



Strong theory, flexible methods: evaluating complex community-based initiatives

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ABSTRACT *A growing number of countries are beginning to move from acknowledging the existence of health inequalities to developing policies to reduce them. Many of these policies consist of complex interventions, operating at a number of levels, which aim to make a positive contribution to health improvement in deprived communities. Evaluating the efficacy of such initiatives poses particular challenges for evaluation. This paper argues that there is real potential in applying a theory-based approach to the evaluation of complex community-based initiatives. Using practical examples from the national evaluation of Health Action Zones in England, the paper outlines the key components of such an approach and argues that theory-based evaluation can strengthen programme design and implementation, as well as promote policy and practice learning about the most effective interventions for health improvement. We conclude that sophisticated theory building social change mechanisms in community settings is essential if real learning is to be generated from concerted efforts to achieve social change.*

Introduction

There is a growing recognition that health policies, practices and processes require clear evidence about effectiveness. When resources are scarce, claims on them are numerous, and the potential exists for interventions to do harm as well as good, there is a strong ethical case for requiring that new policies should be evidence based. But in areas such as health promotion—which has been something of a Cinderella field of enquiry—there are real questions to be asked about what constitutes an appropriate evidence base. In England, for example, the Health Education Authority (HEA), and its successor body the Health Development Agency (HDA), has explicitly recognized the nature of the challenge that is posed by a determined attempt to make use of evidence to promote population health and to tackle health inequalities. For example, Gillies (1999) argues that the challenge is:

. . . to proffer a ‘modern’ view of evidence which crosses methodological and disciplinary boundaries, and which is grounded in theory whilst cognisant of political practicalities. This view requires a new consensus on a wider range of credible study methods and indicators for measuring the

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success of public health ventures as its focus moves upstream to tackle the broader underlying social and economic determinants of health and inequalities in health.

What lies behind this statement is the belief that traditional approaches to evaluation that emphasize the primacy of experimental approaches are often, although not always, inappropriate for complex, community-based health-promotion programmes. This view is reflected in a wide range of publications in the field of health promotion (Speller *et al.*, 1997; Green & Tones, 1999), and it has been taken up and advocated in a wider European context by the World Health Organisation (WHO). On the face of it there are strong grounds for believing that these arguments do have considerable validity. But making the case for new approaches is not inconsistent with using more traditional methods in appropriate circumstances. In this respect the WHO Working Group on Health Promotion Evaluation (1998) may be going too far in concluding that:

The use of randomised control trials to evaluate health promotion initiatives is, in most cases, inappropriate, misleading and unnecessarily expensive.

Nevertheless, what is most important is that the existing, poorly developed evidence base in relation to health-promotion interventions should be strengthened. From this perspective, we take the pragmatic view that all research methods have their strengths and their weaknesses and we agree with Chen (1997) that 'a method's usefulness depends on the contextual circumstances surrounding the specific programme to be evaluated' (p. 63). In our view, mixed methods and the careful triangulation of evidence offer the best way forward in learning about complex health-promotion initiatives. From this perspective theory-driven approaches to evaluation have much to offer. The aim of this paper is to outline the potential benefits of one particular approach to theory-based evaluation that is being employed to generate learning about Health Action Zones in England.

Programme logic and theory

There are a number of reasons why it is important to consider non-experimental approaches to the evaluation of health-promotion initiatives. One rationale is that health-promotion programmes tend to be established in circumstances where evaluation design is a long way down the list of factors considered. At one level it is argued that the very nature of health promotion militates against experimental design (WHO, 1998; Gillies, 1999).

There is also the additional problem that many potentially valuable initiatives are established in ways that simply do not easily lend themselves to evaluation. Owen & Rogers (1999, p. 192) point out that:

In the past, inadequacies in the specifications of many social and educational programs emerged when evaluators were asked to carry out traditional outcome evaluations of these programs. Evaluators in these circumstances found that they were asked to evaluate ‘non-events’—programs with little or no documentation. Sometimes programs existed with vague goals which provided little direction for those responsible for program delivery. From the point of view of evaluators undertaking impact evaluations, there was little or no basis for developing outcome measures. . . .

A good example of the difficulties that can arise in practice comes from English experience with the establishment and development of Health Action Zones (HAZs).

Health Action Zones

Health Action Zones were established in 1998 to serve as trailblazers for a concerted effort to modernize the NHS and to tackle health inequalities as part of an assault on social exclusion. HAZs are complex, partnership-based entities that have set themselves ambitious goals to transform the health and well-being of disadvantaged communities and groups. They have been provided with additional resources, flexibilities and support, but in return they are subject to tough performance-management processes. One important requirement is that HAZs are expected to set out clear plans that not only indicate how they will achieve social change in the longer term but also demonstrate a capacity to deliver against well-specified targets in the form of ‘early wins’ to satisfy political expectations. This has proved not to be an easy requirement to satisfy.

To varying degrees, all of the initial HAZ plans were strong on identifying problems and articulating long-term objectives, and to some extent on specifying routinely available statistical indicators that might be used for monitoring progress. On the other hand, they were much less good at filling in the gap between problems and goals. Only in very rare cases was it possible at the outset to identify a clear and logical pathway that linked problems, strategies for intervention, milestones or targets with associated time scales and longer-term outcomes or goals. Figure 1 illustrates the nature of the basic problem. Interventions and their associated consequences (which we prefer to think of as targets) are not usually clearly linked to problems and goals.

Many of the health action zones found it difficult to specify precisely how they would intervene to address problems, what consequences they expected to flow from such interventions, and how precisely these related to their strategic goals. As a result, the ‘targets’ that they included in their plans were not convincing, for a number of reasons.

For example, many specific ‘targets’ were not clearly linked with strategic goals or objectives set out elsewhere in the plans. Other ‘targets’ were not located within

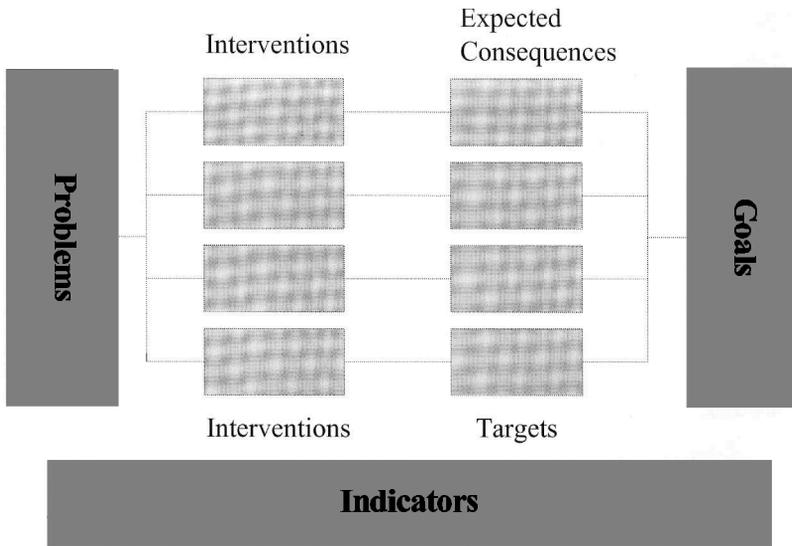


FIGURE 1. Health Action Zones: weak links in the planning process.

a specific time scale. Most importantly, and most frequently, specific ‘targets’ were highlighted without any accompanying explanation of the mechanisms intended to achieve them. This omission is key. It breaks the critical link between the problems that HAZs are there to address and the ambitious goals that they rightly wish to set for themselves.

Of course, one of the main reasons why HAZs did not develop clear plans in the early stages of their development is that the timetables that they were expected to work to were hopelessly unrealistic. But haste is not the only issue and problems of strategic planning are not confined to health action zones. The key difficulty seems to be common to most complex community-based initiatives. Connell & Kubisch (1998, p.23) suggest that:

Experience from a wide range of programs (in the USA) shows that identifying and agreeing upon long-term outcomes is relatively easy, in part because long-term outcomes are generally so broad as to be uncontroversial. . . . Likewise, identifying early activities is relatively straightforward. Intermediate and early outcomes are more difficult to specify because scientific and experiential knowledge about links between early, interim, and long-term outcomes is not well developed in many of the key areas in which [community-based initiatives] operate. Defining interim activities and interim outcomes, and then linking those to longer-term outcomes, appears to be the hardest part of the . . . process.

Theory-based evaluation

Simply to ignore investments in under-specified programmes or initiatives, however, would be to seriously reduce the potential for learning about how best to tackle many intractable social problems, including that of social inequalities in health. What is required is an approach that can help to modify or clarify the design and implementation of initiatives in a way that lends itself to evaluation. This is where theory-driven approaches have a crucial role to play. As Chen (1990) puts it:

A social or intervention program is the purposive and organised effort to intervene in an ongoing social process for the purpose of solving a problem or providing a service. The questions of how to structure the organised efforts appropriately and why the organised efforts lead to the desired outcomes imply that the program operates under some theory. Although this theory is frequently implicit or unsystematic, it provides general guidance for the formation of the program and explains how the program is supposed to work.

The concept of theory-based evaluation has evolved over the past 25 years or so in response to the kinds of difficulties outlined above. For example, Wholey (1983) developed the concept of *evaluability assessment* to focus attention on improving the logic that underlies programmes, both to increase their substantive effectiveness and to increase the feasibility of evaluation. The essential aspect of Wholey's thinking 'was that prior to the start of a formal study, the evaluator should analyze the logical reasoning that connected programme inputs to desired outcomes to see whether there was a reasonable likelihood that goals could be achieved' (Weiss, 1997b, pp. 41–42). Since then a number of contributors (Chen, 1990; Weiss, 1997a) have made significant advances to thinking about how best to evaluate complex public policy programmes and the results have manifested themselves in a wide variety of ways in a number of countries, including Australia, Canada and the USA. What has evolved since the early contributions ranges from sophisticated approaches to the evaluation of complex community-based interventions to more pragmatic and practical uses of 'program logic', 'logical models' and 'logical frameworks' (Funnel, 1997). What is important is not to let differences in terminology obscure common messages.

Logic models seem to be similar to program theories; at least they are if the word *theory* does not overwhelm us. If we take the word *theory* to mean the professional logic that underlies a program, then the two concepts appear to be much the same. (Weiss, 1997b, p. 43)

The most comprehensive and persuasive approach to evaluation that follows the logic of theory-based evaluation and that seems especially applicable to health-promotion initiatives is described as 'theories of change' by the Aspen Institute in the USA (Connell *et al.*, 1995, Fulbright-Anderson *et al.*, 1998).

The theory of change approach to evaluation

The theory of change approach to evaluation has been developed over a number of years through the work of the Aspen Institute's Roundtable on Comprehensive Community Initiatives for Children and Families. It was developed in an effort to find ways of evaluating processes and outcomes in community-based programmes that were not adequately addressed by existing approaches. Comprehensive Community Initiatives (CCIs) aim to: promote positive changes in individual, family and community institutions; develop a variety of mechanisms to improve social, economic and physical circumstances, services and conditions in disadvantaged communities; and place a strong emphasis on community building and neighbourhood empowerment.

These characteristics pose a number of challenges for evaluation because initiatives have multiple, broad goals:

- they are highly complex learning enterprises with multiple strands of activity operating at many different levels;
- objectives are defined and strategies chosen to achieve goals that often change over time;
- many activities and intended outcomes are difficult to measure;
- units of action are complex, open systems in which it is virtually impossible to control all the variables that may influence the conduct and outcome of evaluation.

In order to address some of the complexity of CCIs while still drawing meaningful conclusions regarding outcomes, a new conceptual framework for evaluation was developed. This 'theory of change' approach is defined as 'a systematic and cumulative study of the links between activities, outcomes and contexts of the initiative' (Connell & Kubisch, 1998). The approach aims to gain clarity around the overall vision or theory of change of the initiative, meaning the long-term outcomes and the strategies that are intended to produce them. In generating this theory, steps are taken to explicitly link the original problem or context in which the programme began with the activities planned to address the problem and the medium and longer-term outcomes intended. This framework has much in common with the development in the UK of so-called 'realistic evaluation' (Pawson & Tilley, 1997), with the added element that theory generation is conducted by and with those involved in planning and implementing an initiative. The approach encourages stakeholders to debate how an initiative can best produce desirable outcomes by asking them to make explicit connections between the different components of how a programme works.

Connell & Kubisch (1998) provide a number of convincing reasons why this approach to evaluating complex and evolving initiatives is an attractive one. First, a theory of change can *sharpen the planning and implementation of an initiative*. An emphasis on programme logic or theory during the design phase can increase the probability that stakeholders will clearly specify the intended outcomes of an

initiative, the activities that need to be implemented in order to achieve them, and the contextual factors that are likely to influence them. Second, with a theory of change approach, *the measurement and data-collection elements of the evaluation process will be facilitated*. It requires stakeholders to be as clear as possible about not only the final outcomes and impacts they hope to achieve but also the means by which they expect to achieve them. This knowledge is used to focus scarce evaluation resources on what and how to measure these key elements. Finally, and most importantly, articulating a theory of change early in the life of an initiative and gaining agreement about it by all the *stakeholders helps to reduce problems associated with causal attribution of impact*.

Problems associated with attribution, causation and generalization are common to most health-promotion initiatives. A theory of change approach explicitly addresses these issues. It involves the specification of how activities will lead to intermediate and long-term outcomes and an identification of the contextual conditions that may affect them. This helps strengthen the scientific case for attributing subsequent change in outcomes to the activities included in the initiative. Of course, it is important to acknowledge that using the theory of change approach to evaluation cannot eliminate all alternative explanations for a particular outcome. What it can do is to provide key stakeholders with evidence grounded in their own assumptions and experiences that will be convincing to them. Indeed, at the most general level, the theory of change approach assumes that the more the events predicted by theory actually occur over the lifetime of an initiative, the more confidence evaluators and others should have that the initiative's theory is right.

Along with clear advantages, however, there are naturally difficult aspects to adopting a theory of change approach to evaluation. For example, the approach requires an analytical stance that is different from the empathetic, responsive and intuitive stance of many practitioners. There is also the challenge, evident from the experience of other evaluators who have employed the approach, of gaining consensus among the many parties involved in implementing community initiatives. For example, Macaskill *et al.* (2000, p.67) report that:

As more consultation was completed, it became apparent that no single logic model would meet all the needs of all stakeholders. A lot of dialogue, evidence-based information sharing and communication were required to educate stakeholders and encourage them to compromise on some issues.

It has to be recognized that eliciting theories of change amongst and between the diverse groups of individuals involved in planning and implementing an initiative can be a resource-intensive exercise for evaluators. Despite these problems, evidence suggests that skilled evaluators can and should overcome these difficulties and by doing so they enrich both the programme and the lessons to be learnt from it (Jacobs, 1999).

Theories of change in practice

A simple example of a practical theory of change is illustrated in Figure 2, which shows a stylized approach to urban school reform (see Connell and Klem, 1999). It illustrates the causal links that are hypothesized to be necessary to achieve long-term social outcomes for adults. The model starts with the need to invest in creating the conditions and capacity for change. In this particular example, step two then implies the simultaneous implementation of school-site reforms and community involvement strategies. Step three focuses on changing the quality of teaching and learning within schools that are expected to deliver improvements in educational outcomes. These in turn are assumed to lead to desirable social outcomes such as reduced crime, improved employability, better health and higher incomes for experimental subjects.

There are a number of points about these kinds of highly stylized models that are worth emphasizing. The first is that they are multi-layered. They can be expanded almost infinitely depending on what purpose they are being used for (see Weiss, 1997a, Figure 1). So, for example, the arrow that links steps 3 and 4 in Figure 3 could be developed into a huge amount of detail about the precise ways in which changes in, say, the quality of teaching are expected to interact with the capacity of pupils to learn more effectively in order to generate improvements in educational attainments

Second, it is important to make a distinction between implementation theory and programmatic theory. Implementation theory focuses on how an intervention is conducted whereas programmatic theory:

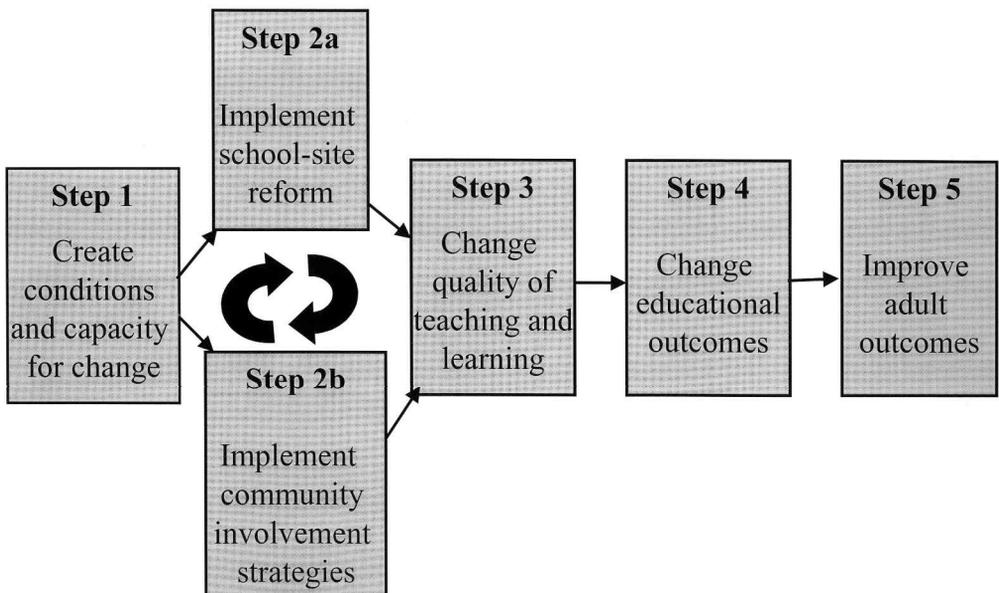


FIGURE 2. Initial change framework – a stylized approach to urban school reform.

... deals with the *mechanisms* that intervene between the delivery of program service and the occurrence of outcomes of interest. It focuses on participants' responses to program service. The mechanism of change is not the program activities *per se* but the response that the activities generate. For example, in a contraceptive counselling program, if counselling is associated with reduction in pregnancy, the cause of change might appear to be the counselling. But the mechanism is not the counselling; that is the program activity, the program process. The mechanism might be the knowledge that participants gain from the counselling. It might give women confidence and bolster their assertiveness in sexual relationships; it might trigger a shift in the power relations between men and women. These or any of several other cognitive, affective, social responses could be the mechanisms leading to desired outcomes. (Weiss, 1997b, p. 46)

The final and critical general point about developing logic models to underpin theories of change is that they must be explicitly articulated in ways that lend themselves to monitoring and evaluation. For each step in a change framework of the kind shown in Figure 2 it is essential that key stakeholders are able to agree about four key requirements:

- *Indicators*: which indicators will demonstrate that a particular element's outcomes are changing?
- *Populations*: which target populations should be showing change on these indicators?
- *Thresholds*: how much change on these indicators is good enough?
- *Timelines*: how long will it take to achieve these thresholds?

In the urban school reform example presented in Figure 2, Connell and Klem (1999) have provided some good examples of how these requirements might be met in practice. For example, step 1 in Figure 2—*create conditions and capacity for change*—might have a number of key outcome indicators as illustrated in Figure 3.

If we take one of these outcomes—*create a sense of urgency amongst education stakeholders*—then it is relatively easy to specify the key elements for which data must be obtained to demonstrate that progress is being made. They might include the following:

- *indicator*: public presentations by key educational and community leaders;
- *target population*: education authority personnel, key community stakeholder groups, and teacher associations;
- *thresholds*: produce 'call to arms' report which includes key indicators of student outcomes; positive media coverage of report. Major stakeholders endorse report and change framework;
- *timeframe*: 12 months prior to implementation of school site reform and community involvement strategies.

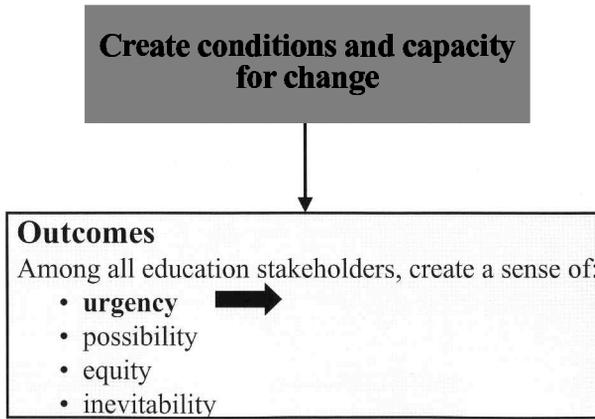


FIGURE 3. Step 1 – create conditions and capacity for change.

Another example closer to final goals in the same model of urban school reform can be taken from the focus of changes in educational outcomes. Key outcomes shown in Figure 2 might be improvements in academic performance and student commitment to learning. Again the four sets of indicators can be specified for each element. In relation to academic performance they might include:

- *indicator*: reading and maths achievement test scores;
- *target population*: all students in the district;
- *thresholds*:
 - 60% of students score above national average in maths and reading for more than one year;
 - less than 5% score in the bottom quartile in either maths or reading for more than one year following enrolment;
- *timeframe*: within five years of implementation of school-site reform and community-involvement strategies.

The crucial point is that these kinds of indicators satisfy three key conditions. First, they are consistent with an overall theory of change. Second, the expected consequences of actions are specified in advance. Third, it is relatively easy to assess whether or not the consequences predicted by the theory actually occur or not.

Theories of change in health action zones

A theory-based approach informs the national evaluation of health action zones in England (Judge *et al.*, 1999; Judge, 2000). Figure 4 illustrates the approach being adopted. The starting point is the context within which HAZs operate – the resources available in the communities and the challenges that they face. Once this is established, the key challenge is for HAZs to articulate a logical way of achieving social change and to specify targets for each of their interventions that satisfy

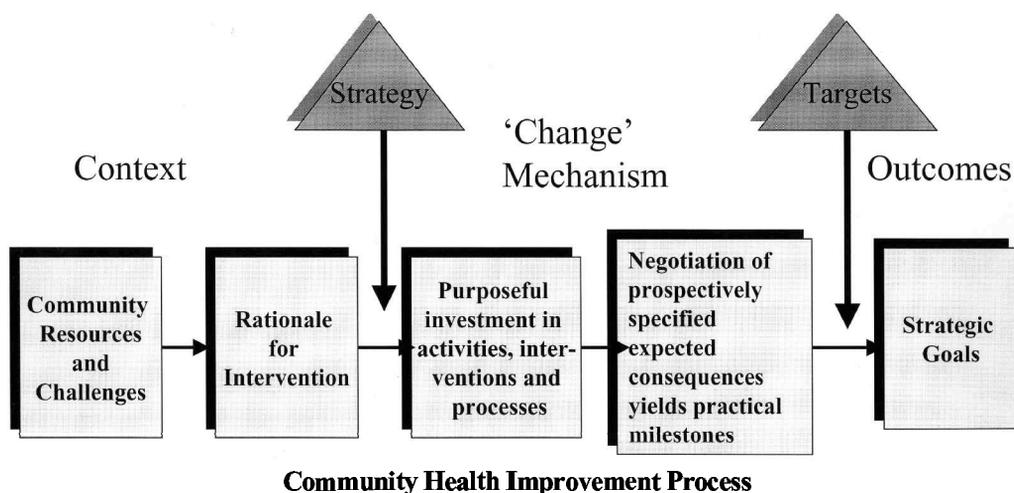


FIGURE 4. Realistic evaluation and theories of change.

two requirements. First, they should be articulated in advance of the expected consequences of actions. Second, these actions and their associated milestones or targets should form part of a logical pathway that leads towards strategic goals or outcomes.

Initial work with HAZs is yielding valuable lessons about the type of information needed if any serious attempt is to be made to learn from their activities. Knowledge is required regarding the ways in which different configurations of contexts, strategies, interventions and their associated consequences contribute to tackling health inequalities and promoting population health. This type of knowledge can be gained only on a continuous basis, through an approach to evaluation that recognizes the evolving nature of HAZ plans and activities. Promoting and achieving change in pursuit of ambitious goals will only be possible if HAZs are encouraged to invest in the planning process, to take risks, and adapt to changing circumstances.

More flexible planning should be matched by adaptive approaches to evaluation if such complex community-based initiatives are to contribute fully to policy learning. The process of monitoring and evaluation has started by trying to persuade HAZ stakeholders to develop and articulate the underlying theories of change that guide their plans.

Practical examples emerging in health action zones

Theories of change in health action zones need to be developed at a number of different levels. All HAZs start with a vision statement of some kind that embraces their primary goals. In each HAZ a set of strategic goals or ‘aspirational’ targets are closely related to the vision. These objectives are then pursued through a series of work-streams or programmes that comprise a large number of projects. For example, in their original plans the 26 zones reported that between them they had more than 200 programmes or work-streams with in excess of 2000 individual projects (Judge

et al., 1999). Each of these activities is expected to generate a range of outcomes in the short, medium and longer term. At each stage in this process—the project, the programme and the overall initiative in each HAZ—it is possible and desirable to develop a theory of change. In practice, it has proved easier for the zones to start to develop theories of change for individual projects than it has at the most general level. A key challenge is to develop convincing and acceptable theory of change models for HAZs as whole systems. For the moment we provide some simple illustrations of the kind of progress that is being made.

Smoking cessation services

Smoking cessation services represent one of the most straightforward areas to illustrate how logic models and a theory of change approach are being developed in health action zones. One of the reasons for this is that evidence-based guidelines exist for smoking cessation interventions, which the Department of Health has instructed HAZs to use in developing local services (Raw et al., 1998).

Figure 5 presents a general overview in logic model form of the approach being adopted by many HAZs. The starting point is the context set out in the white paper, *Smoking Kills*, that outlines why smoking is the UK’s single biggest cause of avoidable ill health and mortality. The rationale for interventions is based on the evidence base. The expected consequences of these investments are that contacts will be made with smokers for whom cessation rates can be predicted depending on the package of services that they receive. The number of ‘quitters’ generated by these interven-

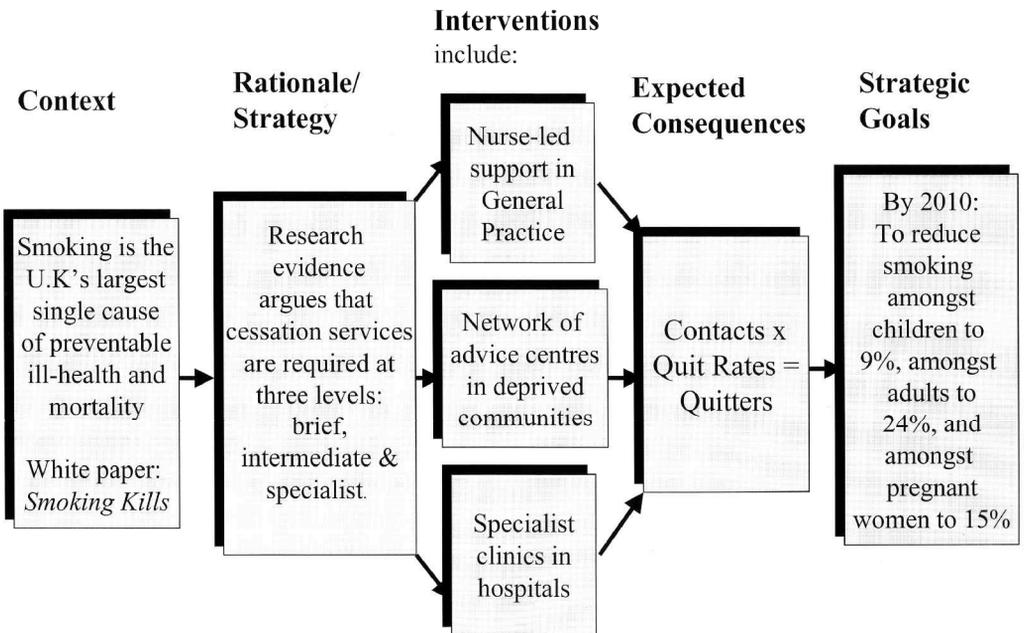


FIGURE 5. Smoking cessation in health action zones.

tions will contribute to achieving ambitious reductions in overall smoking prevalence rates in the longer term.

This kind of logical process can then be taken down to a more practical level as shown in Figure 6. In this example, taken from North Staffordshire, the selected intervention is nurse-led support for patients in general practice. The expected consequences of the intervention highlight the critical assumptions that specified numbers of practices will be willing and able to recruit modest numbers of patients on a regular basis for a specified time to receive different levels of service. If these assumptions prove to be valid then the evidence base predicts that a certain number of 'quitters' can be expected.

What is important about these kinds of relatively simple examples is that they explicitly draw attention to some critical initial assumptions about the ways in which services will be established and the expected consequences that will result within the context of an overall logical model or theory of change. Moreover the model clearly shows what data are required to test whether or not the assumptions are valid.

Capacity for health

Unfortunately, relatively few of the interventions being developed by HAZs are either as straightforward or as clearly linked to evidence-based guidelines as smoking cessation. Many initiatives remain at a relatively early stage of development. But these are exactly the kinds of circumstances in which the theory of change approach has much to commend it. Properly applied it helps stakeholders to specify

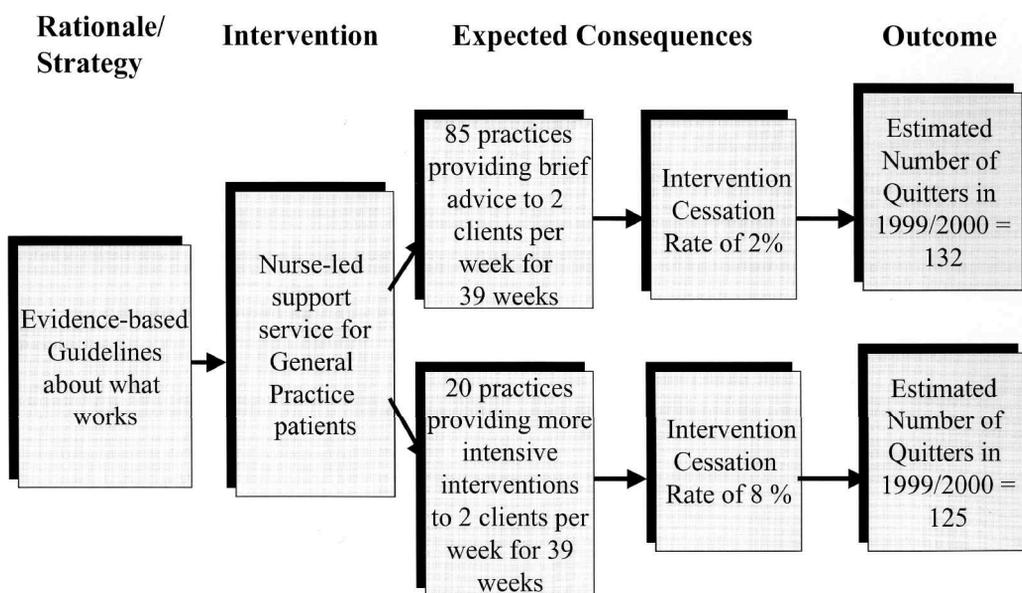


FIGURE 6. Smoking cessation in North Staffordshire HAZ (1).

programme properties more clearly and so aids processes of implementation and learning.

The next example, taken from the *capacity for health* work-stream in Luton health action zone, and which is typical of many community involvement programmes in HAZs, illustrates the practical value of the approach.

When we first examined the overall action plan for Luton HAZ it contained many valuable elements and aspirations. For example, as shown in Figure 7, there were reasonably clear statements of the approach being adopted and the outcomes that were desired. But at the same time we found it difficult to make logical connections between principles, actions and intended outcomes. As stated earlier, this was a very common problem that we encountered in relation to virtually all HAZ plans at the beginning of the initiative. However, in Luton, as elsewhere, this seemed to be more of a function of people's lack of familiarity with formal planning processes than due to any lack of clarity about what they wanted to do and how they intended to develop new approaches.

In discussions with programme leaders in Luton responsible for developing capacity for health it rapidly became clear what they were trying to achieve and how they expected to be able to do this. Figures 8–11 illustrate the emerging logic or theory that is guiding the change process.

Figure 8 highlights the four key assumptions that guided the approach that was adopted. These include beliefs about the lack of access to health-promoting services and resources, and the need to focus attention on the most disadvantaged communities. These assumptions also include a recognition that although valuable work has already been undertaken it may not have been as effective as it could be and that

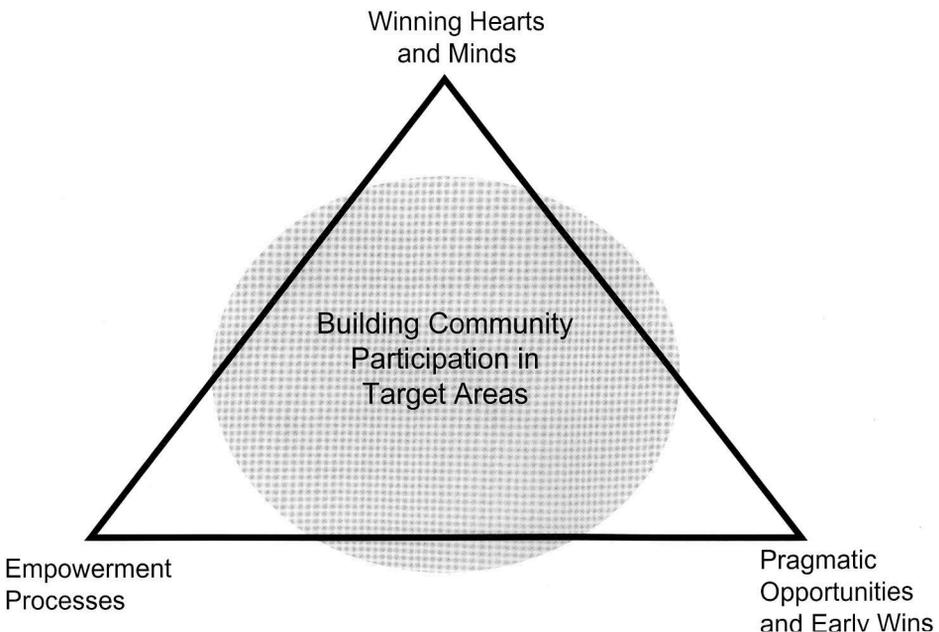
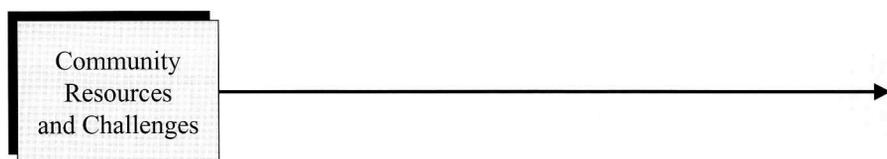


FIGURE 7. Luton HAZ – capacity for health.



- Lack of access to formal and informal services and support networks is a problem which manifests itself in deprived areas.
- It is worth focussing on target areas in Luton, where deprivation is particularly high.
- Professionals and agencies exist in Luton to tackle these problems but existing interventions may not be cost-effective; this implies opportunities and constraints.
- Political pressure exists locally and nationally to demonstrate early wins.

FIGURE 8. Capacity for health: context.

in any event there are significant expectations about delivering early successes that have to be met.

Given these initial assumptions, the programme leaders shared a common view that investing in social capital in general and community participation in particular will yield significant health improvements for disadvantaged people and communities. Combining this belief with the assumptions shown in Figure 8, three distinct approaches to investing in capacity for health emerged and are highlighted in Figure 9.

The next figure (Figure 10) illustrates how programme leaders articulated two key requirements of the theory of change approach. First, they were able to specify the expected consequences that would result from the initial investments in each of the three areas. Second, for each of these consequences they were able to identify performance indicators that would allow judgements to be made about the extent to which they succeeded or not. For example, one important expected consequence of the decision to invest in ‘empowerment processes’ is that neighbourhood and youth action groups (NAGs and YAGs) can be established and that these will generate activities which directly address deficits in health-related networks in the most disadvantaged areas. The associated early performance indicators are relatively simple but essential. The targets are expressed in terms of actually achieving the establishment of NAGs and YAGs in all target areas and the accomplishment of specific tasks.

The final step in the logical process of setting out a strategy is to have very explicit long-term goals, although discussing these objectives is often the starting point of a planning cycle that then requires creative thinking about how to develop interventions to achieve them. Figure 11 shows the strategic goals for the capacity

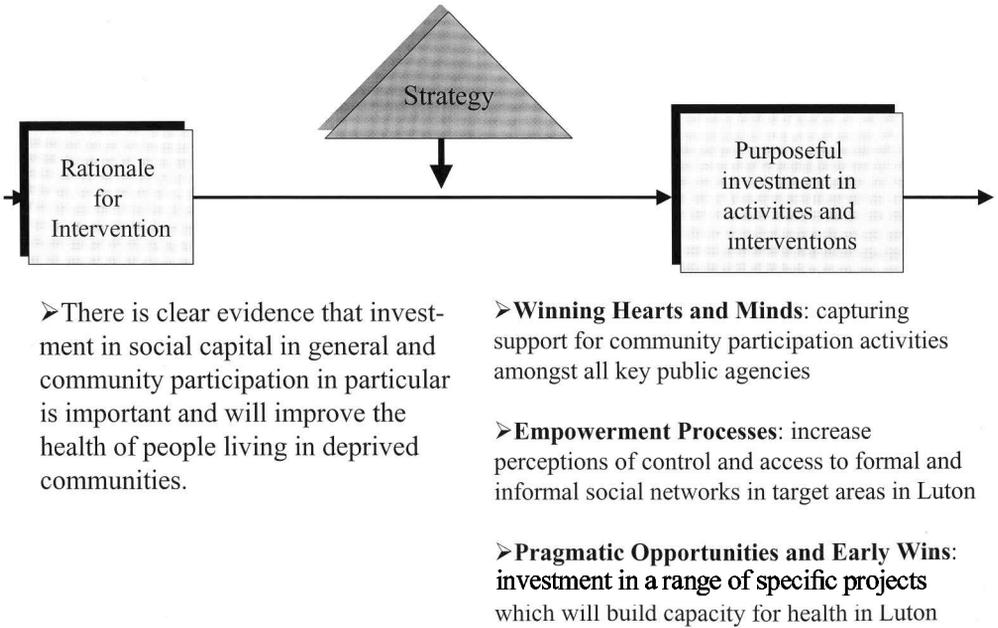


FIGURE 9. Capacity for health: change mechanisms.

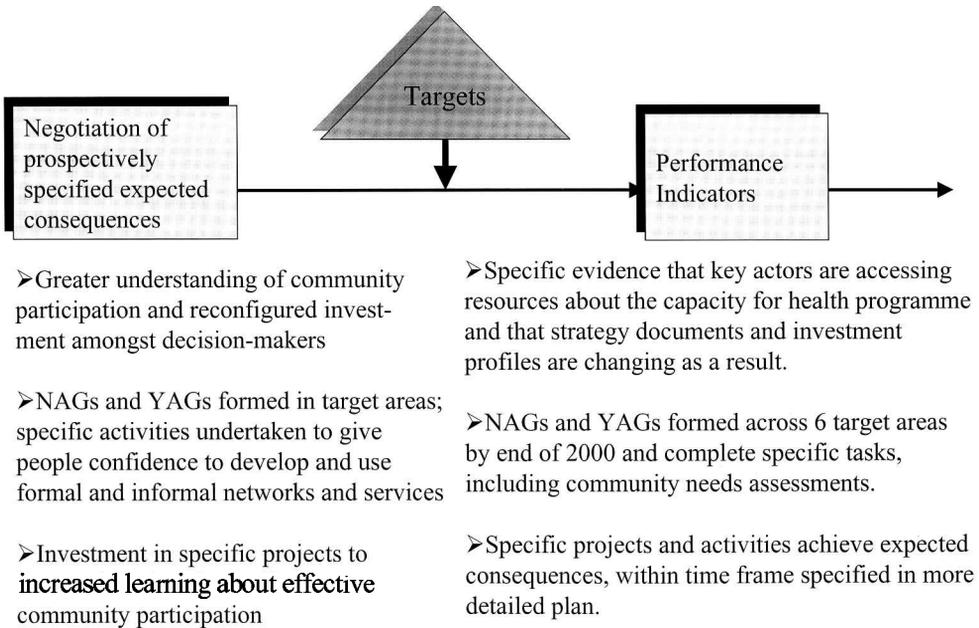


FIGURE 10. Capacity for health: intermediate outcomes.

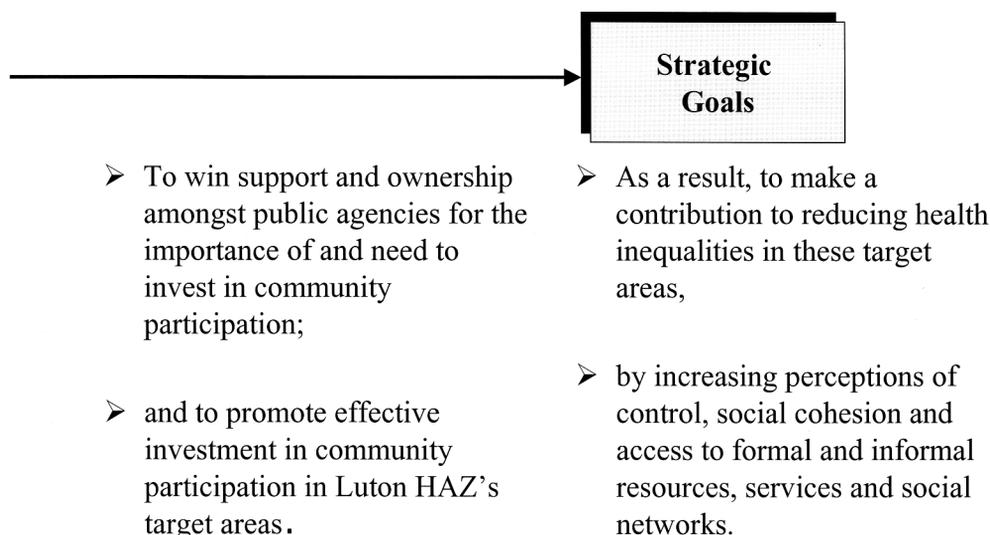


FIGURE 11. Capacity for health: outcomes.

for health programme. What is still missing is a set of clear performance measures so that progress against goals can be evaluated. These indicators are currently being developed by the capacity for health programme board in Luton.

Many other health action zones are in the process of developing similar logic models to those set out above, especially for their most expensive and significant programmes. Only time will tell whether or not this leads to more useful learning that will guide future policy and practice development. We are confident that it will.

Conclusion

Complex community-based initiatives (CCIs) such as English health action zones are typically established as demonstration programmes to tackle configurations of long-standing social problems. They are initiatives with very ambitious goals that require sustained investments over time if they are to have any chance of achieving social change. Their evaluation represents as much of a challenge as does their design and implementation. If they are to achieve their purposes they have to deliver on the promise of substantial social change (impact) but it is also essential to understand how observed benefits were actually brought about (process). However, an understanding of cause and effect is remarkably difficult to establish in complex open systems. It is for these kinds of reasons that the more imprecise objective of 'learning' often replaces the more common use of the term 'evaluation', which often carries with it the unrealistic burden of excessive 'scientific' expectation.

In relation to complex community-based initiatives, Granger has argued that there is a real danger that:

. . . a premature push for ‘effects’ studies is likely to be unsatisfying. Too much time will be spent gathering too much data that will not get synthesised across efforts. . . . (Sponsors) should encourage mixed-enquiry techniques, theory building, and cross-site communication so that the field can aggregate useful information over time. (1998, p. 241)

But no matter how creative researchers prove to be, the process of learning about and evaluating CCIs will remain a very challenging business. Our experience of working with health action zones is that there will be much more scope for productive action and learning if a more theory-based approach to design, implementation and evaluation is adopted at the earliest possible stage (Adams *et al.*, 2000). As Carol Weiss (1995) has persuasively written: ‘there is nothing as practical as good theory’.

In following this approach a wide range of methods can be employed to learn about processes and their impact. In our opinion, all those associated with trying to learn about complex community-based initiatives should be encouraged to make a virtue of pragmatism and to use whatever resources are available to them. But there are some essential requirements associated with the theory of change approach. Policy makers and practitioners must be able:

- to explain their starting assumptions and how they are related to critical aspects of the economic, social and political environments in which they work;
- to specify in a plausible, and preferably evidence-based way, why their chosen investments in interventions and process will take them in the direction of the long-term outcomes they are seeking to achieve;
- to identify in advance the expected consequences of their actions in ways that lend themselves to being monitored and evaluated;
- to commit themselves to a continuous process of learning from the feedback that they obtain;
- to be willing to modify their theories of change and the associated investments in the light of what is observed during the life of an initiative.

If these requirements are satisfied, and if politicians and other stakeholders can restrain their impatience and find ways of escaping from the tyranny of political business cycles that run the risk of undermining sustainable creativity, then we believe that positive learning can be generated from complex community-based health-promotion initiatives. Practical learning about social problems such as avoidable inequalities in health is not only complex in scientific terms but takes time, which seems to be one of the most precious but least appreciated resources required by CCIs. The pressure of the electoral clock and the demands for seemingly instant measures of success may undermine a community’s capacity to deliver social change more than any shortage of human and financial resources. We hope that a wider understanding of theory-based approaches to improving the design, implementation and evaluation of complex-community-based initiatives may do something to redress the balance. It is important that they should.

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