



Centre de collaboration nationale
sur les politiques publiques et santé

National Collaborating Centre
for Healthy Public Policy



National Collaborating Centre
for Methods and Tools

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Dealing with Complex Public Health Issues Using an Evidence-Informed Approach

Jackie Muresan and François-Pierre Gauvin

TOPHC, April 3, 2012



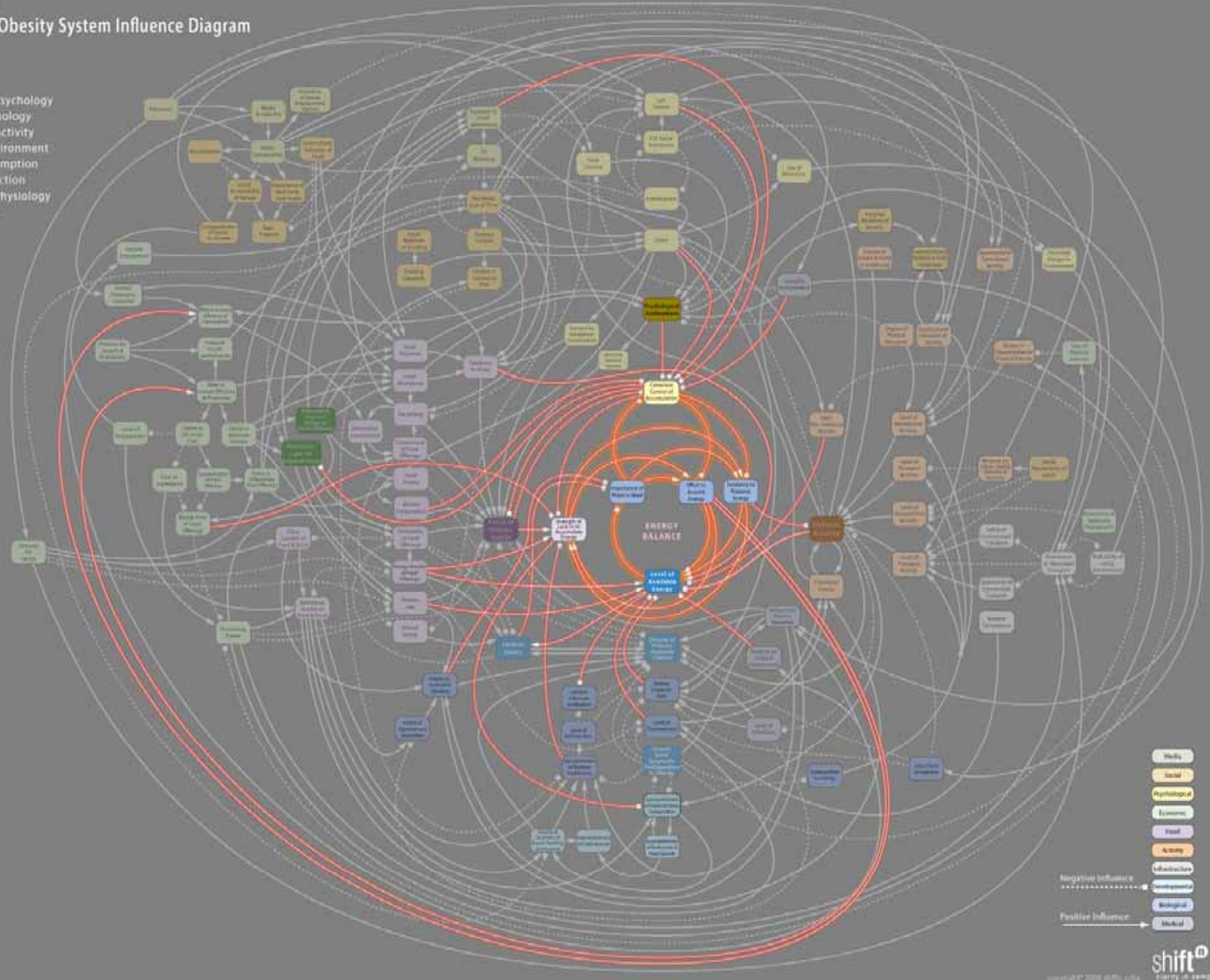
Governments must tackle complex public health problems.

e.g. health inequalities, obesity, climate change, bed bugs....



shift^o Obesity System Influence Diagram

- Full Map
- Clusters
- Know Loop
- Individual Psychology
- Social Psychology
- Individual Activity
- Activity Environment
- Food Consumption
- Food Production
- Individual Physiology
- Physiology



Individual Psychology
Social Psychology
Individual Activity
Activity Environment
Food Consumption
Food Production
Individual Physiology
Physiology

Negative Influence
Positive Influence

Individual Psychology
Social Psychology
Individual Activity
Activity Environment
Food Consumption
Food Production
Individual Physiology
Physiology

shift^o
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clarity in complexity

Understanding change processes*: where effectiveness meets evidence

- Focus on areas with high certainty and high agreement
- Understand and utilize effective change processes



SAFER • HEALTHIER • PEOPLE™



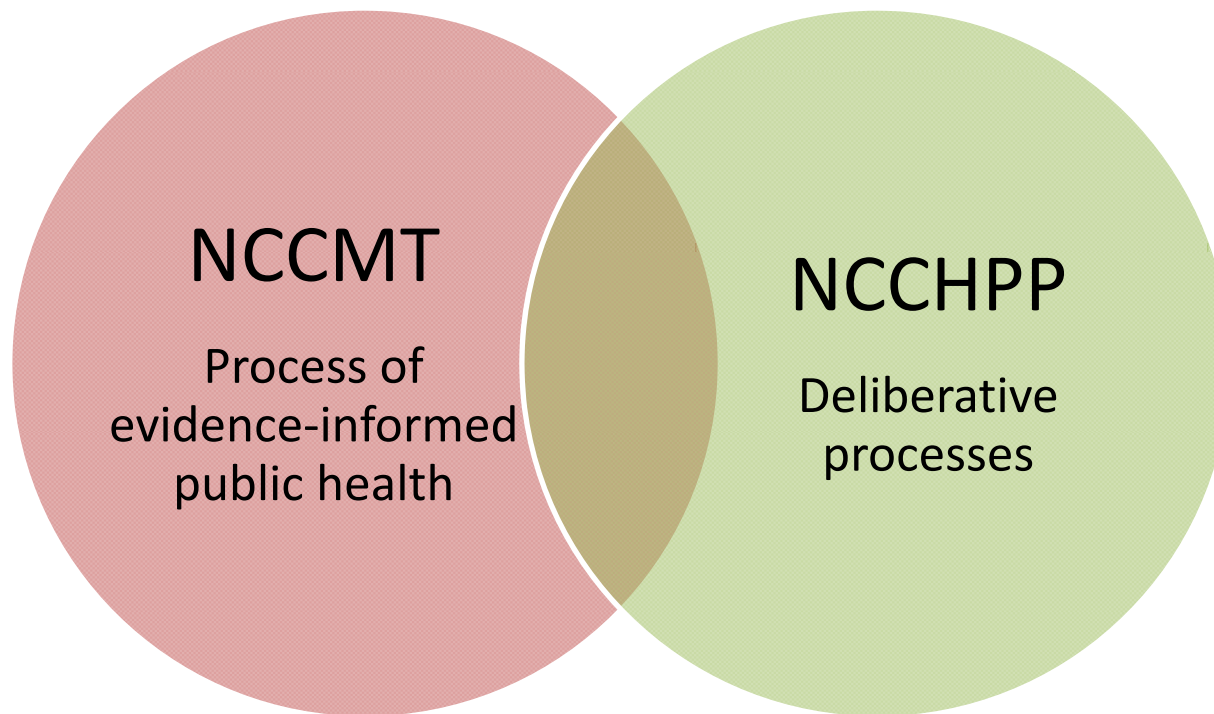
Source: McQueen DV. (2006). *From Bangkok to Vancouver through Budapest*. IUHPE 7th European Conference on Health Promotion and Health Education. Budapest (adapted from Ralph D. Stacey).

A few assumptions about the world we live in...

1. We are facing complex public health problems and there is often no agreed upon definition of these problems
2. There is a lot of uncertainty about the most effective policy options to address these problems and their implications (e.g. unintended effects, feasibility, costs, acceptability, equity, etc.)
3. There is often disagreement about how we should address these problems

We need mechanisms...

1. To develop a shared understanding of these problems
2. To better understand what policy options work and in what context
3. To reach agreement and trigger action



A strategy to address complex public health problems



Objectives

- Provide an overview of the steps of evidence-informed public health.
- Explore the application of deliberative processes to assist with evidence-informed decision-making.



Who are we?

Two of six National Collaborating Centres for Public Health created by the Government of Canada to renew and strengthen public health.



National Collaborating Centres
for Public Health

Centres de collaboration nationale
en santé publique



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**NCC
Determinants
of Health**

Antigonish, NS



**NCC Healthy
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Montreal and
Quebec City, QC



Aims of the National Collaborating Centres

- Increase awareness of new and existing knowledge.
- Identify and help address public health priorities.
- Collaborate with established public health networks.
- Identify gaps in knowledge and relevant applied research.



National Collaborating Centres
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- Support public health actors in their efforts to **promote healthy public policies**

Topics

- Deliberative processes
- Health impact assessment
- Strategies to influence policy making
- Knowledge translation methods





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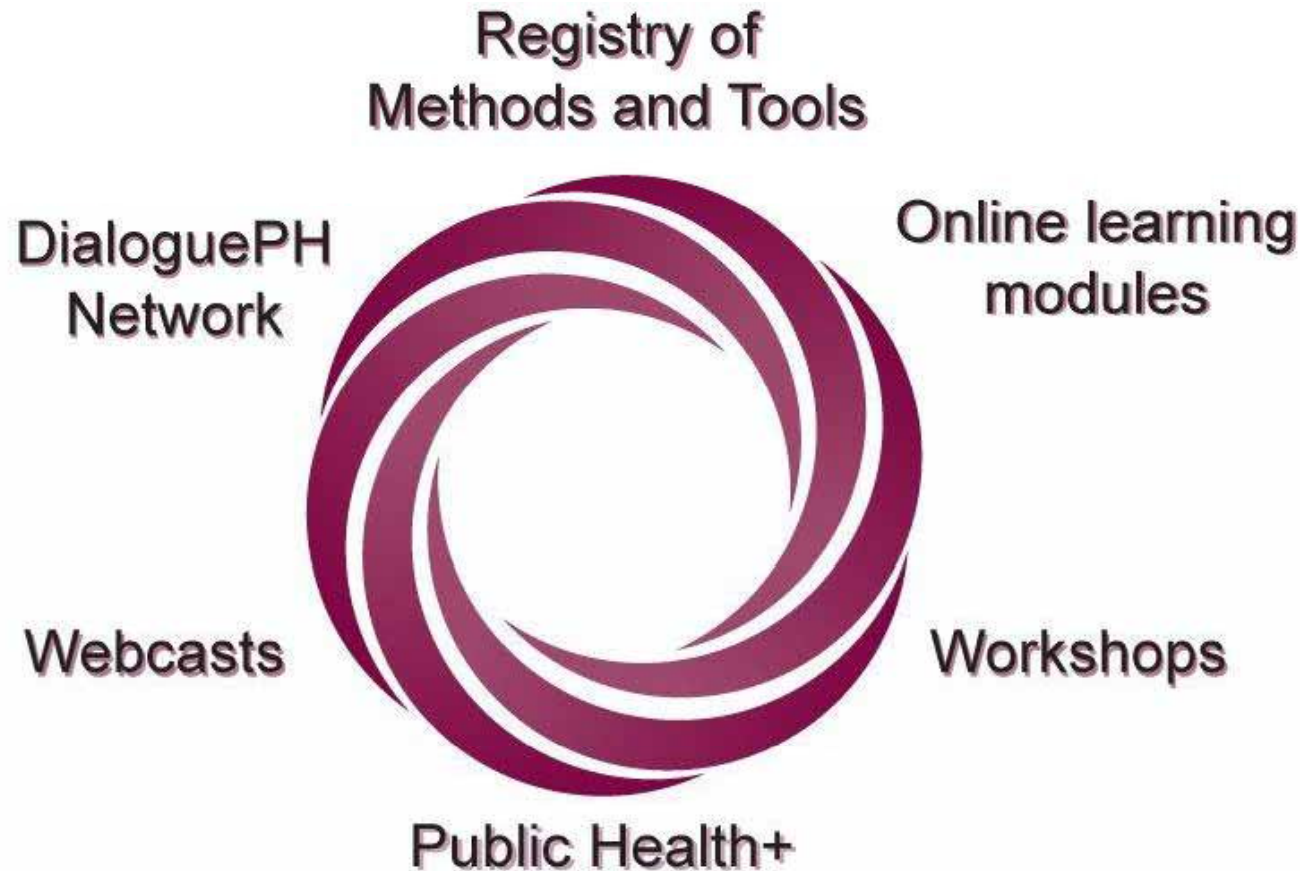
Methods and tools for sharing what **works** in public health

Goals

- Develop the organizational capacity and individual skills of those involved in public health to share what works in public health.
- Identify, develop and evaluate relevant methods and tools for knowledge translation
- Build active and sustainable networks that enable public health professionals, policy makers and researchers to share what works.



NCCMT Products and Services



What is

Evidence-Informed Decision Making in Public Health?

In addition to the best available research evidence, evidence-informed decisions in public health consider valuable evidence from a variety of sources:

- community health issues and local context
- existing public health resources
- community and political climate



What is

Evidence-Informed Decision Making

in Public Health?

Decision makers must rely on their public health expertise to integrate all relevant factors into any conclusions or recommendations.



A Model for Evidence-Informed Decision-Making in Public Health



What is Evidence-Informed Public Health?

... the process of distilling and disseminating the best available evidence from research, context and experience, and using that evidence to inform and improve public health policy and practice.

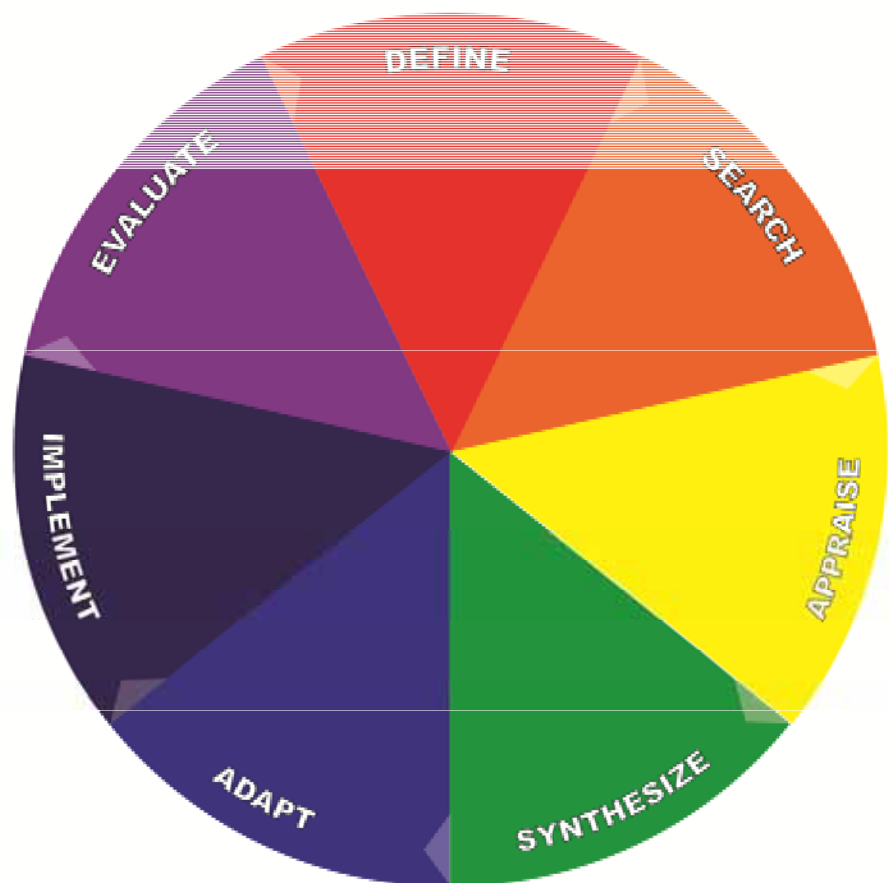


What is Evidence-Informed Public Health?

Put simply, it means finding, using and sharing what works in public health.



Stages in the process of Evidence-Informed Public Health



Have you had an experience with trying to move research evidence into practice?



What is a “deliberative process”?



Deliberation

1. thoughtful, careful, or lengthy consideration
2. formal discussion and debate, as of a committee, jury, etc
3. care, thoughtfulness, or absence of hurry, esp. in movement or speech



Abelson (2010) on ‘deliberative processes’

“Individuals with different backgrounds, interests, and values listen, learn, and potentially persuade and ultimately come to more reasoned, informed, and public spirited judgments”

*Abelson, J. (2010) *Délibération publique et gouvernance démocratique: Théories, pratiques, et données probantes*, Journées annuelles de santé publique, Montréal, March 12 (Online): http://www.ncchpp.ca/docs/DeliberationJASP2010_AbelsonEN.pdf à



Why deliberate?



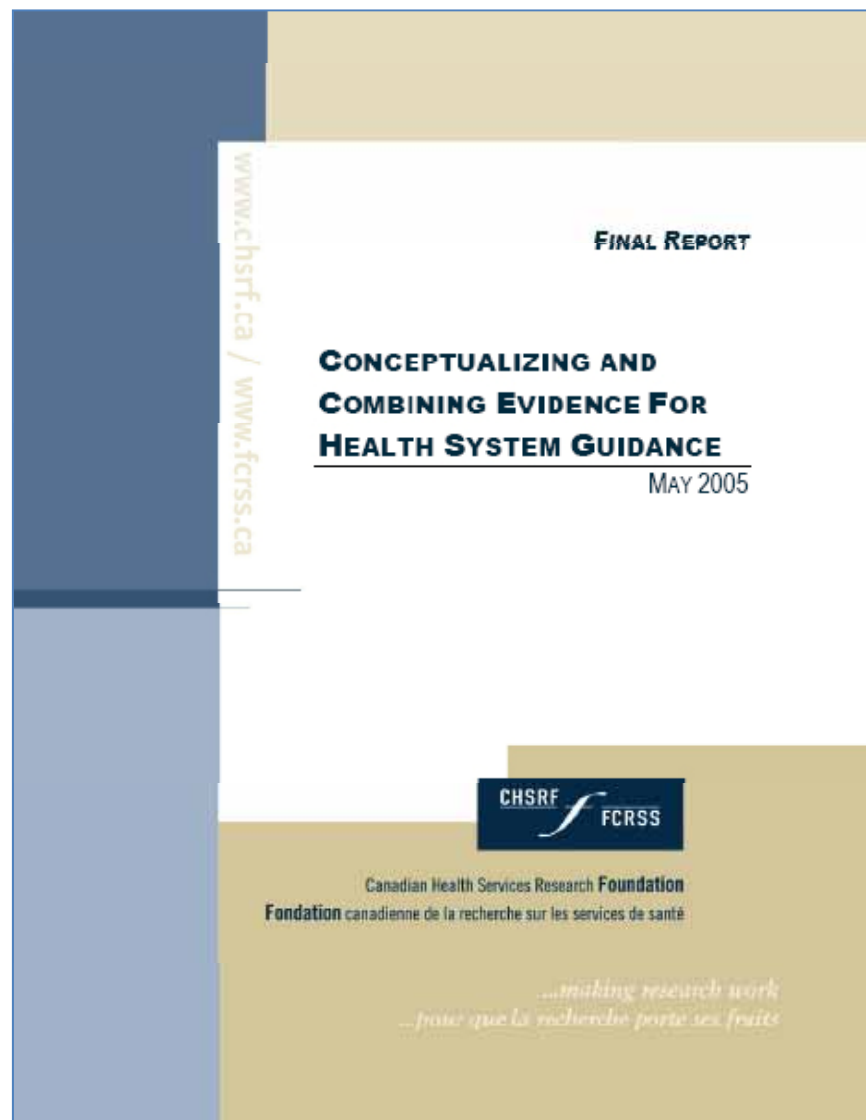
1. Deliberation can help to develop a shared understanding of a problem



2. By tapping into stakeholder's knowledge, a deliberation helps to contextualize the literature and collect new evidence

3. Deliberation is a promising knowledge translation (KT) strategy to facilitate or trigger evidence-informed actions





PERSPECTIVES ON EVIDENCE, SYNTHESIS AND DECISION-MAKING

Moving Forward on Both Systematic Reviews and Deliberative Processes

Aller de l'avant avec les examens systématiques et les processus de délibération

by JOHN N. LAVIS, MD, PHD

Member, Centre for Health Economics and Policy Analysis
Associate Professor, Department of Clinical Epidemiology and Biostatistics
Associate Member, Department of Political Science
McMaster University, Hamilton, Canada

Abstract

Systematic reviews are increasingly seen as helpful "knowledge support" for managers and policy makers, and deliberative processes are starting to be seen as promising, locally contextualized "decision support." Increases to the flow of systematic reviews should be complemented by efforts to facilitate the retrieval, and adapt the presentation, of the available stock of systematic reviews. Research and other evidence should be combined in transparent ways to facilitate cross-context learning. The challenge for managers and policy makers in moving forward will be to avoid the confusion that comes from the branding of both systematic reviews and deliberative processes.

CIHR's 'integrated KT'

- Stakeholders are **engaged in the entire research process**
- Researchers and stakeholders work together **to shape the research process**
- Produce research findings that are more likely be **relevant to and used by the end users**

Soure: <http://www.cihr-irsc.gc.ca/e/39033.html>



Address some of the factors that have been identified as ways to support the translation of research evidence into action:

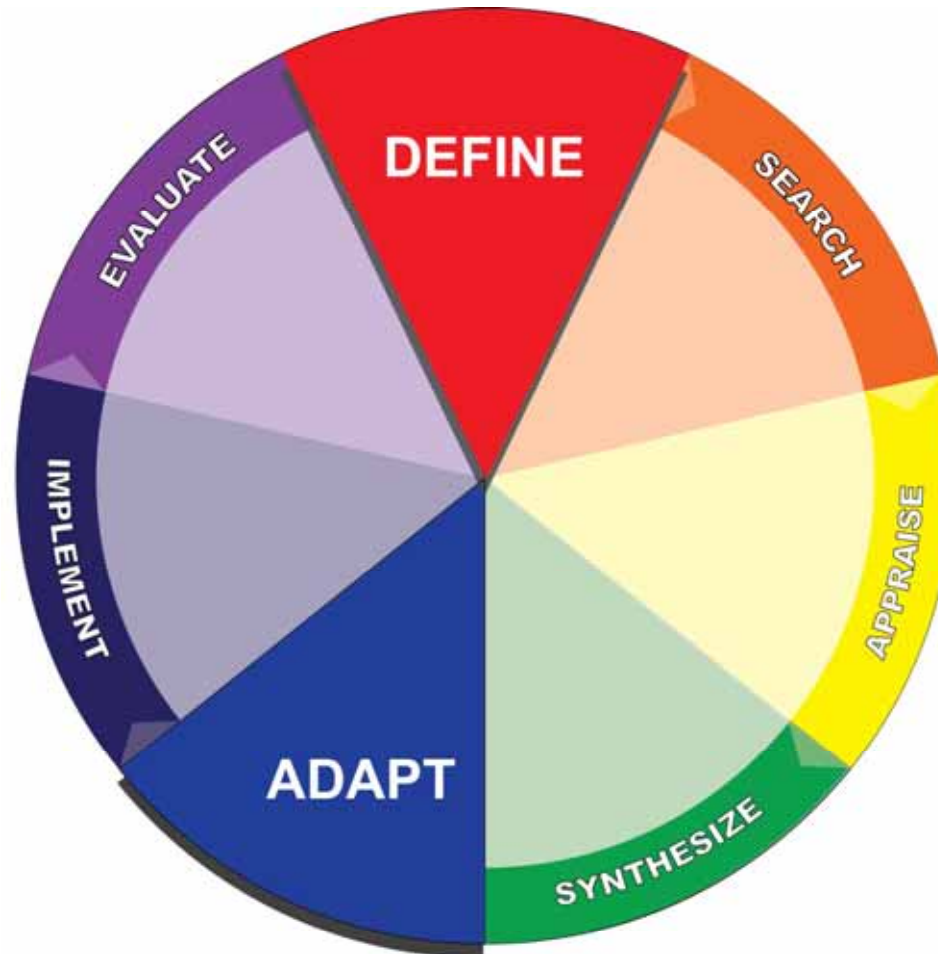
1. **increase interaction** among policy makers and researchers
2. respond in a timely way to a '**window of opportunity**'
3. enable all participants to **understand how existing research evidence does or does not align** with the existing beliefs, values, interests or political goals of key stakeholders

When to deliberate?



Stages in the process of

Evidence-Informed Public Health



Our approach proposes to deliberate with stakeholders at two stages (define and adapt), but there is value in engaging stakeholders at other stages as well...

- CIHR's integrated KT
- CIHR's citizen engagement framework
- Cochrane Consumer Network



Who should deliberate?



Who should deliberate in the process of Evidence-Informed Public Health?

Only public
health
practitioners?



Who should deliberate in the process of Evidence-Informed Public Health?



Who should deliberate?

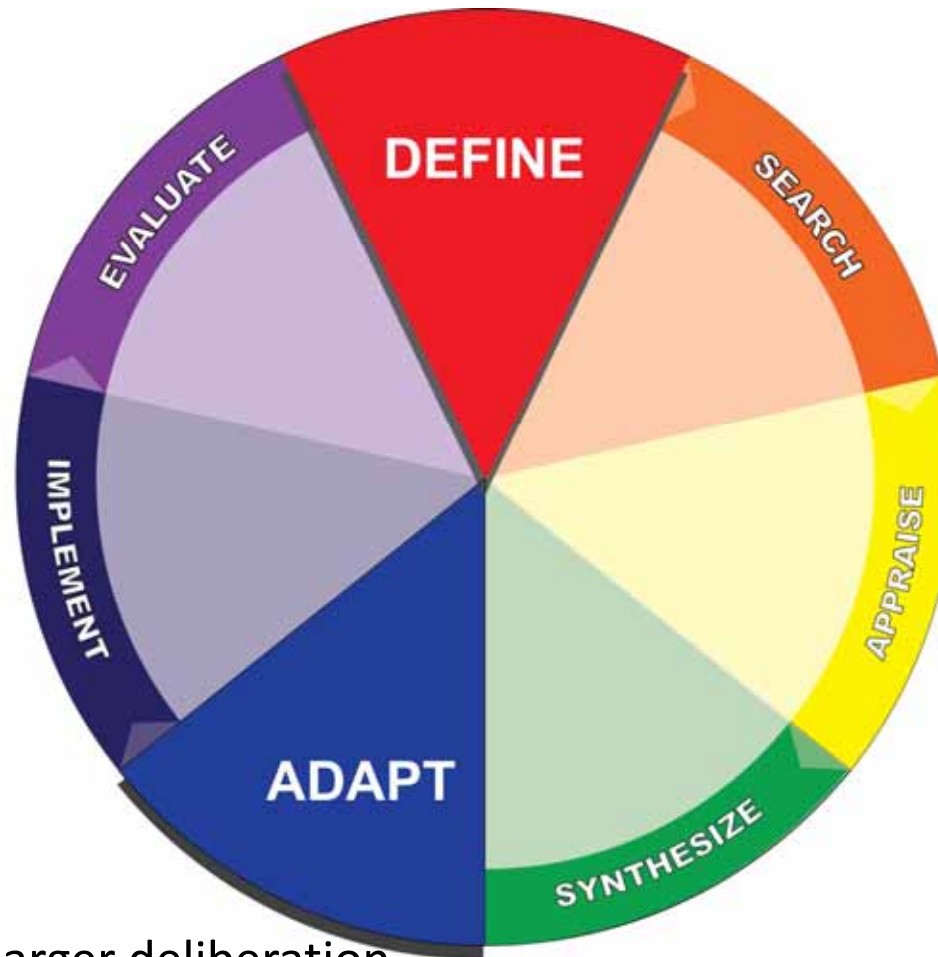
1. Those who are **affected** by the problem and the options
2. Those who can **facilitate or trigger action**
3. Those who are **knowledgeable** about the problem and the options



How many people should deliberate?



Smaller deliberation
(6 to 12)

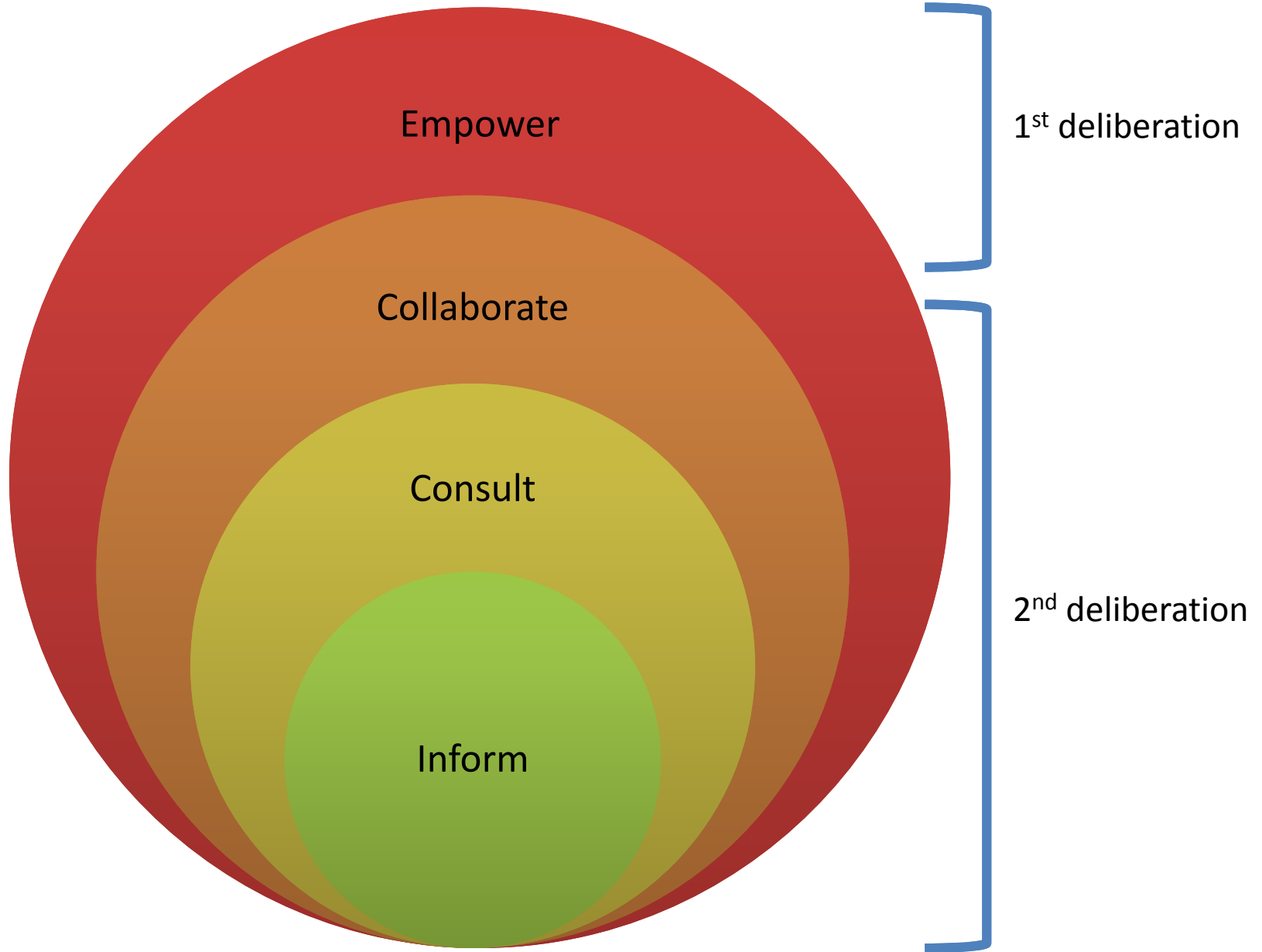


Larger deliberation
(12+)



What is their degree of influence?





What are the key procedural features of a deliberative process?

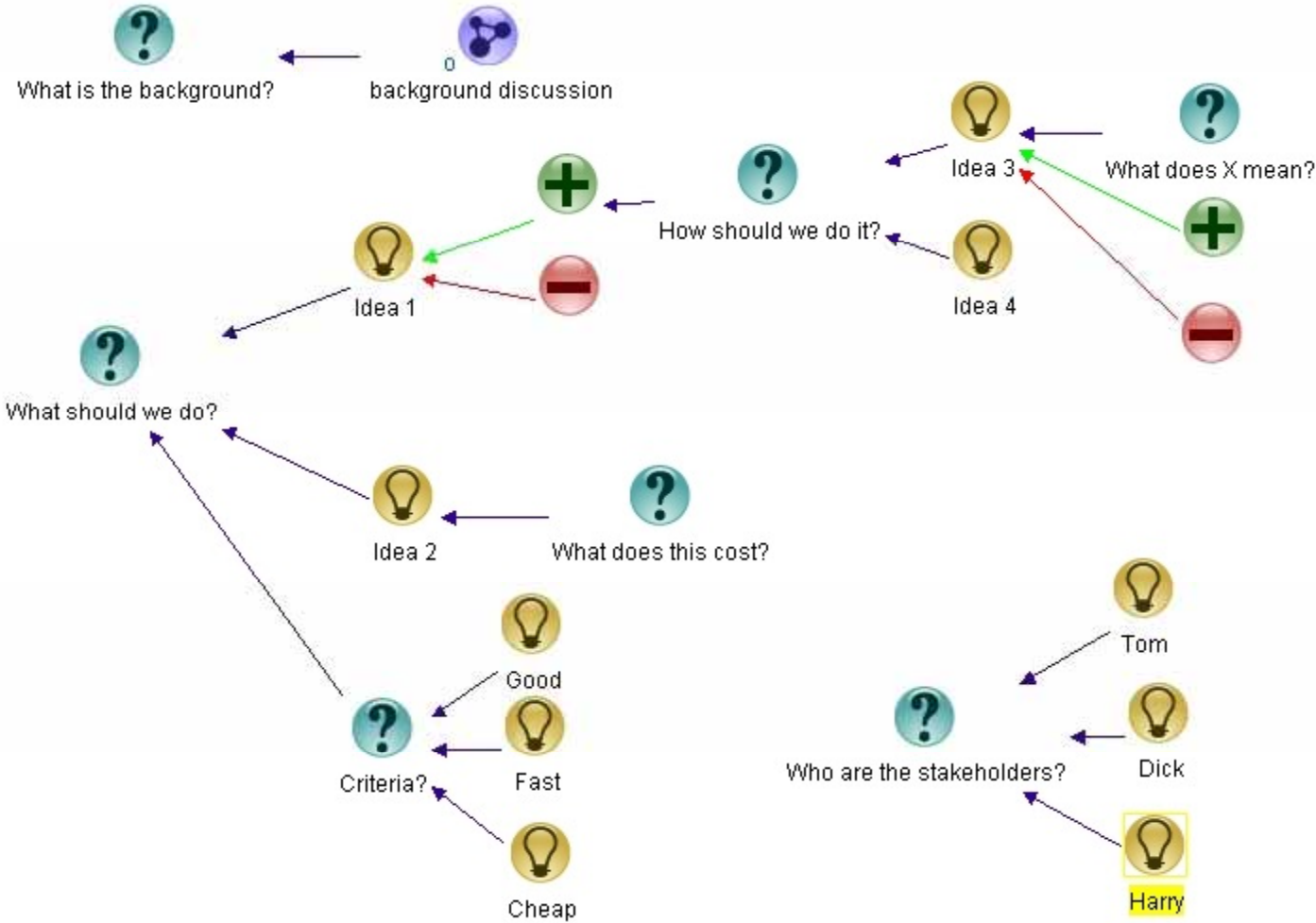


Procedural features

1. the **provision of information** to participants about the problems/options being discussed
2. the opportunity for **interactive discussion** among participants (with or without a facilitator)
3. an explicit process for **collecting individual and collective input** (e.g., observers, pre-post questionnaires, dialogue mapping)



Dialogue mapping (cognexus.org)



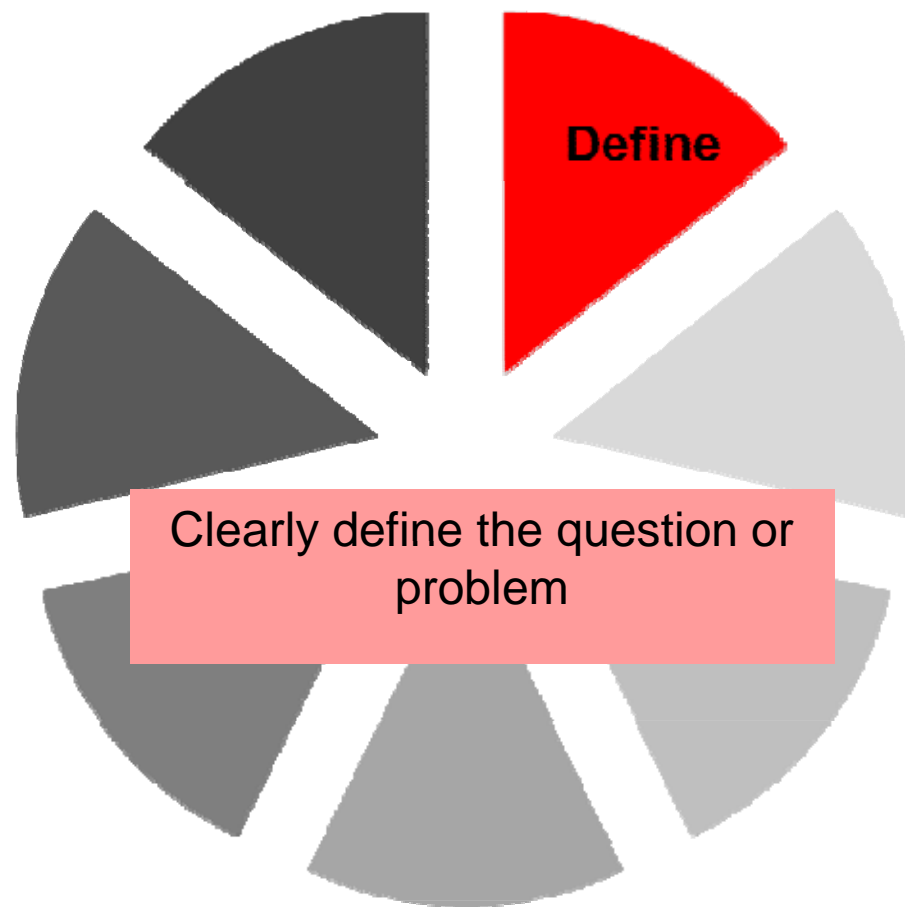
Have you been involved in a deliberative process before?



Stages in the process of Evidence-Informed Public Health



Stages in the process of Evidence-Informed Public Health



Define the question

- Why does it matter?



Define the question

P opulation

I ntervention

C omparison

O utcome



Scenario

- Public health manager
- Concerned about food security for families with young children.
- Survey of the region indicates newcomers to Canada living in low income neighbourhoods at highest risk.



Issue

“**Food security** exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life....and requires an available and reliable food supply at all times”

Agriculture and Agri-Food Canada (1998). Canada's Action Plan for Food Security: A Response to the World Summit. Ottawa: Agriculture and Agri-Food Canada



A deliberation to define the problem

- You invite a **small group of stakeholders** (6-12) to help you define the problem (your new friends around the table!)
- You **provide some background information** to participants about the problem which will serve as a starting point to **interactive discussion**
- The group **tries to achieve consensus** over the definition of the problem and the scope of work necessary
- **Individual and collective input** are gathered using a computer assisted dialogue mapping exercise (how fancy!) or simply by having a note-taker (it's good enough)



Small group work

Introduce yourselves in your small group.

Take 10 min to clearly define the question(s) your group may have from part 1 of the scenario using the PICO format.

P opulation

I ntervention

C omparison

O utcome



Defining the question

An example:

P: School aged children (4-12 years old)

I: School nutrition/feeding programs

C: No intervention

O: self-reported hunger, consumption of fruits and vegetables, height and weight, academic performance.



Defining the question

An example:

P: Low income neighbourhoods

I: Interventions to improve retail access to low cost culturally acceptable healthy foods.

C: No intervention

O: Availability of affordable nutritious foods, food purchasing, or self-reported food consumption.



Small group work

Review part 2 of the scenario.

- *Were your PICO questions similar or different from the two options that were identified?*
- *Who should be involved in a discussion to define the problem in this scenario and what implications will this have for the options that are considered?*



What interventions would be most effective to improve food security among new immigrant families living in low income neighbourhoods?

Focused questions

Do school meal programs have an impact on hunger, nutritional status, height and weight gain or academic performance among disadvantaged students ?

What is the effect of monetary incentives for disadvantaged households on food purchases or consumption of nutritious foods?

Focused questions

Does modifying the food environment to increase availability of healthy affordable food at stores in low income neighbourhoods impact food purchasing or consumption of healthy foods among high risk families?

Among disadvantaged families, can community gardens improve access to healthy culturally appropriate foods, engage community members in food production and impact consumption of healthy foods ?

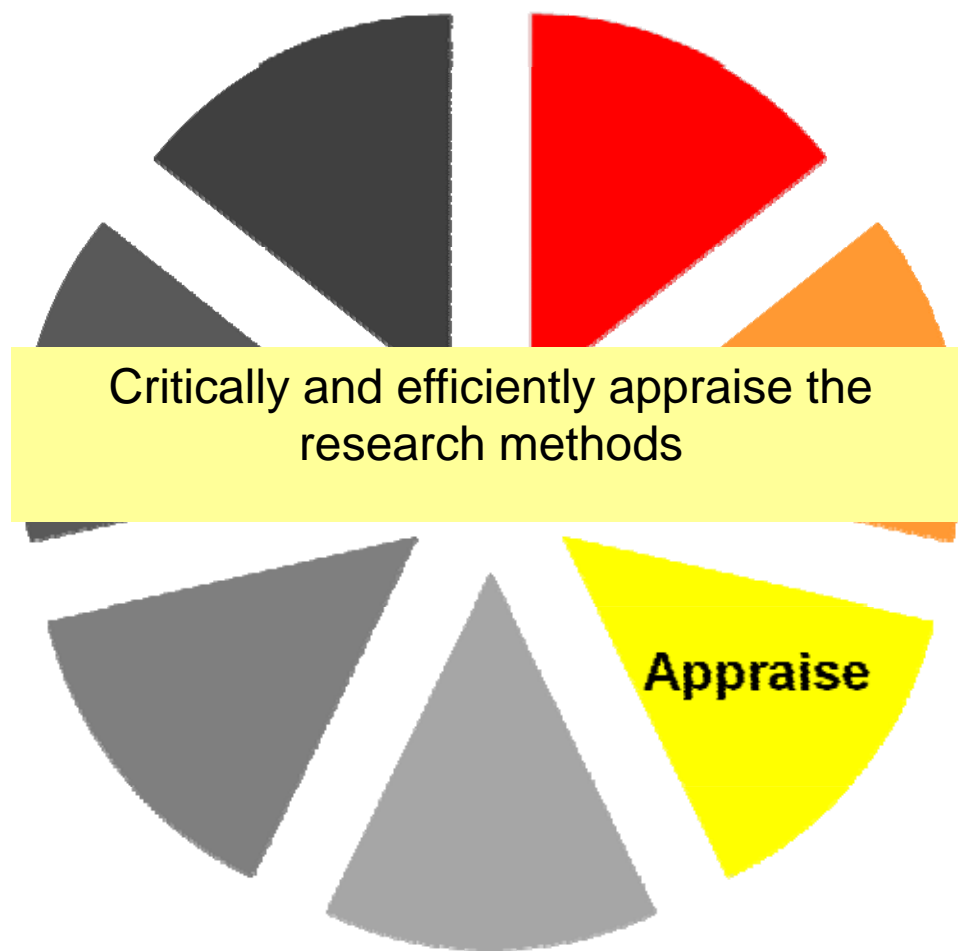
- *Will the answer to one of these clearly defined questions actually make a difference to the problem described in the scenario?*
- *Are we too focused?*



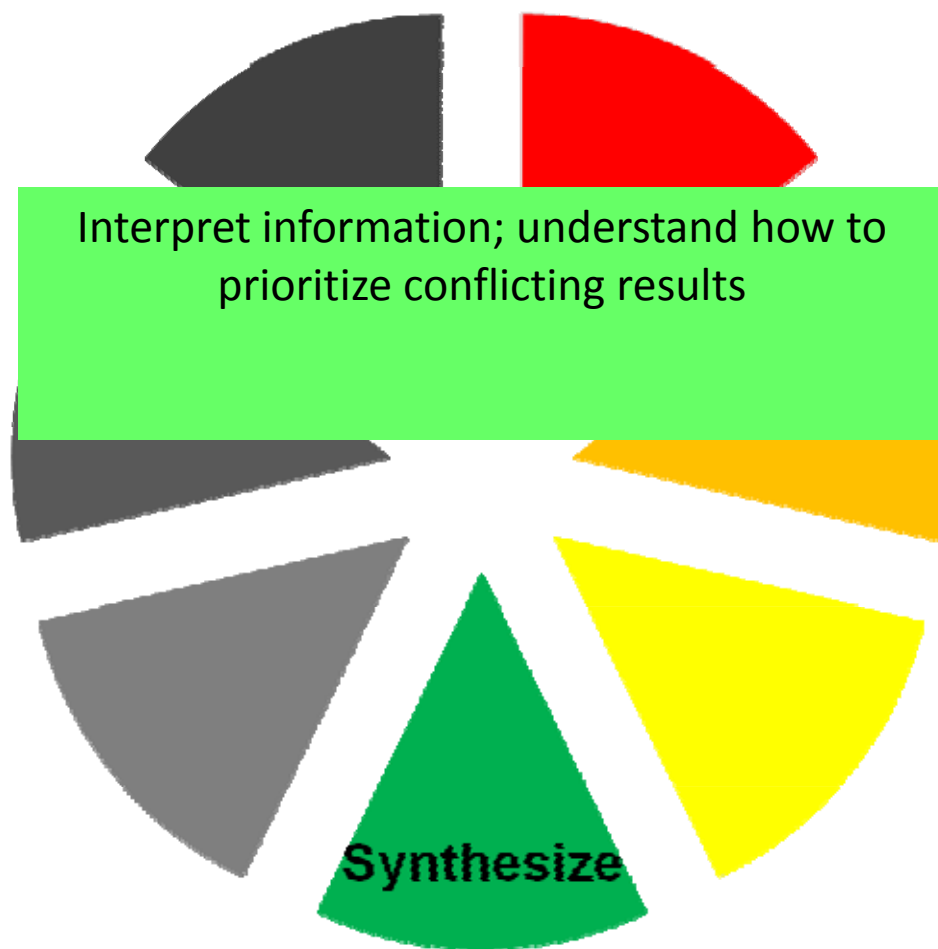
Stages in the process of Evidence-Informed Public Health



Stages in the process of Evidence-Informed Public Health



Stages in the process of Evidence-Informed Public Health



Some evidence relevant to the scenario

- In developed countries, school feeding programs may lead to a small increase in weight gain among disadvantaged students but have no clear effect on school attendance or academic performance
- Conflicting evidence from studies about relationship between retail access to nutritious low cost food and household food security.

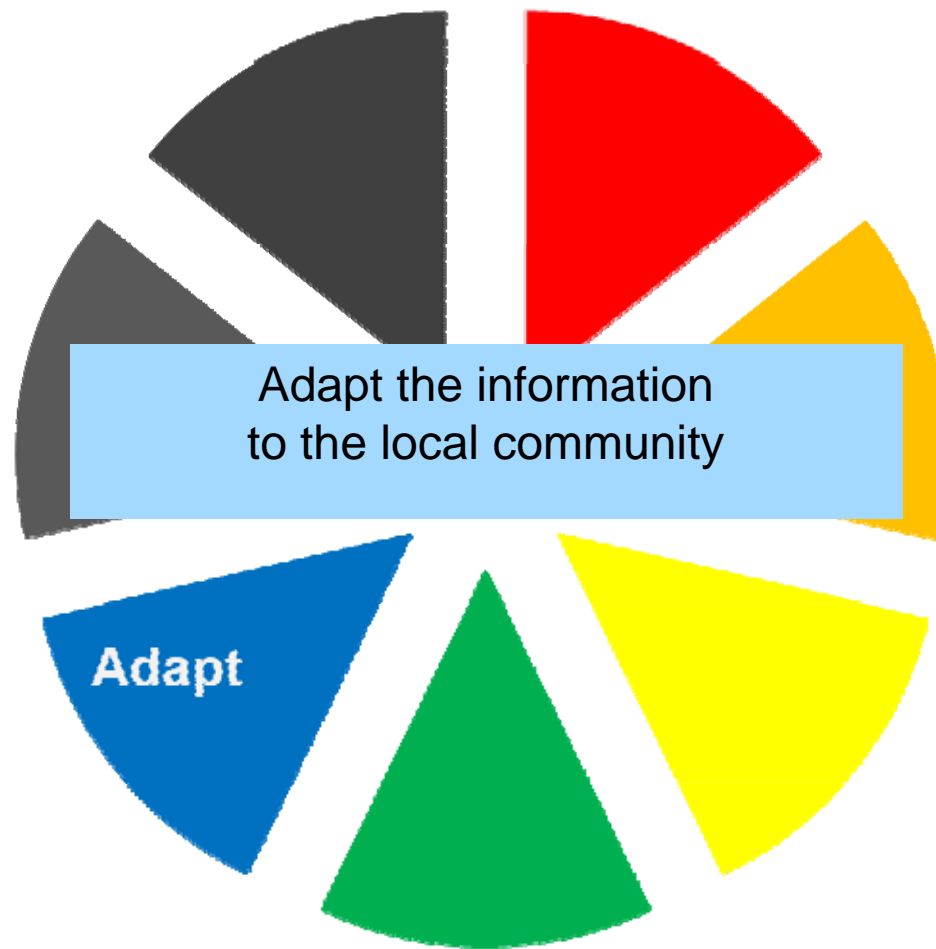


Some evidence relevant to the scenario

- Cochrane systematic review in progress about the effectiveness of community level interventions to improve food security in developed countries.
- CIHR funded project underway to identify attributes of effective policy interventions to address household food security in Canada.



Stages in the process of Evidence-Informed Public Health



You have FINALLY completed the search, appraisal, and synthesis of the literature...

But you are still concerned about certain things...

You are concerned about...

Robustness of the evidence

The « evidence » is limited or is not robust.

Issues are not well-documented

There are perhaps certain issues that are not identified or addressed in the literature.

Applicability and transferability

You do not know if the knowledge from the literature is applicable to your own context.

A deliberative process

can enrich and contextualize your research synthesis

A Model for Evidence-Informed Decision-Making in Public Health



A deliberation to define the problem

- This time, you invite a **larger group of stakeholders (20-25)**, people who are affected by the problem and the option, as well as people who are knowledgeable and could fill the gaps from the literature
- You **provide the research synthesis** to participants (at least 2 weeks in advance), that will be the starting point to **interactive discussion**
- The group **critically examine the problem** and whether the research evidence is **applicable and transferable**
- **Individual and collective input** are gathered





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Search

sharing what **works**
in public health

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Publications

Can I Use This Evidence in My Program Decision? Assessing Applicability and Transferability of Evidence (A & T tool)

Type: Paper

Year: 2007

This paper contains a summary of the current literature, including a process to help you evaluate the feasibility and generalizability of evidence to your public health practice. The associated tool (included in paper) or the revised (2011) tools (available separately below) help you make decisions about program priorities in your own community. Also referred to as A&T / A+T Tool.

How to cite this paper:

Buffet, C., Ciliska, D., & Thomas, H. (2007). Can I Use This Evidence In my Program Decision? Assessing Applicability and Transferability of Evidence. Hamilton, ON: National Collaborating Centre for Methods and Tools.

How to cite the revised tool:

Buffet, C., Ciliska, D., & Thomas, H. (2011). It worked there. Will it work here? Tool for Assessing Applicability and Transferability of Evidence (A: When considering starting a new program). Hamilton, ON: National Collaborating Centre for Methods and Tools.

Buffet, C., Ciliska, D., & Thomas, H. (2011). It worked there. Will it work here? Tool for Assessing Applicability and Transferability of Evidence (B: When considering stopping a now program). Hamilton, ON: National Collaborating Centre for Methods and Tools.

[Paper](#)

[Tool - A starting an intervention](#)

[Tool - B stopping an existing program or intervention](#)

Small group work

Take 5 minutes to review the tool for assessing the Applicability and Transferability of evidence.

Discuss:

- *How could this tool be useful to the situation described in the scenario?*
- *How could this tool be incorporated into a deliberative process?*
- *Who should be around the table?*



Stages in the process of Evidence-Informed Public Health



Stages in the process of Evidence-Informed Public Health

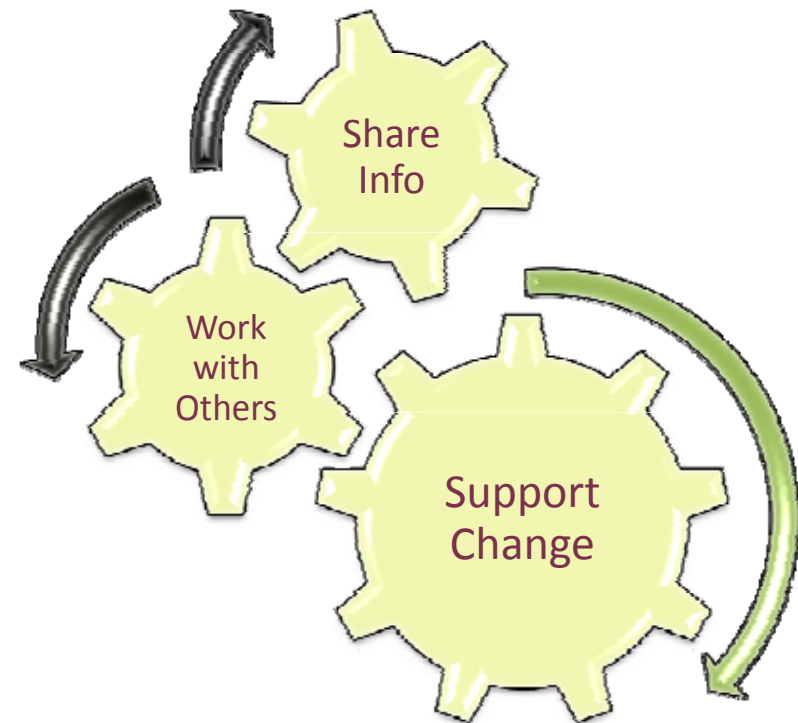


Registry of Methods and Tools

A free, searchable online collection of **knowledge translation** methods and tools for public health

The Registry contains **summaries** of, **references** for, and **web-links** (where available) to methods and tools.

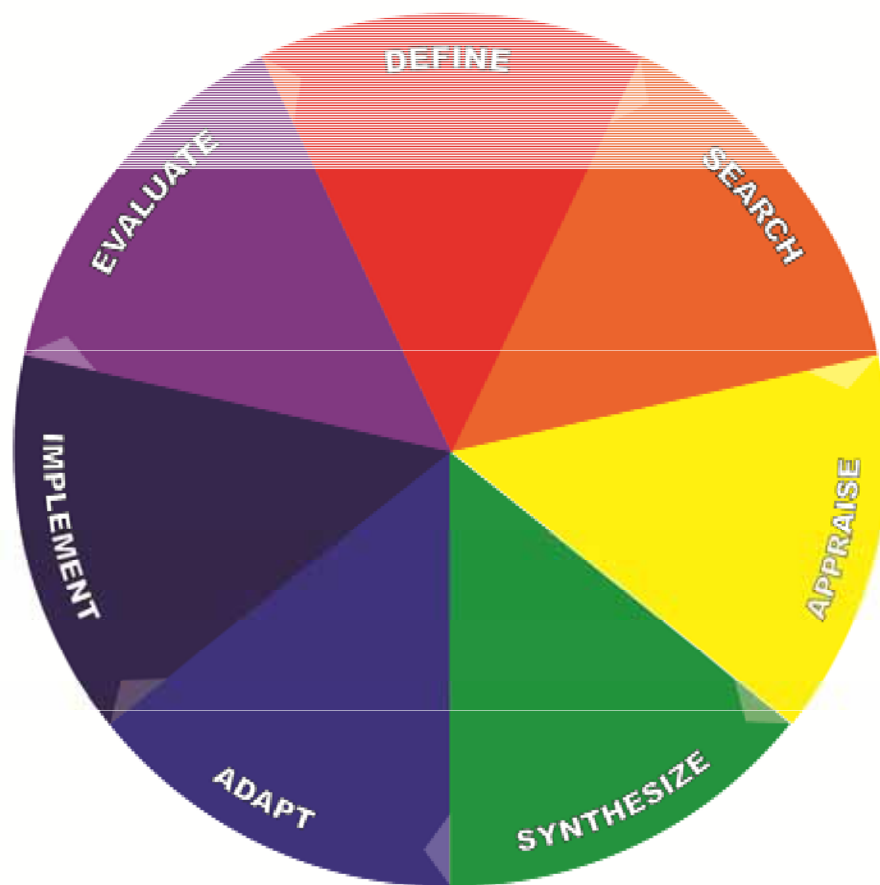
Find resources to assist you with implementation and evaluation



Wrap up



Stages in the process of Evidence-Informed Public Health



Step '0'

Reflecting on areas of uncertainty

- Examine your work critically.
- Acknowledge uncertainty.
- Formulate questions and seek and use research evidence in decision making.

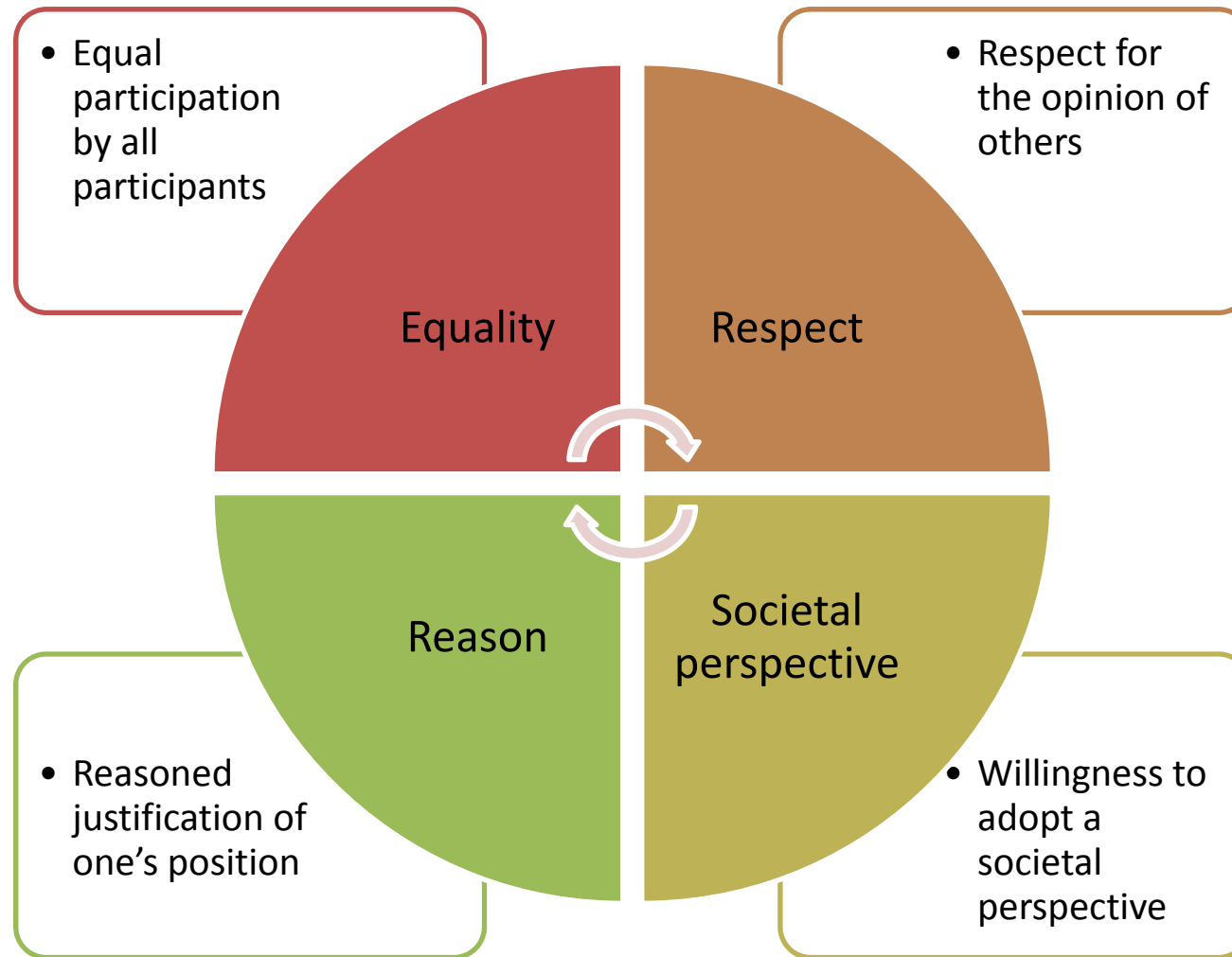


Deliberation is really promising,
but it's no panacea...



Evaluating the 'quality' of deliberation

[De Vries et al., 2010]



Reference: De Vries, R., Stanczyk, A. et al. (2010). Assessing the quality of democratic deliberation: A case study of public deliberation on the ethics of surrogate consent for research. *Social Science and Medicine*, 70, 1896-1903.



From your perspective, what are the **benefits and limitations** of using this combined approach in your work?



What **support, resources, and access to expertise**
would you need to move forward?



Feedback

- Your input is needed to determine whether this workshop was effective in meeting your learning needs.
- Please take a minute to complete the evaluation form in your packages and provide your comments or suggestions.





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