Method for Synthesizing Knowledge about Public Policies: Summary

January 2011

Summary

For up-to-date knowledge relating to healthy public policy

This document summarizes the method proposed by the National Collaborating Centre for Healthy Public Policy (NCCHPP) for producing knowledge syntheses aimed at informing decision makers during the promotion, adoption and implementation of public policies.

Readers interested in practical advice on how to apply this method are invited to refer to the long report (which includes full bibliographic references)[1] and to consult our complementary document which demonstrates the application of this method to public policies on nutrition labelling.[2]

Public policies affect population health. Public health actors are called upon to document this phenomenon, in particular, by producing knowledge syntheses. To meet the needs of decision makers, a knowledge synthesis must consider not only the effects and the equity of the public policy being studied, but also the issues surrounding its implementation (cost, feasibility, acceptability).

Drawing inspiration from political science, from literature on evidence-informed decision making in public health, and from work on evaluation and on deliberative processes, the NCCHPP has developed a method for producing such syntheses. This method is presented in the form of a step by step guide incorporating questions to ask oneself, practical advice, and several tools for facilitating the process, so as to enable public health actors to synthesize knowledge about public policies, a specific subject of study.

This summary sets forth the method in an abridged format. It first presents an analytical framework that makes it possible to document the effects and equity of a policy being studied, along with its implementation issues. We then discuss the types and sources of data to be considered when documenting these various aspects. Next, the knowledge synthesis method is described in a step by step manner as follows:

- Inventory of policies and selection of the subject of the knowledge synthesis.
- Construction of the logic model of the policy being studied.
- Review of the scientific and grey literatures.
- Enrichment and contextualization of the data through deliberative processes.

This summary concludes with a few words about the possible uses of this knowledge synthesis method.

Framework for Analyzing Public Policies

To assess whether a public policy is likely to succeed in a given context, it is necessary to study its effectiveness (including its *failures* of effectiveness: neutral and negative effects on the problem targeted by the public policy). However, study cannot be limited to this.

Thus, the proposed analytical framework also takes into consideration other dimensions related to a policy's effects: its unintended effects and its effects on equity.

This analytical framework also takes into account dimensions related to a policy's implementation: its financial costs, its feasibility and its acceptability (that is, how it is viewed by stakeholders). These dimensions are of interest to the decision makers and actors concerned and, taken together, they have an impact on the effects produced by a policy in a given context.

---

1 Morestin, F., Gauvin, F.-P., Hogue, M.-C. & Benoit, F. (2010). *Method for synthesizing knowledge about public policies.* Montréal: National Collaborating Centre for Healthy Public Policy. Available at: http://www.ncchpp.ca/docs/MethodPP_EN.pdf.

2 Morestin, F., Hogue, M.-C., Jacques, M. & Benoit, F. (2011). *Public policies on nutrition labelling: Effects and implementation issues — A knowledge synthesis*. Montréal: National Collaborating Centre for Healthy Public Policy.

Centre de collaboration nationale sur les politiques publiques et la santé
National Collaborating Centre for Healthy Public Policy

Institut national de santé publique Québec

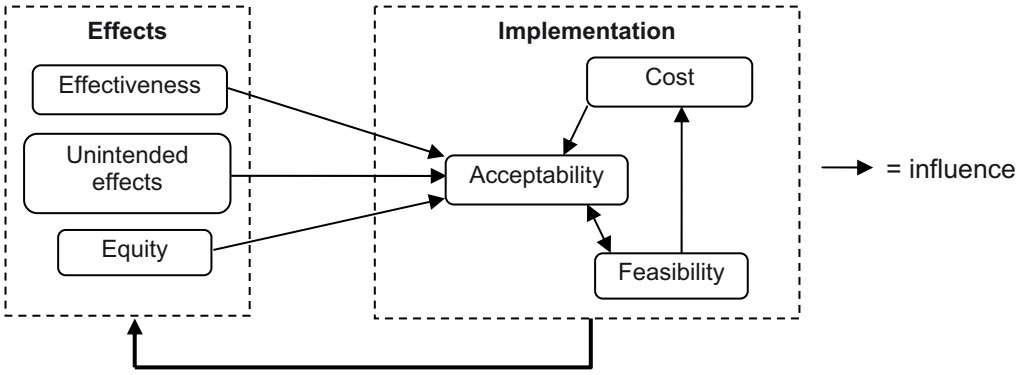

Figure 1 Relationships Between the Six Dimensions for Analyzing Public Policies

Figure 1 illustrates the relationships between the six dimensions of the analytical framework.

Table 1 summarizes the proposed dimensions for analyzing a public policy being studied and the factors to be considered under each dimension.

The aim of the method proposed here is to guide the collection and synthesis of knowledge about these various dimensions of the public policy being studied.

Table 1 Summary Table: Dimensions and Criteria for Analyzing Public Policies

Effectiveness
- Plausibility of the intervention logic[a]
- Effectiveness of the policy under study as a means of addressing the targeted problem
- Intermediate effects of the policy
- Impact of context on the policy's effectiveness

Unintended Effects

Unintended effects of the public policy (be these positive or negative, anticipated or unanticipated)

Equity
- Differential effects of the policy under study on various groups
- Effects on social inequalities in health

Cost
- Implementation cost for the government
- Cost for other actors
- Cost compared to that of other potential policies
- Cost-effectiveness
- Distribution of cost over time
- Visibility[b]

Feasibility
- Conformity with all relevant legislation
- Existence of pilot programs
- Automaticity[c]
- Directness[d] and hierarchical integration[e]
- Number of actors involved in implementation
- Quality of the cooperation between actors
- Ability of opponents to interfere
- Availability of human resources required
- Availability of material resources required
- Availability of "technological" resources required

Acceptability

For each actor concerned:
- Acceptability of acting on the targeted problem
- Acceptability of the policy under study:
  - Assessment of its effectiveness, unintended effects, equity, cost, and feasibility
  - Assessment of the degree of coercion involved
- Acceptability of the decision-making process
- Acceptability of the actors involved in implementation
- Acceptability of accountability measures

[a] See on page 4 the section devoted to the intervention logic.

[b] Visibility: Degree to which the positive and negative costs associated with a policy are apparent (Salamon, 2002; Peters, 2002). [Please consult the long report for full bibliographic references].

[c] Automaticity: Degree to which the implementation of a public policy is managed by pre-existing administrative mechanisms, rather than by new structures that must be created (Salamon, 2002).

[d] Directness: Degree to which the organization that authorizes, finances or launches the policy is also involved in its implementation (Salamon, 2002).

[e] Hierarchical integration: Degree to which those spearheading a public policy guide the activities of the other actors involved in its implementation, using an appropriate system of incentives and sanctions (Sabatier and Mazmanian, 1995).

Types and Sources of Data to Consider

The traditional approach to synthesizing evidence, which focuses on effectiveness data drawn from experimental studies, is insufficient for the study of public policies. Firstly, it is often technically and ethically unfeasible to conduct experimental studies of public policies. Secondly, such studies do not document implementation issues, despite the fact that these are highly important to decision makers and influence the effectiveness of public policies.

For public policies, it seems more appropriate to adopt a broader conception of "evidence," that includes not only research data (generated by all types of research designs), but also other data, particularly data from sources other than scientific publications and data derived from experiential knowledge.

Sources to consider include not only the scientific literature, but also the grey literature (documents produced by governments or not-for-profit organizations, statements by professional associations, opinion polls, etc.) and actors concerned by the targeted health problem and who are working in the context in which implementation of the policy under study is being proposed. These actors are consulted during deliberative processes.

Knowledge Synthesis Method

The broad steps of this method are summarized in Figure 2.

Inventory of Policies and Selection of the Subject of the Knowledge Synthesis

Each knowledge synthesis is devoted to *one* public policy. The policy which is to be the subject of study may be predetermined. However, it seems more interesting, if possible, to start with the targeted health problem and inventory the range of public policies that could potentially address it. In this way, we reduce the risk of failing to consider potentially interesting policies, and the choice of policy or policies to be studied will be better-informed.

This inventory of policies is compiled by means of a preliminary exploration of the literature:

- Grey literature: exploration of websites of national and international organizations interested in the targeted health problem, allowing one to become familiar with the subject and identify policies that have already been established or are generating interest.
- Scientific literature: exploration of websites of institutions that produce, inventory or assess systematic reviews. Optionally (if the inventory of policies still seems incomplete): preliminary exploration of databases.

Next, the subject of the knowledge synthesis (the policy to be studied) is chosen. This selection is made based on the results of the inventory (including the potential effectiveness and cost of each policy), on one's context (in particular, the interest of decision makers and other actors in one or another policy), and on the resources available for carrying out the knowledge synthesis (since a synthesis must be produced for each public policy selected).

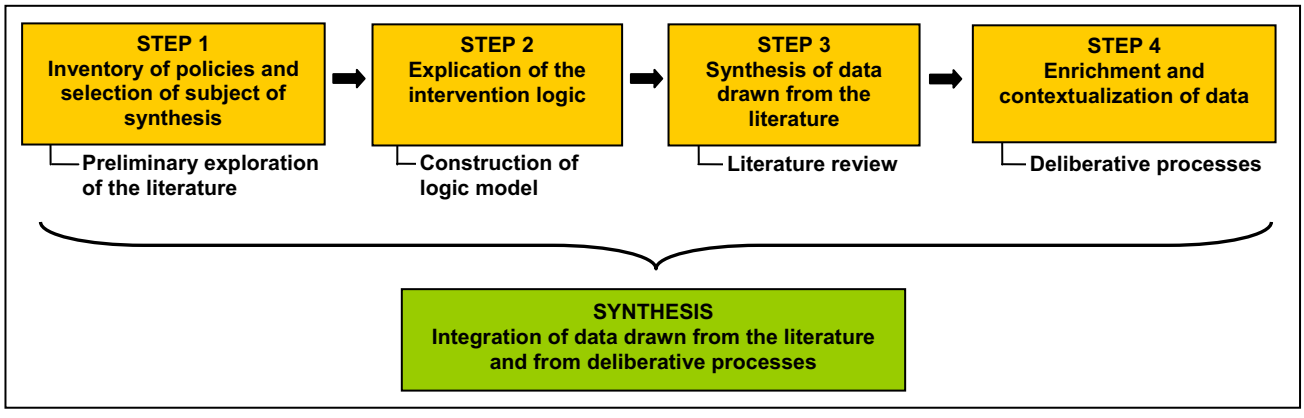

Figure 2 Knowledge Synthesis Method

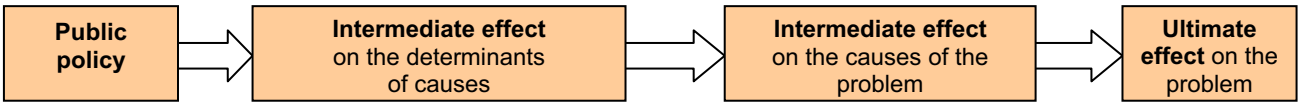

Figure 3 The Logic Model

Explication of the Intervention Logic of the Public Policy Being Studied

Once the policy to be studied has been chosen, the second step is devoted to detailing its intervention logic. The intervention logic (represented graphically by the logic model) deconstructs the chain of effects expected to link the public policy to the problem targeted (Figure 3).

The logic model is constructed on the basis of the knowledge gathered from the preliminary exploration of the literature, during the inventory step; one can supplement this knowledge, if necessary, by consulting with experts or by relying on one's own reasoning.

The logic model allows one to determine if the intervention logic of the policy being studied is plausible and facilitates step by step verification of the policy's effectiveness, making it easier to identify what does and doesn't work. In addition, the logic model helps define the type of effectiveness data to be sought within the context of the knowledge synthesis, which will, in particular, guide the documentary search. For example, often no studies can be found that establish the ultimate effect (that furthest down the chain of expected effects, as shown in the logic model above) of the public policy being studied. However, one can search for studies on the intermediate effects of the policy instead: these studies at least indicate how effective the policy is, up to a certain point in the chain of expected effects.

Synthesis of Data Drawn from the Literature

The third step in the proposed method consists of carrying out a literature review.

Documentary Search

It is difficult to achieve exhaustivity when carrying out a literature review on the effects and implementation issues tied to a public policy, but this does not prevent one from being methodical and transparent (in particular, by keeping a log during the documentary search).

The criteria for including and excluding documents should be made explicit (content of documents, country, period, language).

Possible documentary sources include:

- Sources used during the preliminary exploration of the literature (one can revisit these sources as needed to carry out more narrowly-defined searches).
- Databases.
- Tables of contents of scientific journals devoted to the subject under study.
- Presentations at conferences, which contain more recent and contextualized information.

The documentary search should target public health sources as well as sources from other disciplines of relevance to the public policy being studied.

Searches by keyword and through snowballing should be considered.

There are several options for controlling the size of the documentary corpus amassed:

- If too many documents are found, one can choose to carry out a review of literature reviews, to restrict inclusion criteria, or to begin extracting data and stop when saturation is reached (i.e. when the documents being read are not introducing any new information), while documenting and justifying this decision to ensure methodological rigour.
- If too few documents are found, one can relax the inclusion criteria, try new keywords, explore new documentary sources or look for parallel evidence (on public policies using strategies similar to that of the policy under study, but targeting another public health problem).

Appraisal of the Quality of Data

An appraisal of quality, such as is done in traditional systematic reviews, based on the criteria of research design and methods (hierarchy of evidence) is difficult to apply to knowledge about public policies.

We recommend instead sorting the documents gathered according to their relevance (contribution to the knowledge synthesis), while describing the main characteristics of the documents selected (type, source, research design, authors' affiliations) so that readers can decide how much weight to give them.

Data Perusal and Extraction

We recommend treating as two distinct corpora the published, peer-reviewed literature and the grey literature, which is less-controlled.

Documents should be read in reverse chronological order and, optionally, in alphabetical order, by author. This approach makes it possible to stop the literature review at any given point, on the basis of the saturation criterion. Indeed, this approach minimizes bias related to the order in which documents are read; in addition, it ensures that the most recent documents are examined, these being the most informative within the context of a knowledge synthesis aimed at informing decision making.

Extraction consists of recording, for each document, the information relative to the status of the public policy of interest (for example, the history of its adoption if the policy is already in effect, or a description of the debate underway if its adoption is being discussed) and relative to the six dimensions of the analytical framework (effectiveness, unintended effects, equity, cost, feasibility and acceptability of the public policy). The report from which this summary is drawn proposes lists of key questions that assist one in locating useful information for documenting each dimension. The main characteristics of each document read are also noted, so that its methodological quality can be assessed.

We strongly suggest presenting the data in extraction tables (one for the published literature and one for the grey literature), based on the model below (Table 2). Extraction tables simplify the next step, data synthesis, by helping make sense of the data gathered. In addition, they make it possible to carry out the synthesis in a more rigorous manner, by ensuring that no piece of information is omitted.

Synthesis of Data Drawn from the Literature

If the extraction tables contain large amounts of information, which are difficult to manage as recorded, it is advisable to divide them into sub-tables to classify the extracted data more precisely.

The work of synthesizing consists, next, of summarizing in narrative form *all* the data found (no selection based on expedience), topic by topic, pointing out where the data from the various documents converge and diverge.

In the synthesis text, the data drawn from the grey literature should be clearly distinguished from that drawn from the published literature (for example, by using grey text), so that readers can tell at a glance what type of data are before them.

Enrichment and Contextualization of Data — Deliberative Processes

The fourth step in the knowledge synthesis method consists of organizing deliberative processes. These make it possible to enrich and contextualize the data drawn from the literature by gathering experiential knowledge from actors working in the context in which implementation of the policy under study is being proposed.

Table 2 Sample Data Extraction Table

Reference	Characteristics of document	Status	Effectiveness	Unintended effects	Equity	Cost	Feasibility	Acceptability
Author A, 2010								
Author B, 2010								
…								
Author A, 2009								
…								

Each deliberative process should bring together between 10 and 20 participants, a group size that promotes discussion. In choosing which actors to invite, the question that must be asked is who can bring knowledge about the expected effects of the public policy being studied or the issues its implementation would raise in the context in which it is being proposed. The actors invited may be experts and decision makers (from the health sector or from other relevant sectors, and working in public, private or community contexts), or even ordinary citizens.

In preparation for the meeting, the framework for analyzing public policies presented above and a summary version of the literature review produced should be sent to the actors invited.

The meeting itself should begin with a brief orientation on the knowledge synthesis project and agreement on the rules governing use of the information exchanged. The rest of the meeting centres on exchanges between participants, stimulated by a facilitator who ensures that the discussion is organized around the six dimensions of the framework for analyzing public policies, using the lists of key questions associated with each dimension as prompts.

After the meeting, the statements gathered are classified under the various dimensions of the analytical framework. As with the data drawn from the literature, the statements gathered about each dimension must then be summarized, and attention drawn to points of convergence and divergence. If possible, have the synthesis text validated by the participants in the deliberative processes, to ensure that their statements were not distorted during the analysis and writing processes.

Synthesis – Integration of Different Types of Knowledge

To complete the process, the final knowledge synthesis document must be written. This document includes a transparent and detailed description of the process followed, the logic model of the public policy studied, the synthesis of data drawn from the literature (grey and published) and the synthesis of data drawn from the deliberative processes. The synthesis of the various types of data may be presented either in two separate texts or side by side, for each topic addressed, with features to differentiate them (for example, data drawn from the published literature would be presented as is, those drawn from the grey literature would be written in grey text, and the statements of the participants in the deliberative processes would be indicated with underlining).

It is suggested that this document be accompanied by a summary text that highlights the key points. Since this summary will probably be read most frequently, it must faithfully summarize the data, while providing a clear narrative portrait, making it possible to identify the factors on which decision makers must focus.

Use of this Knowledge Synthesis Method

This method is, in the first instance, designed to be applied from beginning to end, because its various elements complement each other in a useful manner to produce very rich knowledge syntheses. However, one may also choose to use only some elements, since each one constitutes an interesting work tool in itself:

- The six-dimension **analytical framework** can be used outside the context of a knowledge synthesis, to summarize informal knowledge one possesses about a public policy.
- The construction of a public policy's **logic model** enables reflection on its potential effectiveness, which is useful in many contexts outside that of the production of a knowledge synthesis.
- The **inventory of public policies** produced by a preliminary exploration of the literature provides a quick overview of current debates surrounding a health problem and the proposed public policies for addressing it.
- The approach to the **literature review** that we propose, which is adapted to the study of public policies, can be used without requiring that the other steps in the knowledge synthesis method be carried out.
- When a review of the literature on a public policy already exists, one can proceed directly to the organization of **deliberative processes** to complement this literature review, by submitting it for discussion to actors working within the context in which implementation of the policy in question is being proposed.

January 2011

Author: Florence Morestin, National Collaborating Centre for Healthy Public Policy

ACKNOWLEDGEMENTS

The author would like to thank Émilie Robert at the Université de Montréal for her comments on a preliminary version of this document.

The National Collaborating Centre for Healthy Public Policy (NCCHPP) seeks to increase the expertise of public health actors across Canada in healthy public policy through the development, sharing and use of knowledge. The NCCHPP is one of six Centres financed by the Public Health Agency of Canada. The six Centres form a network across Canada, each hosted by a different institution and each focusing on a specific topic linked to public health. In addition to the Centres' individual contributions, the network of Collaborating Centres provides focal points for the exchange and common production of knowledge relating to these topics. The National Collaborating Centre for Healthy Public Policy is hosted by the Institut national de santé publique du Québec (INSPQ), a leading centre in public health in Canada.

Production of this document has been made possible through a financial contribution from the Public Health Agency of Canada through funding for the National Collaborating Centre for Healthy Public Policy (NCCHPP). The views expressed herein do not necessarily represent the views of the Public Health Agency of Canada.

Publication N°: 1251

This document is available in its entirety in electronic format (PDF) on the Institut national de santé publique du Québec website at: www.inspq.qc.ca/english and on the National Collaborating Centre for Healthy Public Policy website at: www.ncchpp.ca.

La version française est disponible sur les sites Web du Centre de collaboration nationale sur les politiques publiques et la santé (CCNPPS) au : www.ccnpps.ca et de l'Institut national de santé publique du Québec au www.inspq.qc.ca.

LEGAL DEPOSIT – 2nd QUARTER 2011
BIBLIOTHÈQUE ET ARCHIVES NATIONALES DU QUÉBEC
LIBRARY AND ARCHIVES CANADA
ISBN: 978-2-550-61832-4 (FRENCH PRINTED VERSION)
ISBN: 978-2-550-61833-1 (FRENCH PDF)
ISBN: 978-2-550-61834-8 (PRINTED VERSION)
ISBN: 978-2-550-61835-5 (PDF)

Centre de collaboration nationale sur les politiques publiques et la santé
National Collaborating Centre for Healthy Public Policy

Institut national de santé publique Québec