Evidence-based Medicine and Managed Care

Quality Colloquium

Boston, Massachusetts

August 23, 2004

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About VCEBM

- *Mission - Promote understanding and adoption of evidence-based medicine*
- *Program Focus:*
  - *Educational Programs*
  - *Research Programs*
    - *Consumer and provider adherence factors*
    - *Role of incentives, media coverage, benefits structures, DTC, technology*
    - *EBM in health system transformation*

VUMC study tries new tactic to cut health-care costs

Staff Writer 12-22-04

A Vanderbilt University Medical Center study is considering a novel way to cut health-care costs.

If insurers paid doctors for talking patiently with patients — instead of seeing as many people as possible in a day — we all might become healthier and spend less on medical care. And, in the long run, health insurance costs paid by businesses and their employees might go down.

"If somebody pays doctors to see patients, they are going to see patients. If someone pays doctors to care for patients, maybe they'll do what they need to do," said Dr. Steve Coulter, chief medical officer for Chattanooga-based Blue Cross Blue Shield of Tennessee, which helped organize the Vanderbilt study and is playing a key role in it.

Primary Resources

- Study of 88 Industry Leaders (November, 2003)
  - *Health transformation approaches, challenges*
- Study of 89 Health Plans (January, 2004)
  - *10 month, multi-stage study involving 128 medical directors and 20 pharmacy benefits officers*
- Managed Care Industry Trend Analysis (Ongoing)
- Consumer-directed Care Analysis (Ongoing)

The Health System Today: Obvious Problems

Transformation Strategies: Key Themes

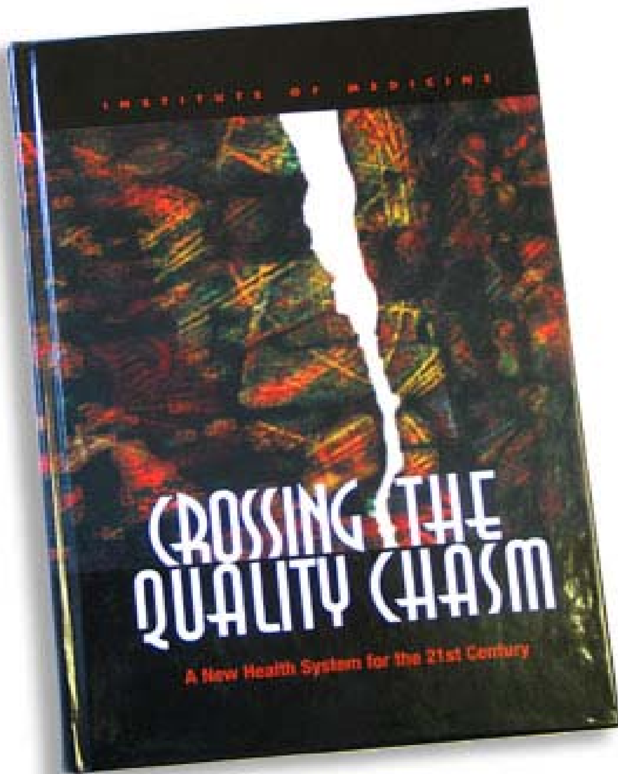
CONSENSUS

Strong/Unclear	***Strong/Clear***
Technology standards **Medicare Choice**	**Prevention** **Disease management** **Consumer-directed care** **Evidence-based medicine** **Administrative simplification**
Weak/Unclear	***Weak/Clear***
Uninsured/Access **Prescription drug coverage**	**Medical malpractice reform** **Employer mandates**

DIRECTION/STRATEGY

Delphi Survey Results: What do you consider to be the most important strategies/initiatives for health system transformation in the United State? **(88 Healthcare Executives)**

Quality: A Key Concern



- Evidence Based Care
- Patient Centered Approach
- System Orientation

What's so new about evidence-based medicine?

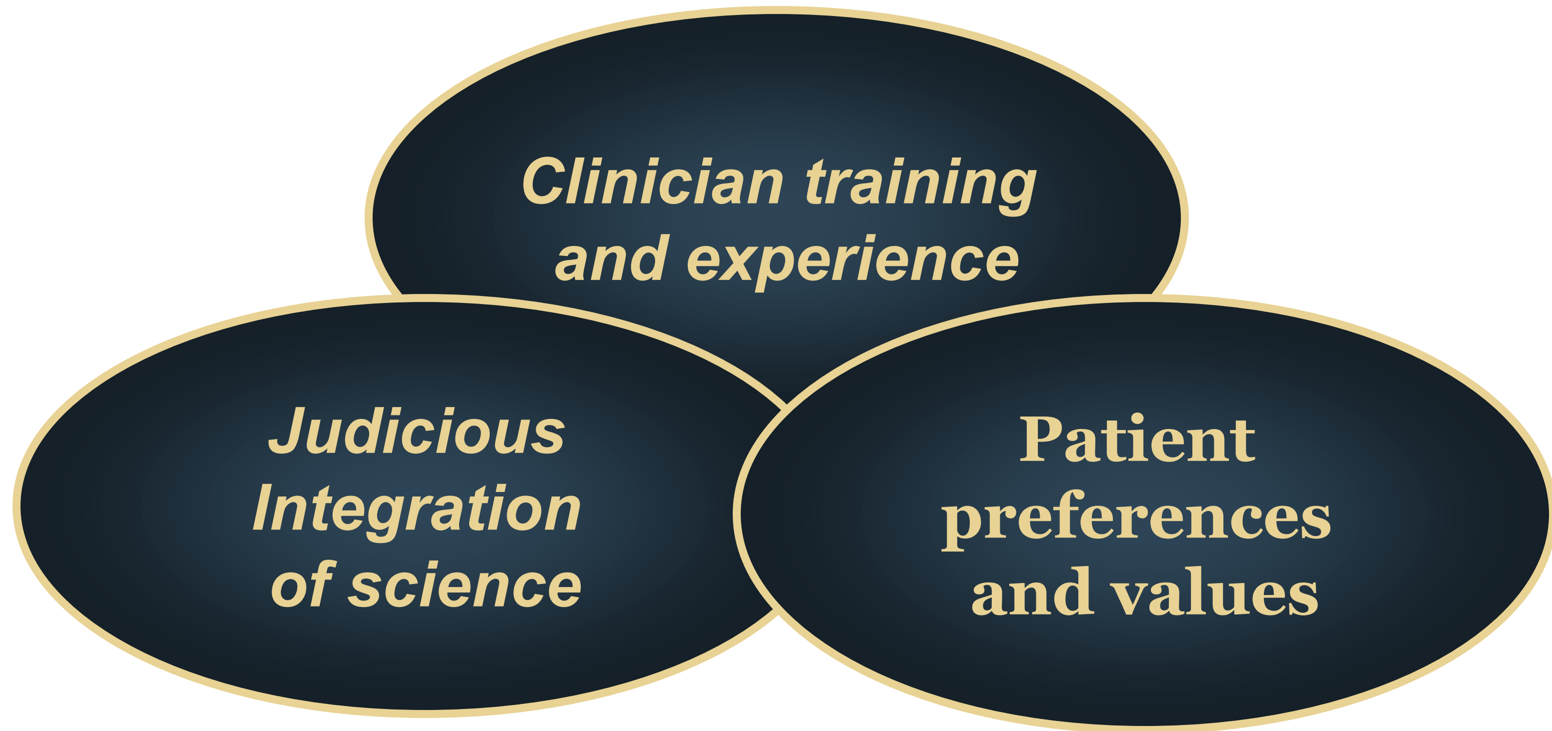
A fundamental approach to market-driven health system transformation or much ado about nothing?

Definition: Evidence-Based Medicine

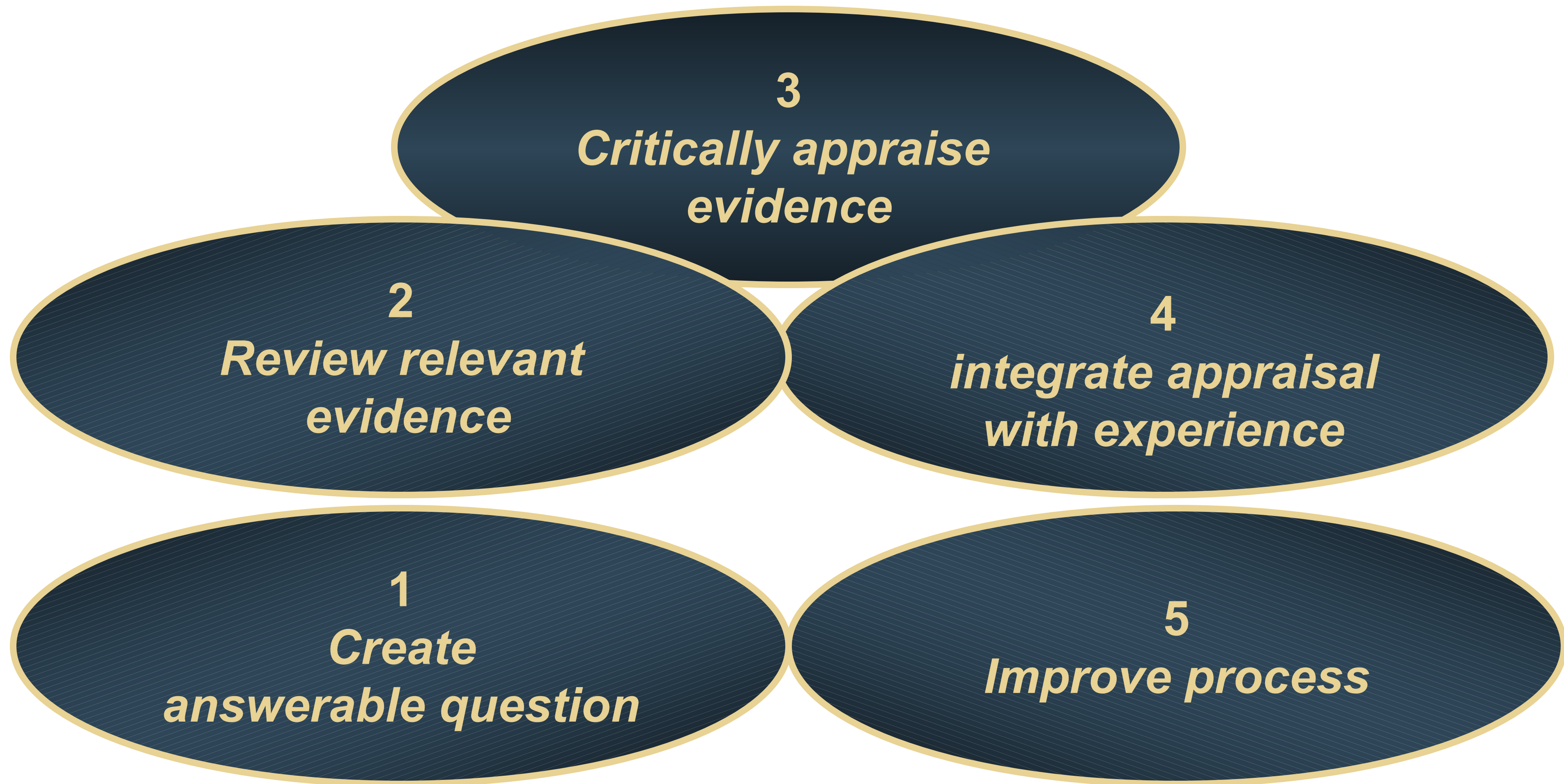
"The practice of EBM includes the judicious integration of current best scientific literature, clinical experience and patient understanding and values."

Adapted from Guyatt et al. and Sackett et al.

Three Dimensions of EBM



EBM: The Traditional Model (McMaster)



Optimal Factors: Evidence-based Care

Incentives
adherence by clinicians and patients

Technology
knowledge management tools

Evidence-based Practice

Public Policy
Tools, not rules

Engaged Consumers
Teachable moments

Common Misconceptions about EBM

Misconception	*Correct Concept*
EBM is cookbook medicine	EBM is based on ***population-based guidelines***; by definition, it's not applicable to every patient
EBM is a cost-containment strategy	EBM is a ***quality improvement*** strategy; consistently applied, it can reduce costs by reducing inappropriate variation
EBM is about changing physician behavior	EBM is about increasing adherence by ***clinicians and patients***
EBM benefits payers most	EBM ***benefits patients most***

Guidelines: The Backbone of EBM

"Systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances"

– IOM '92

- Derived from…
- 10,000 RCTs annually
- 4,000 guidelines since 1989
- 2,500 periodicals in NLS

The Quality of Health Care Delivered to Adults in the United States

The NEW ENGLAND JOURNAL of MEDICINE

Elizabeth A. McGlynn, Ph.D., Steven M. Asch, M.D., M.P.HJohn Adams, Ph.D., Joan Keesey, B.A., Jennifer Hicks,M.P.H., Ph.D., Alison DeCristofaro, M.P.H., and Eve A. Kerr, M.D., M.P.H.

Volume 348:2635-2645 June 26, 2003 Number 26

Results:
Participants received 54.9 percent (95 percent confidence interval, 54.3 to 55.5) of recommended care. We found little difference among the proportion of recommended preventive care provided (54.9 percent), the proportion of recommended acute care provided (53.5 percent), and the proportion of recommended care provided for chronic conditions (56.1 percent). Among different medical functions, adherence to the processes involved in care ranged from 52.2 percent for screening to 58.5 percent for follow-up care. Quality varied substantially according to the particular medical condition, ranging from 78.7 percent of recommended care (95 percent confidence interval, 73.3 to 84.2) for senile cataract to 10.5 percent of recommended care (95 percent confidence interval, 6.8 to 14.6) for alcohol dependence.

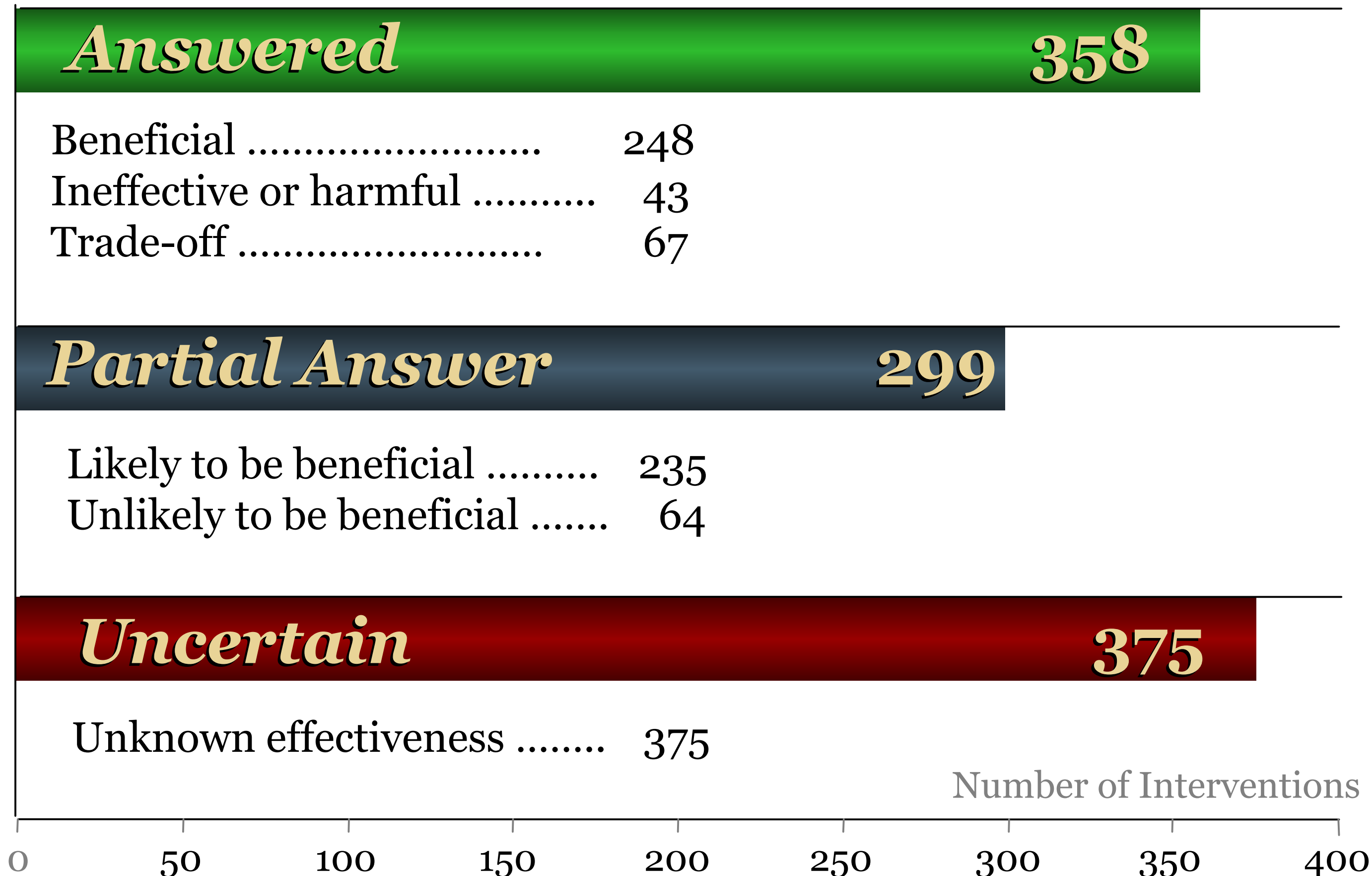
Conclusions: ***The deficits we have identified in adherence to recommended processes for basic care pose serious threats to the health of the American public. Strategies to reduce these deficits in care are warranted.***

Challenge: Knowledge Explosion

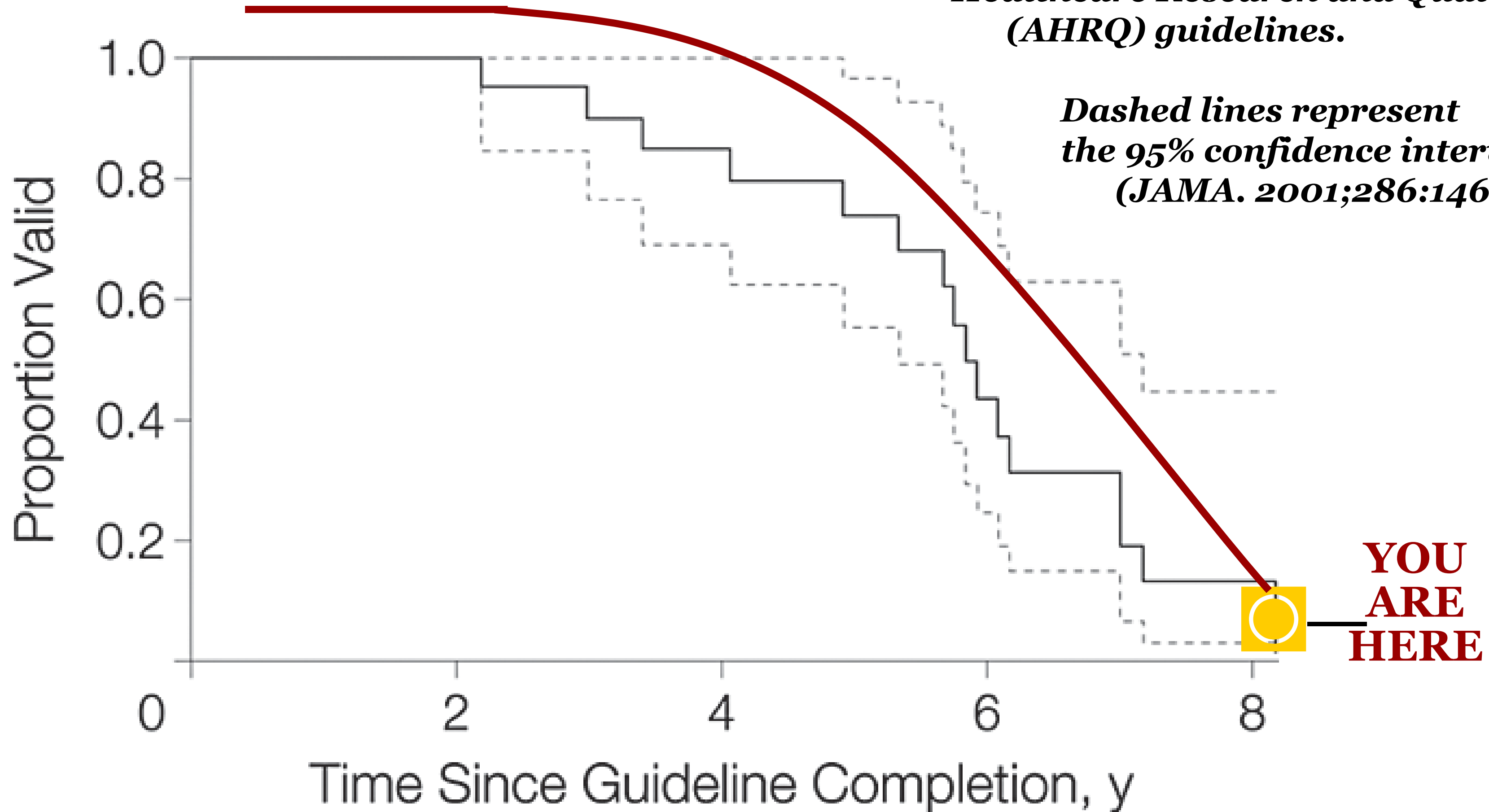
- 20,000 biomedical journals
- >150,000 medical articles published each month
- >300,000 randomized controlled trials

Challenge: Lack of Evidence

How many questions have any evidence? (BMJ 2000)



Challenge : Timeliness



The solid line represents the Kaplan-Meier curve for the Agency for Healthcare Research and Quality (AHRQ) guidelines.

Dashed lines represent the 95% confidence interval (JAMA. 2001;286:1461-1467)

Challenges: Media Coverage

Acrobat Reader - [WHI JAMA 7-17-02_Ref00095.pdf]

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ORIGINAL CONTRIBUTION

JAMA-EXPRESS

Risks and Benefits of Estrogen Plus Progestin in Healthy Postmenopausal Women

Principal Results From the Women's Health Initiative Randomized Controlled Trial

Writing Group for the Women's Health Initiative Investigators

Context Despite decades of accumulated observational evidence, the balance of risks and benefits for hormone use in healthy postmenopausal women remains uncertain.

Objective To assess the major health benefits and risks of the most commonly used combined hormone preparation in the United States.

Design Estrogen plus progestin component of the Women's Health Initiative, a randomized controlled primary prevention trial (planned duration, 8.5 years) in which 16 608 postmenopausal women aged 50-79 years with an intact uterus at baseline were recruited by 40 US clinical centers in 1993-1998.

Interventions Participants received conjugated equine estrogens, 0.625 mg/d, plus medroxyprogesterone acetate, 2.5 mg/d, in 1 tablet (n=8506) or placebo (n=8102).

Main Outcomes Measures The primary outcome was coronary heart disease (CHD) (nonfatal myocardial infarction and CHD death), with invasive breast cancer as the primary adverse outcome. A global index summarizing the balance of risks and benefits included the 2 primary outcomes plus stroke, pulmonary embolism (PE), endometrial cancer, colorectal cancer, hip fracture, and death due to other causes.

Results On May 31, 2002, after a mean of 5.2 years of follow-up, the data and safety

THE WOMEN'S HEALTH INITIATIVE (WHI) focuses on defining the risks and benefits of strategies that could potentially reduce the incidence of heart disease, breast and colorectal cancer, and fractures in postmenopausal women. Between 1993 and 1998, the WHI enrolled 161 809 postmenopausal women in the age range of 50 to 79 years into a set of clinical trials (trials of low-fat dietary pattern, calcium and vitamin D supplementation, and 2 trials of post-

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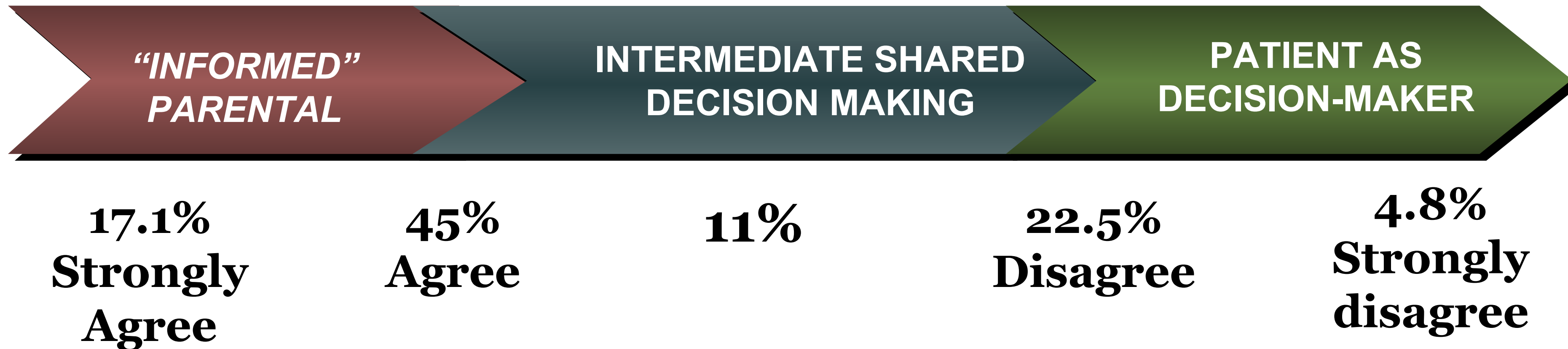
Challenge: Plan Bashing

Challenge: Consumer Expectations

73% of patients depend on physicians to make decisions for them!



*Adapted from Guyatt et al. Incorporating Patient Values in: Guyatt et al. Users' Guide to the Medical Literature: Essentials of Evidence –based Clinical Practice. JAMA 2001

**Arora NK and McHorney CA. Med Care. 2000; 38:335

Plans play a unique role today, tomorrow

- *Information management* is a core competency
- *Influence* is significant among employers
- *Impact* is pervasive across the spectrum of healthcare

BCBSHealthIssues.com

Managing Healthcare Costs

The State of Health Care Quality: 2003
From the National Committee for Quality Assurance

A new report by the National Committee for Quality Assurance (NCQA) finds that "quality gaps" in the U.S. healthcare system result in more than 57,000 avoidable deaths each year. Financial losses sustained from poor quality rang in at $11 billion in lost productivity and more than 41 million lost work days. ***These losses could be avoided annually if "best practices" were more widely adopted, according to the report.***

Expert Opinions: A Starting Point

- Chief Medical Officers from 89 health plans
- Chief Pharmacy Officers from 20 major health plans

What about EBM?

Where is managed care now?

Where is it going? (future state 2006 scenario)

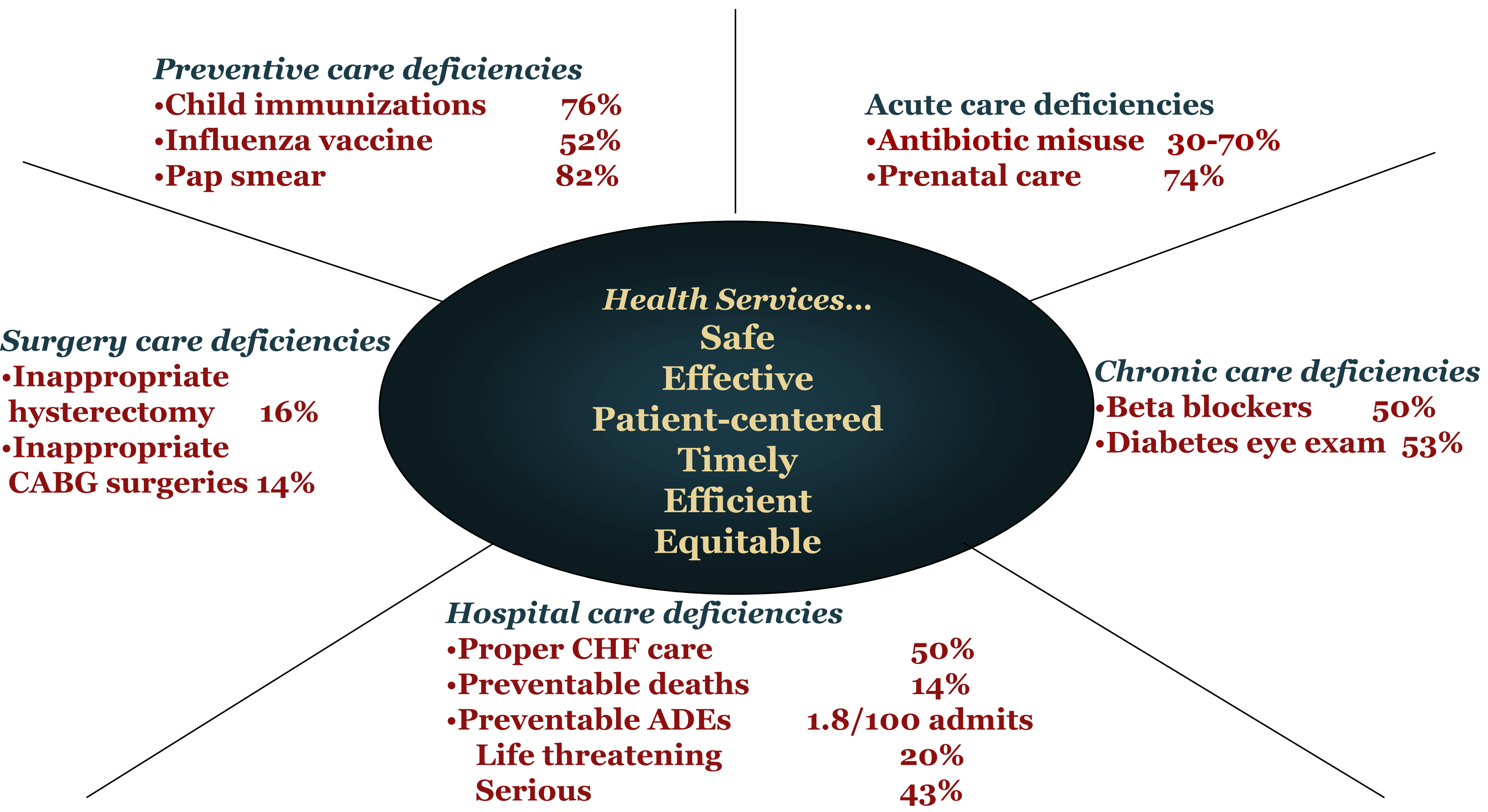
What will it take to get there?

"Managed care" industry drivers

- Customer Satisfaction ⟺
- Profitability ⇧
- Product line strength ⟺
- Reputation ⇩
- Outcomes ⇧
- Access to capital ⇩⇧

Winning the war and losing battles…

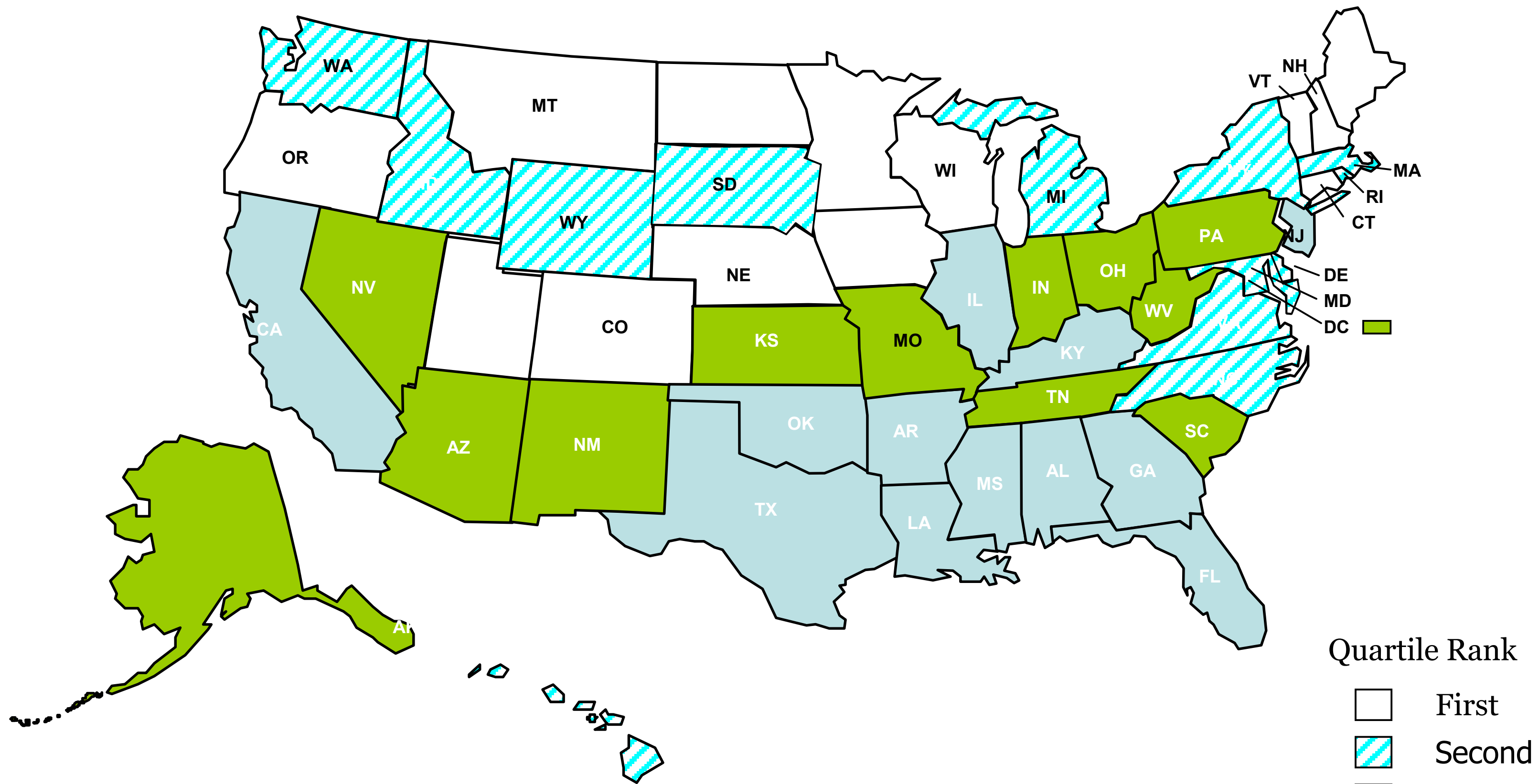
Results of Non-Adherence to EBM: Quality Gaps



Results of Non-Adherence to EBM: Inappropriate Variation

- ***Underuse…***
  - Prevention
  - Dosage
  - Depression
- ***Overuse…***
  - Antibiotics
  - Surgery
  - Imaging
- ***Misuse…***
  - Hospital infections
  - Drug Events

Performance on Medicare Quality Indicators, 2000–2001



Note: State ranking based on 22 Medicare performance measures.

Source: S.F. Jencks, E.D. Huff, and T. Cuerdon, "Change in the Quality of Care Delivered to Medicare Beneficiaries, 1998–1999 to 2000–2001," *Journal of the American Medical Association* 289, no. 3 (Jan. 15, 2003): 305–312.

Realities for managed Care

- Employers want solutions to cost (and large self-insureds also consider quality)
- Medical management risk (costs) are increasing; current approaches do not work.
- How care is delivered (provider focused processes) and consumed (consumers) is the focus
- Plans can play a leading role in solving process and outcome issues

Different Roles, convergent responsibilities…

	Chief Medical Officers	Chief Pharmacy Officers
Yrs in current plan	**Mean: 3.4 years**	**Mean: 1.8 years**
Career Path	**Private practice to plan**	**Varied**
Day to day focus	**Senior management** **Officer level role**	**Pharmacy management** **Department level role**
Level of satisfaction with role	**Satisfied but growing frustration**	**Satisfied but impatient**
Reports to	**CEO/COO**	**CMO**

Job satisfaction for both is relatively high

What is the most satisfying aspect of your job?	**Chief Medical Officers**	**Chief Pharmacy Officers**
Key measures of success	§ **Reputation of plan** § **Accreditation** § **Enrollment growth**	§ **% Use of generics** § **% Cost managed** § **Formulary effectiveness**
Key plan characteristics	§ **Financially sound** § **Strategically innovative** § **Clinical support**	§ **Clinically innovative** § **Knowledgeable CMO**
Key professional characteristics	§ **Relationships with senior management**	§ **Relationships in pharmacy benefits program and PBM**

What keeps you awake at night? Major sources of frustration?

Chief Medical Officers	Chief Pharmacy Officers
Pressure to reduce costs	Pressure to reduce cost
Pressure to demonstrate ROI	Pressure to calculate ROI
Loss of productivity due to expanded senior management role	Need for data from PBM and plan to modify program
Tension with physicians	Tension with PBM

Shared view: consolidation, consumerism, competition likely

		Chief Pharmacy Officers	Chief Medical Officers	2003 Actual
In 2006, what will healthcare expenditures be as a percentage of total GDP? (Current: 13%)	Mean	16.18%	16.29%	13.61 %
In 2006, as a percentage of total health expenditures, what will the following categories be:	Hospital	31%	32%	32%
	Physician	24%	24%	22%
	Drugs	12%	16%	9%
What will enrollment be in consumer directed health plans as % of total commercial market? (Current enrollment: 6%)		13%	25%	6%
In 2006, how many health plans will be operating in the U.S.? (There are 572 currently with an average enrollment of 142,000.)		472	372	531

Shared view: employers as catalysts; hospitals, consultants problematic

1 = "Strongly agree" to 5 = "Strongly disagree"		Chief Medical Officers	Chief Pharmacy Officers
Hospitals do not encourage physicians to practice evidence-based medicine on a routine basis.	Mean	**1.95**	**2.95**
	%Strongly Agree/Agree	**77%**	**35%**
Consultants to large employers do a good job making sure their customers understand how care is delivered and the ways it can be improved.	Mean	**3.45**	**NA**
	%Strongly Agree/Agree	**20%**	**NA**
Large employers are the catalysts for adoption of consumer-driven health programs.	Mean	**2.05**	**NA**
	%Strongly Agree/Agree	**76%**	**NA**

Shared View: consumers will play a major role (in tandem with physicians)

Scale : 1 "strongly agree" to 5 "strongly disagree"		Chief Medical Officers	Chief Pharmacy Officers
I believe consumer directed programs are the key to reducing costs in healthcare.	Mean	2.43	2.55
	% Strongly Agree/Agree	55%	55%
I believe report cards comparing physician adherence to evidence-based guidelines are good ways to stimulate consumers to be more aware of the care they receive.	Mean	2.13	2.85
	% Strongly Agree/Agree	69%	45%
I believe a consumer will change physicians if they believe their physician is not practicing evidence-based medicine.	Mean	3.35	na
	% Strongly Agree/Agree	26%	na
Most consumers do not understand the concept of evidence-based medicine.	Mean	1.40	1.60
	% Strongly Agree/Agree	95%	90%

Shared view: Physicians resistance a major concern; financial incentives necessary

1="Strongly agree" to 5 Strongly disagree"		Chief Medical Officers	Chief Pharmacy Officers
Physician resistance to change is the major deterrent to widespread adoption of evidence-based medicine as the basis for quality of care decisions.	Mean	**2.43**	**2.50**
	%Strongly Agree/Agree	**64%**	**55%**
I believe physicians will change practice patterns if given financial incentives.	Mean	**1.85**	**1.80**
	% Strongly Agree/Agree	**84%**	**90%**
To get physicians to adopt evidence-based standards, health plans must adopt a common set of evidence-based clinical guidelines.	Mean	**1.58**	**2.10**
	%Strongly Agree/Agree	**89%**	**75%**

Current P&T Processes need attention

Coverage decisions for specific drugs are based on several factors. Rate the factors below using percentages to indicate their relative weighting in your CURRENT P&T program and the OPTIMAL weighting each should carry. *(1 to 10 scale with 10 the highest weighting)*	Current Weight	Optimal Weight
Efficacy	**8.40**	**8.75**
Adverse Event Avoidance	**7.55**	**7.65**
Complications	**7.00**	**7.40**
Clinical Outcome	**7.95**	**8.90**
Cost	**6.80**	**6.45**

Application of EBM: Primarily coverage issues, somewhat difficult to apply

What is your understanding of EBM? Its relevance..?	Chief Medical Officers	Chief Pharmacy Officers
Basic Concept of EBM	**Scientific research about treatment strategy (guidelines)**	**Scientific research about interventions**
Primary application to managed care	**Coverage for costly interventions**	**Formulary decisions**
Emerging application	**Provider profiling and incentives** **Consumer directed care**	**Formulary modification**
Most useful tools, resources	**P&T committee**	**PBM** **P&T Committee**

Transitioning from managed care to care management organizations

Provider profiling, report cards
physician focus

Disease & case management
expansion
effectiveness

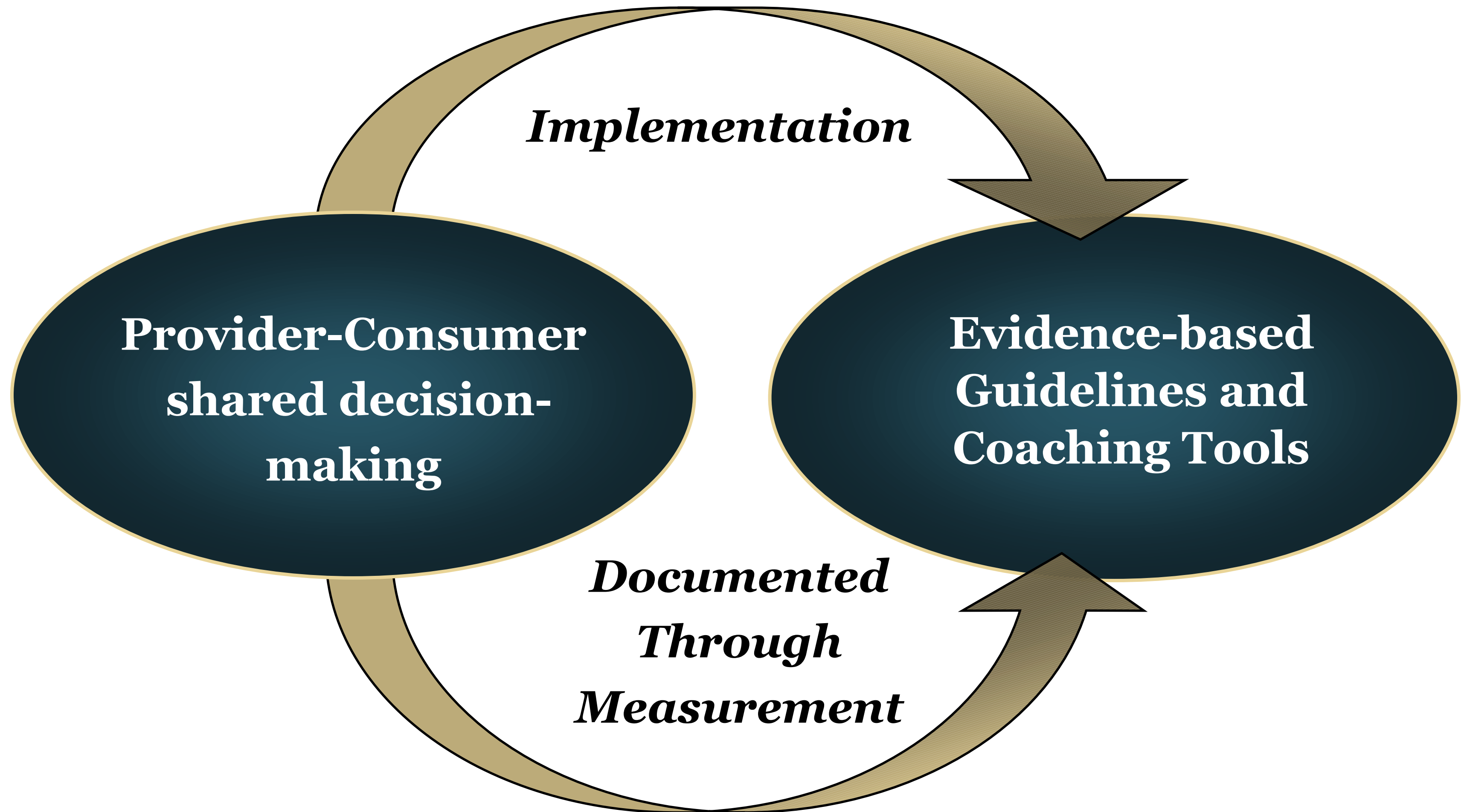
Pay for performance
outcomes
adherence

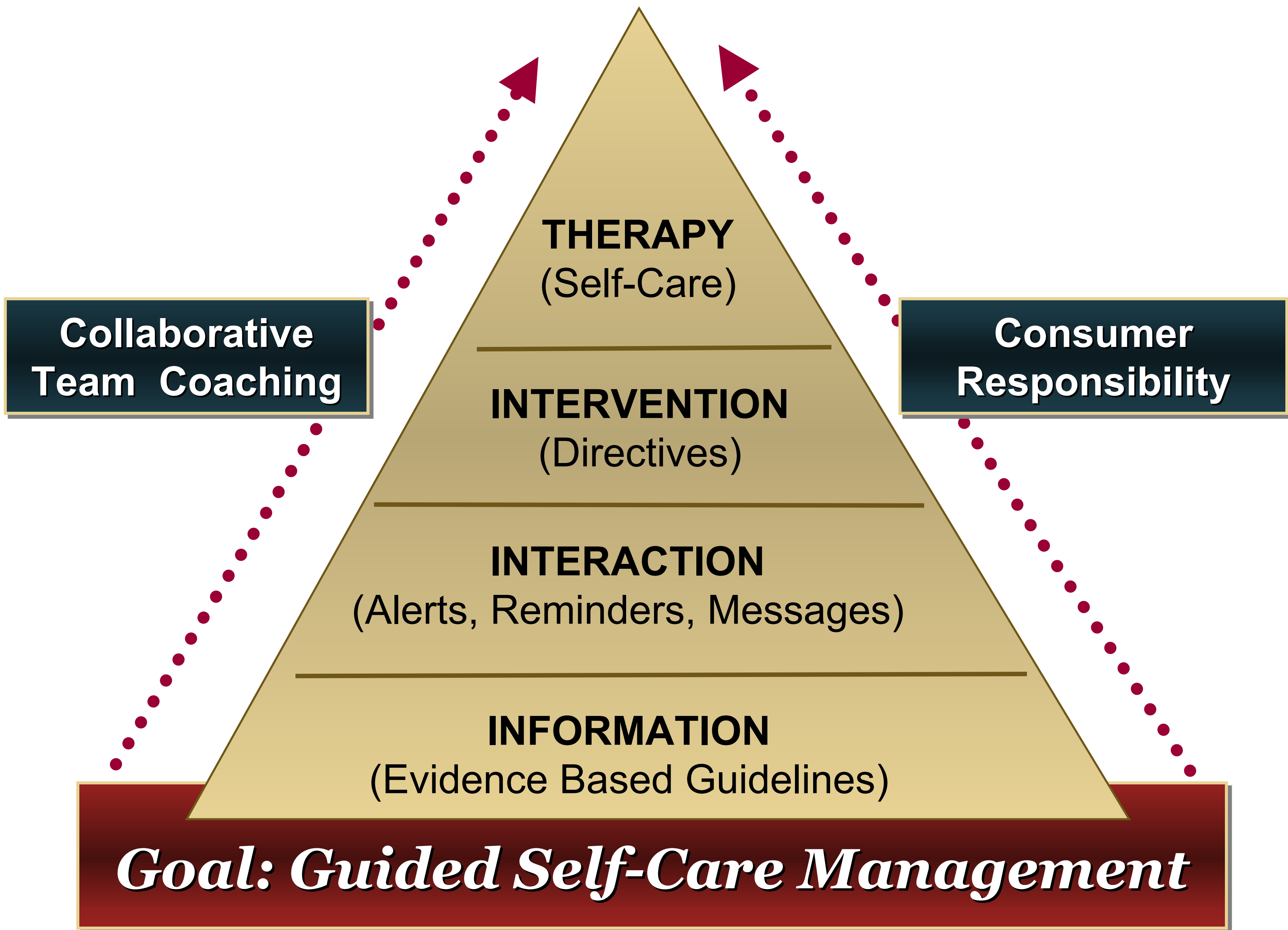
Coverage and denial Management
transparency

Consumer-directed care
Guided self-care

Evidence-based Care

Evidence-based care built on a shared decision-making model




THERAPY
(Self-Care)
INTERVENTION
(Directives)
INTERACTION
(Alerts, Reminders, Messages)
INFORMATION
(Evidence Based Guidelines)
Collaborative Team Coaching
Consumer Responsibility
Goal: Guided Self-Care Management

Evidence-based Medicine and Managed Care: Key Themes

Shared decision-making

Consumerism

Transparency

Tools

Incentives

Evidence!!

Contact

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