DRAFT: 2009 06 12

SUPPORT Tools for evidence-informed health Policymaking (STP)

3. Defining the problem

John N Lavis[1]
Michael G Wilson[2]
Andrew D Oxman[3]
Simon Lewin[4]
Atle Fretheim[5]

1. Centre for Health Economics and Policy Analysis, Department of Clinical Epidemiology and Biostatistics, and Department of Political Science, McMaster University, 1200 Main St. West,
   HSC-2D3, Hamilton, ON, Canada, L8N 3Z5. Email: lavisj@mcmaster.ca
2. Health Research Methodology PhD Program and Department of Clinical Epidemiology and Biostatistics, 1200 Main St. West, HSC-2D1 area, Hamilton, ON, Canada, L8N 3Z5. Email: wilsom2@mcmaster.ca
3. Norwegian Knowledge Centre for the Health Services, P.O. Box 7004, St. Olavs plass, N-0130 Oslo, Norway. Email: oxman@online.no
4. Norwegian Knowledge Centre for the Health Services, P.O. Box 7004, St. Olavs plass, N-0130 Oslo, Norway and Health Systems Research Unit, Medical Research Council of South Africa. Email: simon.lewin@nokc.no
5. Norwegian Knowledge Centre for the Health Services, P.O. Box 7004, St. Olavs plass, N-0130 Oslo, Norway. Email: atle.fretheim@nokc.no

Corresponding author:
John N Lavis
1200 Main St. West, HSC-2D3
Hamilton, ON, Canada, L8N 3Z5

Email: lavisj@mcmaster.ca

Abstract

Background: This article is number 3 in a series of 21 articles on tools for evidence-informed health policymaking. Policymakers and those supporting them often find themselves in situations that spur them on to work out how best to define a problem. These situations may range from being asked an awkward or challenging question in the legislature, through to finding a problem highlighted on the front page of a newspaper. The *motivations* for policymakers wanting to define a problem are diverse. These may range from deciding whether to pay serious attention to a particular problem that others claim is important, through to wondering how to convince others to agree that a problem is important. Struggles over how to define a problem are a critically important part of the policymaking process. The outcome of these struggles will influence *whether* and, in part, *how* policymakers take action to address a problem. When defining a problem, those efforts that are informed by an appreciation of concurrent developments related to policy and programme options (e.g. the publication of a report demonstrating the effectiveness of a particular option) and of concurrent political events (e.g. the appointment of a new Minister of Health with a personal interest in a particular issue) are more likely to generate action.

Objective: In this article we suggest questions that can be used to guide those involved in identifying a problem and characterising its features.

Key messages:
- The following questions can guide how to identify a problem and characterise its features:
  1. What is the problem?
  2. How did the problem come to attention and has this process influenced the prospect of it being addressed?
  3. What indicators can be used, or collected, to establish the magnitude of the problem and to measure progress in addressing it?
  4. What comparisons can be made to establish the magnitude of the problem and to measure progress in addressing it?
  5. How can a problem be framed (or described) in a way that will motivate different groups?
- Activity related to the first question listed above can all too easily be done in a cursory way, which may mean that further resource investments based on such definitions may be potentially misguided
- Close attention to indicators, comparisons and alternative framings can be paid to ensure that decisions about which particular problem to focus on are well informed. In turn, this will influence decisions about which particular policy or programme options warrant serious consideration based on *how* they address the problem

Background

This article is number 3 in a series of 21 articles on tools for evidence-informed health policymaking. It is also the 2nd of 2 articles in this series about prioritising and defining problems. Its purpose is to suggest questions to guide those involved in identifying a problem and characterising its features.

Policymakers and those supporting them often find themselves in a situation in which they need to decide how best to define a problem. They may have:
- Identified a problem through an explicit priority-setting process (the focus of Article 2) [1]
- Read about a problem in a report from a national statistical agency or from an independent researcher
- Been asked a tough question about a problem in the legislature or by a constituent
- Found a problem highlighted on the front page of a daily newspaper, or
- Identified a problem through their personal experience of a health system

Some of these situations lend themselves to the proactive assessment of a problem. But most typically they place policymakers in a reactive mode.

The motivation for policymakers to define a problem may be informed by a consideration of:
- Whether to pay serious attention to a particular problem that others assert is important
- What factors contribute to a problem
- How to measure the magnitude of a problem, whether it is getting better or worse, and whether it is responding to particular policies or programmes
- How to convince others to agree that a problem is important (or that a favoured way forward is the optimal one given *how* it addresses a particular problem), or
- How to address misperceptions or manage expectations among those who (erroneously, in the eyes of the policymakers) see the problem as important

Struggles over how to define a problem are a critically important part of the policymaking process [2, 3]. The outcome of these struggles will influence *whether* (and, in part, *how*) policymakers take action to address a problem.

Problems may come to light through:
- A focusing event
- A change in an indicator, or
- Feedback from the operation of a current policy or programme [4]

Focusing events are very common in the health sector because poor decision making may lead to extreme and often high-profile events such as illness and death. An example of a focusing event would be extensive newspaper coverage over a number of consecutive days of the provision of counterfeit prescription drugs and the deaths that resulted from their use. A change in an indicator, though less dramatic, can also bring problems to attention, particularly if it is a large change or it receives significant attention in a report or media release. A national statistical agency, for instance, may release a report that shows that nurses' pay varies widely across a country and that this is contributing to nursing shortages in certain provinces. Or a problem may come to light through feedback from the operation of a current policy or programme. Informal feedback from a programme manager in charge of a provincial

wait-time reduction initiative might, for example, highlight that the programme is failing to meet its target for wait-time reductions because of resource limitations.

However, not all problems that are bought to attention are deemed worthy of government action. A problem can be defined as warranting government action by:

- Comparing current conditions with values related to a 'more ideal' state of affairs
- Comparing performance with other jurisdictions, and
- Framing a subject in a different way (e.g. describing a problem as an impediment to achieve a national priority) [4]

Politicians from different political parties will reflect different values and interpretations related to what constitutes a 'more ideal' state of affairs. A Minister of Health of a particular country might regard the health system as performing well relative to that of a neighbouring country. But he or she might not do so when it is compared less favourably to other, equally appropriate international examples. Similarly, a cabinet may decide to take action if a particular problem is defined in terms of a lack of patient choice among healthcare providers, but *not* if a problem is defined in terms of a lack of interest on the part of physicians in joining clinics that use collaborative practice models.

Efforts to define problems are more likely to result in action if they:

- Reflect an awareness of concurrent developments related to policy and programme options (e.g. the publication of a report demonstrating the effectiveness of a particular option), and
- Are influenced by concurrent political events (such as, for example, the appointment of a new Minister of Health who may have a personal interest in a particular issue) [4]

If a problem is not defined in a way that 'fits well' with what are perceived to be viable policy and programme options, or if it does not fit with broader political events, it is very unlikely to reach a decision agenda. A policy can be deemed to be a viable solution if it is technically feasible, fits with dominant values and the public's current mood, and is acceptable both in terms of budget workability and likely political support or opposition [4]. Relevant political events can include swings in the public's mood, changes in levels of support or opposition of interest groups forces, and changes to the governing party or prevailing legislative coalition [4].

Questions to consider

The following questions can guide how to identify a problem and characterise its features:
1. What is the problem?
2. How did the problem come to attention and has this process influenced the prospect of it being addressed?
3. What indicators can be used or collected to establish the magnitude of the problem and to measure progress in addressing it?
4. What comparisons can be made to establish the magnitude of the problem and to measure progress in addressing it?
5. How can a problem be framed (or described) in a way that will motivate different groups?

1. What is the problem?

A problem may relate to one or more of the following:
- A risk factor, disease or condition
- The programmes, services or drugs currently being used to address a risk factor, disease or condition
- The current health system arrangements within which programmes, services and drugs are provided, or
- The current degree of implementation of an agreed upon course of action (e.g. a policy or guideline)

The prevalence of a risk factor in a province or country or the burden of a disease or condition in a province or country (e.g. incidence rate, prevalence rate, mortality rate) may constitute a problem. But more often, such issues are the *manifestation* of a problem: their cause is the real problem that needs to be addressed. The problem may instead be at the programme or service level, or relate specifically to the suitability of a drug that is currently being used to address a risk factor, disease or condition. Ineffective programmes, services or drugs may, for example, be in use to prevent or treat the risk factor, disease or condition.

Alternatively, a problem may be rooted in current health system arrangements within which programmes, services and drugs are provided. Potential problems may also lie with governance arrangements/structures. These can include:
- Who has policy (e.g. regulatory), organisational, commercial and professional authority and accountability over particular programmes
- The services and drugs or the parts of the health system within which the programmes are located
- The services and drugs provided
- How authority is discharged
- And how people who exercise authority are held accountable

Or a potential problem may be rooted in financial arrangements. Such arrangements can include who finances (i.e. pays for) particular programmes, services and drugs and the parts of the health system within which the programmes, services and drugs are provided, or how organisations are funded to deliver the programmes, services and drugs. It may also relate to how professionals are remunerated to provide programmes, services or drugs, whether patients/consumers are offered incentives to use them, and how resources are allocated to them. Problems may also be linked to current delivery arrangements. These may include who is targeted by particular programmes, services and drugs, who they reach (or by whom they are they accessed and used), who provides them and how, where are they provided, what information and communication technology is used to provided them, and what safety and quality systems are provided. This taxonomy of health system arrangements is addressed further in Article 5 in this series [5].

Finally, a problem may lie in the current *degree* of implementation of an agreed course of action about a programme, service or drug, or about the health system arrangements within which particular programmes, services and drugs are provided. For example, a problem may already have been defined and a policy introduced to address it, but the policy may not yet have been translated into action. In this instance, one approach to identifying the problem is to identify potential barriers to implementation at one or more of four levels:
1. The consumer level (e.g. consumers are unaware that they can access a programme, service or drug free of charge)

2. The healthcare provider level (e.g. health workers do not fully adhere to national policies and guidelines)
3. The organisational level (e.g. organisations do not manage the performance of their staff), and
4. The system level (e.g. policies are not enforced). Identifying barriers to implementation is the focus of Article 14 in this series [6].

Policymakers and those who support them need to determine whether a problem lies on one or more of these levels. Doing so can be an iterative process: what at first glance may seem like a seemingly unrelated issue, such as disincentives to manage chronic disease proactively in primary healthcare, may actually be the problem that needs attention. Box 1 illustrates how this simple framework can be used to locate a problem at one or more of these levels, using malaria treatment in sub-Saharan Africa as an example.

2. How did the problem come to attention and has this process influenced the prospect of it being addressed?

Identifying a problem is often only the beginning of the process. Typically, a great deal of work will still need to be done in order to define a problem in a way that confirms whether there is a need to address it. If there is a need, support will also need to be built to address it. Understanding how a problem first came to attention can be an important first step in the process of defining it. As outlined in the Background section earlier, a problem typically comes to light through:

- A focusing event
- A change in an indicator, or
- Feedback from the operation of current policies and programmes.

Key policymakers may (or may not) agree at this early stage of the problem definition process that a problem warrants attention. Box 2 illustrates how this question (and three additional questions) can be used to define a problem once it has been located at one or more levels.

If key policymakers do agree that a problem does warrant attention and that they want to stake out a claim for what they would like to achieve in addressing the problem (e.g. through a statement of purpose or a goal), this will often leave little time to define the problem accurately before moving on the specifics of considering how the policy and programme options should be framed. However, a focusing event could, on closer examination, turn out to have been a significant aberration and not to reflect a widespread problem. An indicator may be found to have been poorly measured or not adjusted for seasonal variation. Or an internal report about the operation of current policies and programmes may, when read more closely, contain significant errors of interpretation. It may also be the case that the problem has been provisionally identified at the level of the current programmes, services or drugs being used to prevent or treat a condition while, in reality, the real problem may be found to lie elsewhere.

Alternatively, key policymakers may quickly decide that a problem does not warrant attention. They may focus on addressing misperceptions or managing expectations among those who first brought the problem to attention. In the interim, other policymakers may conduct a preliminary review and conclude that the problem *is* significant. In this key policymakers they will be left with the difficult task of having to make a case for re-opening

an issue that has been effectively closed – perhaps even in a highly visible way.

3. What indicators can be used or collected to establish the magnitude of the problem and to measure progress in addressing it?

Depending on how a problem first comes to attention, it may or may not be necessary to closely examine what indicators related to the problem are currently being measured (or can and should be measured) accurately. If a problem comes to attention through a change in an indicator that is already known to be highly reliable, for example, giving further attention to other indicators may not be needed. On the other hand, if a problem comes to attention through a focusing event, further work would be necessary. In such cases:

- Community surveys and vital registries are examples of good sources of indicators about a risk factor, disease or condition
- Healthcare administrative data (or what are sometimes called health management information systems), monitoring and evaluation data, community surveys, and healthcare provider surveys can be good sources of indicators about the programmes, services and drugs currently being used
- Legislation, regulation, policies, drug formularies, and policymaker surveys can be good sources of indicators about governance arrangements
- Health expenditure surveys and healthcare provider surveys can be good sources of indicators about financial arrangements
- Healthcare administrative data can be good sources of indicators about delivery arrangements, and
- Community surveys and health care provider surveys can be good sources of indicators about the current degree of implementation of an agreed upon course of action

Disaggregated data, such as data by race/ethnicity/culture, gender or socioeconomic status, can often be particularly helpful in defining whether a problem is widespread or particularly pronounced in some groups. Article 6 in this series addresses how to find and use local evidence, and Article 9 describes a categorisation scheme for groups which could be considered when incorporating equity-based approaches within the process of problem definition [7, 8].

4. What comparisons can be made to establish the magnitude of the problem and to measure progress in addressing it?

While indicators can provide policymakers with some sense of the magnitude of a problem, comparisons (whether implicit or explicit) are what truly establish whether a problem is big or small, is getting better or worse, or appears amenable to change. At least four key types of comparisons can be made:

- Comparisons over time within the country: can help to establish whether a problem is getting better or worse and, if corrective actions have already been taken, whether a problem appears amenable to change
- Comparisons between countries and other appropriate comparators (where the data are comparable): can help to establish whether a problem is big or small, what targets could be achievable, as well as help to mobilise support for addressing a problem
- Comparisons against plans: (e.g. national targets and Millennium Development Goals) can help to mobilise support for addressing a problem, and

- Comparisons against what policymakers and/or stakeholders predicted or wanted: can also help to mobilise support for reaching goals

While defining a problem relies extensively on local data, research evidence can often provide comparisons that have been conducted in a systematic and transparent way. Healthcare administrative database studies and community surveys, for example, which are often published in research literature, can help to define a problem and appropriate targets, as well as to mobilise support. Such studies can be highly useful to policymakers in addressing misperceptions or managing expectations. They can also be used to develop or refine a statement of purpose. For example, policymakers may want to change the trajectory of an existing indicator or measure a new indicator in ways that permit comparisons. Article 6 in this series provides approaches to finding and using local evidence [7]. Box 3 also provides tips for finding healthcare administrative database studies and community surveys.

5. How can a problem be framed (or described) in a way that will motivate different groups?

Categorising a given problem in one particular way or another can have important consequences in the way groups may respond to it. Framing a problem in new or alternative ways is likely to result in the issues resonating in different ways among different groups. The field of study related to the social determinants of health, for example, has been framed most neutrally in Canada as 'population health'. In the United States the field is often referred to as 'disparities in health' – a term that conveys the existence of differences but not necessarily unfairness. While in the United Kingdom the term 'inequalities in health' is commonly used and seems explicitly to convey unfairness. In the United Kingdom, the term only gained political traction when a new governing party was elected and made it the focus of their efforts to implement changes within health and other sectors. Some groups may respond more actively to a negatively framed problem statement (e.g. "Our country has the highest infant mortality rate in the region") while others may respond better to a positively framed statement of purpose (e.g. "Our country will, within five years, achieve the national health goals related to infant mortality").

Some groups may rally around issues related to a disease or condition (e.g. rapidly rising rates of cardiovascular disease), whereas others may rally around one of more risk factors (e.g. smoking, diet, and exercise). Even groups with a similar focus may be attracted to different indicators that relate to the same problem. Some may be motivated more by 'hard' indicators such as mortality; others may be motivated by 'soft' indicators such as self-reported health status. The importance of comparisons can also vary by group, with some groups more interested in a narrowly defined group of peers that share a range of key characteristics, and others more interested in the full spectrum of organisations providing similar types of healthcare.

Qualitative research can shed light on the meanings that individuals or groups attach to a particular problem, the indicators used to measure it, and the comparisons made to establish its importance. Box 3 provides some tips for finding this type of research. Conversations with different groups and available qualitative research can help policymakers identify which framings of a problem (or purpose) can best mobilise support among different groups to address the problem. A key challenge, however, is ensuring that the alternative framings

being considered are consistent with the problem, as determined through the type of systematic analysis described above.

Resources

Useful documents and further reading
- Kingdon JW: *Agendas, Alternatives, and Public Policies*, 2 edn. New York, USA: Longman; 2003, pp. 90-115.

Links to websites
- Program in Policy Decision-Making (PPD)/Canadian Cochrane Network and Centre (CCNC) database – Source of a taxonomy of governance, financial and delivery arrangements within health systems, as well as systematic reviews of administrative database studies, community surveys, and qualitative research addressing health system arrangements
  http://www.researchtopolicy.ca

Box 1: Defining the problem underpinning the lack of widespread use of the recommended malaria treatment

A framework, consisting of four questions, can be used to locate a problem at one or more levels (i.e. to address Question 1 discussed earlier). Evidence-Informed Policy Networks (EVIPNet) in ten Sub-Saharan African countries used the following questions and sources of data and research evidence to locate a problem at one or more levels in their respective countries. The problem identified was the lack of widespread use of the recommended malaria treatment, namely artemisinin-based combination therapy (ACT) [9]:

- Does the problem relate to a risk factor, disease or condition?
  - Incidence of (and death rates from) uncomplicated falciparum malaria, by age (including separately for infants), sex (including separately for pregnant women and lactating women), HIV status, malnutrition status, and socioeconomic status
- Does the problem relate to a programme, service or drug currently being used to address a risk factor, disease or condition?
  - Cure rates for, and drug resistance (or reduced drug sensitivity) to, ACT and other anti-malarial drugs, as well as the side effects and costs of the drugs
  - The views and experiences of patients about particular anti-malarial drugs
- Does the problem relate to the current health system arrangements within which programmes, services and drugs are provided?
  - Governance arrangements
    - Regulations about which ACT and other anti-malarial drugs (i.e. drugs, dosage regimes, and packaging) can be registered/licensed for sale, how counterfeit or substandard drugs are safe-guarded against, how patents for them and profits arising from them are handled, how they can be marketed, who can prescribe them and how, and who can sell or dispense them and how
    - National treatment guidelines and/or the national malaria control policy about the first-line (and second-line) drug therapy recommended for uncomplicated falciparum malaria, as well as their dosage regimes/packaging, targeting for particular populations, and targeting for areas with particular characteristics
    - National essential drugs list, particularly the list of anti-malarial drugs
  - Financial arrangements
    - Drug and dispensing fees for first-line drug therapy (and for ACT if this is not the first-line therapy) for uncomplicated falciparum malaria, including any subsidies for particular populations, remuneration arrangements for health works prescribing and dispensing ACT
    - The views and experiences of patients about fees and subsidies and with financial incentives to promote adherence
  - Delivery arrangements
    - Access rates for first-line drug therapy (and for ACT if this is not first-line therapy) for uncomplicated falciparum malaria (i.e. who has access to someone who can dispense drug therapy)
    - Coverage rates for first-line drug therapy (and for ACT if this is not first-line therapy) for uncomplicated falciparum malaria (i.e. who is dispensed what)
    - Treatment patterns for uncomplicated falciparum malaria (i.e. who dispenses what, when, where and how, including whether treatment is part of the Integrated Management of Childhood Illness or other 'horizontal' programmes)
    - Adherence patterns for the treatment of uncomplicated falciparum malaria (i.e. who takes what, when, where and how)

- Arrangements for surveillance, pharmacovigilance and the diagnosis and treatment of atypical cases?
- The views and experiences of patients about particular providers (or delivery arrangements more generally)

- Does the problem relate to the current degree of implementation of an agreed upon course of action?
  - For example, regulations can only help to address a problem if they are acted upon throughout the health system. Regulations may exist about the registration/licensure, marketing, prescribing and dispending of ACT and other anti-malarial drugs. However, if the regulations are not enforced, there may be many counterfeit or substandard drugs in circulation, false statements may be made in drug advertisements, and untrained individuals may be prescribing or dispending ACT

The EVIPNet teams all concluded that the problem was located at a number of these levels. This had important implications for which options were considered appropriate to address the multi-level problem.

Box 2:   Defining the problem underpinning high rates of medication error

Questions 2-5 discussed earlier in this article can be used to define a problem once it has been located at one or more levels. Consider the case of high rates of medication error:

- How did the problem come to attention and has this process influenced the prospect of it being addressed?
  - The problem of medical error may come to attention through a focusing event (e.g. a child dies because a doctor orders the wrong dose of drug), a change in an indicator (e.g. there is a dramatic increase in the number of reported errors in a given month) or feedback from the operation of current policies and programmes (e.g. an evaluation report identifies more types of medication errors than have been routinely measured)
  - The evaluation report may identify that one possible factor contributing to the problem is a lack of clear boundaries between the scope of practice of doctors, nurses and pharmacists, so that accountability for prescribing, dispensing, administration and chart documentation are not clear
  - The same report may propose that the problem be turned into a statement of purpose that can be used to engage a diverse array of stakeholders. For example, policymakers may prefer to talk about their country becoming a leader in patient safety
- What indicators can be used or collected to establish the magnitude of the problem and to measure progress in addressing it?
  - Policymakers may identify that no indicators are currently being measured accurately at the national level but that they are interested in starting to accurately measure both the number of medication error reports per quarter and the number of 'near misses' per quarter. Collecting such data would allow them to set a target level for the indicator
- What comparisons can be made to establish the magnitude of the problem and to measure progress in addressing it?
  - Policymakers may identify that they would like to make four types of comparisons:
    - Comparisons over time within the country
    - Comparisons to other appropriate comparator countries
    - Comparisons against a target to be set as part of a national patient safety strategy
    - Comparisons against what the national consumer association has said it would like to see
  - Ideally a search for administrative database studies or community surveys would allow the policymakers to identify at least some existing research evidence that would allow them to make some of these comparisons immediately
- How can a problem be framed (or described) in a way that will motivate different groups?
  - Policymakers may find that:
    - Pharmacists respond to the language used to describe a medication error
    - Consumer groups respond to a stated purpose of achieving a 50% reduction in medication errors
    - Regulators engage when the lack of clear boundaries between the scope of practice of healthcare providers is discussed as an important feature of the problem
    - Hospital staff may respond positively when told of a plan to collect an indicator that identifies under-reporting in a way does not penalise units or departments who support full disclosure
    - Hospital executives may engage most fully when comparisons are made among their facilities
  - Ideally a search for qualitative studies would allow the policymakers to grasp the different meanings that different groups attach to the problem

Box 3: Finding research evidence about a problem

While much of the task of problem definition involves finding and using local evidence (the subject of Article 6 in this series), published administrative database studies and community surveys can provide insights about comparisons [7]. Qualitative studies can also provide insight into alternative framings for a problem.

The first set of steps involved in finding such studies includes:
- Drawing up a list of words or phrases that capture the problem (e.g. medication error, scope of practice), synonyms for each problem and factor (e.g. drug near-misses, professional regulation), and alternative spellings for each synonym (e.g. medication, medications)
- Deciding whether systematic reviews (the subject of Article 5) or single research studies are the focus of the search [5], and
- Providing any additional details that limit the search (e.g. children, adults).

The second set of steps includes:
- Choosing those words and phrases that would *all* need to be present in order for the article to be identified (e.g. medication error, systematic review, and children), connecting them with 'and,' and putting them in brackets, and
- Choosing those words and phrases for which only one would need to be present (e.g. medical error and its synonyms), connecting them with 'or,' and putting them in brackets, and
- Connecting both sets of brackets using 'and.'

The third set of steps includes:
- Using the Internet to access the health-related database, PubMed that contains a 'hedge' (i.e. a validated search strategy) for the types of studies of interest here [10]
- Clicking on 'special queries' in the left task bar
- Clicking on 'health services research' queries
- Entering the words and phrases, as well as the Boolean operators ('and'/'or'), in the search field, and
- Clicking 'process assessment' or 'outcomes assessment' for administrative database studies and 'qualitative research' for qualitative studies

This approach increases the changes that the citations that are returned will be of the appropriate study type, but many other types of studies may be retrieved as well.

References

1. Lavis JN, Oxman AD, Lewin SA, Fretheim A. **SUPPORT Tools for evidence-informed health policymaking (STP). 2. Setting priorities**. Health Res Policy Syst, In Press

2. Stone D: *Policy Paradox: The Art of Political Decision Making*. New York: W. W. Norton and Company; 1997.

3. Rochefort DA, Cobb RW: **Problem definition, agenda access, and policy choice.** *Policy Studies Journal* 1993, **21:** 56-71.

4. Kingdon JW: *Agendas, Alternatives, and Public Policies*, 2nd edn. New York: Longman; 2003.

5. Lavis JN, Oxman AD, Grimshaw JM, Johansen M, Boyko JA, Lewin SA *et al.*. **SUPPORT Tools for evidence-informed health policymaking (STP). 5. Finding systematic reviews**. Health Res Policy Syst, In Press

6. Fretheim A, Oxman A, Lavis JN, Lewin S. **SUPPORT Tools for evidence-informed health policymaking (STP). 14. Implementing policies and programmes**. Health Res Policy Syst, In Press

7. Lewin S, Marti SG, Fretheim A, Lavis JN, Oxman A. **SUPPORT Tools for evidence-informed health policymaking (STP). 6. Finding and using local evidence**. Health Res Policy Syst, In Press

8. Oxman A, Lavis JN, Fretheim A, Lewin S. **SUPPORT Tools for evidence-informed health policymaking (STP). 9. Incorporating equity considerations**. Health Res Policy Syst, In Press

9. WHO. Guidelines for the Treatment of Malaria. 2009. Geneva, World Health Organization.

10. Wilczynski NL, Haynes RB, Lavis JN, Ramkissoonsingh R, Arnold-Oatley AE: **Optimal search strategies for detecting health services research studies in MEDLINE.** *CMAJ* 2004, **171:** 1179-1185.