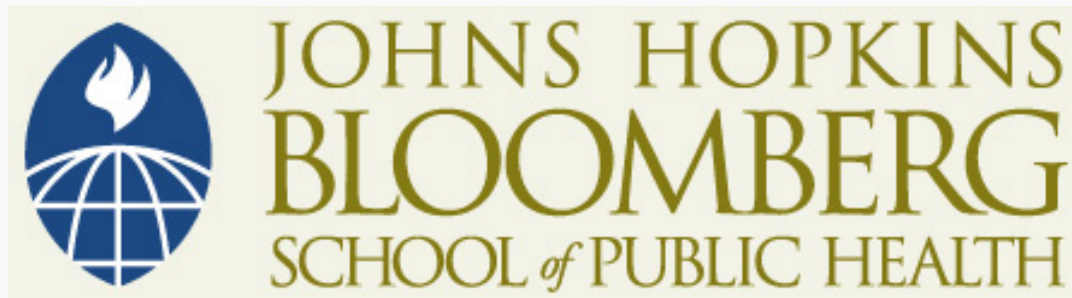


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*Health Policy and the Delivery of Health Care: Case Study Continuation and Placing Policy Analysis in Context*

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Jonathan P. Weiner, DrPH  
Johns Hopkins University

# Lecture Objectives

- To continue our “U-Care” case study
- Per your homework assignment, we will have an individual exercise that focuses on
  - Decision criteria (#4 in expanded Bardach policy analysis framework)

## *Lecture Objectives (Continued)*

- Close out our case study by discussing
  - Estimating impact (#5)
  - Decision-making process (#6)
  - Advocacy (#7)
  - Implementation, improvement, evaluation (#8)
- Place the Bardach policy analysis approach into broader context



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## *Section A*

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Review and Continuation of Case Study

# Beyond Bardach

- Expanded Bardach framework
  1. Understand/define problem
  2. Obtain evidence/data
  3. Alternative solutions
  - 4. Develop “criteria” matrix**
  - 5. Estimate impact (outcome) of policy**
  - 6. Decision process (consider trade-offs)**
  7. Advocate chosen policy
  8. Implement, improve, evaluate (“Beyond Bardach”)
- Standard eight-step Bardach policy framework
  1. Define the problem
  2. Assemble some evidence
  3. Construct the alternatives
  4. Select the criterion
  5. Project the outcomes
  6. Confront the trade-offs
  7. Decide
  8. Tell your story

## *“U-Care” Case Study*

- The application of public health policy principles and methods within a private not-for-profit organization responsible for the health of 200,000 persons

# Our Task Regarding Cardiovascular Disease

- Review of our task
  - To develop appropriate organizational *policies* that address key problems related to the treatment of persons with cardiovascular disease
    - ▶ Specifically, hypertension (high blood pressure) and hyperlipidemia (fatty arteries)
- Problems
  - Many among our population are not receiving adequate care for early-stage cardiovascular disease
    - I. Majority of our members with early-stage disease are not under treatment
    - II. For about 50% of the patients under care, “process of care” standards not being met (e.g., lipid screening, recommended drug regimen)



## *Two Policy Alternatives to Be Considered*

1. Comprehensive “community” **outreach program** involving
  - Member education (not just patients)
  - Screening program for all members
2. Aggressive “**disease management**” program focusing on
  - Improved administrative systems
  - Changing provider practices (using performance-based rewards and penalties)
  - Patient compliance interventions

# Individual Exercise

- Developing decision criteria (turn to step #4 on handout)
  - For each of the five points (#4a–e on the handout), develop at least one practical criterion for possible inclusion in your final decision matrix
    - ▶ Remember, this criteria list is generic and should be applicable to both policy alternatives
    - ▶ Take 15 minutes for this exercise
    - ▶ We will discuss the “correct” answers during the LiveTalk

## *OK, Time's Up—Let's Debrief*

- I am the director of policy, planning, and evaluation at U-Care
- This is a meeting of senior staff from all units across our organization

# *Let's Review Outcome of "Criteria" Exercise*

## a) Population benefit

- End results/outcomes
- Evidence-based care process standards
- Access
- Disparities

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# *Let's Review Outcome of "Criteria" Exercise*

## a) Population benefit

- End results/outcomes
- Evidence-based care process standards
- Access
- Disparities

## b) Cost/economics

- Cost benefit
- Efficiency
- Cost containment

## *Criteria (Continued)*

### c) Ethics/equity

- “Total good” vs. individual rights
- Fairness in distribution of resources

## *Criteria (Continued)*

### c) Ethics/equity

- “Total good” vs. individual rights
- Fairness in distribution of resources

### d) Feasibility

- Organizational control and time frame
- Resources
- Simplicity/chances of success
- Legal/regulatory



## *Criteria (Continued)*

### e) Constituency perspectives

- Providers
- Sponsors (employers, Medicaid)
- U-Care staff
- Your board and hospital “owners”
- Other?

# *Estimating Impact of Policy Alternatives*

- OK ... are there structured evidence-based approaches we can use to estimate the impact of our policy alternatives along some of the dimensions we identified?
- First, a little “methods review ...”



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## *Section B*

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Estimating Impact

# *Estimating Impact: A Brief Methodologic Review*

- A wide range of analytic techniques can be applied to estimate impact of policy alternatives
- The goal for today is modest—for two of these tools, we will open the “black box” a bit, and I will discuss the range of techniques available
- We hope you will continue your studies so you will learn how to apply these techniques on your own

# *Examples of Quantitative Estimation Approaches*

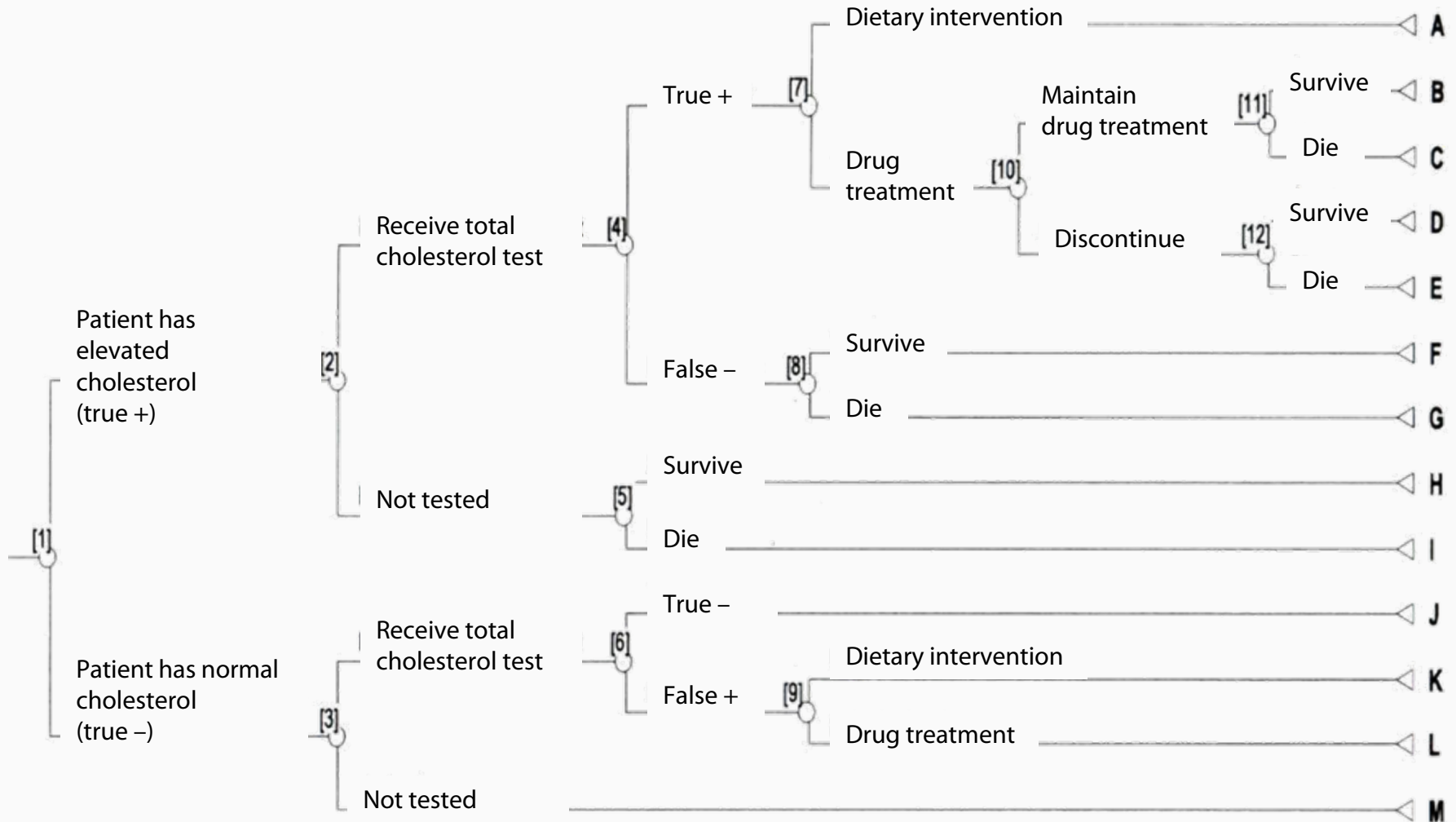
- Simulation (operations research—OR)
  - Linear programming
  - Monte Carlo simulations
  - Markov models
  - Decision trees
  - Forecasting/predictive modeling
  - Bayesian/risk analyses
- See required/extra readings on e-reserve
  - Owen (2002)
  - Barton (2004)

# Examples of Quantitative Estimation Approaches

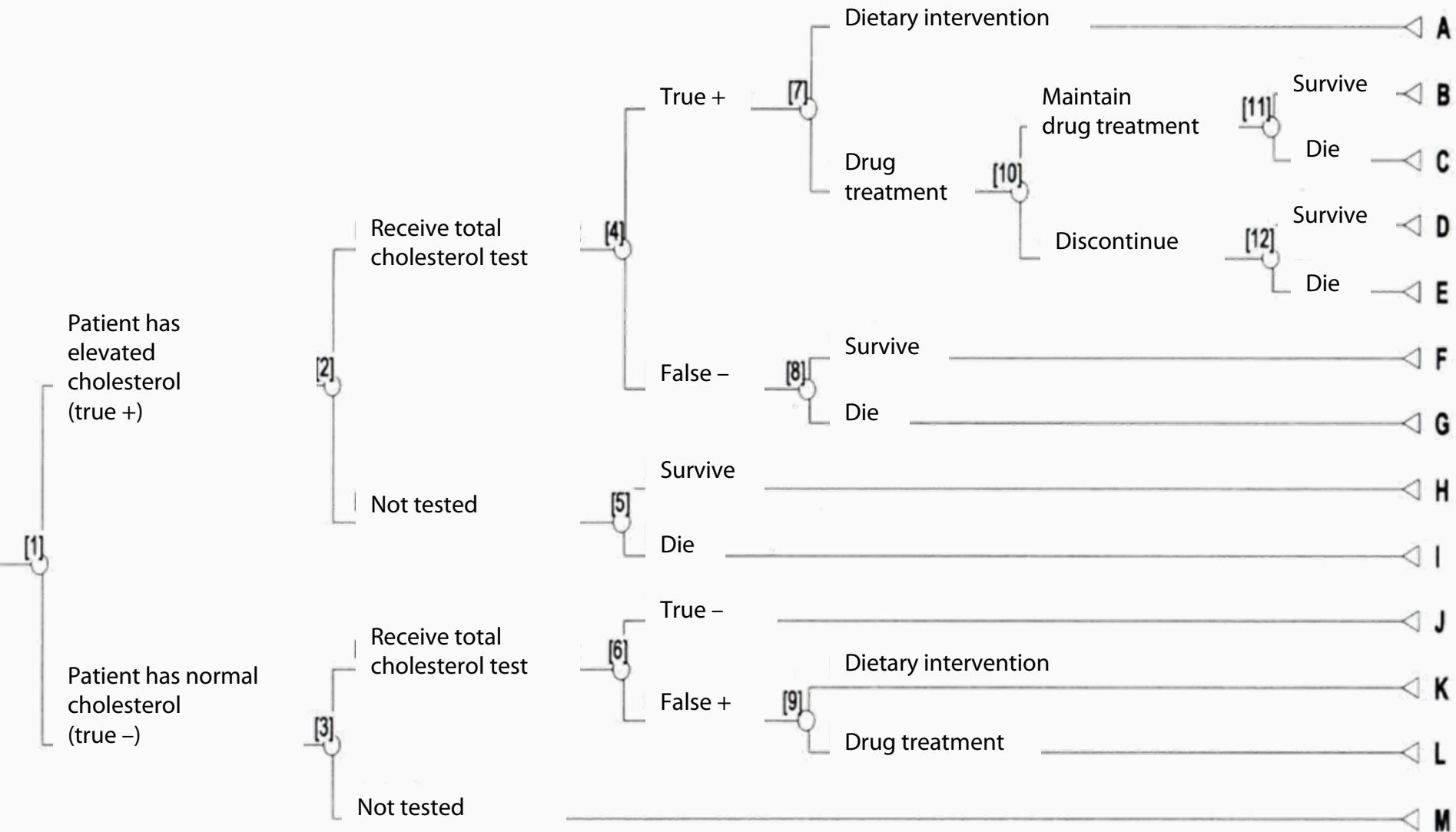
- Simulation (operations research—OR)
  - Linear programming
  - Monte Carlo simulations
  - Markov models
  - Decision trees (**see next slide**)
  - Forecasting/predictive modeling
  - Bayesian/risk analyses
- See required/extra readings on e-reserve
  - Owen (2002)
  - Barton (2004)

# Sample Decision Tree

- Sample decision tree for assessment of costs and outcomes of population-based cholesterol screening



# Sample Decision Tree





# *Examples of Economic Estimation Approaches*

- Cost vs. benefit (CBA)
  - Both sides in monetary terms
- Cost vs. effect/utility (CEA)—**see next 2 slides**
  - Outcomes in units other than monetary
  - Increasing use of “quality/disability adjusted life years” (QALYs and DALYs)
- Fiscal forecasting
- See Russell (1996), Goldie (2003), Maynard (2003)

## *CEA: Diet Intervention and CV Risk Factors*

- See Tables 1 and 2 from Prosser, L. A. et al. (2000). *Annals of Internal Medicine*, 132, 769–779.

# QALYs of Diet Interventions

- See Figure 1 from Prosser, L. A. et al. (2000). *Annals of Internal Medicine*, 132, 769–779.

## *OK, Back to Our Case Study*

- What approaches might we use to help estimate impact of policy alternatives (or their various components)?

# *Estimating Impact/Outcomes*

## a) Need for phased analyses

- Rarely will there be equal effort on all aspects for every alternative

## b) Learn from others

- Evidence-based literature reviews
- Other programs

## *Estimating Impact/Outcomes (Continued)*

c) Quantitative techniques

d) Cost effect or benefit

- Can you suggest an example of a decision science, economic, or other analytic techniques that might be applied to estimate the effects of the two alternative policy solutions?
- What types of outputs might these techniques provide to support our analysis?

## *Estimating Impact/Outcomes (Continued)*

### e) Policy formulation research

- Primary data collection to inform estimation analysis
- Evaluate pilot project

### f) Expert input

- Group process (Delphi panels)
- Consultants
- Commission policy development study

# *Making the Decision*

- a) Advisory group
- b) Translate criteria into decision matrix (see appendix of handout)
  - Determine relative “weight” of each
- c) Quantitatively “score” each policy alternative for each criterion



# *Making the Decision*

- a) Advisory group
- b) Translate criteria into decision matrix (see appendix of handout)
  - Determine relative “weight” of each
- c) Quantitatively “score” each policy alternative for each criterion
- d) Integrate and step back
  - Sensitivity analysis (modify criteria, weights, or scores)
  - Combine/modify alternatives
  - Involve organizational leadership
- e) Finalize internal decision memo

# Sample Decision Matrix

<b>Criteria (Relative weight)</b>	<b>Screening outreach (Score: 1–10)</b>	<b>Disease management (Score: 1–10)</b>
Population benefit (.35)	8	6
Cost/economics (.25)	4	10
Ethics/equity (.10)	8	5
Feasibility (.15)	5	9
Constituencies (.15)	9	7
<b>Total assessment (1–10)</b>	<b>6.7</b>	<b>7.5</b>

## *Before Finishing Our Case Study*

- Before finishing our policy analysis case study, we need to step back and discuss context a bit



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## *Section C*

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A Broader Perspective

# *The Continuum of Policy, Management, and Evaluation*

Problem/needs  
assessment

Policy development  
and analysis

Program design  
and implementation

Program management

Evaluation of  
impact

# *Why This Broader Perspective Is Important to You*

- A subset of you will work within legislative context; most will not
- However, during your careers most of you will
  - Help make “policy” within a public health or service delivery organization
  - Design and plan public health interventions/programs
  - Help implement or manage a program
  - Help evaluate a program’s impact
  - Add to our knowledge base

# *Paradigms in Perspective*

- So, let's step back and view "policy analysis" from within the context of other key paradigms/frameworks
  - Public health problem solving
  - Quality improvement
  - Management
  - Health services research and evaluation

# PH Problem Solving Paradigm

- Public health **“problem solving”** paradigm
  1. Define problem
  2. Measure magnitude
  3. Identify determinants
  4. Develop intervention
  5. Set priorities and lay out policy
  6. Implement program and evaluate
- Standard eight-step Bardach policy framework
  1. Define the problem
  2. Assemble some evidence
  3. Construct the alternatives
  4. Select the criterion
  5. Project the outcomes
  6. Confront the trade-offs
  7. Decide
  8. Tell your story

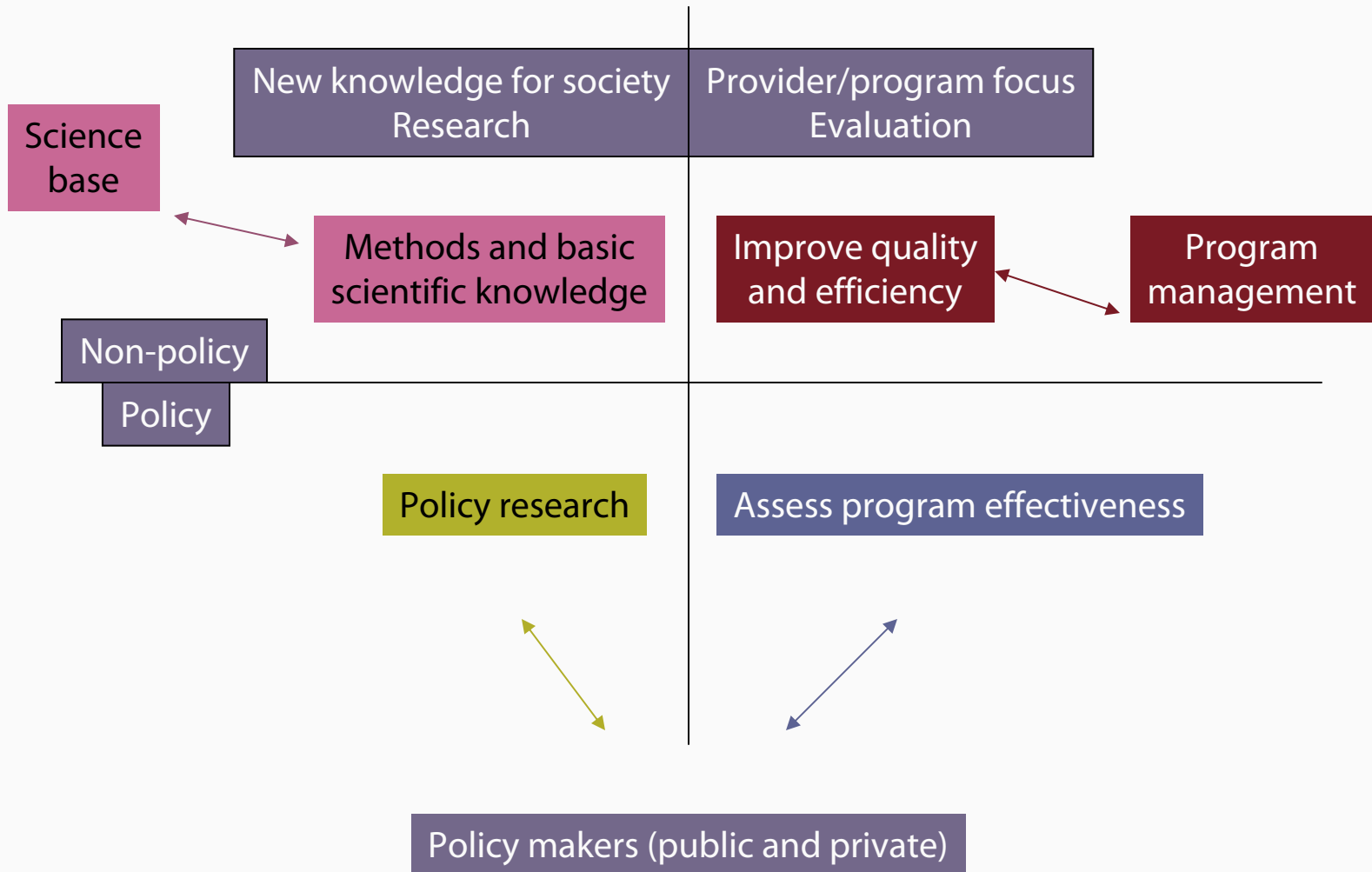


- **“Quality improvement”** paradigm
  1. Define problems and prioritize based on impact
  2. Determine ideal criteria
  3. Measure and evaluate performance
  4. Design improvement
  5. Implement improvement
  6. Repeat cycle as needed
- Standard eight-step Bardach policy framework
  1. Define the problem
  2. Assemble some evidence
  3. Construct the alternatives
  4. Select the criterion
  5. Project the outcomes
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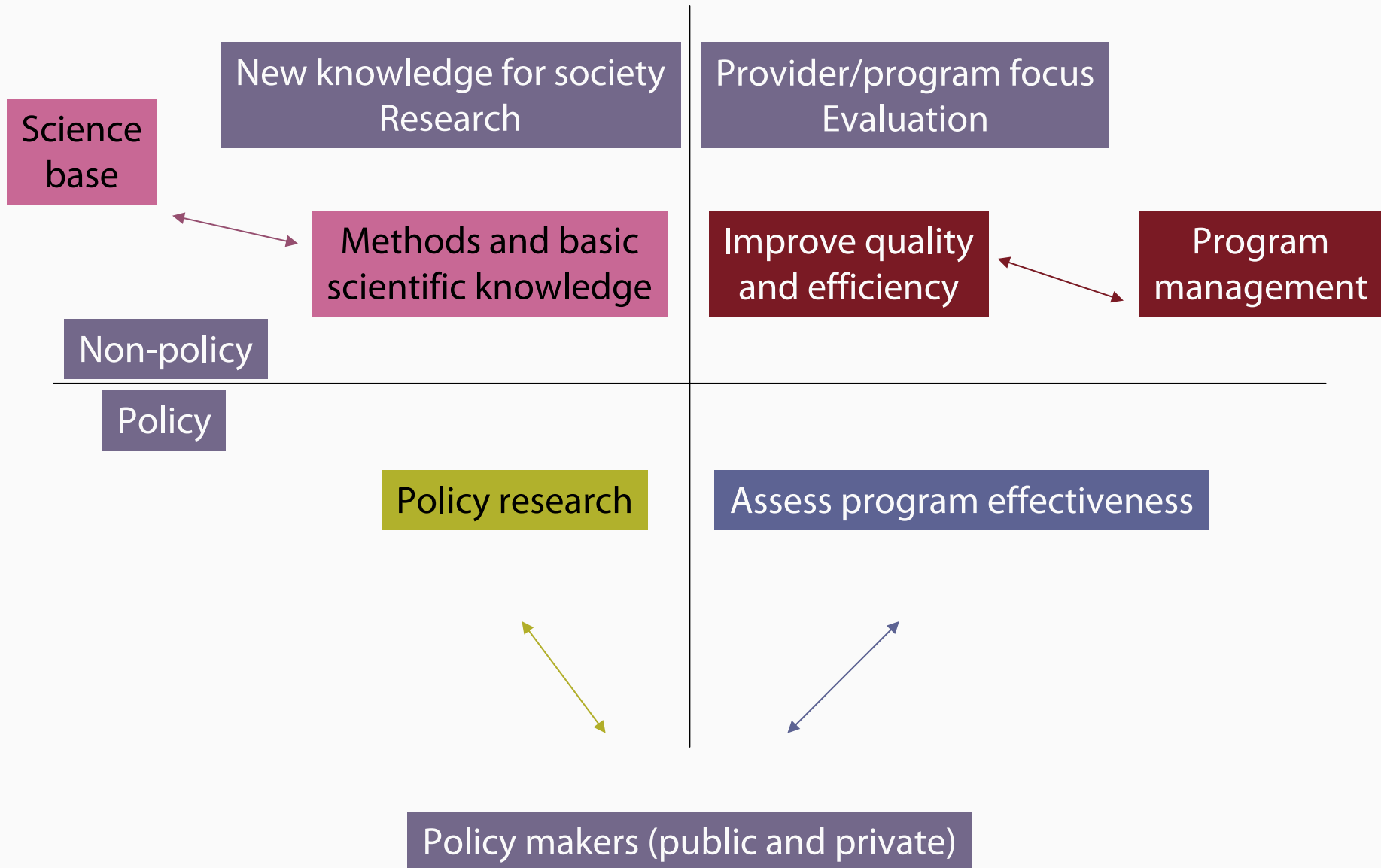
# Focus of Health Services Management

- Focus of health services **management**
  1. Strategic planning
  2. Responding to customer needs and demands
  3. Internal HR/staff management
  4. Process management
  5. Fiscal management
  6. Performance assessment
- Standard eight-step Bardach policy framework
  1. Define the problem
  2. Assemble some evidence
  3. Construct the alternatives
  4. Select the criterion
  5. Project the outcomes
  6. Confront the trade-offs
  7. Decide
  8. Tell your story

# Health Services Research/Evaluation Framework



# Health Services Research/Evaluation Framework



## *Let's Finish the U-Care Case Study*

- Let's finish up the U-Care policy analysis case study
  - (Let's just focus on the "community" outreach intervention)

# The Expanded Adaptation of Bardach

- The expanded adaptation of Bardach
  1. Understand/define problem
  2. Obtain evidence/data
  3. Alternative solutions
  4. Develop “criteria” matrix
  5. Estimate impact (outcome) of policy
  6. Decision process (consider trade-offs)
  - 7. Policy advocacy**
  - 8. Implementation, improvement, and evaluation**
- Standard eight-step Bardach policy framework
  1. Define the problem
  2. Assemble some evidence
  3. Construct the alternatives
  4. Select the criterion
  5. Project the outcomes
  6. Confront the trade-offs
  7. Decide
  8. Tell your story

# *Advocacy: Moving the Program Forward*

- a) Develop carefully targeted policy analysis documents to fit the circumstances
- b) PR strategy campaign
  - Figure out what “hat” you are wearing—an advocacy role is not appropriate in all cases
  - What “stories” should you tell?
  - Targets of information
  - Medium/modalities

# *Advocacy: Moving the Program Forward*

- a) Develop carefully targeted policy analysis documents to fit the circumstances
- b) PR strategy campaign
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  - What “stories” should you tell?
  - Targets of information
  - Medium/modalities



## *Advocacy (Continued)*

c) One-on-one with constituencies

- Feedback
- Buy-in

d) Policy team hand-off to implementation team

# *The Continuum of Policy, Management, and Evaluation*

Problem/needs  
assessment

Policy development  
and analysis

Program design  
and implementation

Program management

Evaluation of  
impact

- a) Liaising with program managers/implementers
  - Reviewing the roles of managers
    - **Strategic planning**
    - Responding to customer needs and demands
    - Internal HR/staff management
    - **Process management**
    - Fiscal management
    - **Performance assessment**

## *A Word about Milestones/Measures*

- Milestones/measures are one key “hand-off” to operational managers
  - Used as ongoing performance indicators
    - ▶ If you don’t measure it, you can’t manage it
  - Focus of quality improvement process
  - Focus of “formative” evaluation
    - ▶ More on that in a moment
- Any thoughts on performance measures that you would suggest to the managers of the outreach intervention program?



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## *Section D*

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Evaluation and Useful Skills

# *The Continuum of Policy, Management, and Evaluation*

Problem/needs  
assessment

Policy development  
and analysis

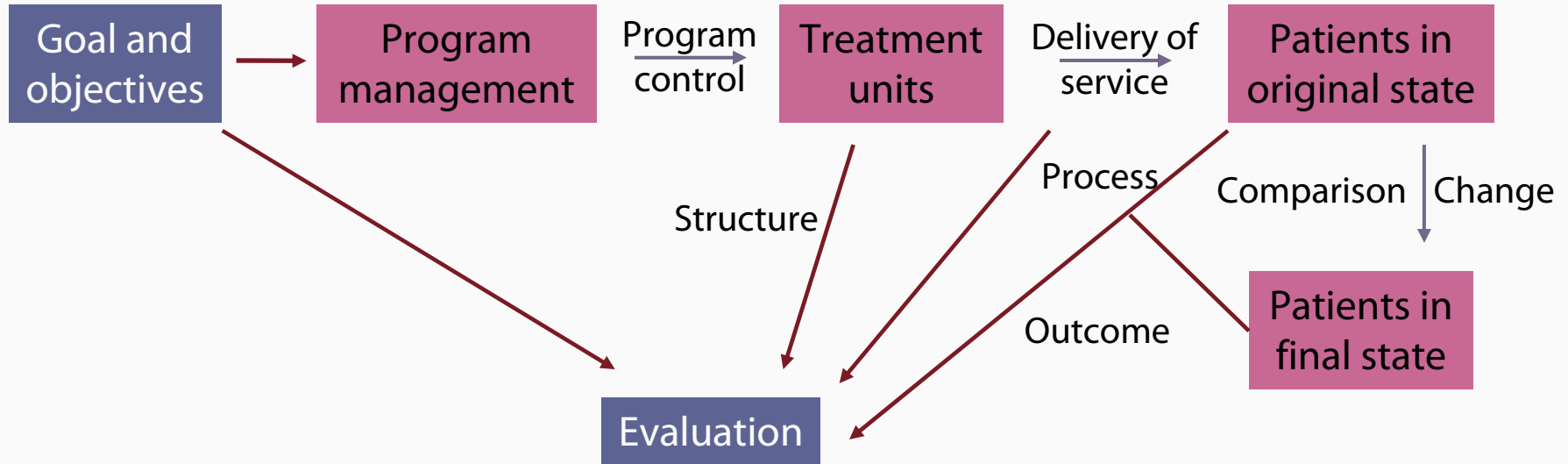
Program design  
and implementation

Program management

Evaluation of  
impact

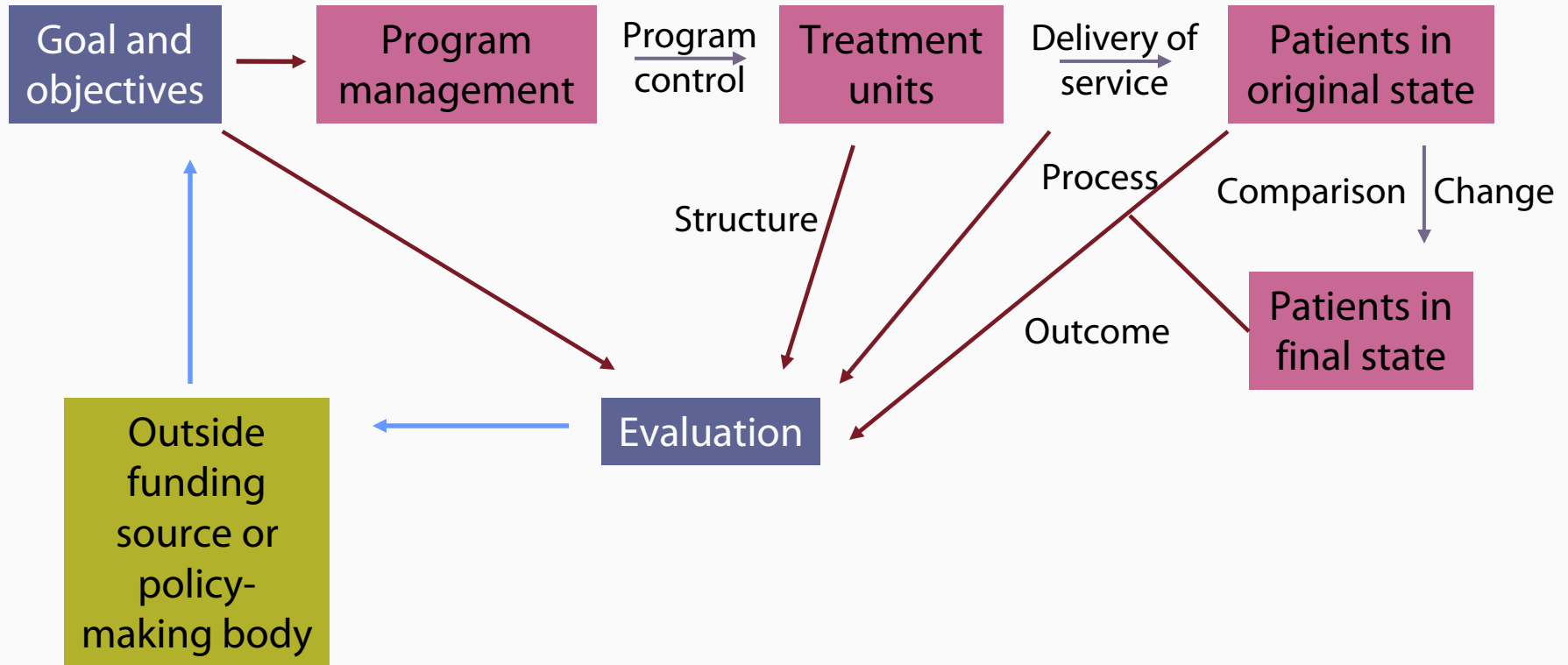
- b) Relationship between policy analysis and evaluation design
  - Within the public health/health care organization context, evaluation closes the “feedback loop”
  - Provides information on whether the policy change has addressed the original problem and how the intervention might be improved

# Evaluation: Feedback Loop for Policy Makers, Managers





# Evaluation: Feedback Loop for Policy Makers, Managers

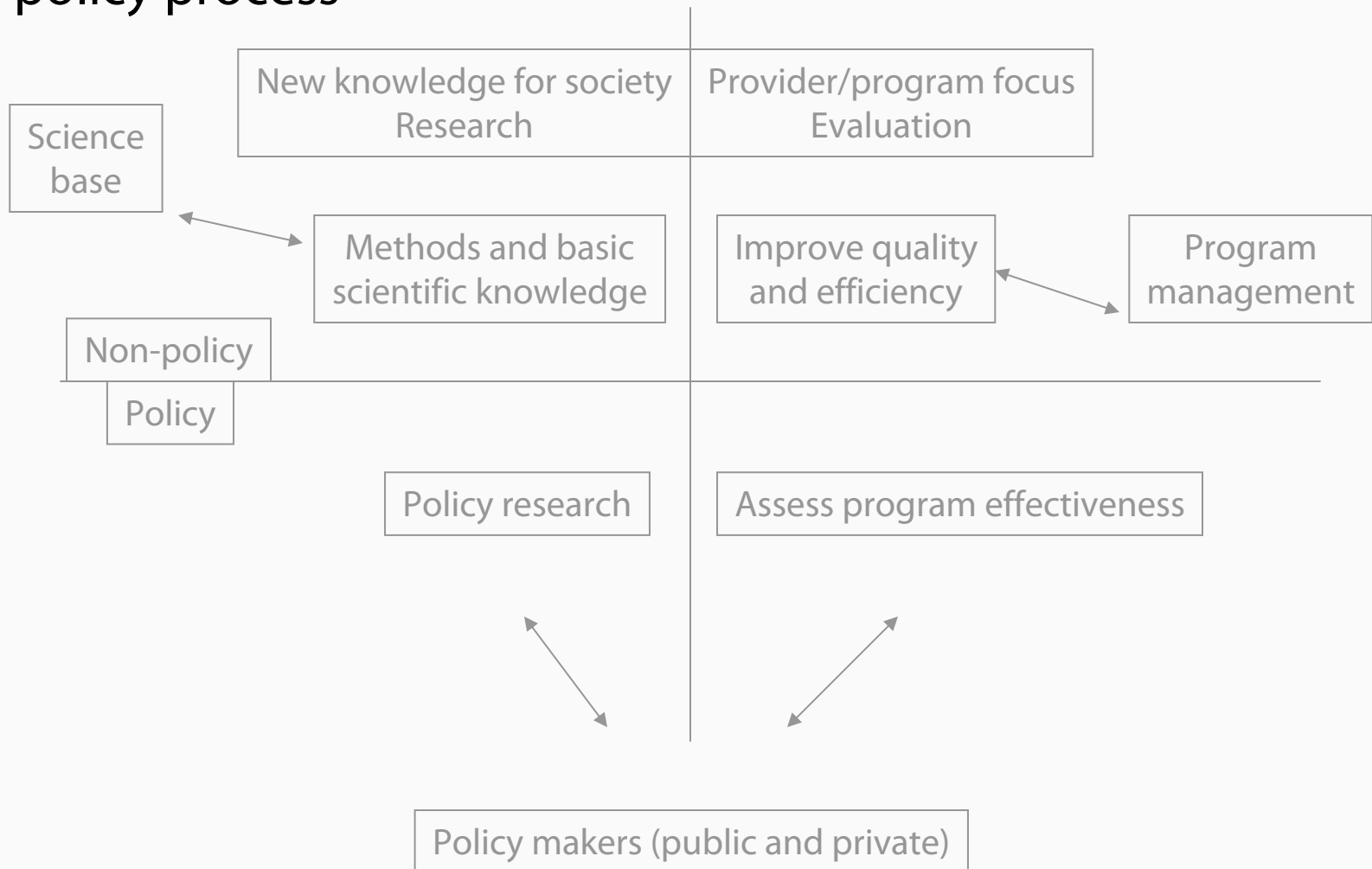


# *There Are Two Main Types of Evaluation*

- **“Formative”** (during formation of program)
  - Emphasizes internal operational objectives
  - Can be viewed as a type of ongoing quality improvement
  - Focuses on efficiency improvement
- **“Summative”** (helps sum a program once fully implemented)
  - Allows policymakers to assess whether goals met
  - Focuses on effectiveness (including cost vs. benefits)

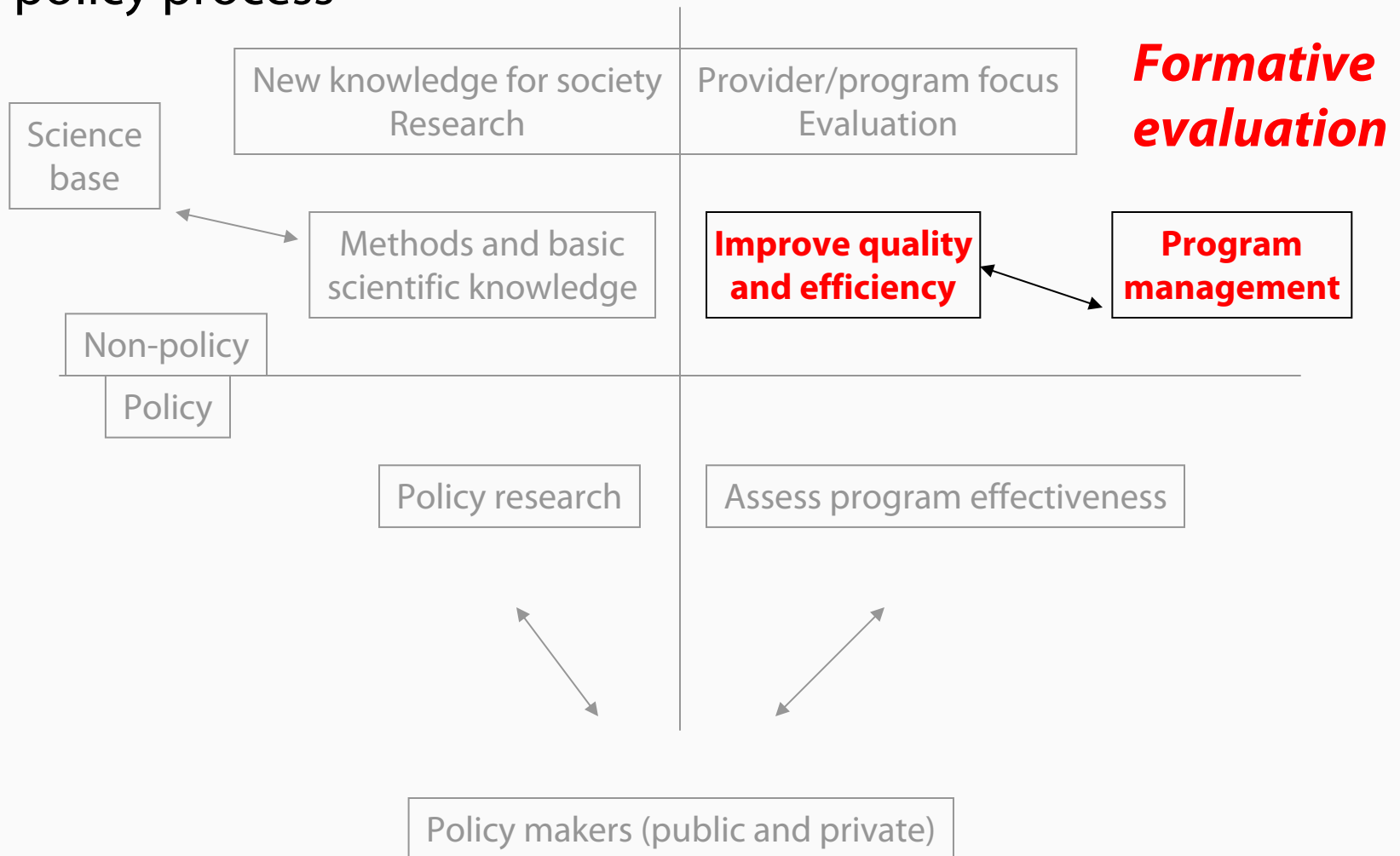
# Health Services Research/Evaluation Framework

- The health services research/evaluation framework and the policy process



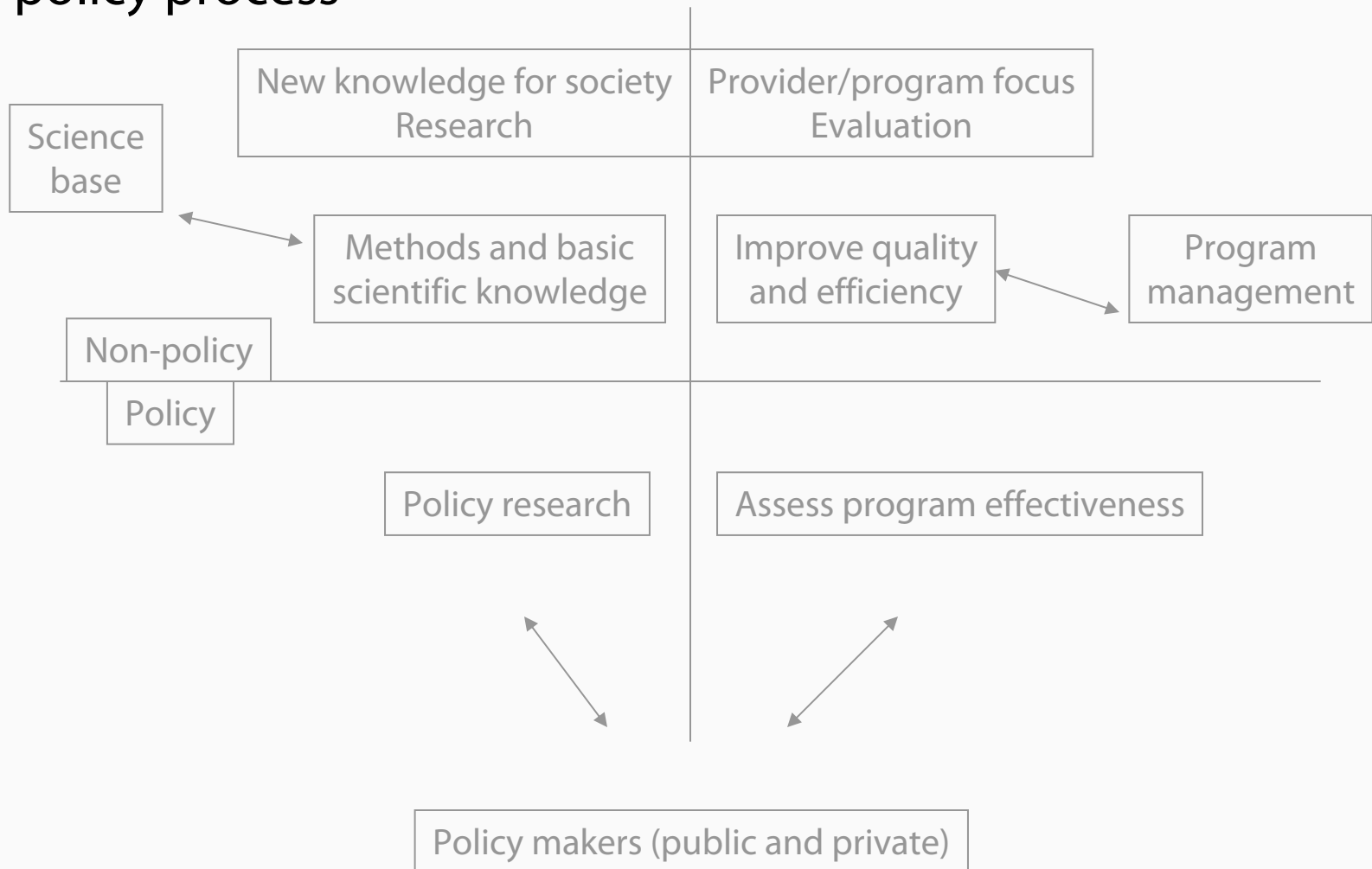
# Formative Evaluation

- The health services research/evaluation framework and the policy process



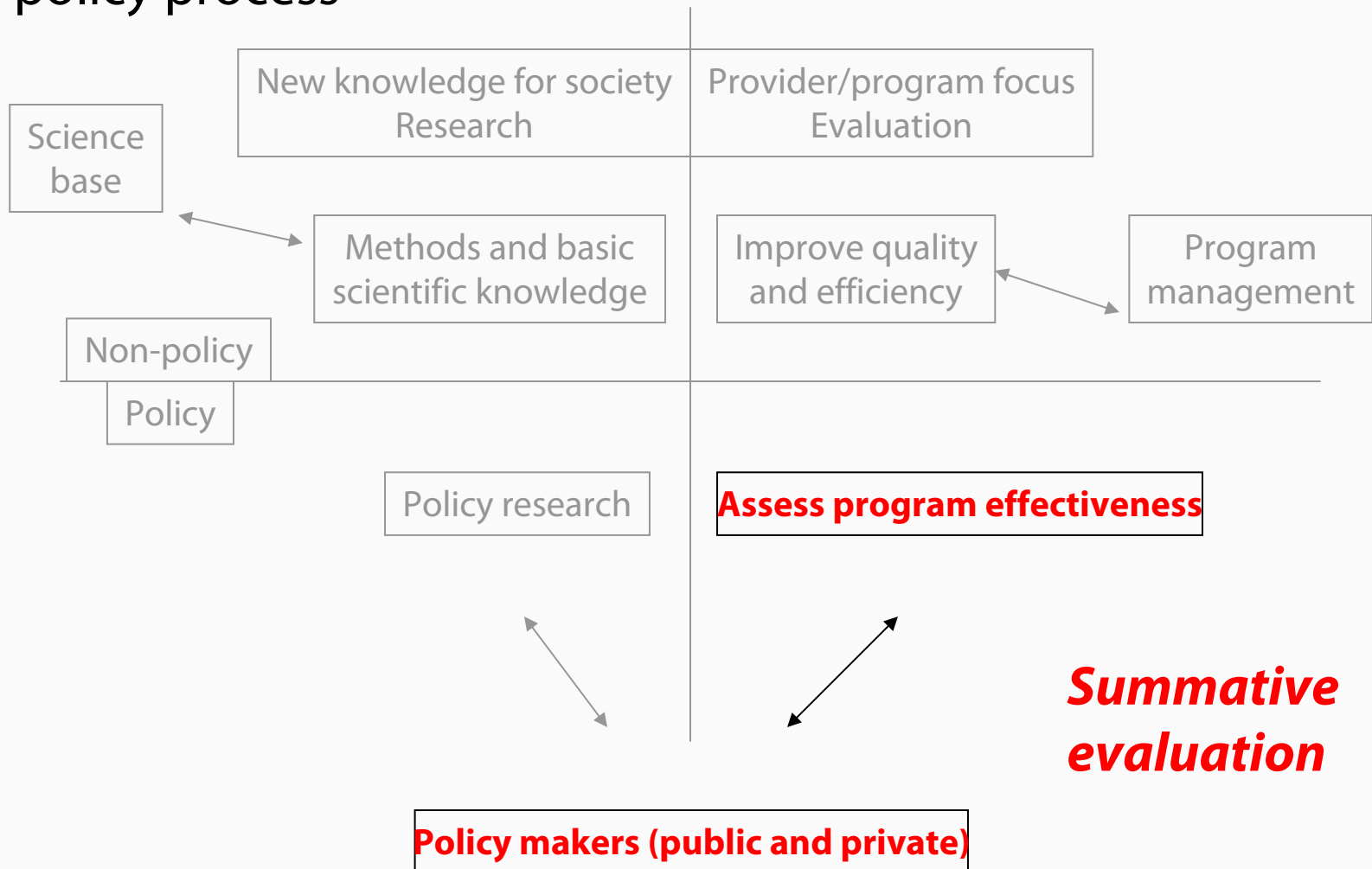
# Health Services Research/Evaluation Framework

- The health services research/evaluation framework and the policy process



# Summative Evaluation

- The health services research/evaluation framework and the policy process



# *Evaluation and Our Case Study*

- As policy analysts, what are some of the key questions that should be included in the screening/outreach program's ...
  - Formative evaluation?
  - Summative evaluation?
- Are there any research design or data collection processes you might want to build into the program at its onset?

# *Evaluation and Our Case Study*

- As policy analysts, what are some of the key questions that should be included in the screening/outreach program's ...
  - Formative evaluation?
  - Summative evaluation?
- Are there any research design or data collection processes you might want to build into the program at its onset?



# *Are You Prepared?*

- Are you prepared for the future challenge of applied policy analysis?
- Some related skills you can learn from courses offered within HPM ...

## *Some Skills That Can Be Obtained from HPM Courses*

- Analytical methods for policy analysis and decision making
- Models for financing and organizing health care delivery to address current problems
- Methods to evaluate the effectiveness of public health interventions
- Methods for measuring and improving quality of care

## *Skills from HPM Courses (Continued)*

- Understanding the role of government and regulation in the policy process
- Understanding social and economic factors that influence health
- Understanding organizational behavior and management
- Effective communication, advocacy, and marketing
- Ethical principles, frameworks, and decision tools

## *Some Relevant HPM Courses*

- Role of Government in Health Policy (308.602/3, 308.625)
- Health Policy and Politics (300.652)
- Health Policy Analysis and Synthesis (301.607)
- Organization, Financing, and Delivery of Health Services (300.651)
- Managed Care and Health Insurance (309.620)
- Cost-Effectiveness/Economics (313.630/1, 313.790)
- Health Services Research and Evaluation (309.615/6)
- Public Health and the Law (306.650)

## *Relevant HPM Courses (Continued)*

- Quality of Care Measurement and Improvement (311.615)
- Ethics (206.650, 306.663)
- Long-Term Care/Aging (309.605/7)
- Introduction to Persuasive Communications (304.620)
- Principles in Health Behavior Change (302.683)
- Theories of Organization and Management (312.615)
- Strategic Planning and Operations (312.621)
- Conflict Management (312.665)