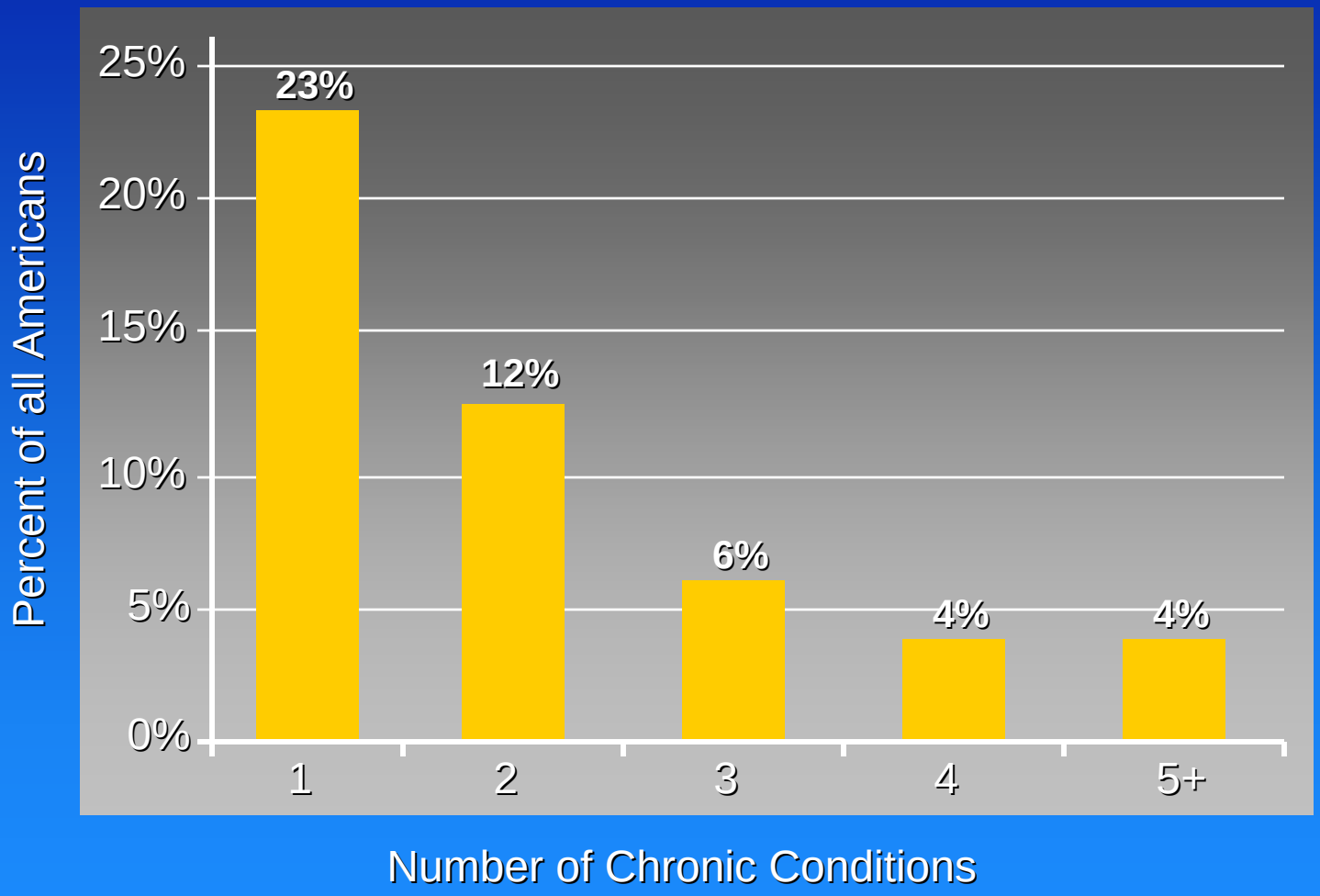
- Disparities vary widely and are only weakly correlated with the overall quality of care

JAMA, October 25, 2006—Vol 296, No. 16

One In Four Americans Has Multiple Chronic Conditions



In 2004, 26% of all Americans had two or more chronic conditions

Medical Expenditure Panel Survey (MEPS) 2004

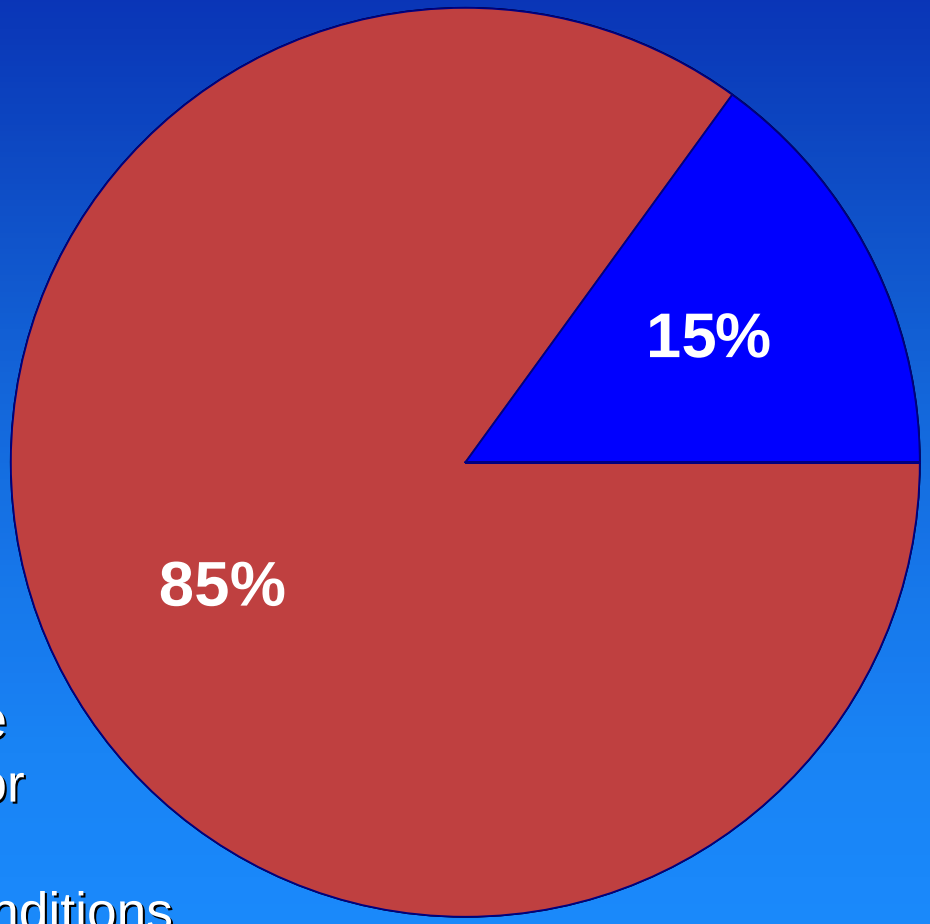
Nine of the Top 10 Highest-Cost Conditions are Chronic in Nature

($ In Billions: Chronic conditions listed in bold type)

- **Heart Disease ($76)**
- Trauma ($72)
- **Cancer ($70)**
- **Mental Disorders ($56)**
- **Pulmonary Conditions ($54)**
- **Hypertension ($42)**
- **Diabetes ($34)**
- **Osteoarthritis ($34)**
- **Back Problems ($32)**
- **Kidney Disease ($31)**

Center for Financing, Access and Cost Trends, Agency for Healthcare Research and Quality: Medical Expenditure Panel Survey, 2005

Health Care Spending on Chronic Conditions



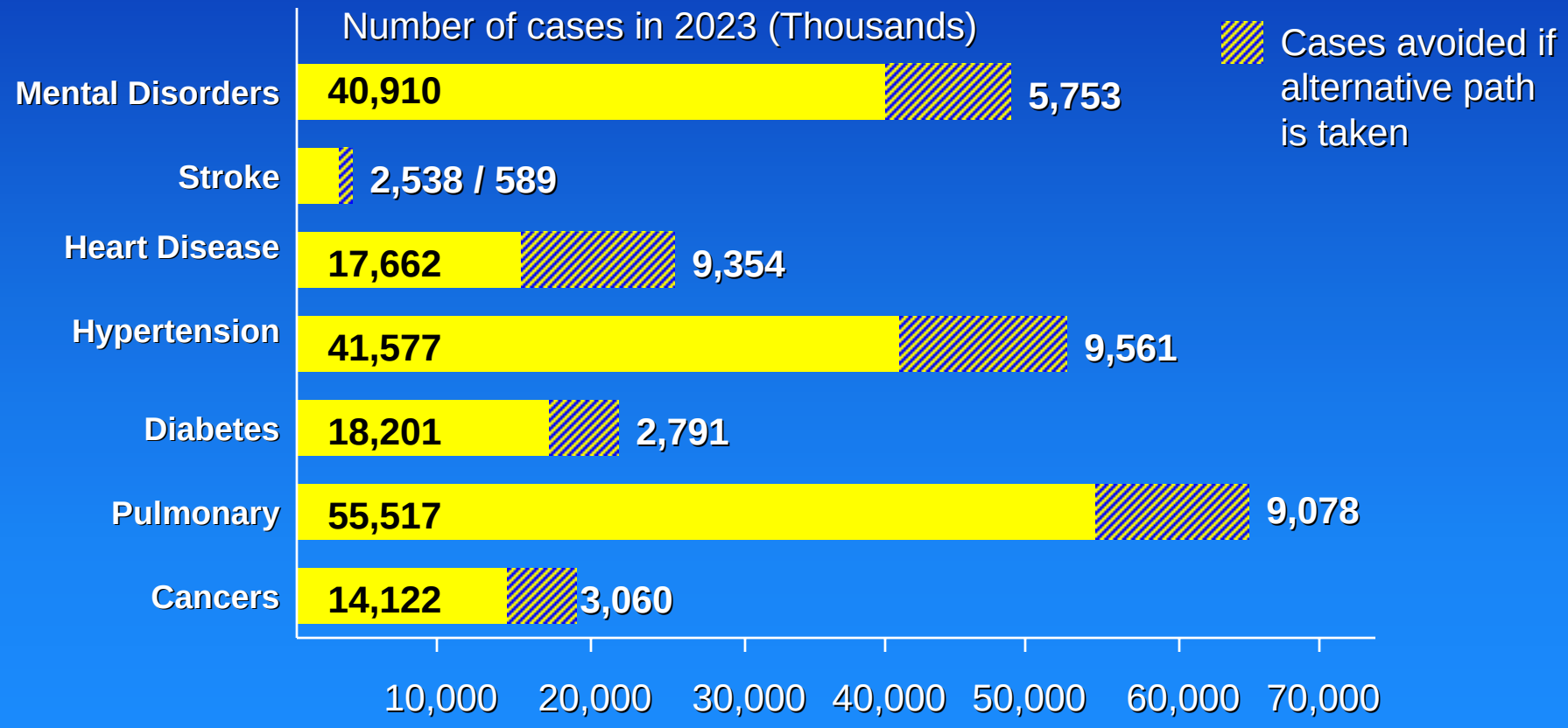
Health Care Spending for People without Chronic Conditions

Health Care Spending for People with Chronic Conditions

Medical Expenditure Panel Survey (MEPS) 2004

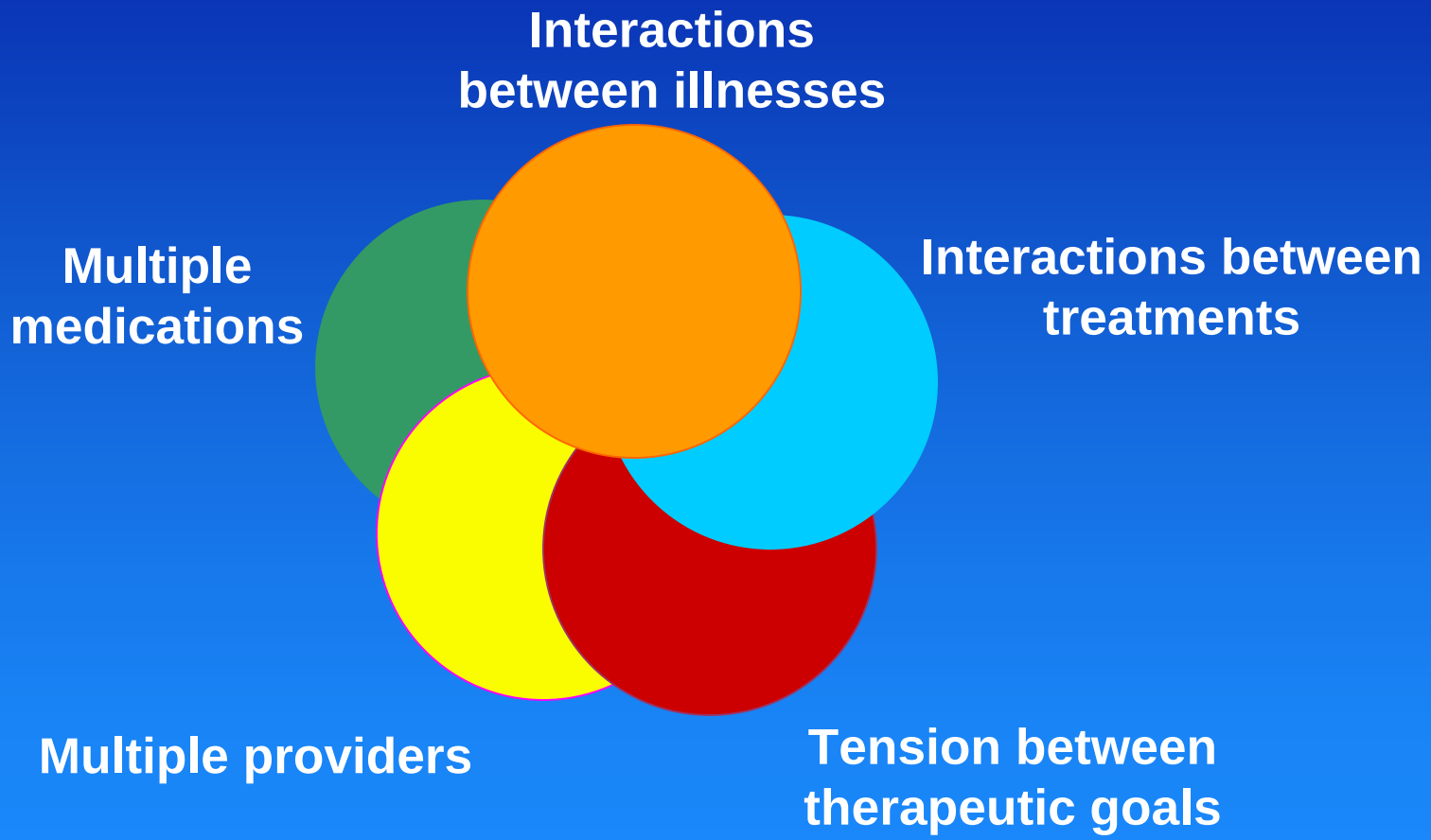
Change Drives Progress

40.2 million cases of chronic conditions can be avoided and $1.1 trillion can be saved in 2023 by making reasonable improvements in preventing and managing chronic disease



An Unhealthy America: The Economic Burden of Chronic Disease Milken Institute October 2007

Challenges in Addressing Multiple Conditions



Knowledge Transfer: Elder Learning Networks

- AHRQ/AOA/CDC: sponsor two Evidence-based Disability and Disease Prevention Learning Networks -2006 & 07/8
- Elders Learning Networks I/II – Florida, Maine, Michigan, Rhode Island, South Carolina, Vermont, Illinois, Maryland, Massachusetts, New Jersey, Ohio
- To facilitate clinical and community linkages for chronic disease management
- GOAL: To provide evidence-based research/tools and peer-to-peer learning to keep elders healthy in community
- To support coalition building among clinical, public health and community organizations

HHS Hispanic Elders Learning Network

- Eight communities with large Hispanic elder populations
  - NYC, Miami, Chicago, Houston, San Antonio, Lower Rio Grande Valley, L.A., San Diego
- Teams develop community partnerships to target health disparities among Hispanic elders
- AHRQ, AOA, CDC, HRSA and CMS partnership provides evidence-based research and tools, promotes peer-to-peer learning
- Community focus on chronic disease, e.g. diabetes

Care for Patients with Multiple Chronic Conditions

AHRQ Ambulatory Safety and Quality Program (ASQ)

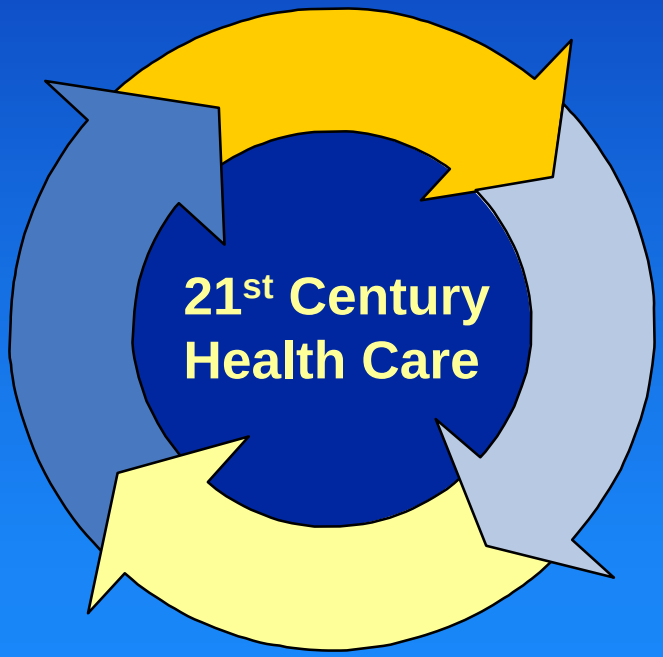
- RxSafe: Shared Medication Management and Decision Support for Rural Clinicians – Oregon Health & Science University
  - Oregon Health & Science University is using previously developed technology to support shared medication management for persons with chronic conditions
  - Type of Health IT: Clinical/Operational Decision Support (provider-focused)

Estimated Total Funding: $1.2 million
Project Start – Sept. 30, 2007
Project End – Sept. 29, 2010

21st Century Health Care

Improving quality by promoting a culture of safety through Value-Driven Health Care

Information-rich, patient-focused enterprises



Information and evidence transform interactions from reactive to proactive (benefits and harms)

Actionable information available – to clinicians AND patients – "just in time"

Evidence is continually refined as a by-product of care delivery

Improving Quality Care and Reducing Disparities

EDITORIAL

Improving Care Quality and Reducing Disparities

Physicians' Roles

FOR SEVERAL DECADES, INTENSE HEALTH CARE policy interest in clinical practice variation has inspired efforts to identify inappropriate variation, that is, differences in care delivery that are not attributable to clinical differences in disease or patient preferences. Practice variations associated with patient race, ethnicity, socioeconomic status, geography, and other factors not attributable to clinical manifestations are prevalent and reflect suboptimal return on our investment in health care. In addition, disparities in access to care may lead to inefficient and costly patterns of care and contribute to long-standing disparities in health status and outcomes. As the US population becomes increasingly diverse, there is growing urgency underlying the imperative to identify solutions to the challenges of "unequal treatment."

HEALTH CARE GAP

Policy initiatives in the public and private sectors that promote transparency and link financial rewards with clinical performance are an important component of the current environment in which efforts to address disparities occur. An extensive literature and numerous authoritative reports have clearly demonstrated 2 overarching themes with respect to quality and disparities in health care: (1) there is a significant gap for all Americans between best possible care and that which is routinely delivered; and (2) this gap is larger for patients who are members of minority groups, poor, of lower educational level, or disabled. The Agency for Healthcare Research and Quality's annual *National Healthcare Quality Report* and

See also page 1145

National Healthcare Disparities Report[1] reinforces these findings across all settings and age groups. In short, suboptimal quality and disparities are not isolated phenomena but rather integrally related concepts that benefit from coordinated intervention. Identifying subgroups at highest risk for poor-quality health care is a pragmatic approach to closing the gap between ideal care and care received and may also offer critical insights regarding both the limits and potential of current health care arrangements to apply scientific evidence to improve patient outcomes. Previous studies[2-4] have found that public reporting on clinical performance has been associated with overall improvements and reduced disparities between black patients and white patients for selected process measures (eg, ordering tests to assess control of diabetes mellitus and low-density lipoprotein cholesterol [LDL-C] lipid levels), whereas differences in outcomes (eg, control of hemoglobin A_{1c} and LDL-C levels) have been far more difficult to affect. Other studies have found that improving quality of care overall has been accompanied by reductions in disparities associated with race and sex.[5] Most studies confirm that disparities remain pervasive, even though these differences vary with specific racial or ethnic groups and specific disease conditions and settings.

PHYSICIAN PERFORMANCE AND RACIAL DISPARITIES

In this issue of the *Archives*, Sequist et al[6] focus on physician performance and racial disparities in diabetes mellitus care. In contrast to prior studies that have focused on disparities within and across hospitals, health plans, and regions, the perspective addressed in their article is the role of variation among individual physicians in contributing to observed disparities in quality. Taking advantage of an integrated multispecialty group practice in eastern Massachusetts that uses a common electronic medical record with decision support tools for chronic disease care, the study addresses the extent to which racial disparities in intermediate outcomes of diabetes mellitus care are related to differences in care provided by the same physician compared with differences owing to black and white patients being seen by different physicians. A secondary objective was to determine whether overall quality of a diverse patient panel is associated with decreased disparities between white and black patients within individual physicians' patient panels.[6]

The results demonstrate similar rates of receiving hemoglobin A_{1c} and LDL-C tests for black and white patients, whereas rates of achieving ideal and adequate control of hemoglobin A_{1c} and LDL-C levels were significantly lower for black patients than for white patients. Adjustment for patients' sociodemographic factors explained 13% to 38% of observed disparities in achieving ideal control of hemoglobin A_{1c} and LDL-C levels and blood pressure, whereas adjustment for patients' clinical factors (comorbid conditions) explained none of the observed differences. In contrast, within-physician effects explained a large proportion of observed differences for black and white patients. In this multispecialty group practice, poorer intermediate outcomes for black patients compared with white patients could not be explained by black patients seeing different physicians than white patients. Instead, the most important explanatory factor was that black patients had worse outcomes than white patients within the same physician panel. Given that process outcomes such as testing rates were similar, at least 2 potential reasons for the worse outcomes for black patients warrant additional exploration. First, it is quite possible that other aspects of care delivery (eg, medication teaching, communication) were worse for the black patients. Second, achieving good control of hemoglobin A_{1c} and LDL-C levels and blood pressure require actively engaged patients and support for sustained

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- Growing demands for information about quality and outcomes of care offer an opportunity for physicians to make sure the quality enterprise:
  - Focuses on important patient outcomes
  - Incorporates the best science, and
  - Supplies practitioners with information needed to provide superb care in a timely fashion – every time

C. Clancy, Archives of Internal Medicine, June 9, 2008

2008 AHRQ Annual Conference

"Promoting Quality – Partnering for Change"

September 7-10, 2008
Bethesda North Marriott Convention Center Bethesda, MD

Sessions on topics including the following:

- Prevention/Care Management
- Patient Safety and Health IT
- Implementation of research findings into changes in practice and policy

To Register: www.blsmeetings.net/2008ahrqannual