

# **11<sup>th</sup> National Quality Colloquium**

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## **Boot Camp 1 Part 2**

**David Nash, MD, MBA**

# **Practice Guidelines and Case Management**

**David Nash, MD, MBA**

# Why Guidelines Now?

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- Increased financial pressures
- Rapidity of spread of technology
- Data showing inappropriate care
- Active management tools for QA
- Continuous quality improvement

# Peer Review

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- Slightly better than “Chance” findings  
*Goldman JAMA 1992*
- Marked variability in applied inpatient  
criteria *Rubin JAMA 1992*
- Marked variability in the office setting  
*Weiner JAMA 1995*

# The Philadelphia Inquirer

Vol. 322, No. 58

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Monday, July 20, 1993

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## For some, MRI symbolizes medical care's costly spiral

By Gilbert M. Gail  
Inquirer Staff Writer

The city of Allentown, an enclave of 37,000 in south-central Pennsylvania, serves as a textbook example of how America's obsession with expensive medical technology is causing it to spread far and wide.

Consider: In July 1992, officials at Mercy Hospital coughed up \$1.5 million for a magnetic resonance imaging device, a fancy diagnostic tool that provides high-resolution images of the brain, spinal cord, heart and joints.

By providing sharper pictures than X-rays, some doctors say MRI helps them make better diagnoses.

Within three years, radiologists at the 182-bed community hospital were doing more MRI scans — 9,393, at prices ranging from \$471 to \$814 per scan — than any other hospital in the state, records show.

All that activity apparently caught the eye of other radiologists in Allentown. Two years ago, a private group of physicians opened a competing MRI center — Blair Imaging Associates — with a larger, more expensive machine.

A relatively short trip across the Allegheny Mountains, a consortium of four hospitals in Johnstown, also took notice. It spent \$2.5 million in 1987 to open an MRI center. And last year doctors there performed nearly 3,000 scans at a charge of \$875 per scan.

The four hospitals said they saved money by jointly operating an MRI, and justified the MRI by noting that it was sometimes difficult to drive over the mountains from Johnstown to Allentown.

In theory, having three MRI devices within such close proximity might be expected to cut into Mercy Hospital's business. Guess again. In 1992, Mercy's doctors performed the equivalent of one scan for every 11.8 residents of Blair County, including Allentown. By comparison, the seven hospitals in Philadelphia County that owned MRIs performed one scan for each 112 residents.

Mercy's MRI, moreover, is continuing to hold its own, says Bill Polito, the hospital's vice president for planning and marketing. "I guess we've

lost about 600 patients after each of the others opened. We're MRI seeing strong demand," he said.

Allentown's experience is not an isolated example. The costly imaging technology, which uses magnetic fields to take detailed pictures, is cropping up everywhere — in hospitals, in physician-owned clinics, even on trucks that send the devices from health facility to health facility.

Nationwide, there are an estimated 600 MRIs, which have cost from \$1 million to \$2 million, plus installa-

tion costs. Average fees for scans vary from about \$200 to \$1,000, although centers often accept less from insurers. And despite some recent signs of a possible industry shakeout, the business continues to grow.

All of which is a concern to government officials and others worried about spiraling U.S. health expenditures — estimated at \$600 billion in 1992 — and the overuse of expensive medical technologies.

The growth of MRI illustrates just how MRI can add.

# Some Definitions: *Standards (Eddy)*

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- Virtual unanimity among patients about the desirability of the intervention, and about its proper use. Define good practice and bad practice.
- Synonym - strict criteria

# Some Definitions:

## *Guidelines (Eddy)*

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- Outcomes are well enough understood to permit meaningful decisions by a majority of people. Flexibility.
- Synonym - parameters, relative criteria

# Consensus Panel of Experts Approach

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- Implicit system
- Impossible to accurately estimate the outcomes of different options



# Conflict?

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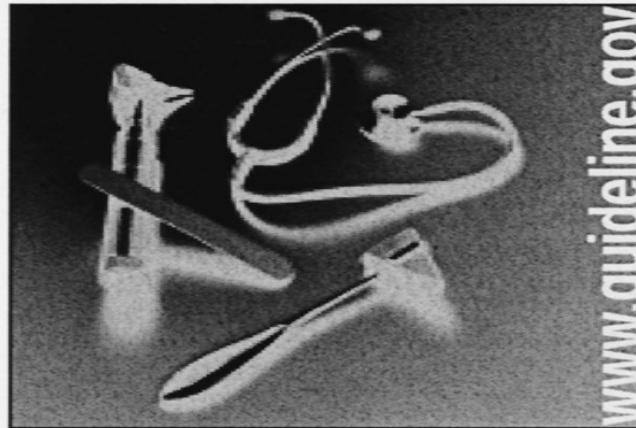
- Chassin
  - RAND
  - Expert panels
  - Consensus statement
  - Value health sciences
- Eddy
  - Duke
  - Poor quality information
  - More rigorous approach
  - CMSS-Hartford Fund

## **Heart Failure: Management of Patients With Left-Ventricular Systolic Dysfunction**

- Prevention
- Initial Evaluation
- Patient Counseling and Education
- Pharmacological Management
- Role of Myocardial Revascularization
- Algorithm

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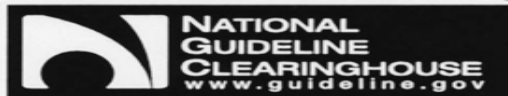


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# TQM + The Medical Staff

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- *Critical Path* - detailed, hour by hour description of care plan; involves nurses
- *Practice Guidelines* - parameter, standard or guidepost for approach to a particular diagnosis. Literature and consensus panel driven
- *Case Management* - Global use of resources and patient placement. May be directed at arms length by third party payer or managed care organization

# Etiology of Case Management

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# Challenge to Guidelines: Technology as Moving Target

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- Prostate drugs vs. TURP
- Lytic therapy vs. CABG
- Biologics vs. lithotripter

# Will Guidelines Alter Practice?

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- Kosecoff - NIH study
- Lomas - Canadian experience
- Eisenberg and Williams - Behavior

# Guideline Nonadherence

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- Cabana and colleagues, JAMA Oct 1999
- Differential diagnosis and framework for improvement
  - Lack of awareness
  - Lack of familiarity
  - Lack of agreement
  - Lack of self-efficacy
  - Lack of outcome expectancy
  - Inertia of previous practice
  - External barriers
  - Patient related barriers



# Improving Physician Adherence to Clinical Practice Guidelines



Barriers and Strategies for Change



New England Healthcare Institute

# Guideline Nonadherence

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- Social influence theory
- Adult learning
- Diffusion of innovation
- Social marketing

# Social Influence Theory

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- Decisions, actions and behaviors are guided by habit and custom
- Also guided by assumption, beliefs and values held by peers
- Prevailing practices and social norms that define appropriate behavior

# Adult Learning Model

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- Physicians respond to three types of behavioral influences
  - Predisposing factors - changing values, beliefs, perceptions
  - Enabling factors - providing MDs with necessary skills and resources
  - Reinforcing factors - visible results, support from colleagues and feedback from patients

# Diffusion of Innovation

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- Intervention to change behavior must emphasize improving skills and enhancing knowledge
  - Orientation
  - Insight
  - Acceptance
  - Actual change
- Early adopters - respond to scientific data
- Late adopters - need extra stimulus

# Social Marketing Theory

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- Source of the communication
- Medium of the communication
- Content of the message
- Characteristics of the audience
- Setting in which communication is received

*Acceptance of a guideline will depend on how it is communicated and the stage at which it is received.*

# Will guidelines be tied to Credentialing?

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- Atypical behavior
- Economic impact of practice

# How to Change Physician Behavior?

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- No magic bullets;  
need for ongoing approach
- Cultural barriers
- Academic detailing
- Eisenberg + Williams



# Can we change physician behavior?

## *Eisenberg and Williams*

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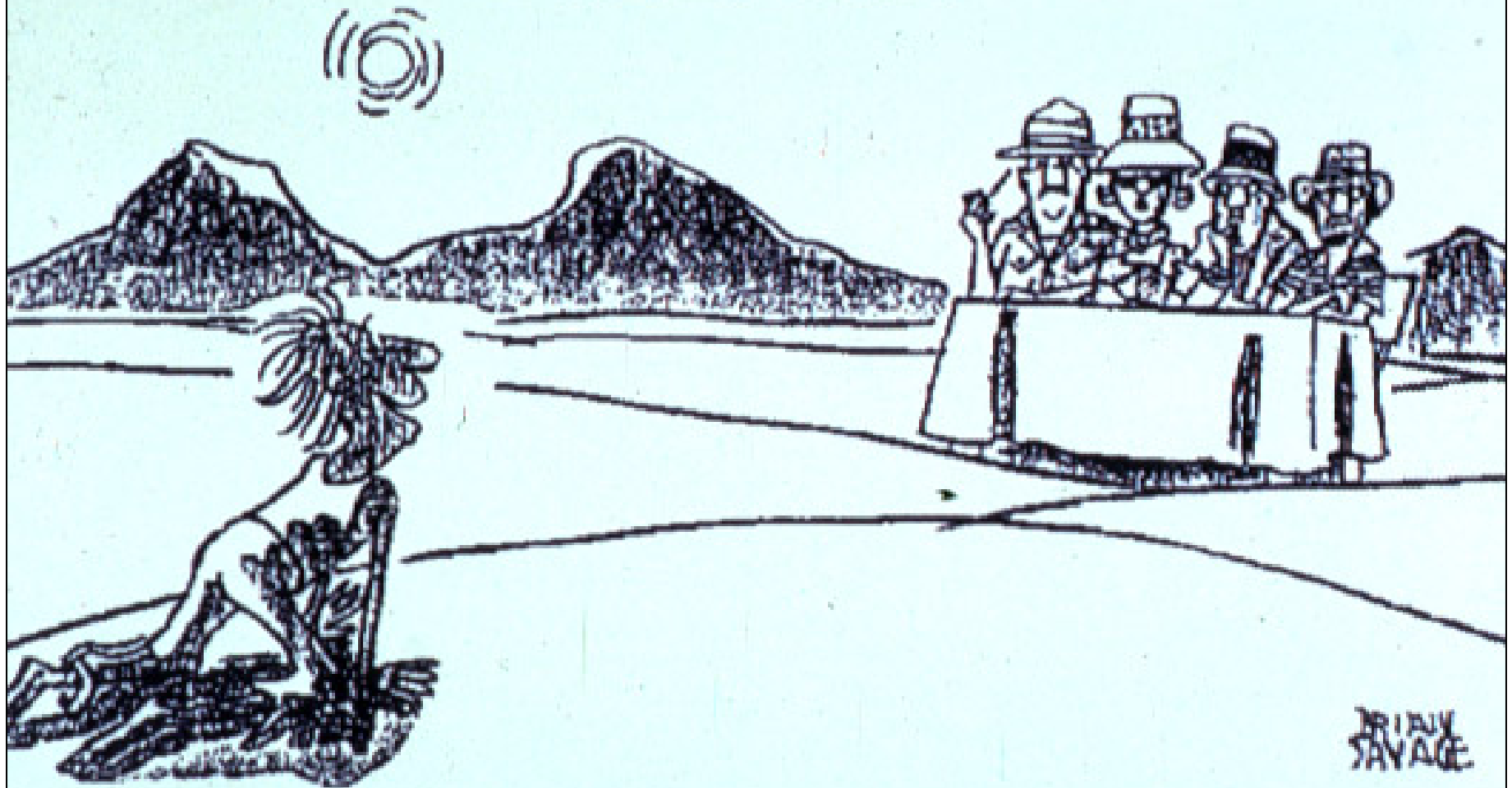
- Education
- Feedback
- Financial rewards
- Financial penalties
- Participation
- Administrative changes

# The Bottom Line

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- Non-punitive feedback on performance
- Locally derived guidelines with demonstrated improvements in patient outcomes
- Physician champions at all levels
- Education, Education, Education

# WELCOME!



*"Thank God! A panel of experts!"*