The Research-Policy Connection:
What We've Learned and
Some Sober, But Not Entirely Discouraging
Second Thoughts on
Cementing the Ties

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Part 1

Evidence-Based Decision-Making: A Brief History and Critique of the Theory

Canadian, Eh?

- Began with evidence-based medicine (EBM) in the 1980s
- Considerably Canadian idea – McMaster (Sackett, Haynes)
- Main concept:
  - Clinical practice should be based on the highest quality available evidence
  - Normally this is the RCT
  - Finding and synthesizing good evidence will improve practice and outcomes

Extending the Domain

- **Evidence-based decision-making (EBDM) extends the principles of EBM to management and policy**
- **Same general notion:**
  - **Locate and synthesize relevant evidence**
  - **Apply evidence to decision-making**
  - **Result will be better policy in that *means* will more likely produce the desired *ends***

The Problem According to Researchers

- Research not influential enough in policy
- Policy-makers undervalue scientific evidence
- Policy-makers misinterpret and misuse research
- Policy is therefore deficient
- Solution: researchers should develop skills that would enhance their influence in the policy process

Is This The Real Problem?

- Are we clear about what “evidenced-based policy” means?
- Do we know exactly whether and how research is taken into account in policy formulation?
- Is policy-making a technical exercise or a values-based exercise – or both?
- Is there a clear understanding and model of how research *should* influence policy?

What's Wrong with EBM Theory?

1. Science is probabilistic; patient care is highly specific
2. The RCT is an artificial construct; life is more like a messy observational study
3. Science is explicit; important insights and assessments are often tacit
4. Science aims for value-free objectivity, but life is normative and value-laden
5. Scientific evidence often complicates decision-making; humans seek clarity and simplicity

What's Wrong with the Theory (cont'd)?

6. **Science has been corrupted, particularly by publication bias, suppression of results, etc.**
7. **Too much is published; the best is often drowned out by the substandard**
8. **Science is partial and fragmented; human problems are multi-faceted and decisions are holistic**
9. **The goal is to make good decisions; EBM/EBDM are means, not ends in themselves**
   (Lewis S. Toward a General Theory of Indifference to Research-Based Evidence. *J Hlth Serv Pol Res 2007 in press*)

Dance of the Two Solitudes

Decision-maker	Researcher
I need to solve a problem today	I need to discover something, sometime
I need to respond to anecdotes, and single events	Outliers are just “statistical noise”; I ignore them
I need to act on what the people want	I focus strictly on what the data tell me
A little information may be all I need to make a decision	A little information won’t get me published
I must use language accessible to my audiences	I must use language valued by my peers
A good decision creates better health and org. well-being	Good research brings promotion and grants

What The Problem Isn't

- A shortage of information—unless everything must be replicated locally
- Difficulty in accessing information—for anyone with Google Scholar, PUbMed, Cochrane database, etc.
- Clear and well-presented information—the applied research agencies are masters of crisp presentation; there are brilliant web sites such as Bandolier; etc.
- An inability to understand the information—research literacy is higher than ever

The “Early Adopters” Conundrum

- There is always some change in health care
- Early adopters and experimenters emerge in almost all environments
- Their response to research-based evidence is usually atypical
- They often need only modest help to advance
- The challenge is to change the behaviour of the unmoved—that is the larger, tougher market to crack
- As in retail, you often learn most from the non-customers

The Policy-Maker's World

- Demand for (action, money, priority) invariably exceeds supply of (time, money, attention)
- Too much information can be a greater problem than too little information
- Gaining and keeping the approval various publics is at least as important as technical impact
- Stories, anecdotes, and narratives are powerful influences
- The briefing note is the major communication tool
- Most things are reducible to dollars

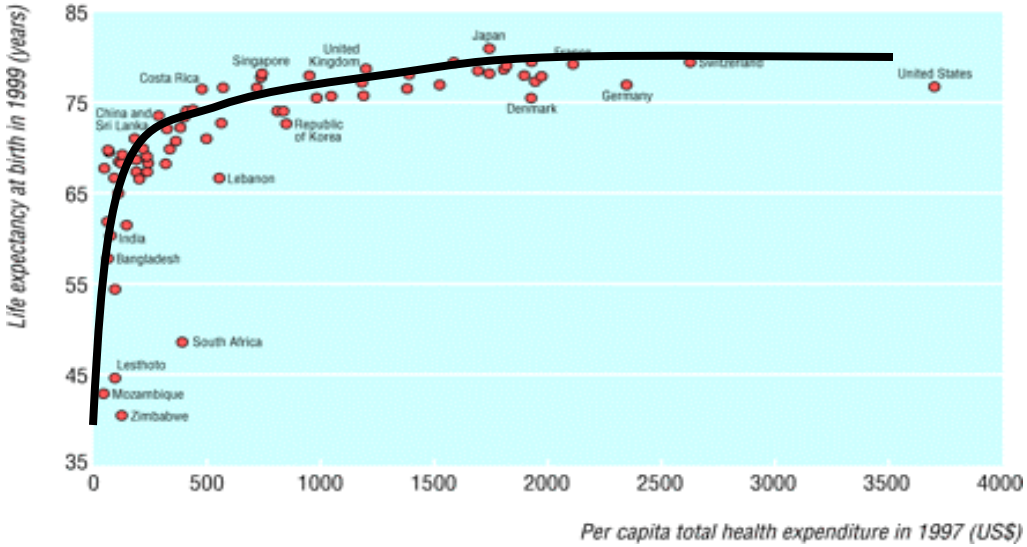
What Factors Influence Policy?

- Distributive justice concerns:
  - Geographic
  - Ethno-cultural
  - Age and sex
  - Class
  - Interest groups and constituencies
- Strongly held values:
  - Ideas of moral worth
  - Attitudes towards inequality
- Political support and realities

Part 2

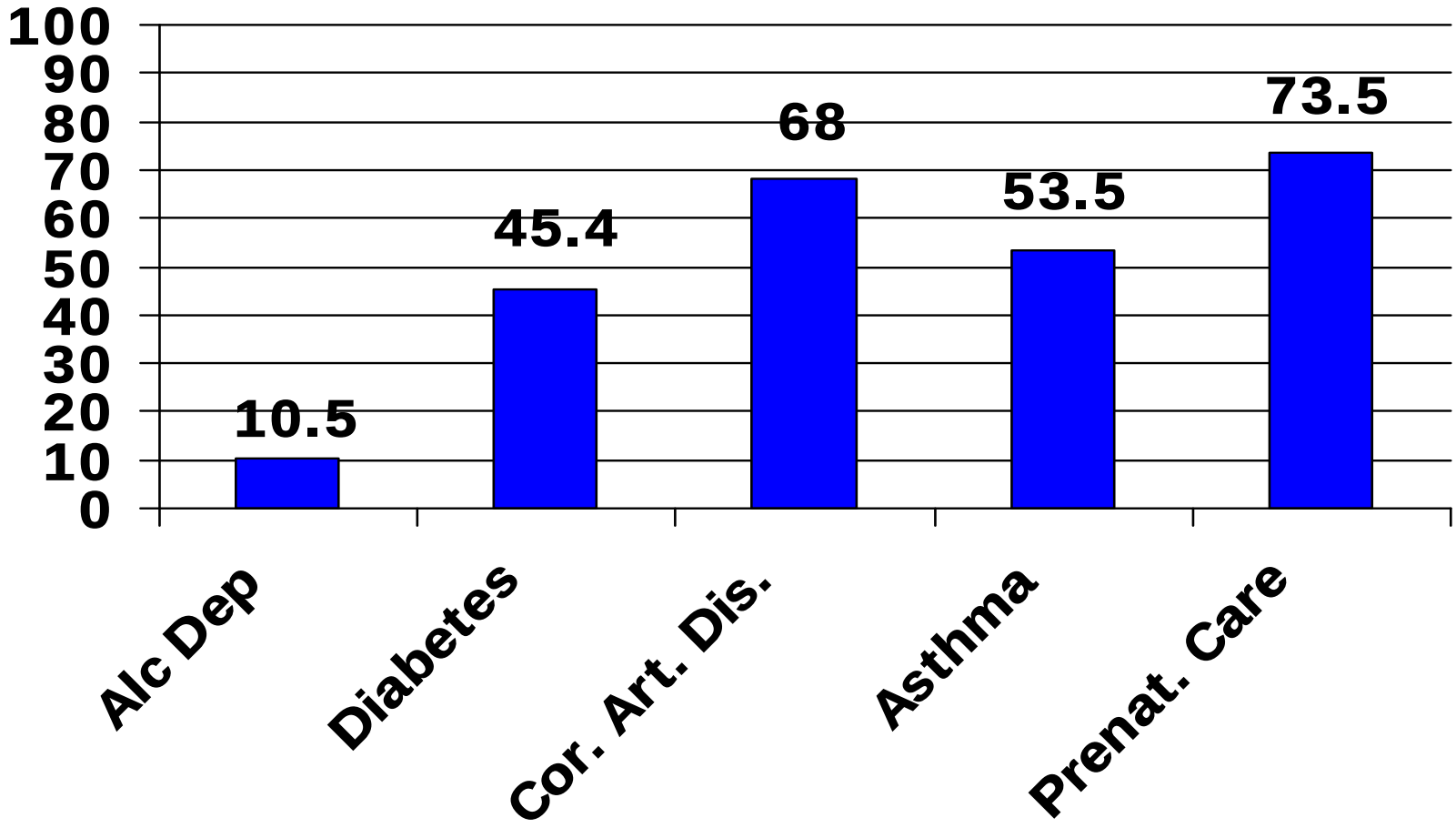
Illustrating the Dilemma: How Should the Policy World Respond to Provocative Information?

Life expectancy at birth in1999 by per capita total health expenditure in 1997 in 70 countries



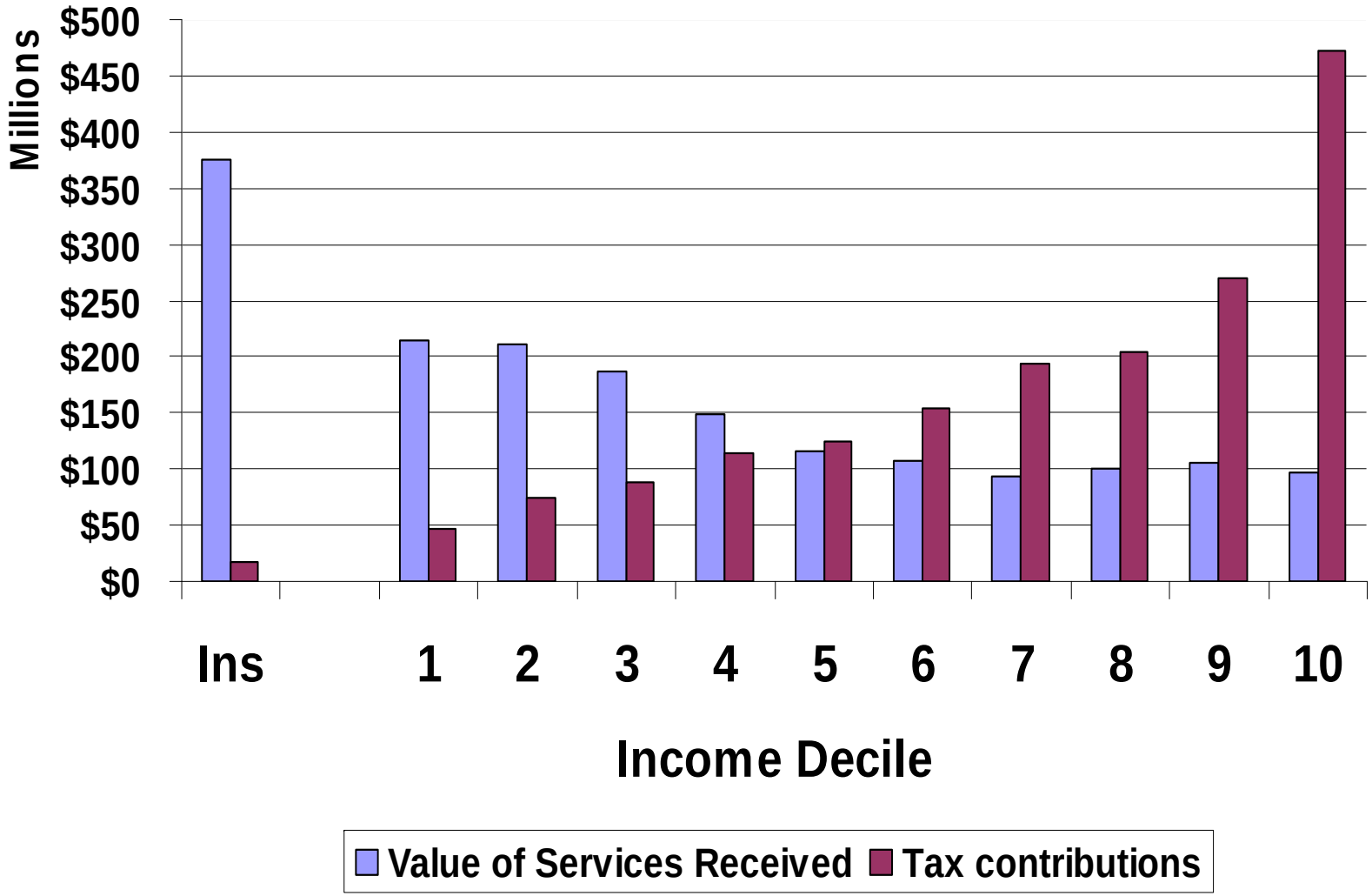
Source: Leon, Walt & Gilson, BMJ 2001;322:591-4

Percentage of Recommended Care Actually Received, Various Conditions, USA



Source: McGlynn EA et al. The quality of health care delivered to adults in the United States. NEJM 2003;348:2635-45

Who Pays for, and Who Receives Health Care, by Income Decile, Manitoba 1994

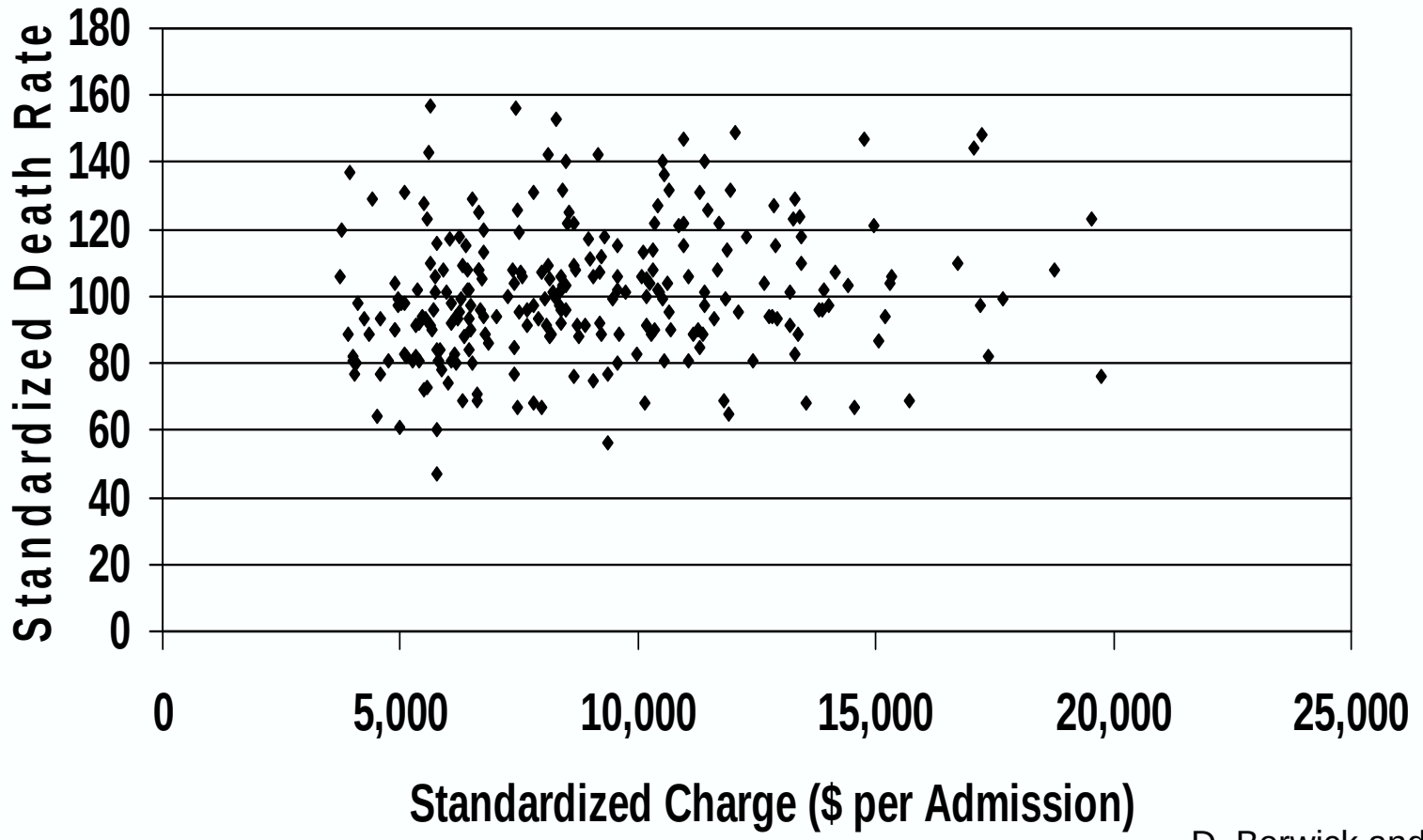


U.S. Hospital Death Rate

(Standardized for Age, Sex, Race, Payer, Admission Source & Type)

vs Charge per Admission

(Standardized for Age and Diagnosis) -- AHRQ 1997 Data



D. Berwick and B. Jarman

Intellectual and Values Conflicts

- Prevention and health promotion are not as highly valued as interventions
- We have a highly medicalized culture that labels and creates new diseases (See PLoS Medicine April 2006 issue)
- The public prizes access and proximity over efficiency and even effectiveness
- EBDM assumes a rational, health optimizing culture
- That culture war has been lost

Organizational Barriers (I)

- There is little corporate solidarity in the health care system
  - Tradition of autonomous medical practice
  - Long history without QI-oriented measurement and reporting
  - Internal competition for resources
- No systematic process for responding to and applying research findings
- Incentives often do not align with objectives
- Accountability even for safety, let alone quality, is still in development

Organizational Barriers (II)

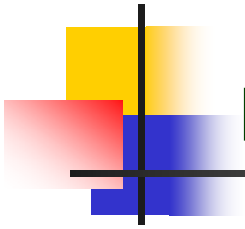
- Inability to differentially reward either good or bad practice
- Lack of concrete goal-setting with consequences for success and failure
- Assumption that change must be slow and incremental
- Unwillingness to experiment and innovate in the face of interest-group opposition

Informational Barriers

- Data that create good research are not the same as data that create QI
- Canada is a latecomer to the IT revolution
- There is very little real-time information usable by governors, managers and practitioners
- There is considerable skepticism of non-local research and analysis
- There is justifiable skepticism about case-mix adjustment and explanations of variations in outcomes

The Issue Is Change, Not Evidence

- Exhortation is not a strategy
- The evidence for change does not guarantee that change will occur
- Neither policy nor goal-setting guarantees that intentions will be realized
- Change must be inspired, pursued, and managed
- Change costs money—it takes sustained investment
- Most people and organizations don't like change



Part 3

What Is To Be Done?
Checking Our Assumptions and Rethinking Our Approaches

Getting Value From Analysis

- Underused evidence is dead inventory
- Causes:
  - There is no market for the product
  - It is the wrong kind of product
  - It is an incomplete product
  - How the product should be used is not well understood
- Need a fresh look at how to prevent the accumulation of underused products

Where Should Evidence be Influential?

- To illuminate a means-ends relationship—if we desire X, will policy Y achieve it
  - Example: will HbA1C testing improve diabetes outcomes in the long run
- To identify problems that need to be addressed
  - Example: what is the projected prevalence of Alzheimer Disease over the next 30 years
- To evaluate existing policies
  - Example: how do prescription drug cost-sharing policies affect use and outcomes

The Virtues of If-Then

- Research and analysis begin with questions:
  - What do we want to know?
  - Who wants to know it?
  - What is the purpose in knowing it?
- Hypothesize a range of findings
- Determine what should change if certain findings emerge
- Analyze the factors that would facilitate or impede change
- Assess the probability of being able to effect the change

The R-squared of Research-Based Evidence

- Important to have a mental model of decision-making that assigns weights to:
  - Research-based evidence
  - Political and financial factors
  - Workplace culture
  - Public preferences
- Recognize the inertia inherent in large and complex systems
- Research reports without policy analysis are like engines without cars—they go nowhere on their own

What Decision-Makers Can Do

- Be more rigorous and precise about
  - Performance in its various dimensions
  - Goal-setting
  - Accountability—processes and consequences
- Anticipate and articulate issues that need illumination from research-based evidence
- Use IT to its maximum potential
- View evidence as capital and develop a plan for maximizing return on the investment

What Researchers Can Do

- Learn more about the policy environment and the complete range of influencing factors
- Design studies responsive to the questions and challenges that confront decision-makers
- Go as far as you can in reporting the "why" in addition to the "what"
- Where possible, report the economic implications of findings
- Contextualize the findings—how does FHA compare to leading practices; how does the research fit into the general FHA environment

What Both Can Do Together

- Conceive of applied research as a project to be managed from conception to implementation
- Stakeholders have to invest up-front time defining the pathway from production to application
- Be candid about the prospects for change
- Be reflective about the levers for change and the role evidence can play
- Study the mechanisms of change—it is a researchable phenomenon

Pathways to Influence (1)

- Talk the policy-maker's language
  - Opportunity cost
  - Costs and benefits
- Illustrate data with a concrete story – make the data and analysis come alive, in human terms
- Write clearly and in plain language – don't make the reader work to understand
- Do not assume interest in your (topic, cause, data) – state why it is important

Pathways to Influence (2)

- Neither oversell nor undersell what the data mean
- Don't underestimate the research literacy of government or health organizations
- Be aware of the policy context and especially competing perspectives and data
  - A crowded playing field is more challenging
  - Policy-makers love consensus and dislike having to alienate Peter to please Paul

Pathways to Influence (3)

- Be strategic in building support
  - Engage various levels – often policy filters up from within the organization or government
  - Organize policy seminars and exchanges to create understanding and comfort level
  - Learn to be media savvy – what's public gets noticed in the policy world
- Policy is politics – messy, contested – and has its own methods, rewards, and liabilities
- Those who understand politics will be more influential than those who don't, or won't

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