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SUPPORT Tools for Evidence-informed policymaking in health

14. Implementing policies and programmes

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Abstract

Background: This article is number 14 in a series of 21 articles on tools for evidence-informed health policymaking. After policy decisions have been made, the next key challenge is how these stated policy positions can be transformed into practical actions. What strategies, for instance, are available to facilitate effective implementation?

Objectives: In this article we suggest five questions that can be considered by policymakers when implementing a health policy or programme.

Key messages:

- The following questions can be used to guide the planning and implementation of a new policy or programme:
  1. What are the potential barriers to the successful implementation of a new policy?
  2. What strategies should be considered during the implementation planning of a new policy in order to facilitate the necessary behavioural changes among healthcare recipients?
  3. What strategies should be considered during the implementation planning of a new policy in order to facilitate the necessary behavioural changes among healthcare professionals?
  4. What strategies should be considered during the implementation planning of a new policy in order to facilitate the necessary organisational changes?
  5. What strategies should be considered during implementation planning of a new policy in order to facilitate the necessary system changes?
- The views of relevant stakeholder groups should be explored in order to identify potential barriers to policy implementation
- The behaviour of healthcare recipients, particularly in relation to the use of healthcare services (e.g. under-utilisation, non-adherence to recommended lifestyle changes or treatment schedules etc.), may act as barriers to policy implementation. Financial incentives and mass media campaigns are examples of interventions that can address such barriers
- Many interventions have been shown to influence professional behaviour to a modest or moderate degree. Passive interventions, such as circulating guidelines or hosting educational meetings, seem to have very little impact, while educational outreach visits and multifaceted interventions targeting identified barriers to change are more promising approaches
- Financial incentives can be an effective way of influencing individual health professionals with regard to simple and well-defined behavioural goals
- Regulatory measures are an inexpensive and potentially effective means of eliciting change in professional behaviour, but may be poorly received by professional groups
- Many different management strategies for organisational change have been recommended, usually with a focus on various steps to take in a process leading to change. Little is known about their effectiveness
- When a new policy is to be implemented, various changes in the health system may also be necessary, e.g. changes in governance arrangements, financial arrangements or delivery arrangements

Background

This article is number 14 in a series of 21 articles on tools for evidence-informed health policymaking [1]. It is also the second of three articles in this series about planning implementation, scaling up, and monitoring and evaluation strategies. The purpose of this article is to suggest how to identify potential barriers to implementation and select implementation strategies.

After a policy decision has been made, the key challenge is transforming the policy into actions – in other words, how to implement real changes 'on the ground'. A key question for those responsible for policy implementation is: "Which strategies are available that can facilitate effective implementation?" In this article we discuss a set of issues we believe are worth considering when discussing policy implementation, and suggest potentially useful approaches.

Questions to consider

1. What are the potential barriers to the successful implementation of a new policy?
2. What strategies should be considered during the implementation planning of a new policy in order to facilitate the necessary behavioural changes of healthcare recipients?
3. What strategies should be considered during the implementation planning of a new policy in order to facilitate the necessary behavioural changes of healthcare professionals?
4. What strategies should be considered during the implementation planning of a new policy in order to facilitate the necessary organisational changes?
5. What strategies should be considered during the implementation planning of new policy in order to facilitate the necessary system changes?

1. What are the potential barriers to the successful implementation of a new policy?

The logical starting point for anyone wanting to elicit change is the identification of likely barriers to change. Knowing what – and where – the major hurdles are that may affect successful implementation is useful for the planning of an implementation strategy.

Because the challenges to policy implementation vary from policy to policy, and between different contexts, lessons learnt from previous experiences may not offer sufficient guidance. However, there is no standard approach to identifying barriers to change, and this process is often done informally by taking *perceived* barriers into account, in an implicit and unsystematic way. Policymakers therefore need to consider potential barriers both explicitly and systematically whenever a new policy is to be implemented.

Those people who will be affected by a new policy are the ones likely to be best placed to foresee possible barriers to policy implementation. A number of methods can be used to explore the views of stakeholder groups about new policies including, for example, a 'mixed methods approach', which can be used to undertake a so-called 'diagnostic analysis'. Such an approach may include brainstorming, focus group discussions, interviews and other qualitative methods or a combination of these to provide new insights into stakeholders' perceptions, and to identify both barriers – and facilitators – to policy implementation. Surveys can also be useful, for example by listing a set of potential barriers and ask

respondents to state whether they agree or disagree that these actually represent barriers to change.

It may be helpful, too, to use a framework or check-list when trying to identify potential barriers to change. A variety of frameworks have been developed, which are often based on a combination of behavioural theories, empirical data and common sense. Examples of these are found in Box 1 [2-4]. The list of categories in each of the frameworks shown is not exhaustive, but can be used as a starting point for evaluating possible barriers.

Practical examples of the application of frameworks are highlighted in Box 2 [5-7].

2. What strategies should be considered during the implementation planning of a new policy in order to facilitate the necessary behavioural changes of healthcare recipients?

The behaviour of healthcare recipients, particularly in relation to the use of healthcare services (e.g. under-utilisation, non-adherence to recommended lifestyle changes or treatment schedules etc.), may potentially be a significant obstacle to successful policy implementation. Once one has identified why, for example, services such as vaccinations, antenatal care or skilled attendance during deliveries, are not adequately used, the next step should then be to identify strategies or interventions that can address the identified barriers (see Table 1).

If economic barriers play an important role, for instance, financial incentives may be worth considering given that evidence from low- and middle-income countries indicates that these may have an impact on the use of health services [8]. A further illustrative of the impacts of financial incentives is provided in Box 3 [9]. Alternatively, if a lack of information related to the health policy in question seems to be the main barrier to implementation, then mass media strategies might be more significant. A systematic review has shown that mass media interventions “can encourage increased utilisation of health services”, but this finding was based on almost exclusively on studies from high-income countries [10] and therefore may not be suitable to other settings.

For further information regarding how to find systematic reviews of potential policy and programme options, please see Article 5 in this series [11].

3. What strategies should be considered in the implementation planning of a new policy in order to facilitate the necessary behavioural changes in healthcare professionals?

A new policy or programme will often require changes in the behaviour of those health professionals responsible for implementing the policy on the ground. Changes in professional behaviour do not always necessarily happen automatically and an active, directed approach may therefore be necessary. The identification of barriers to change may help to inform the design of interventions for policy implementation (see Table 2).

The selection and design of interventions should also be informed by findings from studies of effectiveness evaluations. Several strategies aimed at achieving behavioural change among health professionals have been rigorously assessed [12-15]. Typically, these have been evaluations of guideline implementation strategies targeted directly at health professional and

most, but not all, have been conducted in high-income settings [16]. Findings demonstrate that many interventions can influence professional behaviour effectively to a modest or moderate extent. But passive interventions, such as the circulation of guidelines or hosting educational meetings, seem only to have small – if any – impacts. Educational outreach visits and multifaceted interventions that specifically target identified barriers to change are among the more promising approaches.

Financial incentives may be used as a means of influencing professional behaviour but have been evaluated almost entirely in high-income settings. These can be an effective way of influencing individual health professionals when simple and well-defined behavioural goals are provided, such as increasing the delivery of immunisations – at least in the short term [17]. However, several potentially negative consequences of such programmes have been identified, and the use of financial incentives is not necessarily cost-effective.

Regulatory measures are an inexpensive and potentially effective means of eliciting changes in professional behaviour, but may be poorly received by professional groups [18]. The impact of regulations per se as a means of achieving behaviour change among healthcare professionals, has not been reviewed systematically, so therefore only limited knowledge is available about their effectiveness [19].

See Box 4 for further illustrative examples [20, 21].

4. What strategies should be considered in the implementation planning of a new policy in order to facilitate the necessary organisational changes?

Many organisational change management strategies focus on the measures that should be taken, with these measures being seen as steps in a process leading to change. Defining both why there is a need for change and identifying barriers to change are tasks that are typically included in this process. Most organisational change strategies are, however, based almost solely on theory and opinion. Sometimes these are supplemented with case studies or anecdotes, mainly from high-income settings [22]. It is therefore difficult to predict whether or not a specific method is likely to lead to the desired organisational change. Examples of recommended tools and approaches include:

- Analytic models for understanding complexity, interdependence and fragmentation, such as Weisbord's six-box organisational model, the 7S model, and process modelling
- Tools for assessing why change is needed, such as SWOT analysis
- Tools for determining who and what can change, such as force field analysis and total quality management
- Tools for making changes, such as organisational development, action research and project management.

Although the impacts of such change management strategies are uncertain, they may still be considered as useful processes for active reflection on how to facilitate change within an organisation.

5. What strategies should be considered in the implementation planning of a new policy in order to facilitate the necessary systems changes?

When a new policy is to be implemented, changes in a health system may be necessary, such as changes to governance arrangements, financial arrangements and delivery arrangements [23]. One approach to identifying the need for system changes is to review the various components of a health system and to identify where changes are required. A framework that can be used as a starting point for such analyses is shown in Table 3 [24].

The following questions cover some of the key issues that should be addressed as part of the process of facilitating necessary system change:

- Are current regulations hindering necessary system changes?
- Are the necessary human resources available and are resources available for training?
- Are logistical arrangements of sufficient quality and capacity in place to handle the new policy (e.g. the procurement and distribution of supplies)?
- Do administrative routines need to change (e.g. for the disbursement of funds)?
- Should monitoring and enforcement activities change or be strengthened?
- Is funding needed to facilitate the system change available?

For each question listed above, it is important that a follow-up is developed: who, for instance, will take care of these issues and by what date?

An example illustrating the need for policy implementation system changes is provided in Box 5 [18].

Resources

Useful documents and further reading

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Available at: http://www.health-policy-systems.com/content/4/1/27
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NorthStar - how to design and evaluate healthcare quality improvement interventions. The ReBEQI Collaboration 2005: www.rebeqi.org/northstar

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(Accessed at May 18th 2009)

Iles V, Sutherland K. Organisational Change. A review for health care managers, professionals and researchers. 2001. London, National Co-ordinating Centre for NHS Service Delivery and Organisation R & D.
Avilable at: http://www.sdo.nihr.ac.uk/files/adhoc/change-management-review.pdf
(Accessed May 18th 2009)

Links to websites

Cochrane Consumers and Communication Review Group Resource Bank (http://www.latrobe.edu.au/chcp/cochrane/resourcebank/index.html).

Box 1. Frameworks/check-lists for identifying barriers to change

A simple framework for identifying barriers to good quality health- and social-services [2]

1. Are services effective?
2. Are services available?
3. Are those in need seeking referral to services?
4. Are services accessible?

An empirically-based framework for categorising barriers that can hinder physician-adherence to clinical practice guidelines [3]

1. Physician knowledge (lack of awareness or lack of familiarity)
2. Attitudes (lack of agreement, lack of self-efficacy, lack of outcome expectancy, or the inertia of previous practice)
3. Behaviour (external barriers)
4. Physician knowledge (lack of awareness or lack of familiarity)
5. Attitudes (lack of agreement, lack of self-efficacy, lack of outcome expectancy, or the inertia of previous practice)
6. Behaviour (external barriers)

A suggested check-list for identifying organisational barriers to change [4]

1. Cultural complacency, resistance or scepticism
2. Lack of communication
3. Lack of alignment and accountability
4. Passive or absent leadership support
5. Micromanagement
6. Overloaded workforce
7. Inadequate systems and structures
8. Lack of control plans to measure and sustain results

Box 2. Illustrative examples: Identifying barriers to policy implementation

Accessing antiretroviral therapy (ART) in Tanzania [5]

Since 2005, ART has been freely available in selected reference hospitals in Tanzania, as part of the national government's new policy to make ART more widely accessible. Making medicines available does not automatically result in patients being able to access them. Therefore, to identify barriers to ART access in a setting where the drugs were available, a team of researchers conducted focus group discussions with community members, and in-depth interviews with treatment seekers. The researchers found that "transportation and supplementary food costs, the referral hospital's reputation for being unfriendly and confusing, and difficulties in sustaining long-term treatment would limit accessibility." They noted too that a "Fear of stigma framed all [patient] concerns, posing challenges for contacting referrals who did not want their status disclosed or expressed reluctance to identify a "treatment buddy" as required by the programme."

Caesarean sections in Canada [6]

The caesarean section rate in Canada has been rising steadily, reaching almost 25% in 2003-2004 despite national clinical recommendations that vaginal delivery is the safest route for a foetus. Canadian researchers arranged focus group discussions and semi-structured interviews with gynaecologists at three hospitals in Montreal with the aim of developing an implementation strategy for putting relevant guideline recommendations into practice. The researchers divided the barriers to achieving this into four main categories:

1. Factors influencing the use of induction of labour at term guideline
    a. Induction of labour before 41 complete gestation weeks
    b. Maternal request for induction at term
    c. Possible complications insufficiently discussed with women when planning an induction
    d. Medico-legal concerns
    e. Adoption of a proactive approach to reduce potential risks of lawsuits
    f. Unavailability of induction during the weekend
2. Factors influencing the use of foetal health surveillance in labour guideline
    a. Not having a one-to-one nurse–patient ratio
    b. Use of a central monitoring system
    c. Anaesthesia department preferences for the use of continuous electronic foetal monitoring
    d. Availability of equipment (i.e. pH metre)
    e. Limited use of foetal scalp blood sampling
    f. Fear of lawsuits
    g. Availability of experienced nurses
    h. Maternal preferences for the use of continuous electronic foetal monitoring
3. Factors influencing the use of operative vaginal birth guideline
    a. Conclusions of the term breech trial [25]
    b. Need of more evidence about maternal and neonatal morbidity
    c. Not having a blended remuneration mode
    d. Lack of skills or unwillingness to offer instrumental vaginal birth
    e. Maternal refusal to attempt an external cephalic version

4. Factors influencing the use of vaginal birth after previous caesarean birth guideline
    a. Need of a high-level infrastructure necessary to offer a safe vaginal birth after caesarean section
    b. Availability of an anaesthetist at all times
    c. Use of a conditional verb tense “should be offered to a woman” in the guideline
    d. Fear of lawsuits in cases of uterine rupture
5. Women’s preference for a repeat caesarean section

Cholesterol-screening in the United States [7].

American researchers examined the barriers to participation in cholesterol screenings in both adults and children in West Virginia in the United States. Using the theory of ‘planned behaviour’ as a conceptual framework to provide a model for understanding decision making within particular belief systems and cultures, the researchers postulated that a central factor in determining whether an individual will perform an action is an individual’s *intention* to perform that action. The researchers conducted semi-structured interviews using interview guides designed to elicit information relevant to the key constructs of the theory of planned behaviour. Their findings suggested that environmental, financial, *and* attitudinal barriers affected levels of participation in these health screenings, including concerns about the outcomes of testing, the use of needles, privacy and lack of knowledge in the community, as well as traditional local cultural beliefs.

Table 1. Examples of possible links between barriers and interventions among recipients of healthcare

Identified barrier to policy implementation	Possible interventions to address identified barriers
Current programmes are ineffective or of uncertain effectiveness	• Review the components of ongoing programmes and other possible strategy to clarify to what extent they have been shown to work • Conduct sound evaluations of programmes
The relevant services are not within physical reach of some patients/citizens in need of them	• Creation of new services • Hiring of new personnel • Redistribution of resources
Denial of problem severity	• Education and community awareness programmes
Transportation costs	• Provision of transportation or financial support for transport

Box 3. Illustrative example: Strategy to facilitate change in behaviour among recipients of healthcare

Cash rewards for learning HIV-status, in Malawi [9]

Potential barriers to obtaining results from HIV-testing include the monetary costs of time and travel, as well as psychological costs (including, for example, stress, worry, or fear, or the experience of social stigma). Monetary incentives may compensate directly for time and transport costs – and potentially for any psychological costs incurred. In a field experiment in rural Malawi, individuals were randomly assigned monetary incentives to learn their HIV results after testing. Where no incentive was offered, one third of those tested obtained their results. In contrast, where small monetary incentives were provided, two thirds went to obtain their HIV test results.

Table 2. Examples of possible links between barriers and interventions among health professionals

Identified barrier to policy implementation	Possible interventions to address identified barriers
Lack of knowledge	• Information delivery methods (educational outreach, training)
Disagreement with policy	• Identify opinion leaders who can act as advocates for the new policy
Time consuming	• Offer economic compensation

Box 4. Illustrative examples: Strategies to facilitate behavioural changes in healthcare professionals

Financial incentives to health workers to increase institutional deliveries in India [20]

In 2005, the Indian government introduced the Janani Suraksha Yojana (JSY) programme which aimed to reduce maternal and neonatal mortality through the promotion of institutional deliveries. Cash payments to community health workers (ASHAs) for institutional deliveries among women under their care, was one of the key components of the JSY programme. Since the introduction of the programme, many Indian states have seen a substantial increase in institutional deliveries.

Educational outreach visits to improve asthma care in South Africa [21]

South African researchers found that two 30-minute educational outreach visits to general practitioners conducted by a trained pharmacist led to clinically important improvements in symptom scores for children with asthma.

Table 3. Various components of health systems (adapted from Lavis et al [24])

Delivery arrangements	Financial arrangements	Governance arrangements
• To whom care is provided and the efforts made to reach them (such as interventions to ensure culturally appropriate care)	• Financing – e.g. how revenue is raised for programmes and services (such as through community-based insurance schemes)	• Policy authority – who makes policy decisions (such as whether such decisions are centralised or decentralised)?
• By whom care is provided (such as providers working autonomously versus as part of multidisciplinary teams)	• Funding – e.g. how clinics are paid for the programmes and services they provide (such as through global budgets)	• Organisational authority – e.g. who owns and manages clinics (such as whether private for-profit clinics exist)
• Where care is provided – e.g. whether care is delivered in the home or community health facilities	• Remuneration – e.g. how providers are remunerated (such as via capitation)	• Commercial authority – e.g. who can sell and dispense drugs and how they are regulated
• With what information and communication technology is care provided – e.g. whether record systems are conducive to providing continuity of care	• Financial incentives – e.g. whether patients are paid to adhere to care plans	• Professional authority – e.g. who is licensed to deliver services; how is their scope of practice determined; and how they are accredited
• How the quality and safety of care is monitored – e.g. whether quality-monitoring systems are in place	• Resource allocation – e.g. whether drug formularies are used to decide which medications patients receive for free	• Consumer and stakeholder involvement – who from outside government is invited to participate in policymaking processes and how are their views taken into consideration

Box 5. Illustrative example: Strategy to facilitate change in the health system

Mandatory use of thiazides for hypertension in Norway [18]
Policymakers in Norway decided to make it mandatory for physicians to prescribe thiazides as anti-hypertensive drugs, (rather than the more costly alternatives), if patients were to have the drug expenses reimbursed by the national health insurance scheme. Information about the new regulation was widely disseminated to doctors and increased monitoring of prescribing practices was implemented. Increased monitoring, to identify prescribing patterns that contradicted the government policy, represented a system change and in order to facilitate this change, human resources were made available. Methods for the extraction and analysis of prescription data were also developed.

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