



Evidence-based Management

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Key Themes:

In today's presentation we'll discuss

- Common decision-making models used in health services organizations and the strengths and weaknesses of those models
- The key principle of evidence-based management
- How evidence-based management can strengthen organizational decision making
- The five-step process of evidence-based management
- What managers can do to increase the practice of evidence-based management in their organization

Drivers of Efforts to Improve Managerial Decision-making

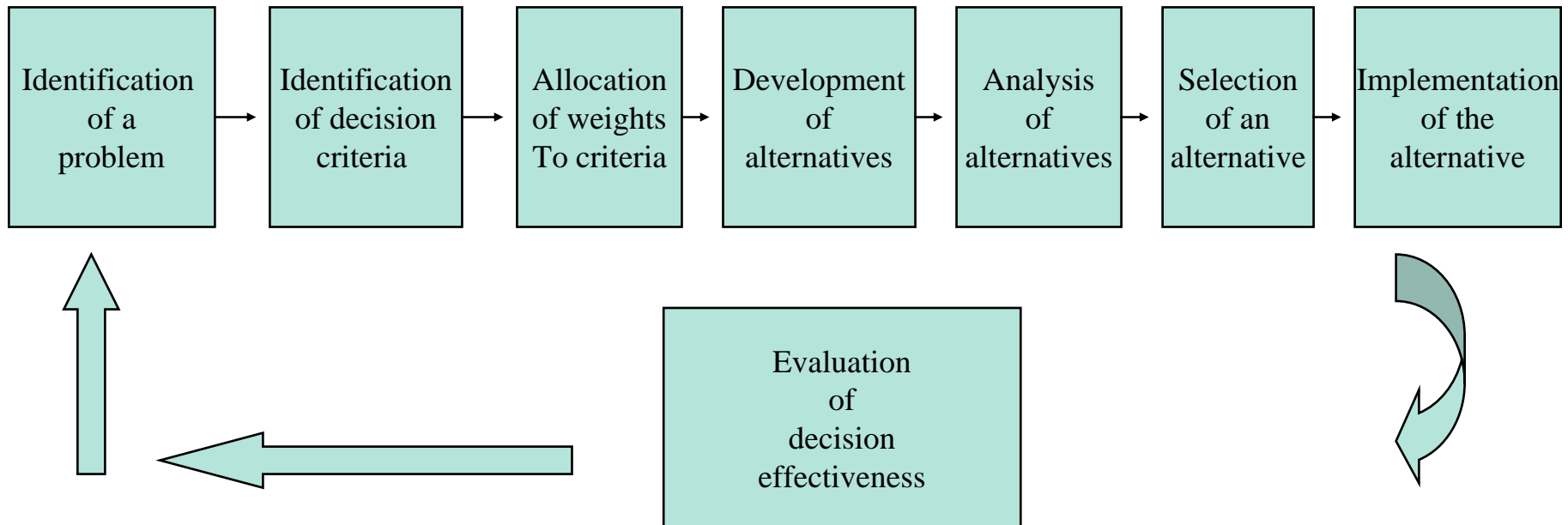
continuing pressure on health systems regarding

- Cost
- Quality
- Access
- Accountability

Is there a gap between what we know about health services management and what managers do?

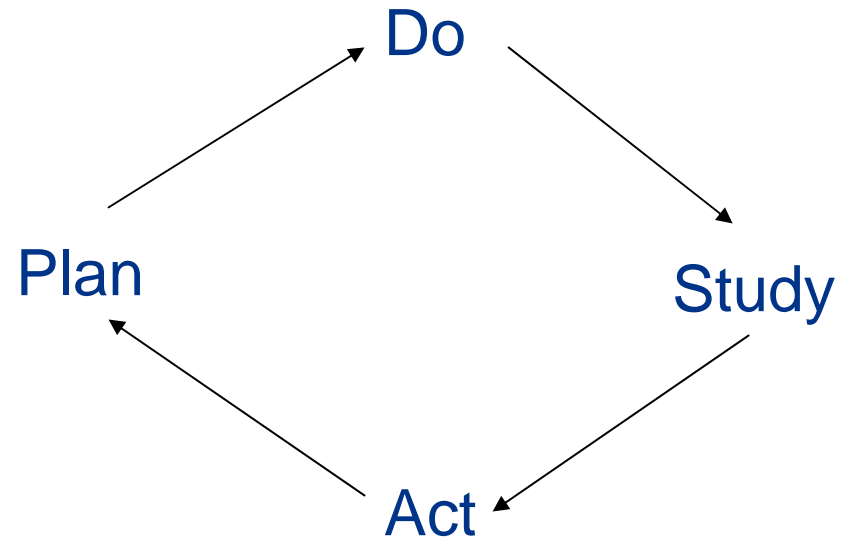
- Difficult to answer quantitatively due to lack of data bases on managerial decisions and outcomes
- Qualitative judgment from manager interviews and focus groups is YES!
- Highly visible examples of problematic managerial decisions
 - The Stanford - UCSF hospital merger

The Idealized 8-Step Decision-Making Process



Shewhart CQI Cycle

1. Plan: study the process
2. Do: Make the change on a small scale
3. Study: observe the effects
4. Act: identify what was learned



The 8-Step Decision-making Process and the Shewhart Cycle

- Strengths
 - Systematically identify causes of problems
 - Provide insights necessary for designing and implementing interventions to improve performance
 - Encourage monitoring and continually improving the effects of the intervention

The 8-Step Decision-making Process and the Shewhart Cycle

■ Weaknesses

- Tend to make improvement processes “inward looking”
- Place little emphasis on systematic research on organization, financing and delivery of health services
- Make little use of modern electronic resources to help managers solve problems

Evidence-based Management can strengthen these decision-making processes

What is Evidence-based Health Services Management?

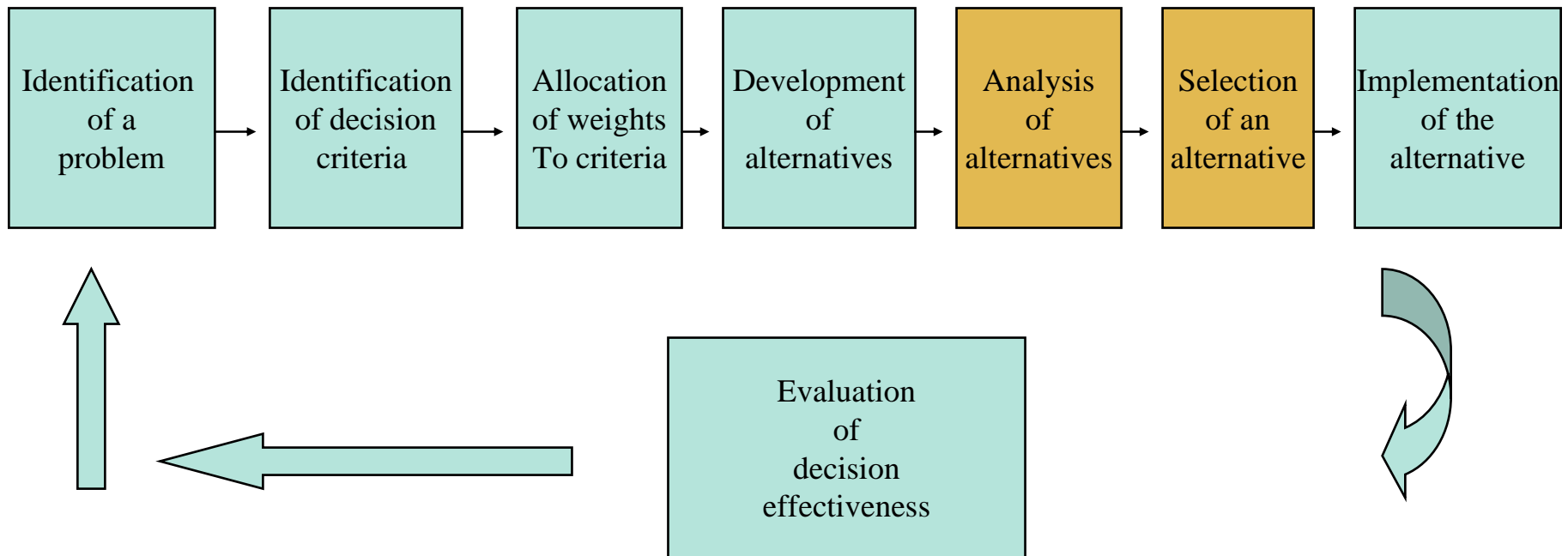
The key principle is ...

the systematic application of the best available evidence to the evaluation of managerial strategies for improving the performance of health services organization

Source: Kovner and Rundall, *Frontiers of Health Services Management*, 2006

The Idealized 8-Step Decision-Making Process

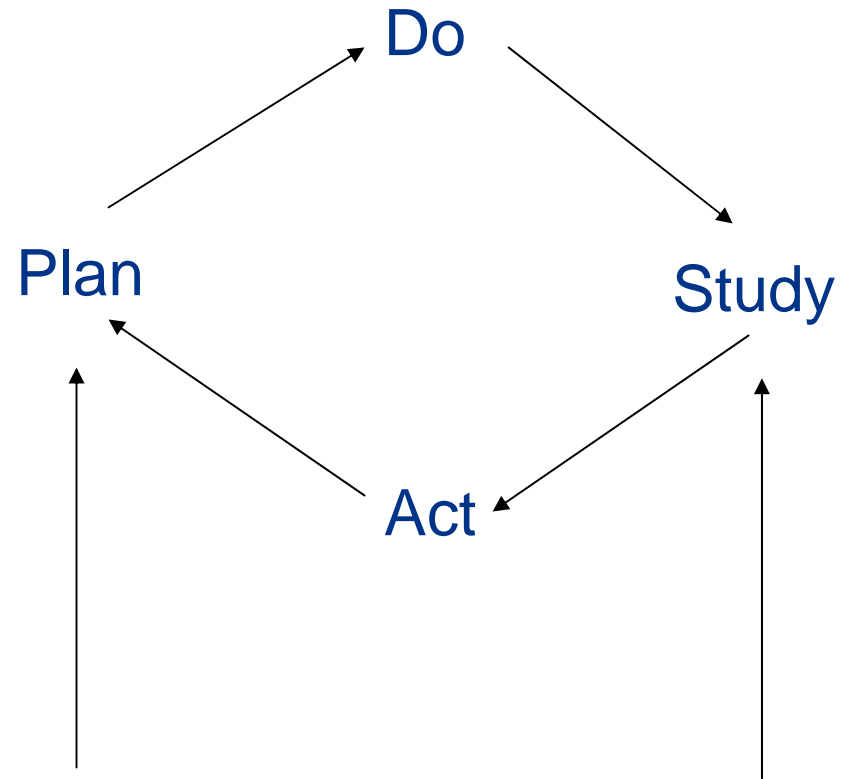
Enhanced with EB Management



Shewhart CQI Cycle

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Evidence-based Management

What is evidence-based management?

Evidence-based management is part of a larger movement to strengthen evidence-based decision making in the health field.

- Evidence-based medicine
- Evidence-based public health
- Evidence-based healthcare
- Evidence-based health policy
- Evidence-based health promotion

At the core of evidence-based management ...

is the notion that health managers should incorporate into their decision making evidence from well conducted management research.

Other sources of information and knowledge, such as customer expectations, service process analysis, personal experience, experiences of others in similar situations, expert opinion, and simple inspection of data trends and patterns, can and should also be incorporated in the decision making process.

The evidence, by itself, does not make the decision for you, but it can increase your understanding of the expected effects of managerial decisions.

Maybe a better term is ...

Evidence-informed Management

Types of questions at three levels of management that could be addressed with the EB Management approach...

Core business transaction management

- How can physicians' claims for payment be processed more quickly by the health system?
- How can the health system's information on patient eligibility for benefits be made more accurate?
- What method for paying physician claims achieves speed, convenience, and accuracy requirements?
- How can errors in bills for hospital services be reduced?

Operational management

- How can nurse-physician work relationships be improved?
- Will decreasing patient/nurse ratio improve patient outcomes?
- Does hospital discharge planning and follow-up improve patients outcomes?
- Does basing part of employee's compensation on achievement of unit or team goals improve teamwork and coordination?

Operational management

- How can unnecessary lab tests be reduced?
- Can distance medicine technology improve health care and patient outcomes?
- Does the ambiance of hospital rooms affect patient outcomes?
- Are patient satisfaction surveys effective tools for improving care?
- Do employee empowerment strategies improve unit or organizational performance?

Strategic management

- Do hospital mergers reduce patient care costs? Administrative costs? Payment revenues from insurance companies?
- Do hospital-physician joint ventures, such as orthopedic surgical centers, have negative effects on in-hospital surgery?
- Does the implementation of an electronic medical record improve the quality of patient care?
- Does publicly reporting the quality of hospital care affect consumer/patient decision making?
- Do pay-for-performance incentives substantially improve targeted care processes? For previously high performing hospitals? For previously low performing hospitals?

Most managers agree incorporating research evidence would improve decision making, but also think...

- There is little or no research that is relevant to most management issues
- It is hard to access the relevant studies
- Researchers do not make clear the practical implications of their research studies
- Managers don't have enough time to incorporate evidence into practice
- Managers don't have the skills to acquire, assess, and apply evidence to decisions

In Fact, today...

- There is a lot of research evidence and other information relevant to many managerial decisions
- This information is easier to access than ever before
- There is a big push within the research community to translate research into practice
- Applying evidence to decisions does take some time, but not as much as most people think
- The skills required are easy to develop

- A Team from U.C. Berkeley and Kaiser-Permanente Division of Research, headed by Dr. John Hsu, is building a tool box to help managers practice evidence-based decision making

Five key competencies required for evidence-based decision making

- Formulating the question
- Acquiring research evidence
- Assessing the validity, quality and applicability of research evidence
- Presenting the research results in a way that will increase use
- Applying the evidence in decision making

1. Formulating the management or policy question

■ Consider

- what management or policy technique or tool is being considered
- the setting in which it would be applied
- the managerial process or outcome that is of interest

■ Example

- What is the impact of a hospitalist program on the cost and quality of inpatient care in U.S. community hospitals?

2. Acquiring research evidence

- Three Basic Approaches:
 - Analyze existing or specially collected data
 - Search for primary studies and systematic reviews using bibliographic and content rich databases (e.g. PubMed, Scholar Goggle)
 - Search for web sites that provide access to research syntheses of relevant management studies (e.g. Cochrane Effective Practice and Organisation of Care Group: <http://www.Cochrane.org/cochrane/revabstr/EPOCAbstractIndex.htm>)

Useful Web Sites

U.S. Sites

- The Center for Organization, Leadership, and Management Research (COLMR)
www.colmr.research.med.va.gov/
- The Commonwealth Fund
www.cmwf.org/
- National Institute for Health Care Management
www.nihcm.org
- American Academy of Family Physicians
www.aafp.org
- National Diabetes Foundation Program
www.betterdiabetescare.nih.gov/
- U.S. Department of Health and Human Services, Agency of Healthcare Research and Quality
www.ahrq.gov
- American College of Healthcare Executives
www.ache.org
- Healthcare Information and Management Systems Society (HIMSS)
www.himss.org
- Pam Pohly's Net Guide
www.pohly.com/
- Center for Health Management Research (CHMR)
<http://depts.washington.edu/chmr/>

Non-U.S. Sites

- NHS Modernization Agency
<http://www.wise.nhs.uk/cmsWISE/default.htm>
- National Electronic Library for Health
www.nelh.nhs.uk/
- Health Services Management Centre
www.hsmc.bham.ac.uk
- The Cochrane Collaboration
www.cochrane.org
- European Health Management Association
www.ehma.org
- Canadian Health Services Research Foundation
www.chsrf.ca
- Bandolier Journal Online
www.jr2.ox.ac.uk/bandolier/extra.html
- University of Sheffield, School of Health and Related Research (SchHARR)
www.shef.ac.uk/scharr/links.htm
- Health Management On-Line, NHS Scotland
www.healthmanagementonline.co.uk/
- The World Health Organization, Regional Office for Europe Health Evidence Network
www.euro.who.int/HEN
- The NHS Service Delivery Organization Programme
www.sdo.lshtm.ac.uk

3. Assessing the quality of the evidence

- Strength of the research design
- Study context and setting
- Sample size of the study
- Control for confounding factors
- Reliability and validity of measurements
- Methods and procedures used
- Justification of the conclusions
- Study sponsorship
- Consistency of findings

4. Presenting the evidence in a way that will increase its use

- Present timely evidence
- Be brief
- Avoid technical jargon
- Provide clear descriptions of questions addressed, context of the research, and findings
- Offer an assessment of the strength of the evidence
- Give the results and implications for practice
- Make the presentation easy to access

5. Using research evidence in managerial decision making

- Creating a culture that values managerial research
- Disseminating and using research
 - Staff development programs to enhance managers' abilities to find, assess, and apply research findings
 - Management research seminars where new research, findings, applications, etc. are presented and discussed are part of the culture and operations
 - Internal documents include research citations
 - Management and/or Policy Journal Club
 - Intranet/Web site management
 - Evidence Assessment Process

In summary, the decision-making tool management can...

- Complement - not replace - the many other forms of data and knowledge that go into making decisions;
- Help managers and policy makers evaluate the feasibility and potential impact of their options.
- Make it easier to explain where decisions came from;
- Help in negotiations between interest groups and competing arguments;
- Increase confidence that managers are making the best investments possible.

Thus far, we have “alpha” tested a prototype of the tool box and we are revising it for the next stage of testing. A version of the tool box will be accessible via the internet within the next month.

The most important thing ... building a questioning culture

- Organize research rounds, management research journal clubs, and research seminars
- Analyze results of past operational and strategic decisions
- Conduct staff development programs to enhance managers' abilities to find, assess, and apply research findings
- Link compensation to metrics related to obtaining and using relevant evidence in decision making and sharing evidence with key stakeholders
- Develop guidelines for decision making that require an assessment of research evidence

A decision is as good as the
information that goes into it.

John F. Bookout, Jr.