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Deliberative methods for combining different types of evidence in the development of policy recommendations

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Overview



- Session theme: *“Deliberating to inform decision-making”*
- Presentation title: *“Deliberative methods for combining different types of evidence in the development of policy recommendations”*
 - Key concepts
 - Systematic review
- Prescribed aim: *“By the end of your presentation, the participants should be able to better understand how deliberative processes can be used to combine different forms of evidence”*



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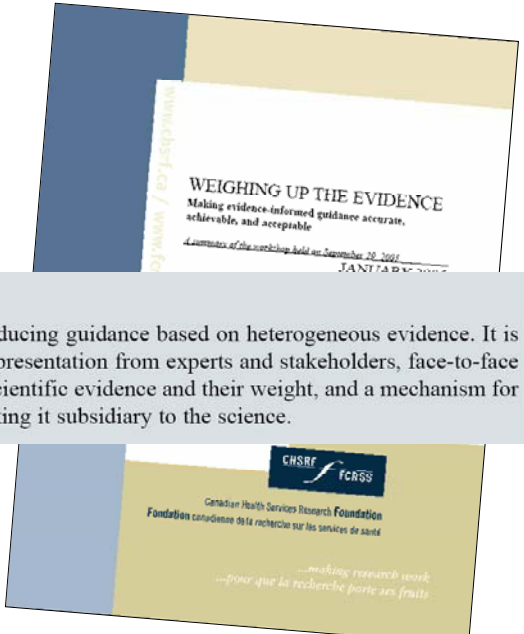


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'Deliberating' and 'deliberative methods'


Julia Abelson's work
CHSRF definition
Casting a wide net



Deliberative process

A deliberative process is a tool for producing guidance based on heterogeneous evidence. It is a participatory process that includes representation from experts and stakeholders, face-to-face interaction, criteria for the sources of scientific evidence and their weight, and a mechanism for eliciting colloquial evidence while making it subsidiary to the science.

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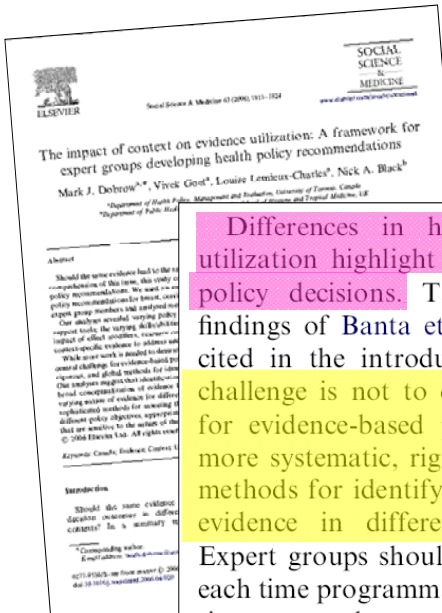
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'Informing decision-making' and 'developing policy recommendations'

What types of decisions/policies?

What types of decision-making processes/contexts?

What is the aim – better decisions vs. better outcomes?



Differences in how context affects evidence utilization highlight the complex nature of health policy decisions. Taking into consideration the findings of Banta et al. (2001) and Taylor (2002) cited in the introduction, **we believe the central challenge is not to develop international evidence for evidence-based policy, but rather to develop more systematic, rigorous, transparent, and global methods for identifying, interpreting, and applying evidence in different decision-making contexts.** Expert groups should not be starting from scratch each time programmatic health policy recommendations are made.

Deliberative processes and evidence-informed decision making in healthcare: do they work and how might we know?

Anthony J. Culyer and Jonathan Lomas

Evidence & Policy

For current purposes, however, we shall take the more consequentialist view that the outcome with which we are especially concerned is the decision that the process enables rather than the experiences of the participants. This flows automatically from our interest in deliberative processes as a way of not only eliciting, legitimising and incorporating stakeholder input, but also of usefully combining this with other evidentiary inputs for decision making. Thus we start with consideration of the latter: what should be considered as evidentiary input to a deliberative process?

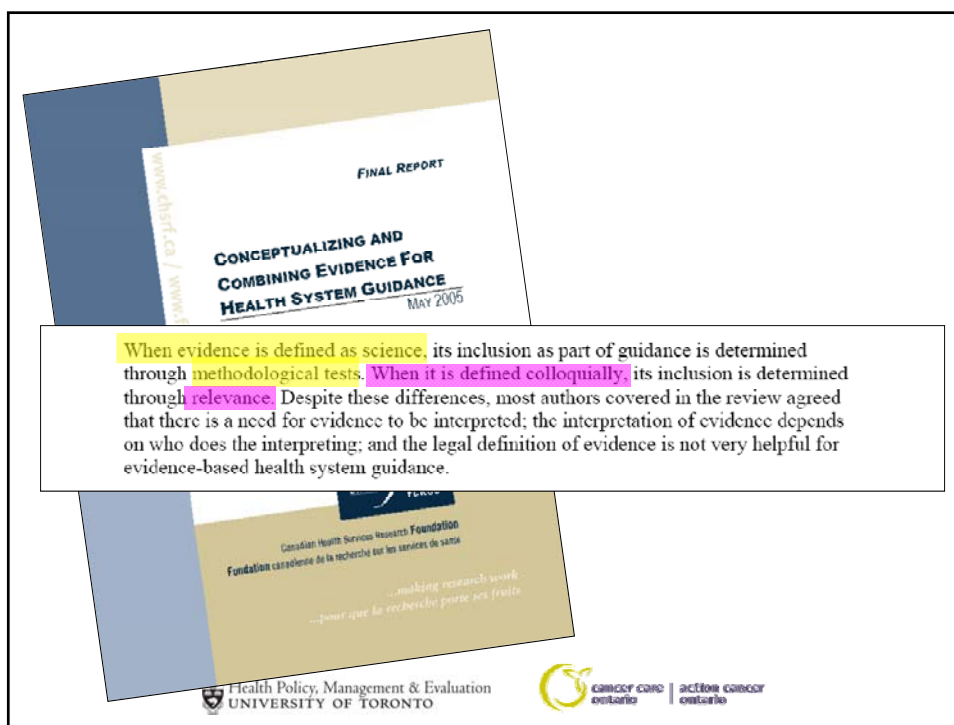
‘Combining different types of evidence’

What constitutes evidence?

- Broad vs. narrow definitions
- Research, knowledge, wisdom, experience, information, data
- Science vs. values
- Talking to people

What is combining evidence?

- Combining vs. using evidence (e.g., identifying, interpreting, applying)
- Explicit vs. implicit
- Combining vs. decision-making



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Evidence & Policy • vol 2 • no 3 • 2006 • 357-71

The issue confronting any decision maker within a deliberative process is thus not so much how to balance the three types of evidence or to assess the weight to place on each, but rather to allow each to perform its appropriate task:

- scientific context-free evidence is evidence about general potential;
- scientific context-sensitive evidence is evidence about particular realistic scenarios;
- colloquial evidence helps to provide a context for otherwise context-free evidence and to supply the best evidence short of scientific evidence when there is neither context-free nor context-sensitive evidence.

“Evidence does not make decisions, people do”

Haynes et al., 2002



A role for deliberative methods in
combining different types of evidence?



Systematic Review

Two overarching questions:

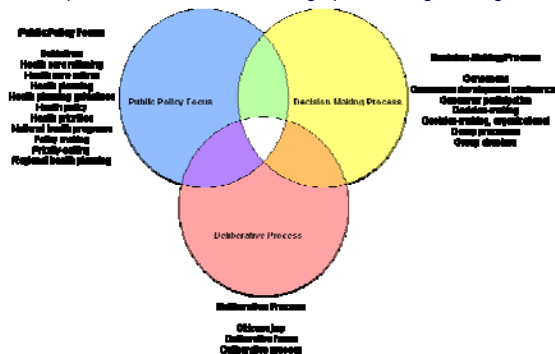
(Q1) How/when are deliberative methods used to combine heterogeneous evidence?

(Q2) What is known about the effectiveness of deliberative methods in combining heterogeneous evidence?

Methods 1/2

- Sources
 - 4 Health databases
 - Medline, Embase, HealthStar, CINAHL
 - 14 Non-health databases
 - ERIC, TRANSPORT, Business Source Premier, InfoTrac Environmental Issues & Policy eCollection, GEOBASE, ProQuest, Scholar's Portal (IBSS, PsycINFO, SSCI, AGRICOLA, ESPM, PAIS, TOXLINE).
 - Other sources
 - Research team, expert recommendations, bibliographies, Google, Google Scholar/Books

- Search Strategy



Methods 2/2

- Articles were excluded if they:
 - were published before 1980;
 - were not written in English or French;
 - were not focused on the process of decision-making for public policy or management practice (e.g., were solely focused on individual/clinical decision making);
 - did not describe the combination of heterogeneous evidence (e.g., context-free scientific, context-sensitive scientific and/or colloquial evidence) within the decision-making process; or
 - did not collect data about how the process worked, or what participants thought about the process (i.e., were not evaluative).

Findings

- Total unique articles (all sources): **6853**
- Total high relevance articles: **15/0***
 - Health policy-related: 11
 - Other public policy-related: 4

*15 articles that were ultimately coded as high relevance did provide insights related to question (Q1), however these articles only indirectly addressed question (Q2)

- Characteristics of deliberative processes highly variable
- Evaluative approaches typically based on case studies incorporating qualitative methods
- Three factors emphasized
 - Deliberative approach
 - Nature of evidence use
 - Decision proximity

Deliberative approach

Original paper Getting a word in edgeways? Patient group participation in the appraisal process of the National Institute for Clinical Excellence

Pauline Quenell

The author is a Research Student, Department of Applied Social Science, University of Manchester, Manchester, UK.

Keywords: Patients' expectations, Gender, Clinical efficacy

Abstract:

This paper examines patient organisations' participation in the technology appraisal process of the National Institute for Clinical Excellence (NICE), in particular, it examines policy areas prominent in recent UK government reforms – patient participation and evidence based medicine (EBM). Data have largely been obtained from structured interviews with patient group representatives in NICE's technology appraisal, publication and implementation team, NICE's customers, and a representative of the pharmaceutical industry. The paper focuses on patient groups' capacity about the relative 'evidence' in NICE's appraisal process, as well as their ability to influence the appraisal process. It is argued that patient groups are to be seen as having had more influence than anticipated.

Keywords:

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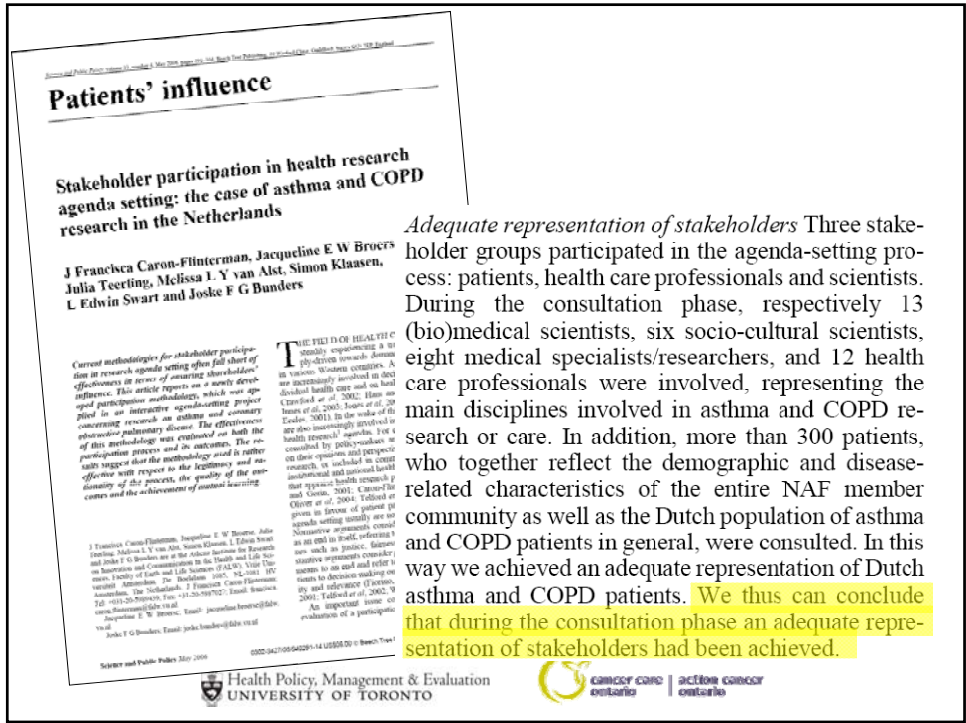
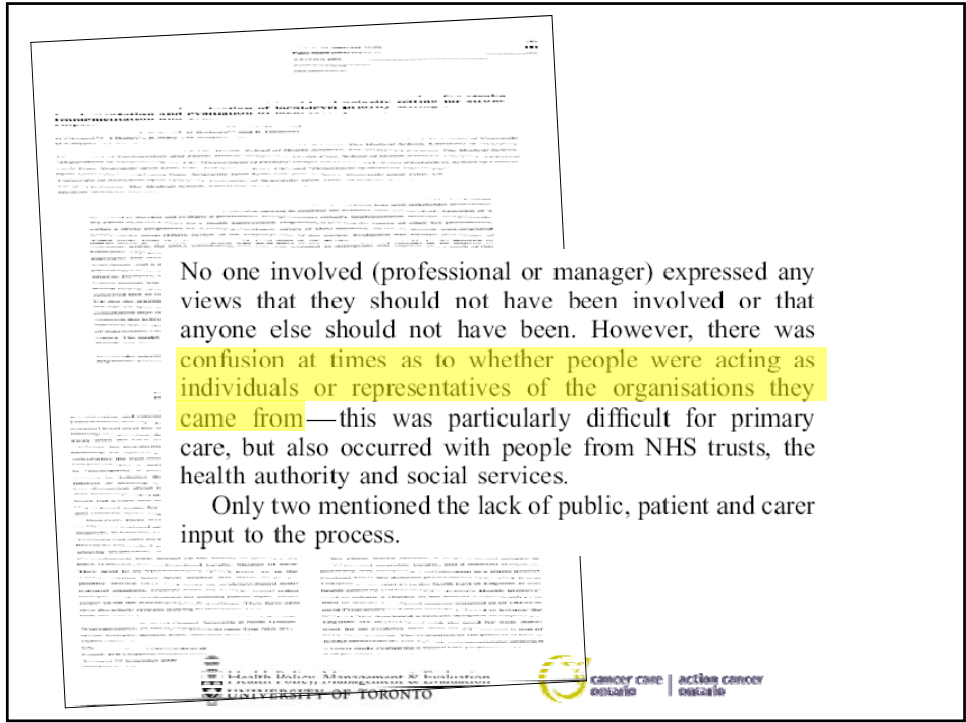
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Introduction

This paper examines the involvement of patient organisations in the technology appraisal process of the National Institute for Clinical Excellence (NICE). The consultation draws together two policy elements prominent in recent UK government health-care policy: evidence-based medicine (EBM) and patient participation. As part of the Labour government's clinical governance agenda, NICE was launched in April 1999 with a remit to advise the National Health Service (NHS) in England and Wales on the clinical effectiveness and cost-effectiveness of health-care technologies and to produce guidelines

Patient participation in appraisals has been a learning process for both NICE and patient groups. NICE claims to treat all stakeholders equally, but patient groups feel that others such as health professionals, health economists, and the pharmaceutical industry have more influence. Thus attempts by NICE at pluralistic involvement may be hampered by structural constraints. By extending the



Risk Analysis, Vol. 16, No. 4, 2002

Deliberation: Integrating Analytical Results into Environmental Decisions Involving Multiple Stakeholders

George E. Apostolakis¹ and Susan E. Pickett²

A concern in utilizing deliberation in order to smooth out the differences among the stakeholders is that the technical issues often fall to the wayside, or

Risk Analysis, Vol. 16, No. 4, 2002

of attention than have participated in the past 30 years, as the inscription of technology and policy choices has become more participatory in a democratic society. This is particularly so in environmental decisions regarding the siting of contaminated sites. Risk assessments are often used to aid the decision maker however, due to the multidimensionality of risk and the fact that only its dimensions that refer to health and safety effects are usually analyzed, many decisions have been controversial. While balancing the magnitude of objectives in order to meet social needs, policymakers and the responsible agencies are faced with difficult choices. Traditionally, engineering measures, such as environmental

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Risk Analysis, Vol. 22, No. 1, 2002

Policy Analysis

A Model for an Analytic-Deliberative Process in Risk Management

ORTWIN RENN¹
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D-70565 Stuttgart, Germany

preferences. Without consensus on values, often appears to be the most needed that decision making, or new keywords are and co-decision. The popularity of communication, from building however, obscures the challenge of

A Procedural Evaluation of an Analytic-Deliberative Process: The Columbia River Comprehensive Impact Assessment

Aimee Giglietto Kinney¹ and Thomas M. Loehlin²

Risk Analysis, Vol. 15, No. 3, 2002

Deliberation: Integrating Analytical Results into Environmental Decisions Involving Multiple Stakeholders

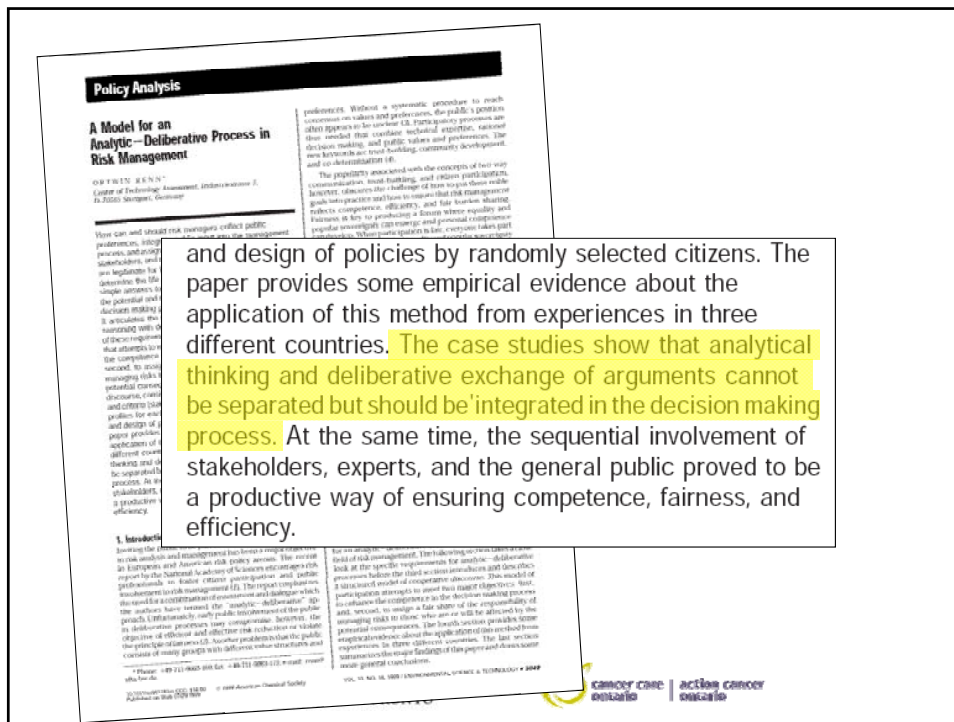
George E. Apostolakis¹ and Susan E. Pickett²

Deliberative mapping: a novel analytic-deliberative methodology to support contested science-policy decisions

Jacquelin Burgess, Andy Stirling, Judy Clark, Gail Davies, Makoto Emoto, Kristina Stealy and Suzanne Williamson

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Deliberative Approach

Democratic-Deliberative	Analytic-Deliberative
<ul style="list-style-type: none"> Participatory process Seeks input from stakeholder/public representatives regarding values and preferences Aim to encourage discussion and consideration of the evidence Recommendations are evidence-influenced 	<ul style="list-style-type: none"> Technical/participatory process Seeks to combine technical knowledge/expertise with stakeholder/public values and preferences Aim to improve understanding and comprehension of the evidence Recommendations are evidence-informed

Nature of evidence use

Abstract

This paper describes evidence-based priority setting and resource allocation undertaken by a Division of the Women's & Children's Hospital Adelaide during 1998-1999. We describe the methods used to combine program budgeting marginal analysis (PBMA), evidence based and "community values" approaches into one decision-making framework. Previous organisational changes involving the formation of multidisciplinary team and program management were pivotal in setting a framework to successfully complete the priority setting process.

absence of strong research evidence if government sees the need to respond to public concerns.

Australia and New Zealand Health Policy 2005, 2:17

necessary to have all the evidence in place to agree actions, that more radical policy change is much more difficult to achieve in the absence of established and detailed evidence, given the interests of important stakeholders, notably the private sector. The process and the outcomes of the Summit suggest that in the absence of strong Type 1 data, and where Type 2 evidence is contested, that policy-makers may opt for the path of least resistance: a call for more and better research and support for the systematic evaluation of interventions. While beneficial to researchers, direct and short term health gain may be limited.

Australia and New Zealand Health Policy

Research
An Australian childhood obesity summit: the role of data and evidence in 'public' policy making
 Nathan SA¹, Devclin E, Grove N¹ and Zwi AB¹

Address: ¹School of Public Health and Community Medicine, the University of Queensland
 Chronic Disease Prevention and Control Laboratory

Open Access

obesity. It raised awareness in the public and political arena and provided a public forum for debating research evidence. The Summit demonstrated that while it is not

Particular attention. The type of evidence used was categorised into three types based on a model adapted from Bowen & Zwi [4] who outlined five types of evidence. The categorisation used in the current study were empirical research (Type 1), such as randomised controlled trials, case control and cohort studies, time series analyses, observational studies, case reports and qualitative studies; ideas and opinions (Type 2) which incorporated the two categories of 'knowledge and information' and 'ideas and interests' outlined by Bowen & Zwi, and included evidence such as the results of consultation processes, opinions and views of "experts", interest groups and community members; and economic data (Type 3) which focused on economic evaluation, finance and resource implications.

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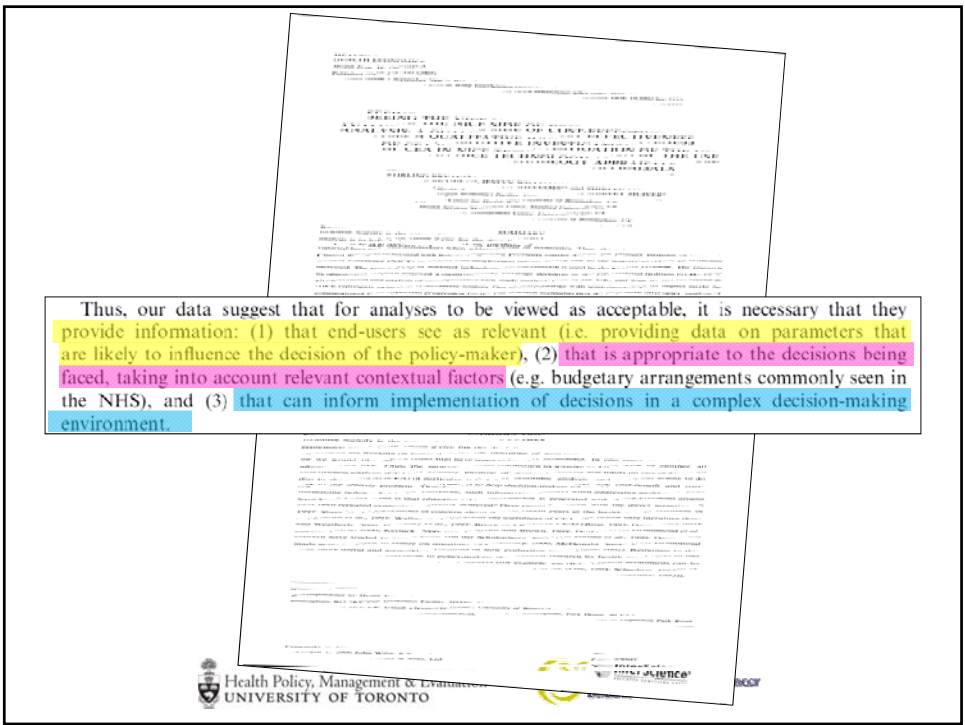
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Nature of Evidence Use

Informal-Implicit	Formal-Explicit
<ul style="list-style-type: none"> Introduction of evidence often through informal channels (e.g., through general discussion) Interpretation of evidence based on expert assessment/evaluation Combination of evidence through unstructured deliberation The recommendation rather than the evidence is the main focus of the process 	<ul style="list-style-type: none"> Introduction of evidence primarily through formal processes resulting in broad/diverse evidence base Interpretation of evidence based on formal assessment tools (e.g., GRADE, evidence hierarchies) Combination of evidence based on formal weighting criteria The evidence rather than the recommendation is the main focus of the process

Decision proximity



Thus, our data suggest that for analyses to be viewed as acceptable, it is necessary that they provide information: (1) that end-users see as relevant (i.e. providing data on parameters that are likely to influence the decision of the policy-maker), (2) that is appropriate to the decisions being faced, taking into account relevant contextual factors (e.g. budgetary arrangements commonly seen in the NHS), and (3) that can inform implementation of decisions in a complex decision-making environment.

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... **published evidence lags a long way behind actual knowledge... it's important that we don't develop a wonderful evidence-based system which is fifteen years out of date... we've got to be very responsive in our plans to current developments.** (INT 8)

This was echoed by another interviewee who was concerned about a purely evidence-based approach:

We have developed a process which integrates evidence-based processes. This has been used to develop priorities. Everyone felt that the right priorities were identified, although there remained some lack of clarity about how they were derived. **There was also a concern that they are insufficiently owned to be actively taken forward.** Proof of the value of this process comes from the way in which district resources have already been harnessed to implement the priority areas identified. For example, hyper-

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Patients' influence

Stakeholder participation in health research agenda setting: the case of asthma and COPD research in the Netherlands

J Francisca Caron-Finsterman, Jacqueline E W Bruerse, Julia Teurling, Melissa L Y van Alst, Simon Klaassen, L Edwin Swart and Joske F G Buijkers

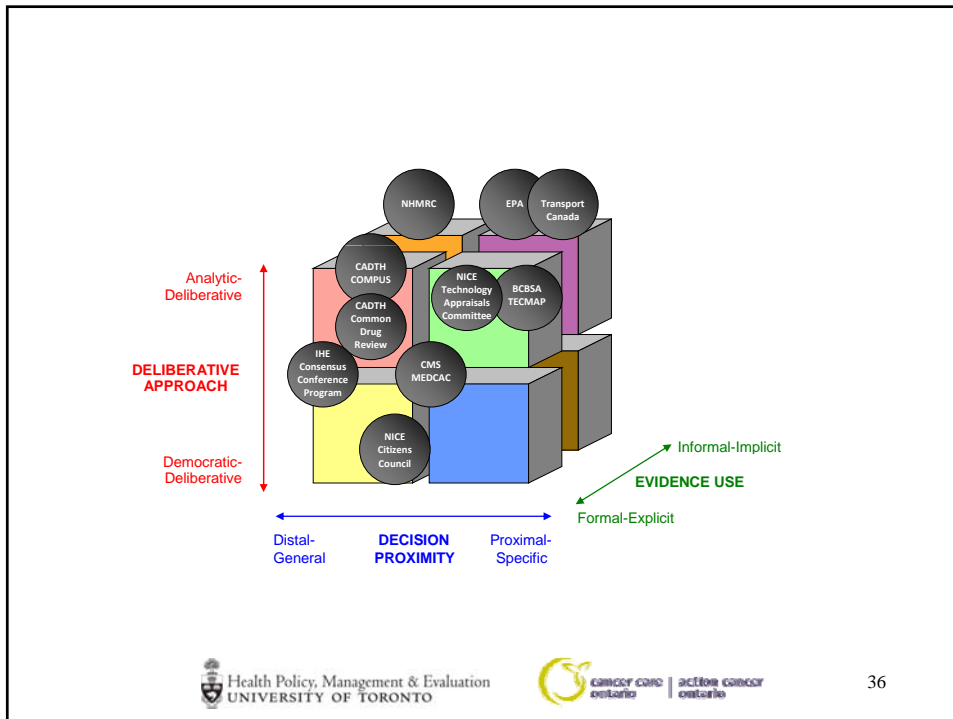
Independent and unbiased management The process management was in the hands of staff members of the Athena Institute who were all independent from both the Asthma Foundation and stakeholders as well as unbiased with reference to asthma and COPD research.

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Decision proximity

Distal-General	Proximal-Specific
<ul style="list-style-type: none"> Decision context is general, theoretical Key decision-maker audiences not always clearly identifiable Relevant decision-making contexts are heterogeneous External to decision-making process Unlikely to be linked to a specific decision outcome Addresses 'global' issues including values and preferences Context-specific evidence not sought Generates/combines evidence 	<ul style="list-style-type: none"> Decision context is specific, operational Key decision-maker audiences clearly identifiable Relevant decision-making contexts are homogenous Linked to, or embedded within, decision-making process Likely to be linked to a specific decision outcome Addresses 'local' issues including effectiveness, feasibility and implementation Context-specific evidence sought Combines evidence



Conclusions

- What do we know about the effectiveness of deliberative methods for combining different types of evidence?
 - Identified numerous examples where deliberative methods are used in policy guidance processes.
 - However, there were only a handful of examples explicitly using deliberative methods to combine heterogeneous evidence, with a paucity of empirical work directly assessing their effectiveness.
 - The health sector has more established deliberative processes than other sectors, however work in the field of environmental policy provided important insights on the role of deliberative methods for combining heterogeneous evidence.
- Ultimately, we identified 3 key factors that influence how deliberative methods contribute to the combining of different types of evidence:
 - **Deliberative approach:** democratic vs. analytic
 - **Nature of evidence use:** formal /explicit vs. informal/implicit
 - **Decision proximity:** proximal-specific vs. distal-general

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