

The IDM Manual

a guide to the IDM (Interactive Domain Model) Best Practices Approach to Better Health

◆ Evidence Framework ◆

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IDM Manual sections:

- ◆ Basics
- ◆ Suggested Guidelines
- ◆ Evidence Framework
- ◆ Research & Evaluation
- ◆ Using the IDM Framework
- ◆ Reports on Using the IDM

Other IDM resources of interest:

- ◆ IDM Best Practices Road Map for Coaches
- ◆ Best Practices Check-In Forms
- ◆ IDM Computer Program
- ◆ IDM Best Practices peer-reviewed journal article

- ◆ The *IDM Manual*, other IDM resources and links to general health-related resources are available from www.idmbestpractices.ca.
- ◆ The *IDM Manual* is also available from www.utoronto.ca/chp/bestp.html.
- ◆ Egalement disponible en français de www.opc.on.ca/francais/nosprogrammes/centre/projets/meilleurespratiques.htm.
- ◆ See also www.bestpractices-healthpromotion.com.

The IDM Manual

The IDM (Interactive Domain Model) Best Practices Approach to Better Health

- ◆ The contribution of Health Canada, Population and Public Health Branch, Ontario and Region (now the Public Health Agency of Canada, Ontario and Nunavut Region) in funding the original IDM Manual is gratefully acknowledged.
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- ◆ The views expressed herein are solely those of the authors and do not necessarily represent the official policy of the Department of Health (nor the Public Health Agency of Canada). Les vues exprimées ici sont uniquement celles des auteurs et ne représentent pas nécessairement la politique officielle ni du Ministère de la Santé, ni de l'Agence de santé publique du Canada.
- ◆ The *IDM Manual* is written from the perspective of health promotion and public health practitioners of all types and at all levels. That is, “we” refers to program implementers (front-line staff and managers), policy and decision makers, and researchers.
- ◆ **IDM** refers to Interactive Domain Model.

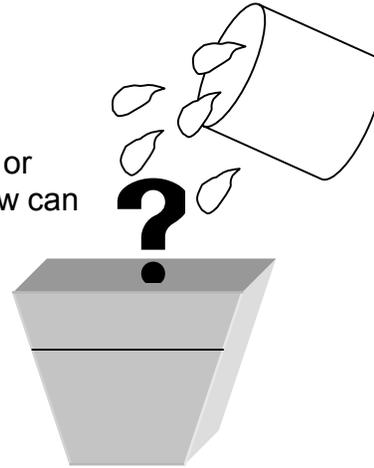
- ◆ **IDM Evidence Framework reviewers** were David Rosenbluth, Evan Morris, Lisa Brownstone and Mary McNutt.
- ◆ **Quotes** are from focus groups and meetings or key informant interviews and discussions.

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INTRODUCTION

“Evidence based practice,” a popular phrase, all starts with one or more questions. How can we be most effective in our work? How can we maximize the likelihood that we will achieve our desired results? How are other organizations addressing challenges? How can we make programs more empowering? What strategies are most likely to increase equity in a society? What capacities exist in our community to provide a supportive environment for healthy living? To answer those questions requires research, ranging from a few phone calls, if the question is simple enough, to a full scale study. Evidence is the information gathered from our research — that is, the answers to our questions — which we deem high quality and appropriate enough to use in making our decisions.



All health promotion/public health practitioners, whether implementing programs, making policies or researching, want to make the best decisions possible in order to enhance health and quality of life; we also recognize the positive contribution evidence can make to decision making. At the same time, evidence is often elusive.

Sometimes, this is because no one asks questions which would require us to look for evidence, either assuming that the way things have always been done are the best, or that there is no point in asking questions when change is not possible. Sometimes, we ask the questions, but how to go about finding the answers (the evidence) is not clear. Occasionally, people think that evidence doesn't exist, for example because health promotion is too complex or too new. Most often, evidence is out of reach because too many other things are competing for our time and attention.

However, a number of points are necessary to keep in mind if health promotion and public health are to continue to evolve in a positive fashion:

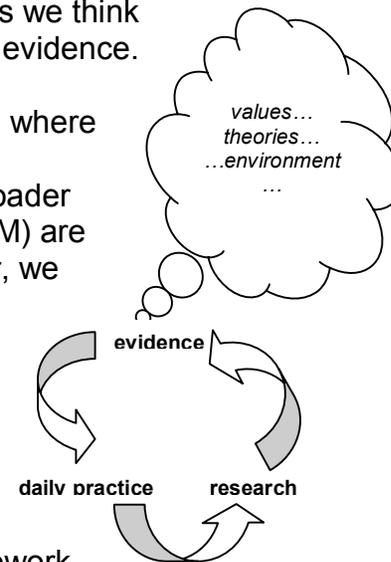
- ◆ it is important to ask questions and think critically, even if the questions aren't immediately obvious, and even if their answers (i.e., evidence) aren't immediately available
- ◆ improvement is always possible

- ◆ making the time to find evidence should be a top priority — improvement in the health promotion and public health fields will not occur without it
 - ◆ while the search for answers/evidence may take longer and be more frustrating than we would like, the process for doing so is well within the capabilities of all practitioners and decision makers
 - ◆ ultimately, the time and energy spent asking and answering questions (i.e., gathering evidence) will be rewarding, and will result in more effective and satisfying practice

It is for the reasons listed above that the *IDM Evidence Framework* was developed: that is, to help health promotion and public health practitioners/decision makers answer the questions we think are most important by doing research that produces high quality information or evidence.

The IDM is an approach to best practices in health promotion and public health where evidence is seen to interact with values, goals and ethics, theories and beliefs, understanding of the environment, and practice (all within the context of the broader environment). If these pieces (referred to as domains or sub-domains in the IDM) are consistent with health promotion or public health principles and with each other, we will be taking a best practices approach to our work as health promotion practitioners.

The *IDM Evidence Framework* is a tool designed to help practitioners/decision makers address health promotion or public health issues more effectively by incorporating the evidence resulting from research and evaluation into daily practice, while taking into account our health promotion or public health values, theories and beliefs, and understanding of the environment. The Framework emphasizes the importance of high quality evidence that originates from *our own* situation (e.g., our specific population, location, organization), as well as from *other* situations.



IDM EVIDENCE FRAMEWORK BASICS

General evidence guidelines

The *IDM Evidence Framework's* guidelines concerning evidence include:

1. The *sources of evidence* should:

- ◆ derive from a wide variety of sources, including all key stakeholders and relevant key informants, and from a wide variety of methods
- ◆ be drawn from sources internal and external to the particular initiative
- ◆ include results/outcomes related to past and current practice

2. The *nature of evidence* should:

- ◆ reflect health promotion or public health values, goals, ethics, theories, underlying beliefs, understanding of the environment, and practice (for an example of evidence guidelines designed to increase this reflectiveness, see the section *Guidelines to ensure consistency between evidence and other sub-domains*).
- ◆ transcend information supporting conventional wisdom, that is, include information supporting new or non-mainstream ideas as well as information contradicting generally accepted ideas
- ◆ be high quality (that is, based on accurate data, produced by methods appropriate to the question, etc.)
- ◆ be qualitative and quantitative, subjective and objective — used in a complementary fashion
- ◆ be appropriate to the issue, setting, etc.
- ◆ include the relationship between processes, activities and results/outcomes

3. The *use of evidence* should:

- ◆ be integrated into each stage of practice (i.e., planning, implementing, evaluating, revising)

basic principle of IDM:
the quality and value of our health promotion practice depends on the degree of awareness, discussion, clarity, and reflection associated with each decision making factor, including evidence

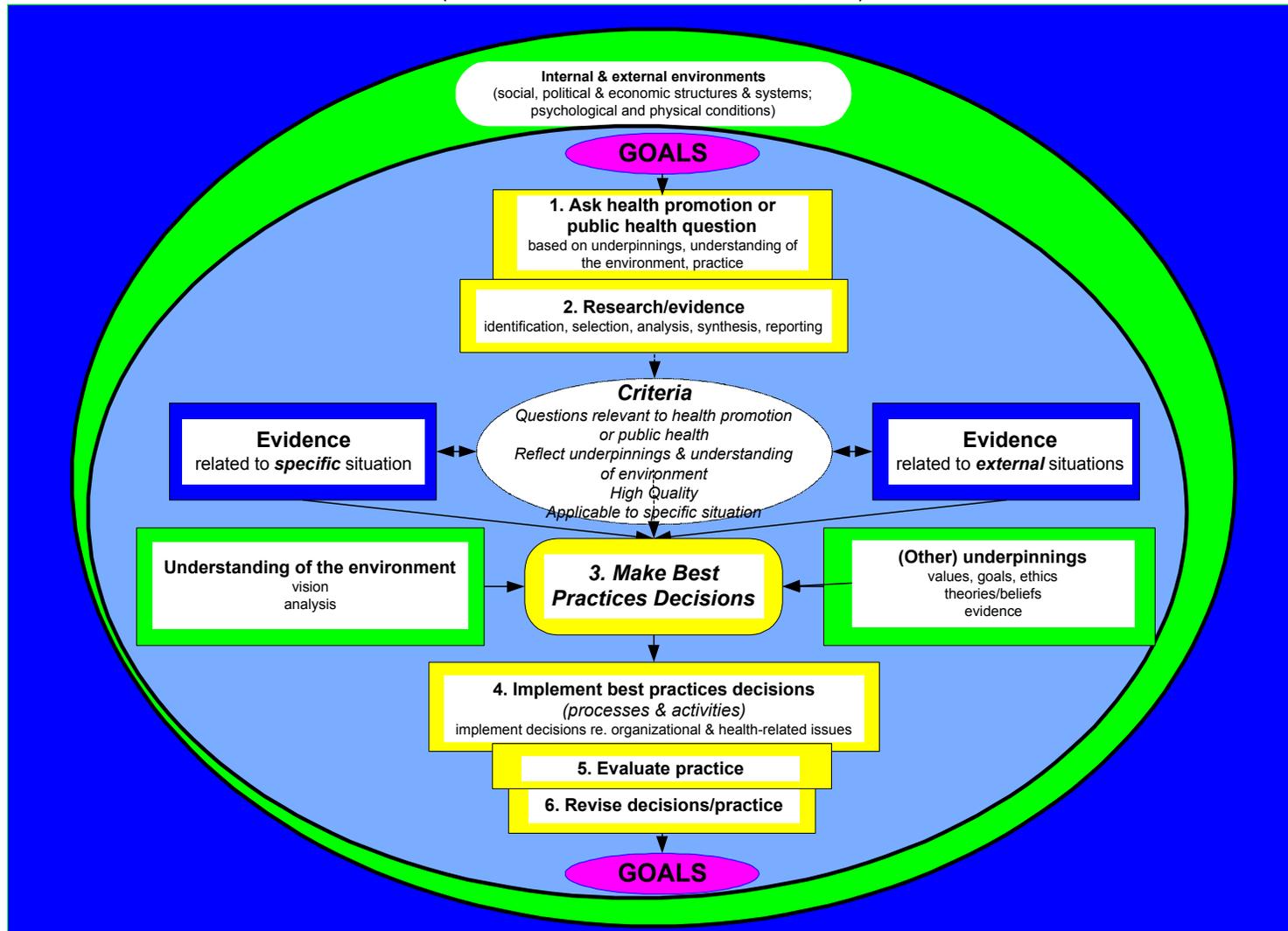
- ◆ contribute to continuous learning and knowledge development, that is, lead to: a broad and complete picture of what is happening, insights into why things happen, understanding of how we might make things happen in a better way
- ◆ be reviewed and updated regularly
- ◆ be used with awareness, discussion, clarity, and reflection regarding all factors relevant to decision-making about health promotion or public health practice

The IDM does not judge evidence in terms of a hierarchy, i.e. evidence produced by one type of research design is not necessarily better than evidence produced by another kind of research design. Instead, the best evidence is high quality, produced by the research design appropriate to the question, relevant to health promotion/public health, and relevant to the specific situation.

What the IDM Evidence Framework looks like

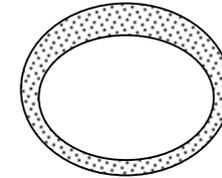
The *IDM Evidence Framework* is shown on the next page in the format of a model. This model incorporates the same pieces as the general IDM shown in the IDM Manual section *Basics*, simply rearranged — illustrating the interactivity of the IDM. The difference between the two models is that the more detailed *IDM Evidence Framework* specifically highlights the role of **evidence** and **research** in the decision making process concerning health promotion or public health practice.

The use of research & evidence in effective health promotion & public health practice
 (Using the Interactive Domain Model of Best Practices for Better Health)
 (Barbara Kahan & Michael Goodstadt, 2001)



overview of the IDM Evidence Framework

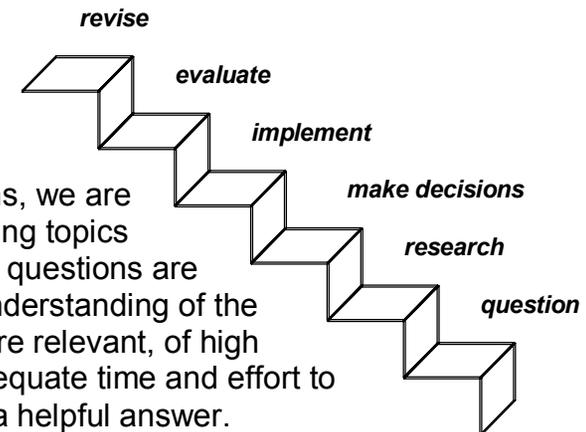
The outer circle of the *IDM Evidence Framework* on the previous page represents the **ENVIRONMENTS** in which we live and work. Our environments are composed of social, political and economic systems and structures, and current physical and psychological conditions. These occur at the level of the group, organization, local community, region, nation, and international community.



Our **GOALS**, at the top and bottom of the inner circle, emanate from our health promotion or public health values, theories/beliefs, evidence, and understanding of the environment. Using our goals as the impetus for asking and answering our questions, and applying the answers to our practice, makes it more likely we will achieve our goals.

At the heart of the Framework are six steps common in identifying, assessing and using evidence in health promotion or public health.

1. The first step is asking **THE HEALTH PROMOTION OR PUBLIC HEALTH QUESTION**. If we don't ask health promotion/public health questions, we are unlikely to obtain health promotion/public health answers, regarding topics such as capacity building, empowerment, and equity. In the IDM, questions are based upon our health promotion/public health underpinnings, understanding of the environment, and practice, thereby ensuring that our questions are relevant, of high priority, useful, and, given our resources, answerable. Taking adequate time and effort to define our question increases the likelihood that we will develop a helpful answer.



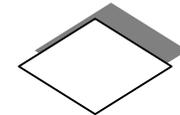
2. The second step is conducting **RESEARCH** to answer the question. This involves:
 - ◆ identifying and selecting information sources — we attempt to be as comprehensive as possible given the nature of the question and our resources, making sure to include sources from our own and other situations (i.e., related to our populations and settings, and other populations and settings); in some cases we may need to generate new information if it is not currently available

- ◆ gathering and analyzing the information, making a summary or synthesis of the findings, and then reporting on the findings
- ◆ filtering the information we obtain throughout the selection, analysis and reporting stages, to ensure that it meets our basic criteria — we want our information to be relevant to our question, consistent with and reflective of health promotion/public health underpinnings and understanding of the environment, high quality, and applicable to our situation.

Research information that meets our basic criteria can be considered **EVIDENCE** to be used in our decision making.

Evidence should include information from situations beyond our own, so we can learn from other’s challenges, successes and insights. It also includes evidence originating from our situation. This evidence, rooted in our specific population and experiences, will ensure that planning and implementation is immediately relevant and, ultimately, will allow us to assess what actually works in our situation.

3. The third step is applying the evidence resulting from the research (see above) in making health promotion/public health best practices **DECISIONS** concerning our health- and organization/work-related issues and research.



However, evidence is only one of the factors involved in best practices decision making. Our decisions are also influenced by our underpinnings and understanding of the environment, whether we are conscious of these or not.

Our **UNDERPINNINGS** include, in addition to evidence, our values, goals and ethics, and theories and beliefs.

Our **UNDERSTANDING OF THE ENVIRONMENT** includes our vision and analysis of health-related and organizational issues. Our analysis, in addition to identifying etiology and best ways to address priority issues, involves an assessment of our resources and challenges.

if we value empowerment over academic qualifications, to be consistent we will choose a participatory approach to identifying evidence; if we value academic qualifications over empowerment, we will choose a narrowly defined “expert” approach

4. The fourth step is implementing decisions through the processes and activities involved in our **PRACTICE**. What we include in the realm of practice, and

whether or not this is consistent with our health promotion/public health underpinnings and understanding of the environment, determines what kind of impact we are likely to have in our chosen health promotion/public health areas.

5. The fifth step is ongoing **EVALUATION** of our decisions and our practice. In reality, evaluation is not an “end” step but is best integrated into the planning and decision making process from the beginning.
6. The sixth step is making **REVISIONS** where necessary. Depending on our evaluation results, we may need to revise either our decisions or our practice processes and activities. We will also likely identify new questions. We are now ready to enter a new cycle of planning, implementation and evaluation.

When identifying (and using) evidence, It is useful to make the following distinctions:

- ◆ **between evidence from our own situation and evidence from other settings, experiences, etc.**
- ◆ **between evidence from individual research reports or evaluation studies, and from reports that summarize or synthesize evidence from a number of studies such as literature and systematic reviews (see Evidence Logic Models)**
- ◆ **between evidence which is “usable” because it meets criteria for quality and relevance, and evidence which doesn’t meet basic criteria and is therefore best not used**

GUIDING QUESTIONS FOR USING THE IDM EVIDENCE FRAMEWORK

Sets of questions to guide us through the process of identifying, assessing and using evidence follow. The categories for the questions are:

Set the stage

- ↳ Identify potential information sources
 - ↳ Select information sources
 - ↳ Generate information
 - ↳ Analyze information
 - ↳ Summarize or synthesize information
 - ↳ Report on findings
 - ↳ Make best practices decisions
 - ↳ Implement decisions
 - ↳ Evaluate practice
 - ↳ Revise decisions/practice

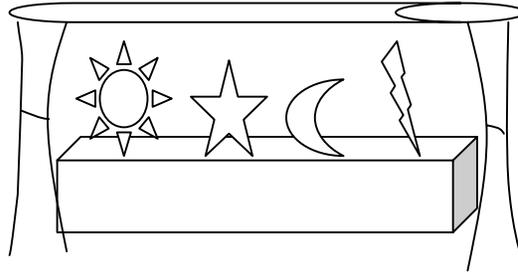
This section contains:

- ◆ questions to guide us through the process of using the IDM Evidence Framework
- ◆ boxes with points to consider when we are answering the questions
- ◆ quotes from a number of different people working in health promotion and public health who participated in focus groups, meetings, interviews, or discussions

To assist us in using the Evidence Framework in practice, worksheets are included in the section *Worksheets and Logic Models*.

This section, together with the section which includes worksheets, offers a variety of features in order to meet the range of learning and working styles among people. Use what is most helpful, modify where possible to improve the process, and ignore what isn't helpful.

Set the stage



1. What are our general health promotion/public health guiding principles and criteria?

consider:

- ◆ values, goals, ethical principles
- ◆ theories/concepts, underlying beliefs/assumptions
- ◆ evidence
- ◆ understanding of the environment
- ◆ practice

lining up all our pieces at the beginning saves time in the long run and ensures a better process and a better outcome

2. What is our selected health-related issue?

consider:

- ◆ in what ways is our issue consistent with our health promotion/public health underpinnings and understanding of the environment
- ◆ in what ways is it a priority

3. What health promotion/public health question(s) are of the highest priority to answer in connection with our selected issue?

consider:

- ◆ what we need to know more about, whether it is:
 - **effectiveness:** how well do specific initiatives or interventions work to address our selected issue
 - **etiology:** which factors influence our selected issue
 - **context:** what is the nature of the physical, socio-political and other environments for our issue and our work, including challenges and resources
 - **people:** in relation to a particular issue and/or particular processes or activities, how do people act and feel and why do they act and feel that way
 - **our program:** how do all its components fit together and what can we do to make them fit together better, how can we increase efficiency
 - **theory:** what explanation or understanding can we develop for something that is currently an enigma to us
- ◆ what makes our question a health promotion/public health question, that is, in what ways does it relate to health promotion/public health:
 - values, ethics and goals
 - theories and beliefs
 - evidence
 - vision of our environments
 - analysis of our environments
- ◆ what makes our question a priority
- ◆ are there other questions that are necessary to answer first
- ◆ do we have a built in process for regularly reviewing our question and changing it as understanding and circumstances change

“that’s one of the hardest things for people to clarify, what is their question – we spend a lot of time as health promotion consultants helping people figure out what it is they are looking for”

“As a researcher you need to find out about the real world before you identify your research questions, select methods and devise instruments. Researchers ought to learn to listen before they begin research – I mean really listen, hang around, recognize the problems, if something seems intriguing check with practitioners to see if it really is.”

See Worksheet 1.

“Research is also an iterative process. Generally you start out with a big research question. As you assemble your group together and take stock of the skills you have, look at what resources you have to carry this thing out, figure out time frames etc., invariably the question gets changed. In fact the question may get changed several times along the way and at different stages of the research process. This is really quite normal and people should expect it to happen. Again, however, it is something that you don't usually read about, and novice researchers often assume that research/evaluation is a much more linear process than it really is. I think more acknowledgement that it is OK to go back and revise the question or the data collection method would be useful.”

4. Who are our key stakeholders (whether perceived as supportive or not)?

key stakeholder categories:

- ◆ members of priority population who are participants in our program
- ◆ members of priority population who are not participants in our program
- ◆ family/significant others of members of priority population
- ◆ members of the organization
 - front-line implementers
 - managers
 - board members
 - volunteers
- ◆ funders
- ◆ members of other organizations
- ◆ others

“I have found that including opponents in our processes keeps the channels of communication and negotiation open -- this has sometimes improved the project and sometimes gained us new supporters”

5. What role will each key stakeholder play?

consider:

- ◆ processes stakeholders could play a role in:
 - choosing the question, indicators, and/or information sources
 - providing, collecting, analyzing, and/or summarizing/synthesizing data
 - reporting results
 - making decisions
 - implementing decisions
 - evaluating implementation of decisions
 - following up on evaluation results

“it's in supporting the connections from human to human, which recognizes that each person has a different expertise if you can capitalize on all these different kinds of expertise regarding research, that makes the difference”

- other
- ◆ possible levels of activity for each stakeholder role:
 - active (if active, in what way)
 - advisory capacity only
 - keep informed only
- ◆ amount of time each stakeholder has to participate
- ◆ supports available for stakeholder participation
- ◆ particular skills, knowledge, and experience each stakeholder has to contribute for each possible role
- ◆ opportunities for building the capacity of each stakeholder in each possible role

“it’s helpful if the stakeholder at the table can make decisions rather than having to go back and check with others – but this can be a trade off too, because if they’re the person who can make the decision they may be too busy to come often”

See Worksheet 2.

6. What are our terms of reference?

- consider:*
- ◆ purpose
 - ◆ time frame
 - ◆ who is included as a participant
 - ◆ general expectations of participants
 - ◆ each participant’s responsibilities
 - ◆ nature of processes, e.g. re.:
 - decision making
 - communication
 - conflict resolution
 - ◆ funding sources

“having clearly defined terms of reference from the beginning is really helpful – people think they don’t need it but you do; interpersonal dynamics can take over everything...how to resolve conflicts, what to do with discordant approaches, all these things can be captured in here”

7. What do we do about resources?

consider:

- ◆ resources we need, e.g.:
 - people
 - skills
 - time
 - commitment and enthusiasm
 - positive dynamics in working together
 - money
 - organizations (our own or others)
 - tools
 - sources of information
 - space
 - equipment
 - other
- ◆ resources currently available and accessible
- ◆ resources we don't have but might be able to get
 - what we need to do to get these
- ◆ resources not available under any circumstances
 - how lack of availability affects our plans

“one of the things I always encourage is going to other people – people as resources, in addition to journals – trying to find contacts who would know the kind of information that you're seeking”

See Worksheet 3.

8. What do we do about challenges?

consider:

- ◆ the range of potential challenges, e.g.:
 - lack of resources such as funding, equipment, time, skills, organizational support and understanding
 - different or conflicting perspectives among key stakeholders
 - interpersonal issues
 - undefined vision, processes, values, etc.
 - local regulations (e.g. from government, unions)
- ◆ how can we prevent likely challenges from appearing
- ◆ how can we address challenges which currently exist
- ◆ if challenges can't be prevented or addressed, how does this affect our plans

See Worksheets 4 & 5.

“The informal lunches I mentioned before were hugely helpful – it becomes a support group – people start to feel isolated, think you’re the only one struggling – then you find it’s a shared issue which is empowering, and you can start to share possibilities.”

“Something that has always been a problem for me, is how to convey the notion that good research methods are something you strive for, but in reality research is always a compromise between what you know should be done, and what can be feasibly done, while still maintaining credibility and validity. Manuals should acknowledge the small ‘p’ political nature of developing and conducting research projects – all the interpersonal issues that go with needing to understand different interests, personalities, organizational and individual histories”

9. What does our action plan look like?

consider:

- ◆ given the kind and amount of resources we will have access to:
 - what can we realistically accomplish
 - how will we accomplish it
 - if we can't do everything we would like to, what can we leave out without compromising the integrity of our research
- ◆ which key stakeholders will do what
- ◆ how they will do it with respect to specific activities and tasks
- ◆ with what resources they will do it
- ◆ when they will do it including:
 - how much time in total each activity and task will take
 - the start and end times for each activity and task
- ◆ what process is best to ensure ongoing review and improvement of all components such as our question, key stakeholder participation, methods for gathering and analyzing data

“...there really is no single ‘right’ way to do the research. The right way is the one that provides the most valid answers, given the time, skills and resources available for the research.”

See Worksheet 6.

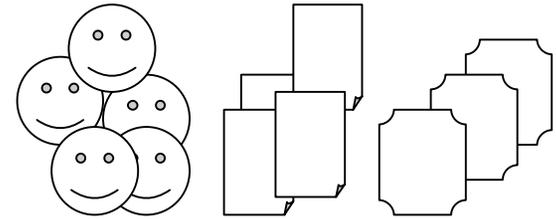
10. What processes do we have to deal with differences of opinion or perspective?

“ We got together a team which includes academics, people from the hospital, and people from the community. Issues pop up – there are different approaches between academics and practitioners. We are having to challenge each other because we come from such different perspectives. The partnership brings different possibilities – different experiences, different expertise...The project is part way into its second year – it is one of those exciting learning opportunities, there are frustrations along the way, but as we work through them everyone’s perspective shifts somewhat.”

11. What cultural or other sensitivities should we be aware of when working with different key stakeholder groups?

12. What system do we have to track all findings and/or decisions in an organized fashion?

Identify potential information sources



1. What are the boundaries for our search?

consider:

- ◆ limits for our search, such as:
 - language (e.g. all languages or English and French only)
 - time (e.g. last 10 or 20 years)
 - location (e.g. world-wide or North America only)
- ◆ reasons for the limits (e.g. restricted resources)
- ◆ areas where information is not available

a comprehensive set of potential information sources ensures that:

- ◆ **important pieces of information are not overlooked**
- ◆ **the information sources are as representative as possible in all respects**

2. What are our potential sources of information?

consider:

- ◆ human sources of information
 - key stakeholders (see list with examples in previous section *Set the Stage*)
 - other key informants (those with special expertise relevant to the particular question even if they are not a key stakeholder)
- ◆ documentation (published and unpublished) relating to our initiative or population
 - generated by our organization (e.g. evaluations, reports, log books, minutes)
 - generated by other organizations (e.g. census data)
- ◆ documentation (published and unpublished) relating to other initiatives or populations (e.g. evaluations and other research studies, statistical reports)
- ◆ all research designs

“going to the community is important – knowledge of issues and people’s lives and what enables them to be healthy or what’s a barrier to their well-being has to come from them, and what would be helpful and useful”

“We pulled together different kinds of data, looking at census data, agency utilization data, questionnaire data, all sorts of different data...”

3. How will we find sources of information?

consider:

- ◆ relevant databases, websites, journals (see sections under Resources)
- ◆ key words which have been
 - refined through experimentation
 - reviewed if necessary by a librarian
- ◆ relevant organizations (e.g. libraries, universities, community agencies, government departments)
- ◆ reference lists of relevant articles (published or unpublished)

See Worksheet 7.

“ I had to find some data and I connected with someone who connected me with someone else who connected me with someone else – it went around – it’s a great way to get information”

“ what I do is I make a list ahead of time, of the different engines I’m going to use, then I work through them methodically, then I use different search terms, I use different synonyms and phrases – so I make sure I search under a range of synonyms and engines. There’s billions of things out there so you can never do a totally exhaustive search – but there are things you can do to increase the chances. And it’s important to keep a record of what you’ve done.”

“ by going through bibliographies of articles you get a lot of references”

“Start with what you know – go to an organization you trust and agree with, find out what they know, what’s on their website, who do they think is important, and build up from there. For each organization you would ask the same questions – who are the best contacts, best printed resources. Some have more detailed data. Start with organizations, work up to government agencies, e.g. Stats Canada or the National Clearing House on Tobacco, look at how they organize data. Then look at more collective ways of looking at information – the internet brings libraries closer, helps close some of the distances between information sources. Gradually work from people to search engines...”

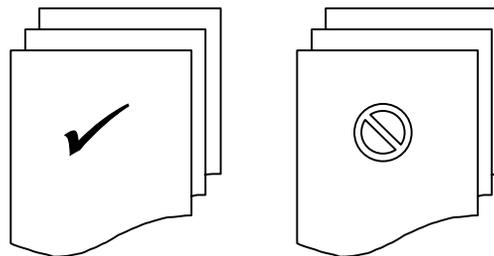
4. How comprehensive was our search?

consider:

- ◆ in what ways it wasn't
- ◆ the implications if our search wasn't comprehensive

“Besides some activities being more important than others, there is also an issue of how much time to spend on different activities. There are diminishing returns associated with tracking down that last reference to a study, or pursuing that last questionnaire return. At some point people have to figure out when enough has been reasonably done, and move on to another part of the research process.”

Select information sources



1. Is the selected information relevant to our health promotion/public health question?

to ensure that our analysis is based on the “best” information available, we need to select information which is of the highest quality and is relevant to

- ◆ our question
- ◆ health promotion or public health
- ◆ our specific situation

2. Is the selected information drawn from the fullest range of sources?

consider if the information:

- ◆ relates to our own as well as other populations and initiatives
- ◆ represents a variety of formats, e.g.:
 - oral
 - written
 - visual
- ◆ represents a variety of research designs
- ◆ represents a variety of quantitative and qualitative methods

“who decides in any situation what is evidence – that’s very political, defining evidence...we need to make the case for a range of valid and legitimate evidence and ways of producing it”

3. Is the selected information relevant to health promotion/public health?

consider:

- ◆ if it offers knowledge relevant to health promotion/public health, e.g.:
 - which processes, activities and strategies do or don't lead to desired outcomes in which situations
 - how to build capacities and address challenges
 - which factors influence selected issues
 - nature of physical, socio-political and other environments
 - how people behave and feel, and why
- ◆ is the information based on "best practices" initiatives, i.e., where processes/activities/strategies reflect:
 - health promotion/public health values/goals/ethics
 - health promotion/public health theories/concepts/beliefs (including determinants of health)
 - health promotion/public health evidence
 - health promotion/public health understanding of the environment (including specific context)
- ◆ if information that fully reflects all of above is not available: does it reflect at least some of above, and what are the implications of a limited reflection

“We need to integrate research into daily practice. But what we do has to be relevant – sometimes researchers take a bad rap because they research things that in the daily scheme of things aren't relevant...there has to be community relevance as well as scientific rigor – if it's not relevant, no matter how rigorous, there's still not any point.”

4. In what ways is or isn't the selected information high quality?

consider (for information either quantitative or qualitative in nature):

- ◆ accuracy and lack of bias:
 - maintained in an organized fashion
 - verified for accuracy
 - available to others for verification upon request
 - based on valid and reliable data
 - no evident errors in analysis
 - identified results consistent with presented data
 - no over- or under-representation of any variable (e.g. population group) or information source, unless consistent with question
 - limitations identified and accounted for
 - reviewed at each step of its formation by people with different expertise and perspectives (e.g. stakeholders, content experts, methods experts)
- ◆ methodological soundness:
 - methods follow traditionally accepted guidelines, or, if they diverge, a strong rationale for the divergence provided
 - based on methods appropriate to the question
 - applied by people with an appropriate level of skills (e.g. analytic, computer, statistical, communication, interpersonal)
 - data-gathering procedures (e.g. interviews, surveys) pre-tested to ensure required information is collected
 - based on clear, unambiguous, "user friendly" wording which is not biased towards specific responses over others
 - displays openness to new thoughts and insights
- ◆ position in context re.:
 - the existing body of information related to the issue
 - the specific environment from which the information is drawn
- ◆ adequacy of available information upon which to make assessments concerning above points (or made available upon request)

“the dilemma is the same for everyone, there is too much information varying in quality and if you don't know something about how to search and how to determine quality you're going to get into a big mess, you could easily pick out 5 studies that are poor quality”

“there is so much that is good and so much that isn't good on the internet – it's knowing how to discern that – knowing the difference between a good sales pitch presented as evidence compared to good reports”

See Worksheet 8.

- 5. How applicable is the selected information to our specific situation (i.e. our priority population and our particular initiative)?**

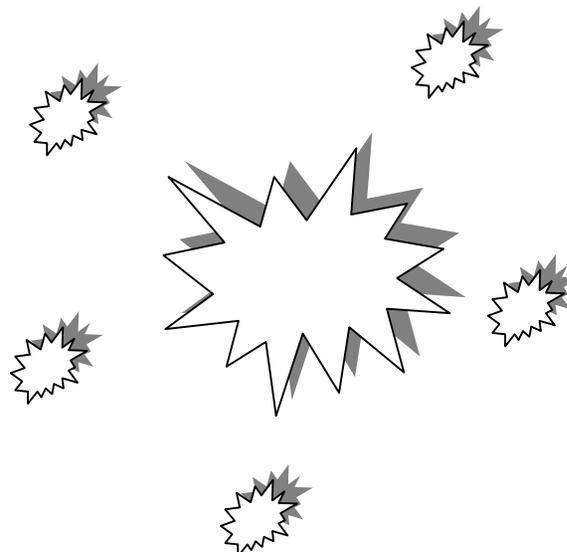
See Worksheet 9.

“the evidence isn't always clear, it's not as straightforward as 'if you wear the green dress you're going to be successful' – some things work only in some situations”

“if I hear something on the OHPE Bulletin [about] someone doing some work, I'll direct my staff to find out a little more, tell them about our situation, what do they think would work, not work, do they have advice for us in our particular circumstances – so they help to interpret what they've done, position themselves in our context”

- 6. Have we documented the reasons why we have eliminated any information sources?**
- 7. What are the limitations of our selection process, and what are the implications of these limitations?**

Generate information



1. What are the most appropriate sources for our information?

consider:

- ◆ key stakeholders (see list with examples in section *Set the Stage*) and other key informants (those with expertise relevant to the question)
- ◆ documents

- ◆ when information on which to base our practice decisions is not available, we may need to generate the information ourselves
- ◆ once we implement decisions, we need to generate information on the appropriateness or effectiveness of our decisions and their implementation

2. What is the most appropriate research/evaluation design?

consider:

- ◆ experimental or quasi-experimental
- ◆ analytic observational
- ◆ descriptive observational

“the methods, the approach you take, depends on the kind of information you’re looking for”

note: see IDM Manual section *Research and Evaluation* for description of designs.

3. What are the most appropriate methods for collecting the information?

consider:

- ◆ observation
- ◆ individual and group interviews
 - structured (a specific set of questions with the same wording used for each interview)
 - semi-structured (some flexibility in questions and wording used)
 - unstructured
- ◆ surveys
 - close ended (only a limited selection of responses allowed)
 - open ended (no pre-selected responses)
- ◆ journal writing
- ◆ document study

“there needs to be a recognition that both qualitative and quantitative research are needed”

4. What checks will we have to ensure data and analysis methods are high quality?

consider pre-tests and regular review to ensure:

- ◆ completeness
- ◆ accuracy
- ◆ relevance to question
- ◆ usability

“This may not be the case [that everything is of equal importance] – some things may be more important than others. Having a sufficient sample size, for example, may be more important than having an elegant research design. Since all research involves compromises, people need some way of knowing how to make trade-off's, so that the project is manageable and still has validity.”

5. What are the most appropriate methods for analyzing the information?

consider:

- ◆ by hand
- ◆ by computer program, e.g.
 - SPSS for statistical analysis
 - NUD*IST for qualitative analysis

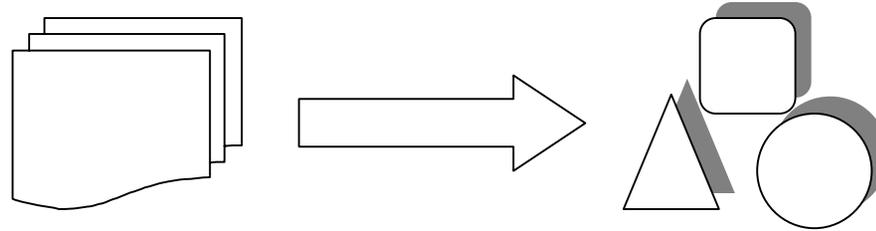
6. What is our process for summarizing or synthesizing the information?

7. What format will we use for reporting?

consider:

- ◆ PowerPoint presentation
- ◆ written report
- ◆ videotape
- ◆ audiotape

Analyse information



for each piece of information, e.g. report, article, data set:

1. What are the theoretical/conceptual perspectives and the implications of these perspectives?
2. What methods were used to obtain or identify information?
3. What are the characteristics of each piece of information?

consider:

- ◆ purpose of the study or data collection
- ◆ study or data collection design
- ◆ publishing status, e.g.:
 - administrative records (unpublished)
 - internal reports (unpublished)
 - external reports (unpublished)
 - peer reviewed (published)
 - non-peer reviewed (published)
- ◆ nature of results, e.g.:
 - from a single study
 - from a non-systematic review
 - from a systematic review

the analysis which best prepares the way for our summary or synthesis is one which is

- ◆ based on health promotion or public health content
- ◆ accurate
- ◆ appropriate

4. Does the report, article or other piece of information consider health promotion/public health underpinnings and understanding of the environment in relation to practice?

5. What variables were involved?

consider:

- ◆ population characteristics, e.g.:
 - age
 - culture
 - sex
- ◆ environmental characteristics, e.g.
 - setting (school, hospital, workplace, etc.)
 - socio-political structures and systems
 - psychological conditions
 - physical conditions
- ◆ characteristics of processes, activities and strategies, including fit with:
 - health promotion/public health values/goals/ethics
 - health promotion/public health theories/concepts/beliefs (including determinants of health)
 - health promotion/public health understanding of environment
- ◆ time period

6. What are the limitations?

7. What are the implications of these limitations?

if the piece of information relates to effectiveness:

8. What are the health promotion/public health short-term, intermediate and/or long-term outcomes related to the initiative?

consider:

- ◆ do long-term outcomes include not just morbidity (illness) and mortality (death) but quality of life and enhanced health
- ◆ do short-term and intermediate outcomes include those which may contribute to long-term health-related outcomes, e.g. increased empowerment, social support, and equity
- ◆ do outcomes include those at organizational, community, and societal levels as well as individual levels
- ◆ how reliable are indicators as a measure of the outcomes

“If you look at 10 programs you find 8 different outcomes, they are hard to compare; for practitioners it's a nightmare. People mix up long and short term outcomes, they don't follow up the group long enough. Maybe people stopping smoking is a long term outcome – maybe you need something shorter term, e.g. wanting to quit, making a plan – there should be a continuum.”

9. What is the relationship between outcomes, activities and processes?

consider:

- ◆ activities/strategies which did and didn't achieve desired outcomes
- ◆ processes which did and didn't adequately support activities/strategies
- ◆ processes which did and didn't directly support desired outcomes
- ◆ resources required to support processes and activities/strategies
- ◆ challenges and solutions
- ◆ degree of consistency between the source's conclusions and the cited data (basing analysis on data rather than stated conclusions if there is an inconsistency)

“we learn as much from what didn't work as from what did work...we learn a lot from our mistakes”

See Worksheet 10.

if the piece of information relates to understanding (e.g. of influencing factors, environments, people, concepts):

10. What were the conclusions?

See Worksheet 11.

looking at all pieces of information together:

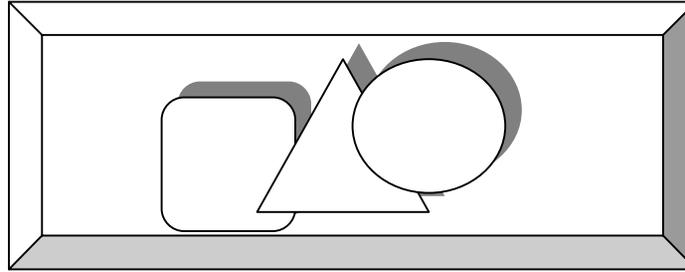
11. What are the similarities and differences amongst all the findings?

12. How do we explain differences and similarities in findings?

13. What are the limitations of our analysis?

14. What are the implications of these limitations?

Summarize or synthesize information



1. Is a summary or synthesis more appropriate?

whether we are doing a summary or a synthesis:

2. What are our theoretical/conceptual perspectives?

3. Which pieces of information are comparable and which aren't?

4. What is our assessment of specificity, generalizability or transferability of findings?

5. Based on findings, what “learnings” have we identified that are relevant to health promotion/public health?

6. What are the limitations of our summary or synthesis?

7. What are the implications of these limitations?

- ◆ a **summary** highlights key findings and/or learnings
- ◆ a **synthesis** combines and generalizes an appropriate synthesis or summary will provide credible relevant answers and meaningful understanding and knowledge

“in health promotion [we] need to look at a lot of issues, we have to be open to surprises, open to learning, one and one don't always make two – and that's what's so exciting about it”

if we are doing a summary:

8. Have we summarized key findings of the pieces of information?

if we are doing a synthesis:

9. How have we weighted the different components being considered (if weighting is appropriate)?

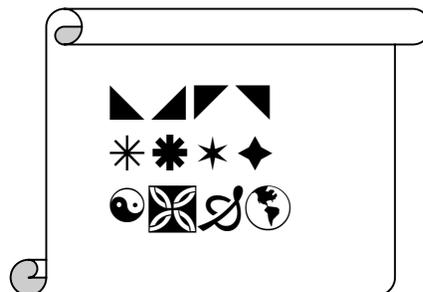
consider:

- ◆ selection criteria
- ◆ characteristics of initiatives (e.g. nature of population, political context, fit with health promotion/public health, time period)
- ◆ methods employed by initiatives
- ◆ degree of “best practices” demonstrated by initiative (i.e., consistency between practice and health promotion/public health underpinnings and understanding of environment)
- ◆ how broad a range of situations initiatives have been tried in and how consistent or inconsistent the results were across the range
- ◆ appropriateness of research design for study of initiatives
 - sample size
 - relevance
 - date
 - consistency of research methods with health promotion/public health best practices
 - relevance to question

10. How have we coded findings and variables?

11. How have we combined coded findings (if combining is appropriate) in relation to variables?

Report on findings



1. Who is our audience?

Reports that

- ◆ reach the people they are meant to reach
- ◆ focus on health promotion or public health content
- ◆ follow principles of clear communication
- ◆ assist people to understand implications and application of the findings

are necessary to help people decide whether it is appropriate for them to apply the findings and, if it is, to make it as easy as possible to do so

2. What is the appropriate type of reporting for our audience?

consider:

- ◆ format
- ◆ presentation style
- ◆ language level
- ◆ distribution/dissemination methods

“one part of [communicating] is finding out what information people want, then presenting it in a way that they can understand it”

3. What steps have we taken to ensure high quality reporting?

consider:

- ◆ have we received feedback from relevant stakeholders
- ◆ have we revised the report as appropriate
- ◆ have we double checked for accuracy, language, spelling, presentation
- ◆ have we planned for production, distribution, and follow up discussion

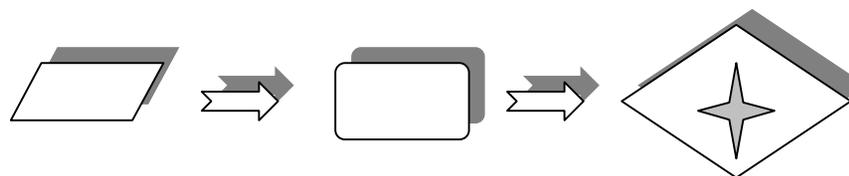
“ I believe it is important to engage the community in actually knowing what the research results were and where you got the information and even getting them to help collect data because then there's more ownership for them for the evidence and doing things – make sure you share it so people understand why and can use it as part of the decision making process – arm them with information”

4. What is included in our report?

consider:

- ◆ identifying the question
- ◆ accurately reflecting all the relevant findings of analysis and/or summary/synthesis
- ◆ providing the important information in a clear manner
- ◆ providing a full description of methodology and perspective
- ◆ describing “learnings” relevant to health promotion/public health
- ◆ identifying limitations and the implications of these limitations
- ◆ reflecting concerns of relevant stakeholders

Make best practices decisions



1. Which decisions does the evidence suggest we should implement to help us achieve our health promotion/public health goals?

See *Worksheets 12 & 13*.

“people often make decisions and then try to rationalize the decisions after – decision-based evidence making – I believe we should be learning from our experiences and trying to inform our judgements and moving ahead that way”

“advancing knowledge and providing information for decision makers both require systematic inquiry, appropriate rigour and an appreciation for the limitations of whatever methods and methodologies are used”

“There’s a sense that there’s people who do research and those who do practice. However we need to reintegrate the two – that when we do practice that it’s a result of our research.”

2. Of these best decision choices, which ones are consistent with our other underpinnings?

consider:

- ◆ priority values
- ◆ ethics
- ◆ theories and concepts
- ◆ underlying beliefs and assumptions

“this is the tension – you don't do anything in public health just based on evidence, there are always all those other variable that go into decision making – values and beliefs on the community or provincial level, it doesn't matter, then there is the context of community, what will sell here, financial

3. Of these best decision choices, which ones are consistent with our understanding of the environment?

consider:

- ◆ vision
- ◆ analysis, i.e., what we have identified as
 - the priority issue
 - the factors influencing the issue
 - the best ways to positively address the issue
 - the challenges that exist to addressing the issue
 - resources to draw on to address the issue and the challenges

“I've been looking at a profile of the community, who lives and works in the community, and then through that, what are the strengths of the community, and based on that, what kind of decisions would you make...”

4. Are there inconsistencies between what the evidence suggests and our underpinnings and understanding of the environment?

if yes, consider:

- ◆ does a re-examination of our underpinnings or understanding of the environment suggest modifications to any of them
- ◆ what kinds of modifications

Implement decisions, evaluate and revise

1. Before we start: what is our action and evaluation plan?
2. Once we start: are we implementing as closely as possible to the processes and activities outlined in our action and evaluation plan, while closely monitoring what we do in case there is good reason to change the plan?
3. Are we documenting as we go?

consider:

- ◆ activities and processes which are implemented as outlined in our plan
- ◆ deviations from our plan and reasons why
- ◆ results (expected and unexpected)
- ◆ challenges and how we deal with them
- ◆ our use of resources

4. What are the findings of our formal evaluation (i.e. resulting from the activities outlined in our action and evaluation plan)?
5. What are the findings of our informal reflection (individually and collectively)?

6. What evaluation questions do we want to look at retrospectively, that hadn't occurred to us initially?

consider:

- ◆ which ones are possible to look at retrospectively (i.e. for which there is enough data available), and which ones aren't
- ◆ for the ones which are, what are the findings

7. Based on the findings from our evaluation, what do we need to revise?

consider:

- ◆ our data gathering procedures
- ◆ the way we implemented our decisions in practice
- ◆ the original decisions themselves
- ◆ the original question

8. What new questions arise out of our implementation and evaluation for which we want to seek evidence?

WORKSHEETS AND LOGIC MODELS

Worksheets are included in this section to help organize our answers to the guiding questions listed previously section. Cross-reference worksheets if there is repetition between them.

Worksheets

Worksheet 1: Identifying our priority health promotion/public health question(s)

Our selected issue is: _____

| | |
|--|--|
| What is the question that we want to examine? | |
| What "sub" questions are related to this question? | |
| Why is this question a priority in relation to our selected issue? | |
| How does this question relate to our underpinnings and understanding of the environment? | |

Worksheet 2: Identifying roles of key stakeholders in research-to-practice process

1. Who are the key stakeholders?
2. How involved will they be in using research in practice?
3. In what ways will they be involved in using research in practice?

| Process | Involvement of Stakeholders | | | | |
|--|---|----------------------|----------------------|----------------------|----------------------|
| | Stakeholder Group A: | Stakeholder Group B: | Stakeholder Group C: | Stakeholder Group D: | Stakeholder Group E: |
| | <ul style="list-style-type: none"> ◆ in the row below, identify key stakeholder groups ◆ for each process (see left column) which corresponds to each stakeholder group, in the appropriate box identify the level of involvement: <input type="checkbox"/> active <input type="checkbox"/> advisory <input type="checkbox"/> minimal (i.e. keep informed only) ◆ if level of activity is “active,” describe | | | | |
| choosing the question | | | | | |
| choosing indicators | | | | | |
| choosing information sources | | | | | |
| providing data | | | | | |
| collecting data | | | | | |
| analyzing data | | | | | |
| synthesizing/
summarizing data | | | | | |
| reporting | | | | | |
| applying conclusions
(making decisions) | | | | | |
| implementing
decisions | | | | | |
| evaluating results of
decisions | | | | | |
| following up on
evaluation results | | | | | |

Worksheet 3: Identifying resources required for undertaking the research-to-practice process

| | Resources we need | Availability of resources (internal and/or external to our organization) | | | Implications challenges & solutions |
|------------------------|-------------------|--|--|---|-------------------------------------|
| | | currently available resources | potentially available resources, if..... | resources not available under any circumstances | |
| skills | | | | | |
| time | | | | | |
| money | | | | | |
| people | | | | | |
| organizations | | | | | |
| sources of information | | | | | |
| space | | | | | |
| equipment | | | | | |
| other resources | | | | | |

Worksheet 4: Identifying internal and external challenges related to research/evaluation

| challenges regarding... | challenges in our organization's internal environment | | challenges in our organization's external environment | |
|---|---|--|---|--|
| | <i>finding research & evaluation</i> | <i>using research & evaluation</i> | <i>finding research & evaluation</i> | <i>using research & evaluation</i> |
| organizational structure, decision-making, etc. | | | | |
| support, value given to research | | | | |
| existence of research/evaluation | | | | |
| access to research & evaluation | | | | |
| skills | | | | |
| time | | | | |
| money | | | | |
| personnel | | | | |
| other | | | | |

Worksheet 5: Developing an action plan to address environmental issues re. identifying/obtaining evidence/research findings

Which environmental issue (internal or external to the organization) do we need/want to address with respect to identifying and obtaining evidence/research findings? (use one worksheet for each issue)

| <i>in order to meet objectives related to...</i> | activities
(what will we do?) | tasks
(how will we undertake our activities?) | resources
(what will we need to complete our tasks?) | time frames
(how much time will we need; when will we stop, start, etc.?) | roles
(who will do which tasks, etc.?) |
|---|---|---|--|---|--|
| <i>addressing the issue</i> | | | | | |
| <i>obtaining/using the resources required to address the issue</i> | | | | | |
| <i>reducing the challenges that will be faced in our efforts to address the issue</i> | | | | | |
| <i>evaluating our efforts to address the issue</i> | | | | | |

Worksheet 6: Developing an Action Plan for identifying and obtaining evidence/research findings

| Steps | activities
(what will we do?) | tasks
(how will we undertake our activities?) | resources
(what will we need to complete our tasks?) | time frames
(how much time will we need; when will we start, stop?) | roles
(who will do which tasks, etc.?) |
|--|---|---|--|---|--|
| <i>setting the stage</i> | | | | | |
| <i>identifying sources of information</i> | | | | | |
| <i>selecting information sources</i> | | | | | |
| <i>generating additional needed information</i> | | | | | |
| <i>analyzing the information</i> | | | | | |
| <i>summarizing or synthesizing the information</i> | | | | | |
| <i>reporting the findings</i> | | | | | |

Worksheet 7: Identifying sources of evidence

1. What sources of evidence/information do we need?
2. What sources of evidence/information do we have?
3. How will availability assist/restrict our practice (including research/evaluation)?

| | sources of evidence/information we need | currently available sources | potentially available sources, if..... | sources not available under any circumstances | Implications challenges/solutions |
|--------------------------------------|---|-----------------------------|--|---|-----------------------------------|
| Published literature | | | | | |
| Unpublished reports | | | | | |
| Systematic reviews of the literature | | | | | |
| Web-based information sources | | | | | |
| Key stakeholders | | | | | |
| Other key informants | | | | | |
| Other sources | | | | | |

Worksheet 8: Applying criteria in selecting sources of evidence

Source of evidence: _____

| | To what extent does the source of evidence meet the criteria re.: | | | | Implications re. selecting this source of evidence |
|--|---|---|------------------------|---------------------------------|--|
| | Relevance to health promotion/
public health question | Reflecting best practices in health promotion/
public health | Other quality criteria | Relevance to specific situation | |
| <i>Criteria regarding:</i> | | | | | |
| Initiatives' processes, activities & strategies (that are the subject of the report) | | | | | |
| Nature & source of the evidence | | | | | |
| Procedures & methodologies used to:
1. identify & select
2. analyze & summarize or synthesize
3. report the information | | | | | |
| How adequately the information source provides information to assess:
1. relevance of evidence to health promotion/
public health?
2. extent to which it reflects best practices in health promotion/public health?
3. quality of the evidence?
4. relevance to the specific situation? | | | | | |

Worksheet 9: Assessing applicability of evidence from other situations to our specific situation

In what way is our specific situation similar to and different from the situations from which the evidence/research findings were obtained?

| | Analysis of our & other situations (i.e. that of the evidence/study) | | Similarities & differences between situations | | | Implications & conclusions |
|--|--|--|---|---|--|----------------------------|
| | our situation with respect to... | the situation addressed by the evidence/study with respect to... | similarities between our situation & that addressed by the evidence/study | differences between the situations that don't matter | differences between the situations that do matter | |
| <i>fill in only those which are relevant</i> | | | | | | |
| population demographics | | | | | | |
| population profile | | | | | | |
| physical environment | | | | | | |
| social, economic & political environment | | | | | | |
| psychological environment | | | | | | |
| challenges | | | | | | |
| resources | | | | | | |

notes

- ◆ *population demographics*: sex, age, income levels, education levels, health status, etc.
- ◆ *population profile*: culture, awareness and understanding of environmental issues (including physical, psychological, social, economic and political environments), underlying beliefs, readiness for action or change, nature of dynamics, etc.
- ◆ *physical environment*: geography, climate, pollution levels, housing density, etc.

- ◆ *social, economic and political environment*: nature of social, economic and political systems and structures, and nature of social, economic and power relationships
- ◆ *psychological environment*: degree of optimism, fear, motivation, caring, etc.
- ◆ *challenges*: any factor or issue which might impede the application of the strategy, program etc. being considered
- ◆ *resources*: any factor which would support the application of the strategy, program etc. being considered

Worksheet 10: Summary & assessment of findings re. individual outcome-focused evidence source

| | summary/description of findings | assessment of findings | | |
|---|---------------------------------|--|-------------------------------|-------------------------------------|
| | | relevance to health promotion/public health best practices | quality of methods & findings | applicability to specific situation |
| OUTCOMES | | | | |
| short-term | | | | |
| intermediate | | | | |
| long-term | | | | |
| ACTIVITIES & STRATEGIES | | | | |
| which achieved outcomes | | | | |
| which failed to achieve outcomes | | | | |
| PROCESSES | | | | |
| which adequately supported activities & strategies | | | | |
| which didn't adequately support activities & strategies | | | | |

| | summary/description of findings | assessment of findings | | |
|---|---------------------------------|--|-------------------------------|-------------------------------------|
| | | relevance to health promotion/public health best practices | quality of methods & findings | applicability to specific situation |
| CHALLENGES & SOLUTIONS | | | | |
| challenges similar to our circumstances | | | | |
| solutions to challenges | | | | |
| RESOURCES | | | | |
| resources required to support processes | | | | |
| resources required to support activities/strategies | | | | |

notes:

applicability to specific situation: refers to issue, demographics, geography, culture, health attitudes, systems/structures, challenges, capacities, resources...

relevance to health promotion/public health best practices: refers to relationship to health promotion/public health underpinnings, understanding of the environment, practice

quality of methods & findings: match with points listed in guiding questions

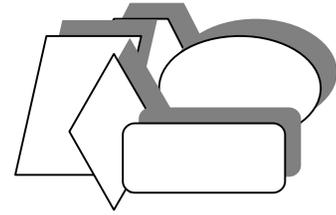
Worksheet 12: summary of findings from ALL selected outcome-focused sources

| | findings from our own situations | findings from other situations | conclusions/implications
(based on findings from our own and other situations) | decisions for future practice
(based on implications of findings & consistent with health promotion/public health underpinnings and understanding of the environment) | implement decisions | evaluate decisions |
|---|---|---|--|---|----------------------------|---------------------------|
| | <ul style="list-style-type: none"> • general description of findings • degree of relevance to health promotion/public health best practices • degree of quality • degree of applicability to specific situation • strengths • limitations | <ul style="list-style-type: none"> • general description of findings • degree of relevance to health promotion/public health best practices • degree of quality • degree of applicability to specific situation • strengths • limitations | | | | |
| OUTCOMES | | | | | | |
| short-term | | | | | | |
| intermediate | | | | | | |
| long-term | | | | | | |
| ACTIVITIES /STRATEGIES | | | | | | |
| which achieved outcomes | | | | | | |
| which failed to achieve outcomes | | | | | | |
| PROCESSES | | | | | | |
| which adequately supported activities/strategies | | | | | | |
| which didn't adequately support activities/strategies | | | | | | |
| CHALLENGES & SOLUTIONS | | | | | | |
| challenges similar to our situation | | | | | | |
| solutions to challenges | | | | | | |
| RESOURCES | | | | | | |
| required to support processes | | | | | | |
| required to support activities/strategies | | | | | | |

Evidence assessment logic models

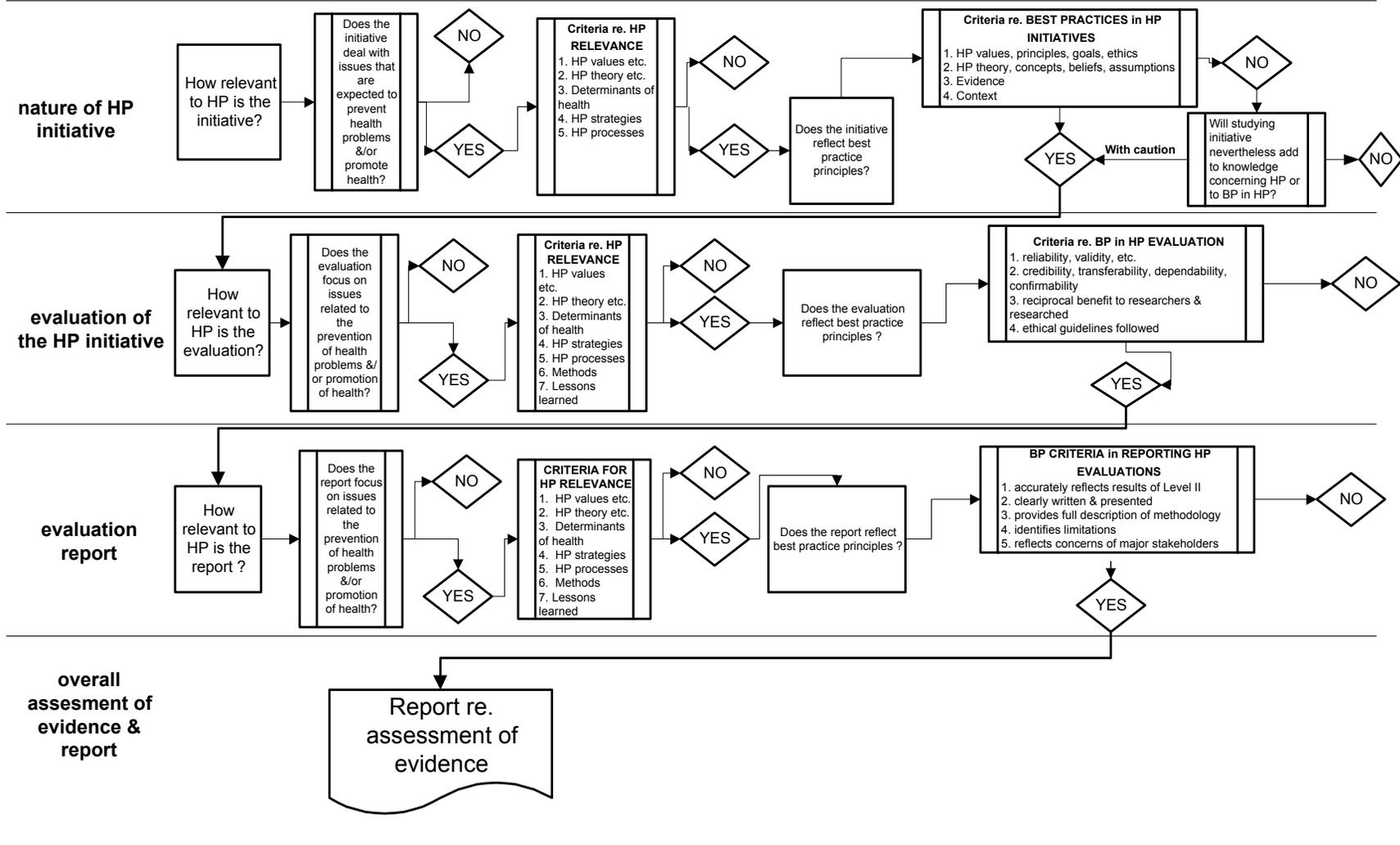
The figures on the following pages represent the steps involved in identifying and assessing evidence obtained from:

- ◆ reports of individual research studies and/or evaluations
- ◆ reviews/syntheses of evidence



Logic model for identifying and assessing evidence from individual research/evaluation reports

IDENTIFYING & ASSESSING EVIDENCE FROM INDIVIDUAL RESEARCH/EVALUATIONS



Logic model for identifying and assessing evidence from reviews/syntheses of evidence

IDENTIFICATION & ASSESSMENT OF SYSTEMATIC REVIEWS OF EVIDENCE

