

## Doctors Office Quality- Information Technology

### Health Care Quality & Patient Benefits

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## Quality of health care

- Conducted by RAND
- Random sample of adults living in 12 metropolitan areas in the United States (telephone survey and chart review)
- Adults with diabetes: 45% of recommended care
- Adults with acute MI: 45% received beta blockers
- Adults with pneumonia: 39% of recommended care  
(Pneumococcal vaccine, influenza vaccine, antibiotics)

McGlynn EA et al. The quality of health care delivered to adults in the United States. N Engl J Med 2003;348:2635-45

### 'Quality Gap' in Health Care Kills 57,000 Each Year in U.S.

New Study Cites Failings  
In Treatment, Prevention  
Of Some Chronic Conditions

By BRONNA L. BYRNER

For the fourth straight year, quality of care improved in managed health plans whose performance is measured by national standards. Yet there is a growing quality gap: the recent millions of Americans from receiving the best care, according to a new study.

More than 2,000 Americans die needlessly every year because they don't receive the appropriate health care that is routinely provided to some health plans, according to the National Committee for Quality Assurance, a nonprofit organization in Washington. These estimates reflect the U.S. health care system's poor performance on both measures of controlling heart disease, high blood pressure, and diabetes' blood-sugar levels.

"It's not a question of knowing how to treat heart disease, diabetes, or asthma," said Margaret E. O'Keefe, president of the quality organization. "We know how. We're just not doing it."

Americans do not receive the care that medical experts have shown to be effective in controlling leading conditions, such as heart disease, stroke, and asthma.

The study shines a light on a track record of failures in health care delivery, and government policy makers to take action to help the labor market about the best ways to invest and train doctors to become part of the quality practice of medicine. The NQA, which tracks data submitted by health plans, hopes to improve overall medical practice by making the data more available for their performance.

Hazard health care opportunities cost the nation more than \$1 billion a year in avoidable hospital bills, according to the study. The health-care system's failure to provide the best treatment for just five conditions—asthma, depression, diabetes, heart disease, and high blood pressure—costs a year, resulting in loss of \$1.1 billion annually by about 100 hospitals.

The NQA study is the first to put a price tag on the system's failures and assess opportunities. "People will all speak positive words about it, but it's a way of trying to get people's attention on the issue," said Ms. O'Keefe. Some researchers have criticized a 1998 National Academies Institute of Medicine study that attributed 90,000 deaths, a loss to medical services, and several years later the report continues to be widely cited and has become part of the national debate about health-care quality.

The "quality gap" leads to enormous variations in the rates at which certain important chronic diseases are diagnosed. The NQA report says, for example, nationwide only about 45% of people with diagnosed high blood pressure have their pressure adequately controlled, an increase to 50%—the level already achieved by the nation's top health plans—would save an estimated \$100 billion over next year, according to the report.

For the second consecutive year, Washington Health Plan in Arlington, Va., was the nation's strongest overall performer on measures of quality of care. Better diabetes control, asthma control, and asthma control, says an industry source and research unit of the study, the study found. Health plans in the study were ranked by their quality of care, including management of chronic conditions, and compared those in other years. They have consistently in other years.

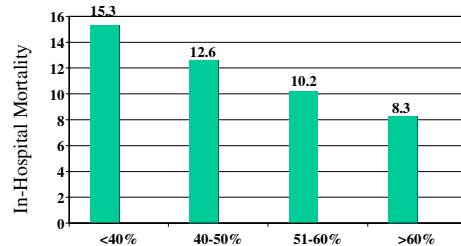
The study says in the study were ranked by 11 health plans that collectively cover more than 71 million people, or about a third of the national population.

### Wall Street Journal, September 18, 2003

"More than 57,000 Americans die needlessly every year because they don't receive the appropriate health care that is routinely provided by some health plans."

"Missed health-care opportunities cost the nation more than \$1 billion a year in unavoidable hospital bills."

### Relationship between overall composite quality and in-hospital mortality



Hospital Composite Quality Quartiles

Peterson et al., AHA Scientific Sessions, Chicago, November 2002

## Medicare healthcare spending

- 20% of patients spend 84% of MC dollars
- Five or more chronic conditions = 2/3 of MC spending
- 18% have Diabetes = 32% MC spending
- 14 % have HF = 43 % of MC spending

A more proactive approach to disease management is required!

## IOM Report

"...called for a national investment in patient and population-based health information systems as a principal means of more effectively addressing issues of health care quality and health care disparities."

"Charting the Legal Environment of Health Information"

[www.rwjf.org](http://www.rwjf.org) or [www.qwumc.edu/sphhs](http://www.qwumc.edu/sphhs)

### JAMA: Elderly receive inferior care

- Diabetic eye exam 47.9%
- Hemoglobin A1c monitoring 55.9%\*
- Mammogram 46.7%\*
- Flu vaccination 46.5%\*

\*Rates even lower if Medicaid revenue 16%

Pham, et al, JAMA. 2005;294:473-481

“If we keep doing what we are doing, we will keep getting what we got!”

Yogi Berra

### What can our patients expect?

- Decrease in A1c of 1 leads to a 25-35% decrease in microvascular complications
- Reduction of B/P by 10 mm can result in a decrease in macro and microvascular complication and mortality rates by 35%
- Lipid control lowers:
  - CAD risk by 25-55%
  - Risk of death by 43%

DCCT, Am J. Cardiol 1995;75:894-903

### Comprehensive medical therapy for patients with CHD/vascular disease

- |                     | <u>Risk Reduction</u> |
|---------------------|-----------------------|
| • ASA               | 20-30%                |
| • Beta Blockers     | 20-35%                |
| • ACE inhibitors    | 22-25%                |
| • Statins           | 25-42%                |
| • Smoking cessation | 50%                   |

### Use of technology to bring about improvements to the system of care

- Proactive planning for population care
- Planned care for the individual as a whole
- Support for continual process of improving care

### Health information technology (Health IT)

- Improve health care quality
- Prevent medical errors
- Reduce health care costs
- Increase administrative efficiencies
- Decrease paperwork
- Expand access to affordable care

U.S. Dept. Health and Human Services

## HIT can help healthcare, but...

- Used only piecemeal
- Doctors still scribble prescriptions (sometimes illegibly)
- Providers continue to miss important opportunities to help us avoid disease or serious complications.

## Cardiovascular risk in diabetic women

- Diabetic women have not benefited from changes that dramatically improved the CVD outlook for others
  - Less likely to receive appropriate care
  - Suboptimal cholesterol control
  - Lower rates of B-blocker and ACE use
  - Greater risk from CHD death for diabetic women

N. Wenger, *Ann Intern Med.* 2007;147:208 - 210



## DOQ-IT

### Premise:

Substantial improvement in physician office quality cannot be achieved without adoption of health information technology and process redesign.

## DOQ-IT pilot

- April 2004 – August 2005
- Four states: CA, AR, MA, UT
- Small & medium-sized groups (1-9)
- 3521 contacted; 971 participated

Fergusson et al, Pilot Debrief, lessons learned assisting physician practices adopt Health IT; J AHIMA June 2007

## Most likely to succeed

- Widespread physician buy-in
- Physician champion
- Sufficient funding
- Sufficient time
- Strong management

## Are they ready?

- Basic computer skills
- Using other forms of health IT
- Regular staff meetings
- Financial readiness
  - Budget
  - Timeline

## Improving EHR implementation

- Assessment upfront
- ID potential trouble spots
- Draft realistic plans and timelines
- Reasonable expectations

## EHR defined

- Digital information
  - Collected and stored
  - Supplied on request
  - Electronic patient care orders (CPOE)
  - Provide advice (clinical decision support)
- Implications of the technology is dependent on non-technical considerations

Blumenthal and Glaser, Information Technology comes to Medicine: N Engl J Med 2007;356:2527-2534

## Changes for clinicians

- Organization of offices, workflows
- Entering and retrieval of information
- Processes of medical decision making
- Process of interactions with:
  - Colleagues
  - Consultants
  - PATIENTS

Blumenthal and Glaser, Information Technology comes to Medicine: N Engl J Med 2007;356:2527-2534

## DOQ-IT objectives

- Provide implementation assistance for small – medium sized physician practices
- Provide assistance in
  - IT adoption decision
  - Implementation and workflow efficiencies
  - Care management/patient self-management
- Use clinical data reports for improved practice performance and outcomes

## Data collection

1. Chronic stable coronary artery disease
2. Diabetes mellitus
3. Heart failure
4. Osteoarthritis
5. Hypertension
6. Prevention measures

## QIO 8th Scope of Work Task 1d1

- Assist at least 5% of practices to improve in four areas:
  - Health Information Technology adoption
  - Care process improvement
  - Improvement on clinical measures performance/ results
  - Reporting data to CMS Data Warehouse

## How often do we receive high quality healthcare?

Always

Most of the time

Sometimes

## CHF in primary care practices

- Primary care – FM & IM
- 46% > 80 years of age\*
- 1/3 had LVEF < 40%
  - 80% on ACE, ARB or Hydralazine
  - 74% beta-blocker
  - 50 % were on statins

\*See editorial by Aurigemma, G.P. Diastolic Heart Failure...;  
N Engl J Med 2006;355:308

## Enormous complexity of things-

ultimately impedes change

## Attack a complex problem

1. Determine a goal
2. Find the “highest-leverage approach”
3. Discover the ideal technology for that approach
4. Make the smartest application of the technology you already have

## Wyoming DOQ-IT

- Working with 6% of Primary Care Practices (10 sites)
- 8 of these sites had no-EHR at recruitment
- Currently;
  - ✓ 2 sites without an EHR at recruitment have adopted and fully implemented an EHR
  - ✓ 1 site is currently implementing its EHR
  - ✓ 2 sites are in the RFP/contract negotiation stage and are anticipated to have an EHR by this fall
  - ✓ 2 sites are utilizing their EHRs for care management
  - ✓ 30+ non-eligible sites have expressed interest in the program

## Wyoming DOQ-IT sites



## DOQ-IT participants quotes

- “DOQ-IT was the key to our successful implementation it helped lead us and give us next steps. They outlined the process really well.” – Shannon Walker, Office Manager; Red Rock Family Practice, Thermopoli, WY
- “I would strongly encourage other practices to use (Mountain-Pacific Quality Health’s) services.” – Travis Bomengen, MD; Red Rock Family Practice, Thermopoli, WY
- “DOQ-IT was a big help in guiding the practice in the right direction. The help given in the implementation gave Dr. Fischer a comfort zone.” – Barbara World, Office Manager; Carol Fischer, MD, P.C., Cheyenne, WY

## Factors for EHR success

- Leadership
  - Physician, Nurse, and Administrative Champions
- Thorough Project Management
  - Practices need to invest adequate time and resources to their EHR project
- Ask for help
  - DOQ-IT, Other Practices/Peers, HIT Consultants, Lawyers, Accountants, etc.

## WY health IT barriers

- Cost
- IT Support
- EHR Vendor Penetration/Accessibility
- Privacy/Security
- Time/Resources
- Perceived need and Provider Interest
- Scope and funding of DOQ-IT is limited

## Health IT in Wyoming our view

- Interest in the utilization of health IT in Wyoming is on the rise.
- Motivated healthcare providers are making efforts to investigate health IT.
- The lack of available IT support in rural communities makes Wyoming ideal for ASP solutions. However, reliable broadband Internet access hampers this.

## Wyoming DOQ-IT team

- Developed a model for rural states
  - Consultative
- Chosen to mentor other QIOs in the US
- Wyoming HIT Council

## How will HIT dramatically change the work of health care?

- Will to improve: is Primary
- Technology: is Secondary
- **Patience: is CRITICAL**

## Contact Information

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Thank you

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