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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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

## Dance of the Two Solitudes

<table>
<thead>
<tr>
<th>Decision-maker</th>
<th>Researcher</th>
</tr>
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<tbody>
<tr>
<td>I need to solve a problem today</td>
<td>I need to discover something, sometime</td>
</tr>
<tr>
<td>I need to respond to anecdotes, and single events</td>
<td>Outliers are just “statistical noise”; I ignore them</td>
</tr>
<tr>
<td>I need to act on what the people want</td>
<td>I focus strictly on what the data tell me</td>
</tr>
<tr>
<td>A little information may be all I need to make a decision</td>
<td>A little information won’t get me published</td>
</tr>
<tr>
<td>I must use language accessible to my audiences</td>
<td>I must use language valued by my peers</td>
</tr>
<tr>
<td>A good decision creates better health and org. well-being</td>
<td>Good research brings promotion and grants</td>
</tr>
</tbody>
</table>
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 of 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 in 1999 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

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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