Disease Management and the AHRQ Research Agenda

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Outline of Talk

- DM and AHRQ's agenda in research and quality
- The potential of, and obstacles to, DM in bridging the "quality chasm"
- Thoughts on what do we still need to know about DM

AHRQ Mission Statement

To improve the quality, safety, efficiency, and effectiveness of health care for all Americans

AHRQ Strategic Direction

Accelerating the Pace of Innovation

- ***Ensuring Value*** through More Informed Choice
- ***Assessing*** Innovation ***Faster***
- ***Implementing*** Effective Interventions ***Sooner***

What Is Appropriate Role of Government?

- **Monitor** health care quality
  - National Healthcare Quality and Disparities Reports
- **Inform** health care decision-makers
  - Payers, providers, plans, patients
- **Support** development of health technologies and practices
  - Tools, technical assistance
- **Convene** stakeholders
- **Support** acquisition of new knowledge
  - Primary research, syntheses

Changes that Will Increase Importance and Alter Role of DM

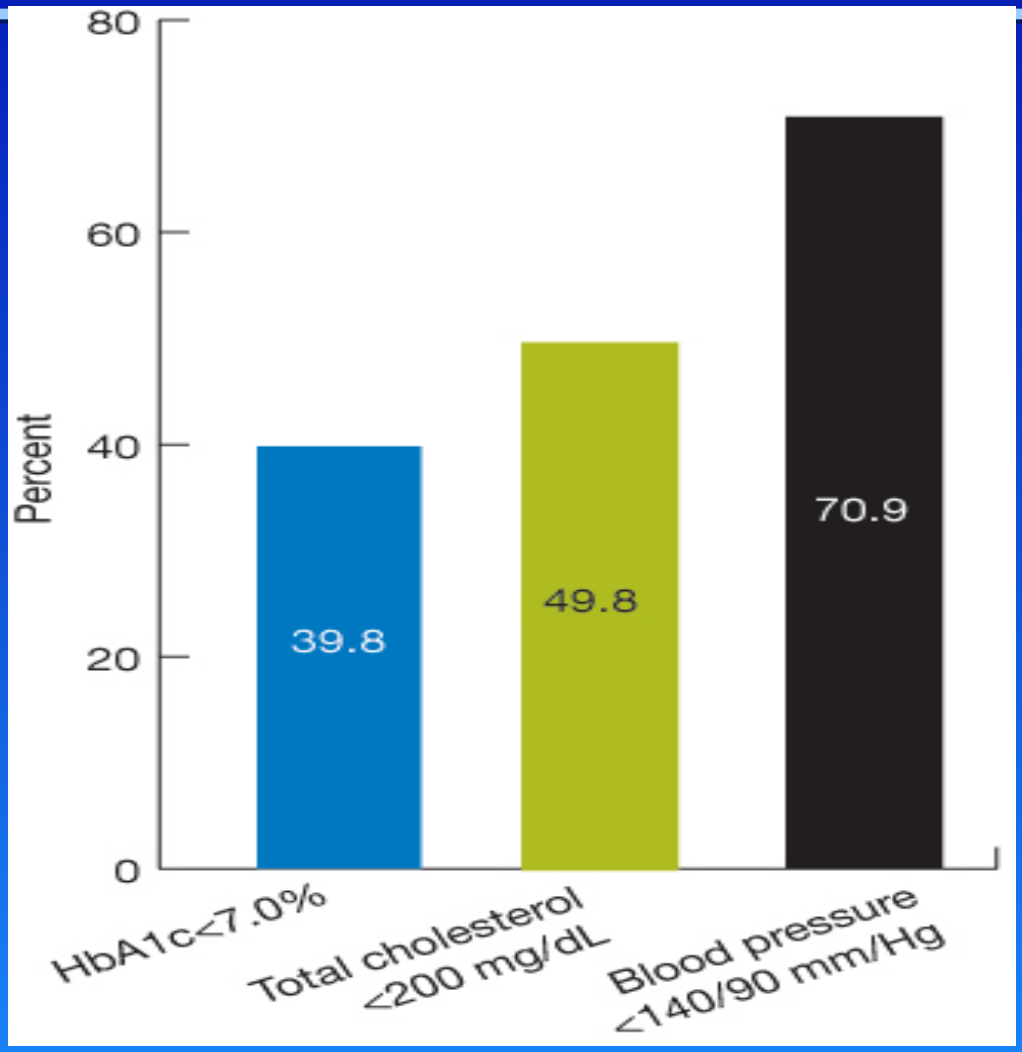
- Growing elderly population
  - More surviving with chronic disease
  - Some conditions (e.g. diabetes) increasing on their own
- Medicare drug benefit
- Medicare chronic care pilots and demonstrations
- Pay for Performance Initiatives
- Consumer directed health plans
- Electronic health records

1. Monitoring Quality of Chronic Care: Improving but still variable

- 85% of patients with acute MI prescribed beta-blocker at discharge
- 65% of patients with CHF and LV dysfunction prescribed ACE inhibitors
- 65% of depressed patients initiating drug treatment who get a continuous trial of drug therapy during acute phase
- 27% of patients with high blood pressure who have optimal control

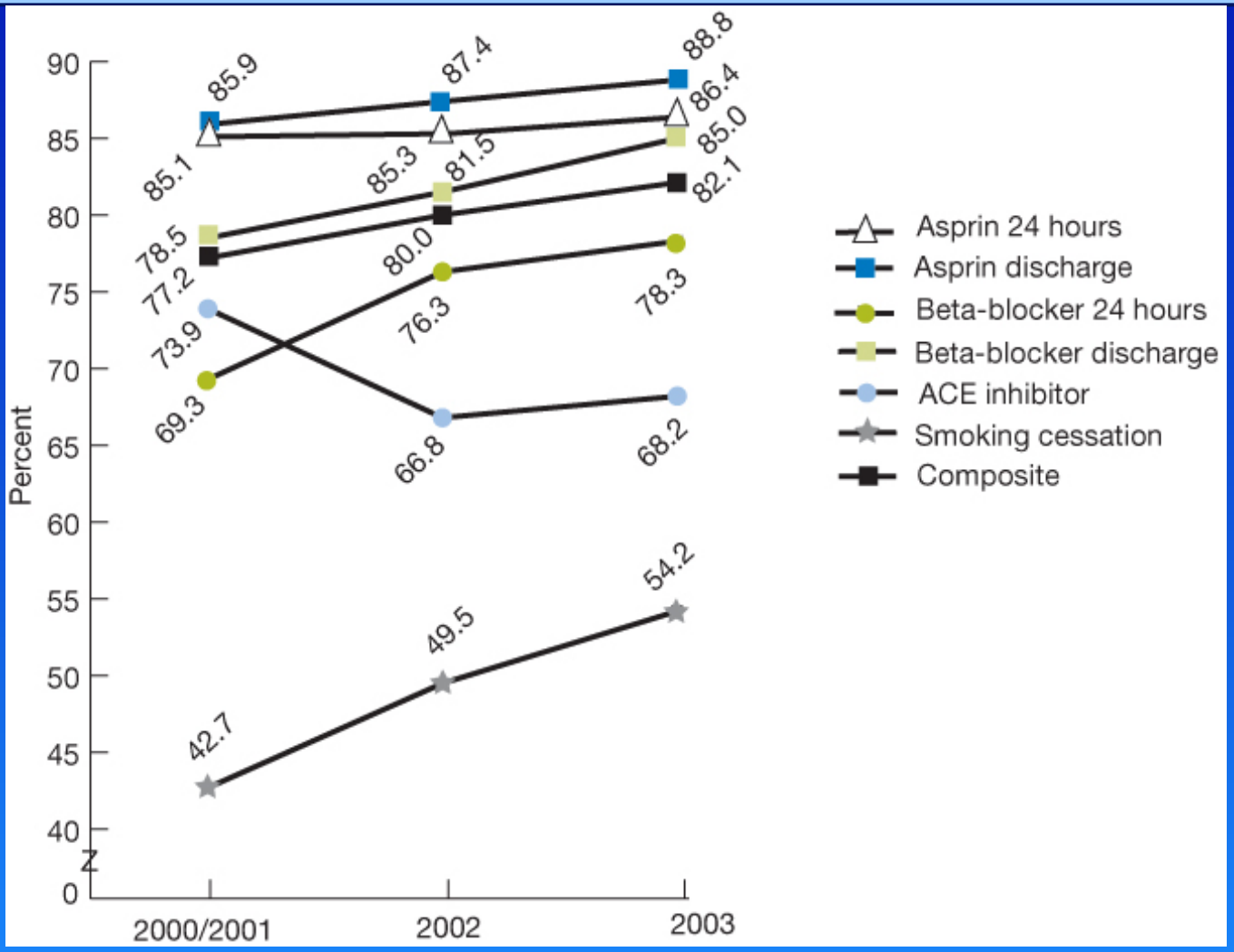
AHRQ: *National Healthcare Quality Report, 2005*

Quality of Diabetes Care - 2005



2005 National Healthcare Quality Report (www.qualitytools.ahrq.gov)

Post-MI Care - 2005



2005 National Healthcare Quality Report (www.qualitytools.ahrq.gov)

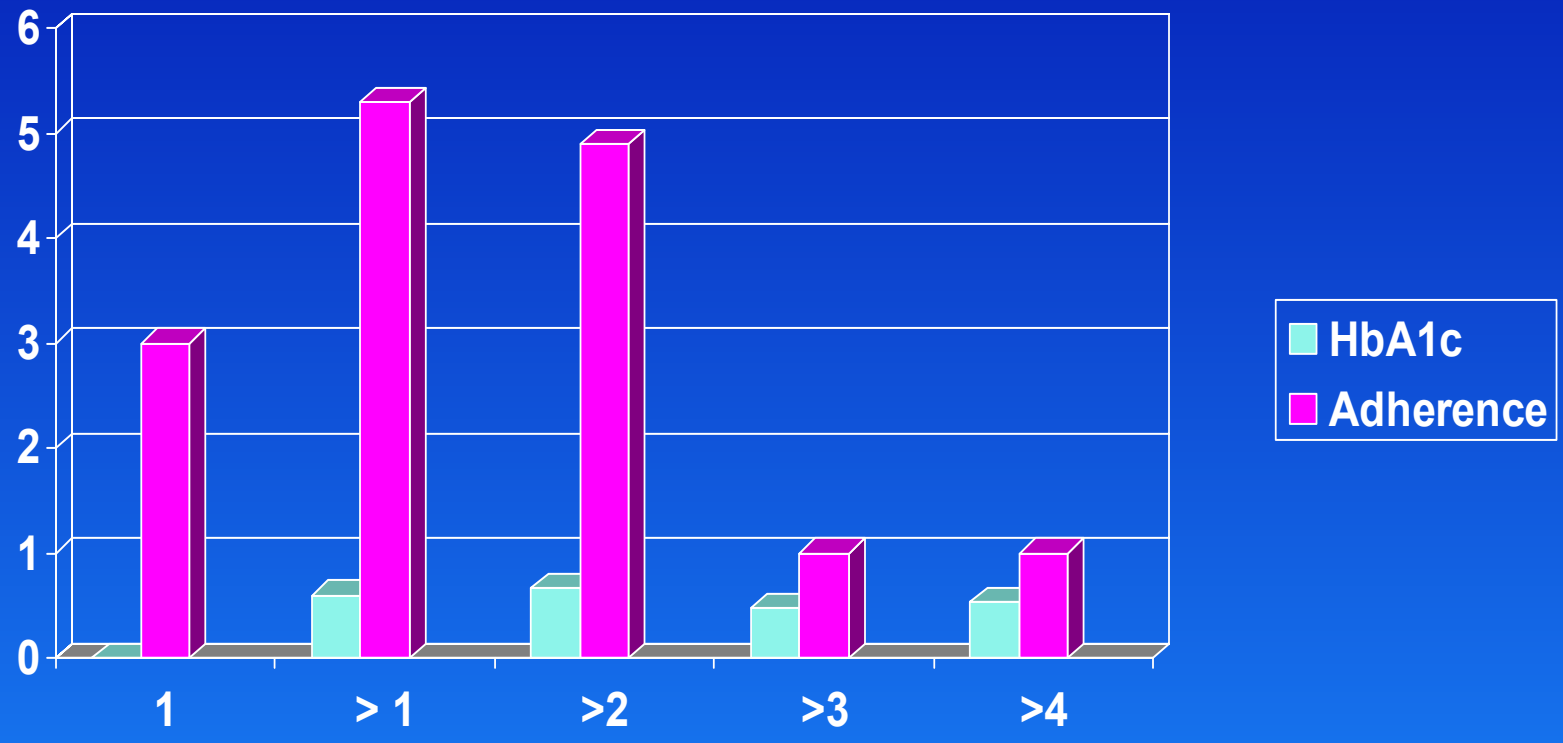
2. Informing Decision Makers "Best Practices" Series

- Systematic reviews of interventions to improve care in IOM'S High Priority Health Conditions
  - Emphasis on highest quality designs
- Improving care of diabetes and hypertension
  - 2004, 2005
- Health literacy - 2005
- Improving asthma care – due this year
- Care coordination – due this year

Diabetes Interventions Studied

- Patient education
- Patient reminders
- Promotion of self-management
- Provider education
- Provider reminders
- Facilitated relay of clinical data
- Audit and feedback
- Organizational change
- Financial, regulatory, legislative incentives

Effects of # of Intervention Strategies on HbA1c and Provider Adherence



Improving Hypertension Control

- 63 studies of various interventions
  - Patient reminders, identifying high-risk patients, nurse follow-up, etc.
- Median reduction of 4.5 mm (SBP), 2.1 mm (DBP)
- Greater effects of interventions emphasizing organizational change and patient education
- Lesser effects of those emphasizing provider adherence with guidelines

Improving Asthma Care

- 53 RCTS and 17 controlled before –after
- Children: Educational interventions aimed at parents most important
  - 4 studies: 8+ hours of educations
  - 2 studies – single individual session with specialist
- Adults: Education combined with system change or multidisciplinary approach more effective
- Adolescents: Limited research, little impact
- Patient self-management review in progress

General conclusions and limitations of

- Both DM and system approaches effective
- Literature limited by poor reporting of specific details of interventions
- Secular improvements, reporting bias, and weaker study designs may exaggerate effects.
- Combination approaches needed to affect outcomes
- Limited studies of commercial DM programs with good outcomes data
- Difficult to generalize findingsa across settings and populations

Care Coordination

- Overview of interventions and concepts
- 53 systematic reviews
- 17 different interventions in 7 different populations
  - E.g. multidisciplinary teams for diabetes care
  - Case management for depression
- 4 conceptual frameworks

Effects of DM on overall health care costs

- Debates over appropriate methodology
- CMS Pilots with RCT design may provide more definitive answer
  - RCT of DM for diabetes and CHF in Indiana Medicaid
- 2006 DMAA initiative to standardize methods
- Problems in:
  - Accounting for administrative costs of programs
  - Controlling for secular trends in costs
  - Regression to mean and selection bias

Challenge for Research:

- How do we balance concerns about “internal validity” (does it really work?) with “external validity” (is it relevant to the real world?)
- Need to understand and reduce sources of bias in non-randomized studies of DM
- Need combination of clinical and economic outcomes to validate effects

3. Helping Develop Effective Practices in Disease Management

- Working with Partners
  - Health plans - disparities
  - Medicaid programs
- HIT demonstrations
- Developing Tools

Health Disparities Health Plan Collaborative

- Partnership between RWJ, AHRQ, 9 National Health Plans
- 76 million covered lives
- Focus on reducing disparities in diabetes
- Center for Health Care Strategies/ Rand/ Institute for Healthcare Improvement providing training and technical assistance

Working with Medicaid

- 2 year project beginning 2005
- Working through “knowledge translation” contractors with 6 states that have implemented DM in their Medicaid fee-for-service plans
- Establishing “learning network” to promote sharing knowledge about developing, running and evaluating disease management
- Improve ability to use data to measure quality
- Improve decisions in DM contracting

Health Information Technology Regional Projects – "RIOs"

- Promoting regional collaborations to share data
- Emphasis on chronic diseases
- Community-based disease registries

Promoting Tools

- National Guideline Clearinghouse
- National Quality Measures Clearinghouse
- Quality Tools
- Estimating Costs of Chronic Disease
  - AHRQ/CDC collaboration using Medical Expenditure Panel Survey
- Consumer satisfaction (CAHPS)
  - Piloting measures of self-management support

Barriers to the "Business Case" for Quality

- Not paying for quality, paying for defects
- Inability to market quality to consumers
- Payoffs removed in time and place
- Disconnection between consumers and payers
  - Patients can't pay for what they value
- Clinicians lack access to relevant information

– Leatherman, Berwick wt al. Health Affairs 2003

Breaking Down Barriers to Business Case

- Patients:
  - Better information on quality
  - Greater choice (e.g. Consumer directed plans)
- Clinicians:
  - Health information technology, registries
  - Ability to market, incentives for quality
  - Innovate in approaches to care
- Payers:
  - Pay for performance
  - Differential pay for sicker patients
  - Pay for alternative delivery modes (group visits, e-mail)
  - Support IT and greater choice

4. Convening Stakeholders in DM

- Link clinicians, plans, payers, patients, policy makers, vendors
- Look across conditions
- Improve our ability to measure progress
- Identify partnerships to advance implementation
- Emphasize importance of disparities

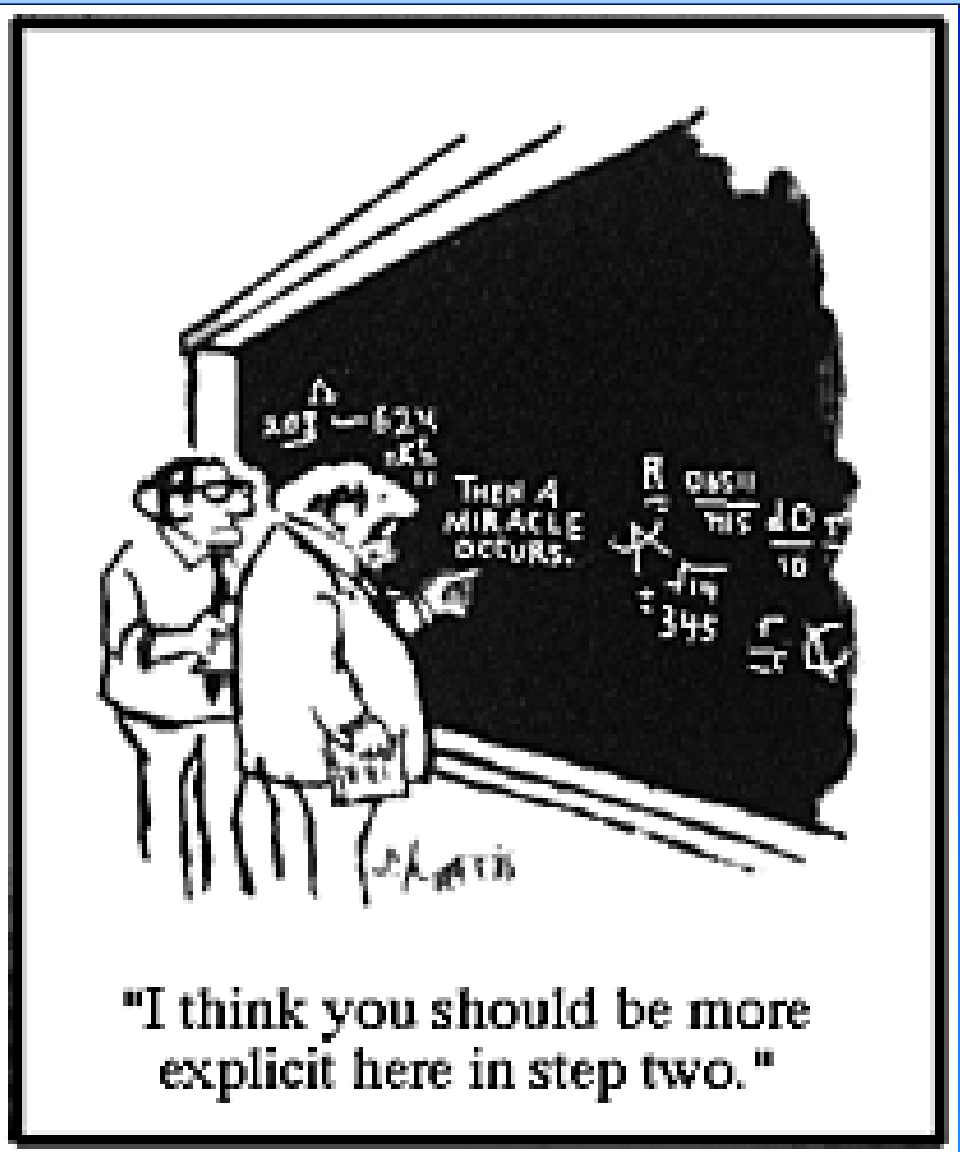
Input From Research and QI Community

- Help transfer knowledge
  - Disseminate models of success
  - Connect partners, establish learning networks
- Bridge gap between Research/QI community
  - Help promote better reporting
  - Improve research methods, synthesis
- Research and Evaluation
  - Patient self-management

Input from Employer Purchasers

- Improve models for predicting costs of chronic diseases
  - Including productivity
- Improve and standardize methods for calculating ROI
  - Provide objective standards to validate vendor analyses
  - Promote greater transparency of methods
- Identify best methods for self-management support and valid measures to gauge success

Improving Methods to Assess Economic Impact



"I think you should be more explicit here in step two."

5. Generating New Knowledge: Challenges in DM Research

- Rapid pace of change
- RCTs difficult, less applicable to real world
- Growth of private sector activity
  - Proprietary data
- Disease-specific research silos
- Importance of system interventions

FAILURE

When Your Best Just Isn't Good Enough.

Learning from what doesn't work

- Not all approaches to DM are effective
- Telephonic support for CHF in Kaiser
  - Frank et al., Ann Intern Med 2004
- Possible reasons:
  - Less effective in low-risk patients
  - Telephone-only DM lacked other components
  - Better baseline of care
- We need to do a better job of determining:
  - Essential components
  - Applicable populations
  - Effect of settings

3 Critical Areas for Research and Action

- Standardizing methods and evaluation
- Patient self-management
- Incorporating DM into system redesign

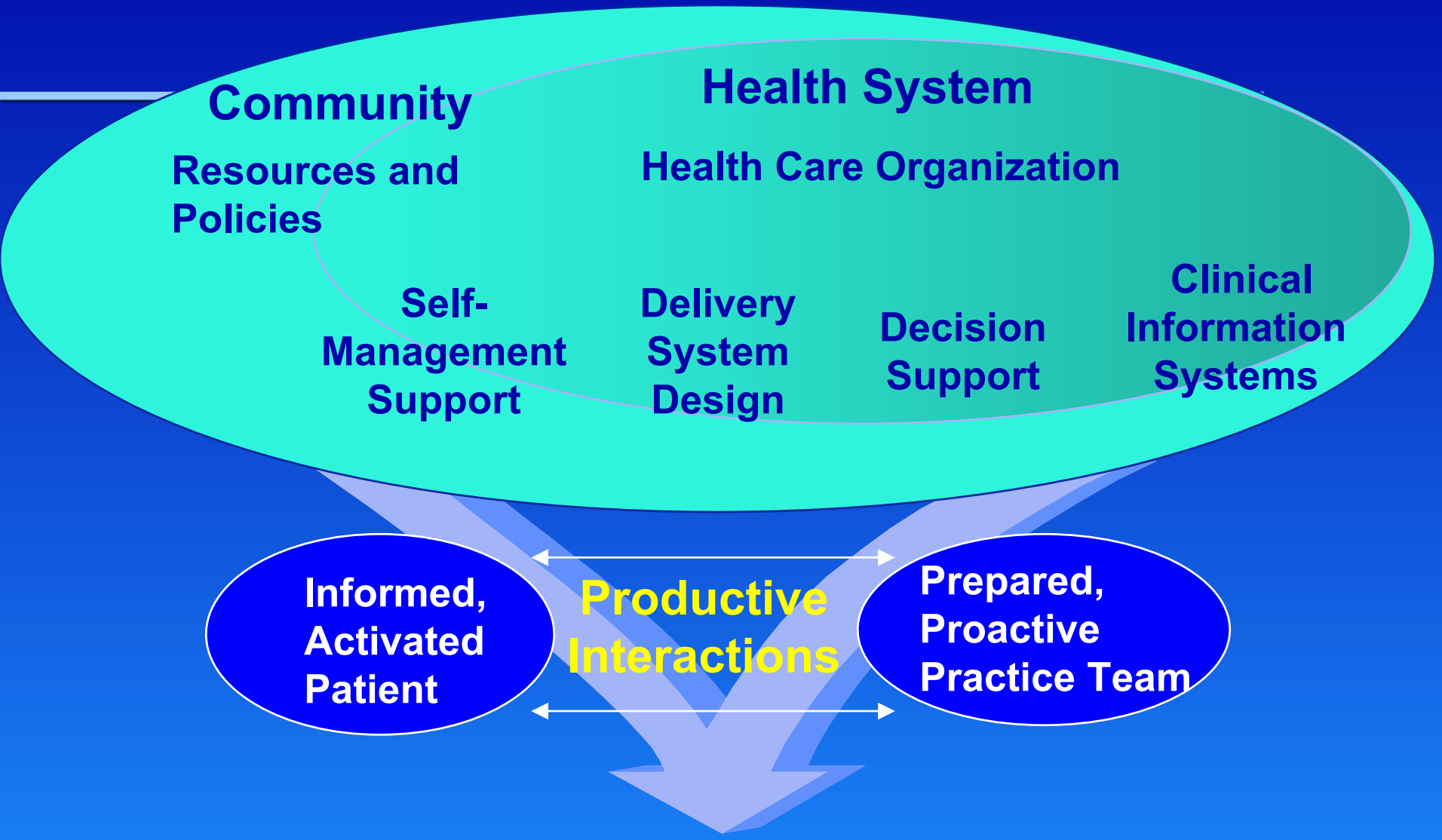
Standardizing Evaluations

- DMAA approach to standardizing methods
- Project to develop decision guide for Medicaid programs on economic evaluations of DM
- Institute of Health Policy/Brandeis project to develop guidance for health plans
- Can we promote greater transparency while protecting proprietary methods?

Patient Self-Management

- RAND review of patient self-management
  - Literature review
  - Informant interviews with industry, health plans, researchers, purchasers
- Describe range of approaches
- Describe methods for evaluating effectiveness of self-management support
  - Short term measures
- Examine specific issues:
  - What approaches work in hard to reach groups (e.g. low literacy, non-English speaking)?

Care Model


Community
Resources and Policies
Health System
Health Care Organization
Self-Management Support
Delivery System Design
Decision Support
Clinical Information Systems
Informed, Activated Patient
Productive Interactions
Prepared, Proactive Practice Team
Improved Outcomes

Incorporating DM Into Efforts to Redesign the Care System

- How can DM be better integrated into primary care?
  - Does it make a difference?
- Can we promote more effective practice teams in a fragmented healthcare system?
- Which organizational/delivery system interventions are most effective?
- How can we promote and measure their use in HIT innovations?

Conclusion

- Disease management models will continue to evolve
- Effective integration into clinical practice remains major issue
- Cost-saving vs. “improving value”
- DM as a component of (not alternative to) of system redesign