

Report to the UNAIDS HIV Prevention Reference Group on

## **Developing Minimum Quality Standards for HIV Prevention Interventions**

Carol Medlin, Jen Balkus and Nancy Padian

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# I. Introduction

The Joint United Nations Programme on HIV/AIDS (UNAIDS) is currently developing a framework for defining minimum quality standards in HIV prevention programmes, which focus on behaviour change. This is part of UNAIDS’ support of the goal of universal access to HIV prevention services and AIDS treatment, care and support. The impetus for this emerged during a meeting of the UNAIDS HIV Prevention Reference Group, in Geneva, Switzerland, 4–5 April 2007, which concentrated on the need for greater clarity in nomenclature for behavioural interventions<sup>1</sup> (definitions, critical components and methodologies) and on identifying and/or developing minimum quality standards for those interventions. Our proposed framework for planning and evaluating behavioural HIV prevention interventions is illustrated in Figure 1.

**Figure 1. Proposed framework for planning and evaluating behavioural HIV prevention interventions**

Pre-implementation	Ensure quality implementation and delivery			Impact and outcomes
<b>Assessing the macro- and micro-context</b>	<b>Adaptation</b>	<b>Integration with delivery systems</b>	<b>Rollout and delivery</b>	<b>Environmental</b> e.g. Changes in social and sexual norms  <b>Behavioural</b> e.g. Condom use  <b>Biological</b> HIV/sexually transmitted infections Pregnancy
Health and development context <i>Epidemiological (prevalence, incidence, distribution of risk)</i> <i>Health systems</i> <i>Education system</i> <i>Social welfare system</i>	Identify core components/ causal mechanism	Consider “bundled” interventions	Intervention-specific features <i>Coverage/access</i> <i>Fidelity</i> <i>Intensity</i>	
Political/economic context <i>Level of development</i> <i>Labour markets</i> <i>Regulatory</i> <i>Democracy/free media</i>	Consult with stakeholders  Tailor to context	Identify human resource and training requirements	Operational issues <i>Effective management</i> <i>Predictable funding</i>	
Sociocultural context  <i>Religion</i> <i>Gender</i>	Conduct pilots whenever possible		Strong political support	

To further these goals, UNAIDS commissioned work from Dr Nancy Padian and Dr Carol Medlin of the Women’s Global Health Imperative at the University of California, San Francisco (UCSF), United States of America. This report is authored by Dr Medlin, Dr Padian and Jen Balkus (also from the Women’s Global Health Imperative at UCSF). We were charged with reviewing current practices among researchers and service providers in developing countries in order to identify minimum quality standards that may already be in use in the field and/or to provide a framework for further development and refinement of such standards. We were asked to focus specifically on three types of interventions that were agreed upon in advance: condom social marketing, peer education and microcredit.

<sup>1</sup> The term “intervention” is used in this paper given its common usage in the field. Note, however, that the *UNAIDS’ terminology guidelines* suggest that the term not be used as it conveys “doing something to someone or something” and as such undermines the concept of participatory responses (UNAIDS, 2007). The preferred terms include programming, programme, activities, initiatives, etc. We expect that the use of these alternative terms will be addressed substantively as systematization of descriptions and definitions proceeds in subsequent taxonomy and quality standards work supported by UNAIDS.

While we were not asked to review the existing evidence base on efficacy or effectiveness for these prevention interventions, we were asked to identify, using a variety of methods, the operational attributes or characteristics that make the difference between highly effective or ineffective behavioural interventions. Thus, a primary operating assumption was that the existing evidence base, as it relates to efficacy for many HIV prevention interventions, including the three we concentrated on, is sufficiently strong to justify the current focus on quality. Our second assumption was that improvements in quality will have a significant impact on HIV incidence and prevalence. In conducting our research, we expected to discover an emerging consensus among the experts, if not an already existing evidence base, on what these quality improvements might be, expressed in terms of specific operational characteristics or programmatic attributes for each of the interventions selected for this study. However, as will be evident later, we were unable to provide confirmation of the existence of any such consensus.

The results of our research are presented in this report in several sections. In Section II, we describe the various methods used in data collection and analysis for the study. In Section III, we provide a general overview of the quantitative and qualitative findings of the study as they pertain to the development of minimum quality standards for HIV prevention interventions. In Section IV, we summarize the results of our study as applied specifically to each of the three interventions of focus. In Section V, we discuss the implications of our findings for potential directions in developing quality standards in the future. In Section VI, we set out our conclusions and recommendations.

## II. Methods

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This report was prepared using information drawn from key informants' responses in both a brief online survey and an hour-long semi-structured interview, an in-depth literature review and examples of existing protocols and standards currently in use in each of the three areas of focus.

Approximately 30 key informants were selected jointly by UNAIDS and the authors on the basis of their international reputation in HIV prevention and/or their specific expertise in one of the three focus areas. Key informants were asked to participate in a telephone interview (lasting approximately one hour) guided by a series of semi-structured interview questions (see Annex 1) and a brief online survey (see Annex 2). At the end of each interview, key informants were asked to share examples of existing protocols and standards that might be used in developing minimum quality standards for projects and programmes. Interviews were conducted over a period of approximately three months between July and September 2007. Overall, telephone interviews were conducted with 18 individuals (see Annex 3). The remaining 12 of the 30 either declined to participate (2), could not participate due to travel or scheduling conflicts (3), did not respond to repeated requests for an interview (5) or could not be reached using the contact information provided (2). In addition, 17 responses were collected through the (anonymous) online survey.

An in-depth review was also carried out of the existing evidence base in the literature, in particular on the efficacy and effectiveness of the three types of interventions included in the study. Literature searches were performed using the online citation database PubMed on each of these three focus areas—condom social marketing, peer education, and microcredit—using the following key words: evaluation, effectiveness and efficacy. General search terms, such as HIV, AIDS and prevention, were used in conjunction with commonly used terms referring to the interventions of focus: condom social marketing, peer education, microcredit and microfinance. The review was restricted to studies conducted in developing countries. Special attention was given to microcredit interventions that included an HIV or health-education component. Peer-reviewed randomized controlled trials, quasi-experimental studies (i.e. prospective observational studies with a control

group) and programme or impact evaluations were included in the review. In addition to reviewing the evidence on efficacy and effectiveness, scholarly articles were examined in order to identify commonly used outcome measures.

Finally, non-peer-reviewed grey literature, such as organization-specific technical reports or working papers, was also considered, providing additional background information on specific projects and programmes that have implemented any of the three areas of focus. Whenever possible, we collected examples of existing standard operating procedures, protocols and/or guidelines for implementation from those we interviewed, and reviewed these in conjunction with the technical reports and working papers. We opted to collect standard operating procedures, protocols and/or guidelines only once it became clear that the kind of explicit standards of quality we were seeking (linked either conceptually or empirically to improved outcomes) were not available.

## Data Limitations

We make no claim regarding the representative nature of the results from the structured online survey or the semi-structured interviews. Key informants were purposefully selected (jointly with UNAIDS) to solicit their unique perspective based on their particular area of expertise and their reputation in their respective fields. The information summarized here should provide a clear picture of the range of views and perspectives held by this particular group of individuals but not necessarily the field as a whole.

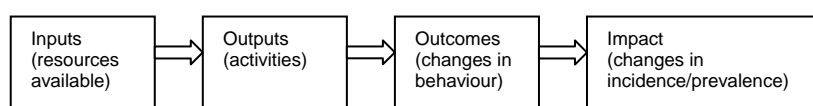
## III. General Findings and Observations

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### Processes: The Missing Pieces of Monitoring and Evaluating HIV Prevention Interventions

Overall, the interviews revealed little in the way of a common definition of quality or ideas about what might be used to measure it. However, what they did reveal was evidence of an emerging, albeit rough, consensus regarding the task at hand. This was to characterize the missing piece in the logic model used in the monitoring and evaluation of HIV prevention interventions. This model (or causal chain) typically describes the critical elements of an intervention in terms of inputs, outputs, outcomes and impact (see Figure 2a).

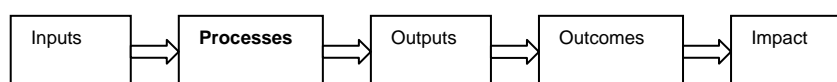
**Figure 2a. Conventional Monitoring and Evaluation Framework**



Whereas the conventional focus of monitoring and evaluation efforts is almost exclusively on outputs (in part to satisfy donor-reporting requirements)—that is, measuring and quantifying *what* has been implemented—the new focus implied by an emphasis on quality is instead on measuring processes—or the “hows” of implementation—that are clearly linked to improved outcomes and impact. This

can be illustrated at the most basic level in terms of a simple modification of the previous figure (as portrayed in Figure 2b).

**Figure 2b. Modified Monitoring and Evaluation Framework**



The presumption is, therefore, that there is an important component along the causal chain that is reflected in what we call the black box of processes. However, as we shall see, defining and measuring its contents remain something of a mystery.

## Results of Semi-Structured/Open-Ended Interviews

In collaboration with our UNAIDS colleagues, we developed a questionnaire designed to elicit views on quality standards held by experts in the field. The complete questionnaire is provided in Annex 1.

However, we soon opted for a more open-ended format for the interviews, in response to the diversity in perspectives and experiences. This permitted interviewees to reflect broadly on issues pertaining to quality that were most pertinent to them. The following provides an informal summary of the discussions that took place.

Key informants, interviewed by telephone, were universally in agreement that minimum standards are needed to improve the quality of HIV prevention interventions. Rapid implementation and scale-up over the past several years in the area of HIV prevention has encouraged many new entrants into the field. There was a clear concern expressed by many of the respondents that this has resulted in an uneven quality in the design and delivery of key interventions. A related concern was the relatively uncoordinated and piecemeal nature of the scale-up and the perceived need of many interviewees for a more comprehensive approach to planning, implementation and oversight than currently exists.

However, it quickly became apparent that there were differences in views among those interviewed about what would be required to improve the quality of programmes and services. Many seemed to view the problem in terms of poor management and oversight at the project level. They also tended to express the view that stricter standards and tighter control by the funding agencies would go a long way towards improving the quality of behavioural interventions and, by extension, achieving better results in reducing incidence and prevalence rates. However, others were sceptical of the notion that widespread behaviour change could be achieved and sustained using the existing toolbox of prevention interventions, and, therefore, tended to support greater investments in operational research to improve upon existing interventions or to identify new strategies or methods to promote behaviour change. Several of the individuals, who held this view, expressed concern about the apparent gap between self-reported behaviours—which have been proven responsive to a variety of prevention interventions, including condom social marketing—and actual biological outcomes.

Other key informants were more concerned about the lack of coordination and planning at the global, national, and subnational levels required to direct the efforts of specific projects and programmes. The emphasis here is on the need for strong



leadership in guiding and orchestrating the work of the plethora of organizations involved in delivering prevention services, to prevent cherry-picking and ensure that widespread coverage is achieved. It was reported recently (Zamblé, 2007) that researchers in West Africa expressed concerns about disparities in AIDS services and HIV prevention between urban and rural areas. Bonfo Bassirou, a researcher at the Swiss Centre for Scientific Research in Côte d'Ivoire, said that some people in rural regions in the country have limited access to HIV prevention, testing and treatment services despite the availability of such resources in urban areas (ibid.).

A basic tension was apparent in the suggestions offered by those who considered themselves researchers first and foremost, and health practitioners, who had little patience with academic discourse and preferred to rely on their own personal instincts, based on their extensive field experience. On the one hand, researchers tended to emphasize that linkages between knowledge acquisition, behaviour change and epidemiological impact are poorly understood and that further research is needed to determine whether existing tools and interventions are having a real and sustained impact on incidence and prevalence. Relatedly, they tended to emphasize the lack of reliability of using data on self-reported sexual behaviour to assess programme effectiveness. (This is a weakness in the evidence base on effectiveness that plagues all three areas of focus.) On the other hand, health practitioners with significant field experience tended to downplay concerns about gaps in the evidence base and instead emphasized the importance of good project management and oversight. As one respondent to the structured survey explained,

To ensure quality, you need supervision (on site, hands on, one on one). I am not sure this is the same as monitoring, which could just imply reviewing process indicators. I think that much can and should be done in prevention without formal research—just a presence of basic services. I think that academics over-complicate this and paralyse the implementation of basic service packages. Obviously, refinement, accomplishing 'the last mile' etc. requires some research but needs are so great and basic [that] I would not complicate [them] by the usual laundry list of research needs and priorities. And the cynic that I am, I would be interested in 10 formal OR [operations research] questions in prevention that have actually changed practice in any way.

While the idea of developing minimum quality standards for HIV prevention interventions had widespread appeal among those interviewed, there were at least two divergent views on what would be needed to accomplish this goal. As is apparent in the next section of the report, we did receive many suggestions about which operational components or attributes were thought to be linked to quality and improved outcomes for each of the interventions of focus. However, there was little agreement on how these might be defined and/or measured. The literature review yielded no further insights into the nature of these critical components or attributes or how they might be linked to the specific outcomes of interest.

The main unresolved issue raised by those interviewed for this study is whether the task of developing minimum standards should be organized primarily as a management or a research endeavour. Many seemed to feel that progress can be made more rapidly if the focus is centred on questions regarding management and oversight rather than the research agenda. The assumption apparently underlying this view is that certain interventions are already known to be effective (although we found that this was in fact not the case) and the remaining task is to identify critical processes related to delivery and implementation that must be undertaken in any

context to ensure that the intervention is effective. In practice, this would probably look different from the current monitoring and evaluation emphasis on monitoring outputs, such as the number of condoms distributed or number of service providers trained. However, it is not clear—in the absence of a scientific evidence-base relating programmatic attributes to impact—what criteria would be used to select the processes to be monitored. Some of those interviewed seemed to feel that these processes can be easily identified without relying on further research and by focusing exclusively on common-sense management strategies, although others clearly disagreed.

At the other end of the spectrum are those who emphasized the need for additional research to carry forward the agenda around developing minimum quality standards. Some of those interviewed who expressed this preference were clearly troubled by the over-reliance on self-reported data to assess programme effectiveness, as opposed to biological impact data. Others more specifically emphasized the importance of developing an operational research agenda to relate specific attributes or characteristics of interventions to the desired outcome (e.g. to achieve a certain percentage reduction in incidence through a peer education intervention, what is the minimum number of hours or days of training needed by the peer educator? How often should the peer educator meet with his or her group? What are the specific messages that should be taught?).

## Responses to (Online) Structured Survey Questions

Over the course of the first several weeks of interviewing, it quickly became apparent that the discussions were not yielding the level of anticipated specificity regarding the development of quality standards. Thus, in discussions with UNAIDS, we decided to construct and administer a structured survey questionnaire that would permit us to demonstrate the burgeoning interest in quality standards and also to provide insights into the various perspectives represented. The structured questionnaire and complete results are presented in Annex 2, but we also summarize the findings here. Respondents were allowed to answer any of the questions, and there are some inconsistencies in the responses. The results are reported exactly as they were received.

At the time of writing, 17 key informants had responded to the request to participate in the online structured survey that was posted on SurveyMonkey.com. Of these respondents, 94% (16 out of 17) reported having specific programme or project experience in one of the three areas of focus, although many of these individuals were involved in research activities as well. Among those with specific experience, 75% (12 out of 16) indicated that they have standard operating procedures or protocols in place to “provide guidance to implementers, standardize the delivery of [the] programme or services and/or to promote quality standards”, although only 70% (9 out of 13) said that they monitored and/or evaluated the implementation of the procedures, guidelines and/or protocols on a regular basis.

Only 13 respondents expressed confidence that the procedures, guidelines or protocols they already had in place could be usefully “integrated into a national or global programme to develop quality standards for HIV prevention interventions”. However, there were no negative responses given to this question. Only 33% (5 out of 15) felt that the standards and procedures currently in place could be considered “SUFFICIENT” to ensure the highest-quality standards in programmes and services in any of the three focus areas. Also, in a related question, 93% (14 out of 15)

responded “yes” to the question of whether additional research (surveillance, operational, behavioural or other) was needed to improve the potential health impact of the HIV prevention interventions they are responsible for implementing.

## **IV. Intervention-Specific Findings**

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For each subsection, we begin by providing a basic description of the intervention in question and then describe the explicit or implied conceptual theory and/or assumptions about how the intervention is expected to produce the intended effects. Next, we offer a brief summary of what may be described as the current standard or typical kinds of data that may be collected as part of a continuing monitoring and evaluation effort to assess progress and/or the likely impact of the intervention. We also describe common criticisms or failings of these approaches and present a summary of alternative approaches proposed by the key informants we interviewed. We conclude each subsection with a brief summary of the various issues to consider in developing quality standards for each intervention.

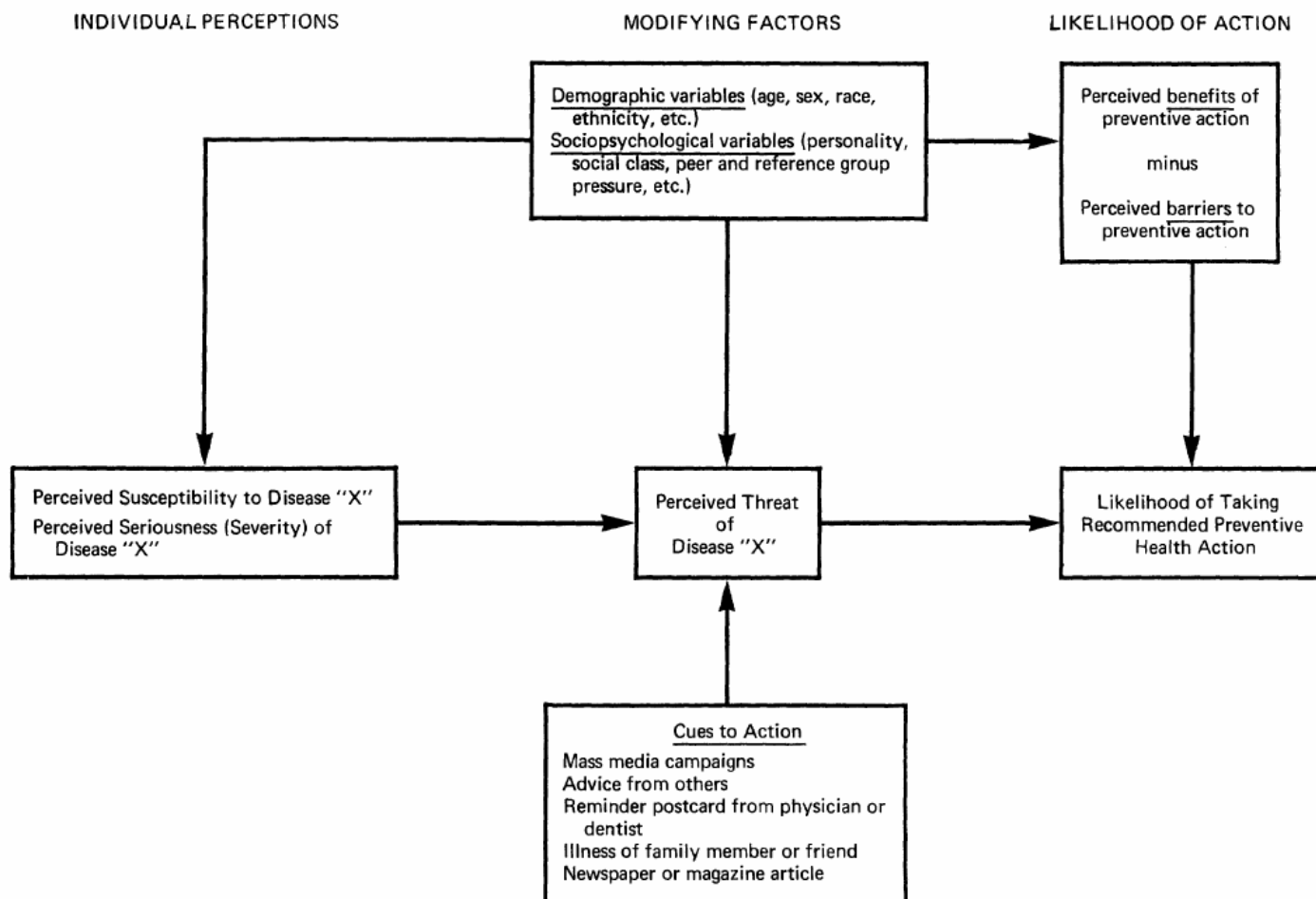
### **Condom Social Marketing**

Condom social marketing programmes are widely considered a key component of a comprehensive HIV prevention strategy (UNAIDS, 2000). The social marketing concept, applied to condom sales and distribution, focuses on commercial advertising and private-sector distribution strategies to promote individual-level behaviour change (Lamptey and Price, 1998).

#### ***Conceptual Foundations***

In theory, social marketing works primarily by encouraging the adoption of safer sexual practices through correct and consistent condom use, although a variety of health-promoting behaviours may be encouraged. In practice, this is achieved through brand-specific advertising, as well as generic educational campaigns, using a mix of strategies and channels, including mass media and interpersonal communication strategies, to reach the target population (UNAIDS, 1998). Products and services are branded, attractively packaged, widely marketed, effectively promoted to the poor and selected target groups and sold at low prices affordable for the poor. Since this retail price is often even lower than the manufacturing cost (so the poor can afford the price), donor contributions are a vital element of the social marketing process (PSI, 2007).

While it is rarely made explicit, condom social marketing programmes appear to be grounded in the health belief model of behaviour change. This model predicts that behaviour change can be encouraged by raising greater awareness of risks and benefits associated with certain behaviours, in conjunction with increasing access to the necessary tools to support the desired behaviour change (in this case, condoms) (Becker and Maiman, 1975). A common illustration of the health belief model is presented in Figure 3.

Figure 3. The Health Belief Model<sup>a</sup>

<sup>a</sup> Reproduced, by permission of the publisher, from Becker M, Maiman L (1975). Sociobehavioral determinants of compliance with health and medical care recommendations. *Medical Care*, 13(1):10–24.

Strikingly, many of the specific operational features of condom social marketing as described by one of the primary contractors engaged in such programmes around the world clearly reside outside of the parameters of the health belief model. Population Services International, one of the leading condom social marketing organizations, emphasizes on its web site the importance of selling condoms rather than giving them away free because “when products are given away free, the recipient does not value them or use them”. Similarly, some studies have found that reported condom use in the general population is greater among those who purchase condoms compared with those who are given free condoms (Hughes et al., 1995; Sunmola, Olley and Oso, 2007).

Population Services International also argues that price subsidies should be encouraged in instances where there is latent demand for the product and when effective distribution of an attractively packaged product at an affordable price is what is needed to motivate use by lower-income groups. Finally, it also recommends that the logistics of marketing and distribution be pursued in conjunction with awareness-raising and educational campaigns since the value of increased awareness of risk and consequences will be lost if products are not available or affordable. However, as previously mentioned, these operational guidelines are not clearly linked

in any way to the conceptual model nor are they backed up by references to a pre-existing evidence base.

### **Common Measures of Effectiveness**

The most common indicators used for monitoring and evaluation reporting purposes on the progress and achievements of condom social marketing field projects are related to sales and distribution data or outputs (e.g. number of condoms sold, number of distribution outlets, and so on). However, more in-depth, published assessments of condom social marketing have also focused on behavioural data (albeit self-reported) or on intermediate outcomes.

Indicators of primary interest for evaluating the effectiveness of condom social marketing programmes include: changes in knowledge and beliefs; changes in self-reported sexual activity and behaviour, including condom use; condom availability; and condom sales. Condom use is the most commonly used indicator, although we found that the way in which condom use is measured varied. Common measures used to assess condom use include numbers of new condom users, condom use at last sex (i.e. reported use with last regular, commercial or non-regular sex partner) and correct and consistent condom use (with a regular or non-regular partner) (Plautz and Meekers, 2007; Agha, Karlyn and Meekers, 2001; Keating, Meekers and Adewuyi, 2006; Schopper et al., 1995; Agha, 2003; Eloundou-Enyegue, Meekers and Calves, 2005; Price, 2001; Meekers, 2001; Kajubi et al., 2005).

Other reported behaviour changes are also frequently examined. The impact of condom social marketing programmes on sexual behaviour has been assessed through changes in reported number of sexual partners; age at sexual debut; number of unprotected sex acts per sexually active male; reported incidence of coerced sex; and the proportion of women able to negotiate safe and satisfying sexual relationships (e.g. self-efficacy). In addition, non-sexual behavioural measures, such as perceived personal risk, prompted and/or unprompted recall of condom social marketing messages, discussion of condom social marketing messages with friends and discussion of HIV risk or condom use with partners are frequently included in assessments of condom social marketing programmes.

Though no randomized controlled trials have been conducted to assess the impact of condom social marketing on condom use or HIV incidence, numerous quasi-experimental, prospective cohort studies have been performed. These studies report a variety of results—including increases in AIDS-related knowledge (Keating, Meekers and Adewuyi, 2006; Schopper et al., 1995), knowledge about condoms (i.e. where to obtain them, how to use them) (Plautz and Meekers, 2007; Schopper et al., 1995; Agha, 2003), self-efficacy (Plautz and Meekers, 2007; Agha, 2003), general condom use<sup>2</sup> (Schopper et al., 1995; Eloundou-Enyegue, Meekers and Calves, 2005), condom use at last sex and consistent condom use (Plautz and Meekers, 2007). Despite promising reports of increases in self-efficacy, HIV knowledge and condom use, several studies have reported conflicting results. An evaluation of the VISION project in Nigeria reported increases in HIV knowledge and high levels of exposure to the social marketing messages. However, the programme had no effect on condom use at last sex (Keating, Meekers and Adewuyi, 2006). In addition, a randomized trial was conducted in Uganda involving men on the receiving end of either a condom-promotion intervention or a brief information session. Though not an evaluation of condom social marketing as such, the authors reported that, although men in the programme group used more condoms, the average number of sexual partners also increased as compared with

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<sup>2</sup> General condom use includes every use of a condom or condom use with an unspecified frequency.

the control group, thus potentially increasing the overall risk of HIV acquisition as condom use was not necessarily consistent (Kajubi et al., 2005). The use of condoms produces minimal benefit if it is not consistent and, therefore, directly impacts efficacy (Hearst and Chen, 2004). Nonetheless, we identified only one published study that assessed consistent condom use as part of a condom social marketing programme (Plautz and Meekers, 2007).

Unfortunately, biological outcomes have not been assessed among condom social marketing programmes. As outlined above, researchers and evaluators have had to rely on self-reported measures of behaviour when assessing programme efficacy. However, the reliance on self-reported behaviours is a major point of vulnerability for the assessment of condom social marketing effectiveness due to participant recall bias and social desirability. As discussed previously, this vulnerability applies to all studies of behavioural interventions that rely exclusively on self-reported data as evidence of impact, not just condom social marketing.

Because condom social marketing programmes are typically evaluated as a package of interventions, including mass education campaigns in addition to the focus on sales and distribution, it is difficult to know which aspects of the intervention are actually linked to behaviour change. Some studies have suggested that the ability to effectively brand the product was a key factor in promoting behaviour change. For example, a prospective study among male factory workers in Zimbabwe found that condoms were used in 48.8% of all sexual contacts (regular and non-regular partners)—with socially marketed ProtectorPlus condoms used in 71% of all protected encounters (Meekers, 2001). Examples of successful branding of condoms include Salama (United Republic of Tanzania), Jeito (Mozambique), ProtectorPlus (Zimbabwe) and Trust (Kenya), which have become widely recognized among people residing in the programme areas (Keating, Meekers and Adewuyi, 2006; Agha, 2003; Eloundou-Enyegue, Meekers and Calves, 2005; Meekers, 2001). However, evidence tying behaviour changes to the specific content of messages offered in the advertising campaign is relatively weak or non-existent.

Thus, common assessments of effectiveness have focused on outputs and outcomes. However, the link between intermediate outcomes (self-reported behavioural data) and ultimate health impact has not been fully explored nor has the specification of processes that are needed to induce individual behaviour change. In fact, the health belief model on which condom social marketing is based is fairly simplistic, assuming that merely providing information about risks and making condoms easily available will result in the desired changes in behaviour. There is little evidence to support such a view, leading us to conclude that condom social marketing is a necessary, but certainly not sufficient, component of HIV prevention.

### ***Views of Key Informants***

These and similar points were the focus of a great deal of discussion during the interviews as well. Several of those interviewed expressed frustration with the nearly exclusive focus on sales and distribution data and lack of emphasis on behavioural outcomes. This concern was especially apparent among those familiar with the South African data, which has shown an increase in reported condom use without evidence of a corresponding decrease in incidence rates. However, the proposed solutions were as numerous as the number of people commenting on this issue. They comprised: messages that challenge social and sexual norms and gender–power inequities in particular in condom social marketing media campaigns; conducting more and better behavioural surveillance in



areas targeted by condom social marketing programmes; collecting more detailed information on correct and consistent condom use, rather than simply on condom use at last sex; and, lastly, including biological data alongside behavioural data and sales and distribution data to evaluate the impact of condom social marketing programmes. In sum, our review of the data suggests that the dominant focus for assessing condom social marketing effectiveness has been on sales and distribution data (outputs) and, to a much lesser extent, on behaviour change (outcomes). However, the link between outcomes and impact has not been clearly established, (in large part, due to the unreliability of self-reported data), nor have the critical processes needed to generate these outcomes and the resulting health impact been clearly elucidated.

In light of the apparent weaknesses in the causal chain linking inputs, outputs, outcomes and impact, we propose that, when considering quality standards or processes, the focus should initially be on unpacking and testing elements of the conceptual model underlying condom social marketing. Since cues to action (see Figure 3) are posited as the trigger to induce changes in behaviour, further exploration of the most effective cues (e.g. types of messages and the manner in which they are conveyed) is needed. If these are known, it should then be possible to assess the quality of programmes based on, for example, the content and emphasis of the messages (or cues) delivered. To illustrate this point, behavioural economic theory suggests that, to be effective, prevention messages should emphasize consequences of risky behaviour rather than probability of infection. If this is indeed the case, it would be possible to evaluate condom social marketing campaigns based on the content of their messages, in addition to sales and distribution data. However, even such an approach would still (at least eventually) need to confirm the hypothesized link between self-reported behaviour change and health impact.

## **Peer Education**

Peer education programmes—also a core component of a comprehensive HIV prevention strategy—typically involve the selection and training of individuals, who may have a higher risk of exposure to HIV, to participate in imparting knowledge and encouraging behaviour change among their peers (UNAIDS, 1999). Peer education has been implemented among a variety of people potentially facing a higher risk of exposure to HIV including but not limited to young people (in and out of school), agricultural and transport workers, female sex workers and injecting drug users. Since peer education programmes are frequently part of a larger package of prevention services offered to key populations at higher risk, often involving condom social marketing/distribution and/or counselling and management of sexually transmitted infections, it may be difficult to assess the independent effect of peer education alone.

## ***Conceptual Foundations***

The model of behaviour change underlying peer education can be easily linked to the social-cognitive theory first proposed by Albert Bandura (1997). While rooted in traditional learning theories, this model was the first to recognize the social aspects of learning and has thus become one of the most influential theories of learning and development in developmental psychology today. Unlike the health belief model, social-cognitive learning theory denies that learning—acquiring new information about the health risks and benefits of certain behaviours—necessarily leads to changes in behaviour. Rather, it posits that people can learn new information and behaviours through observation and the modelling of others' behaviour.

However, according to social-cognitive theory, not all observed behaviours are effectively learnt and factors involving both the modeller and the learner can play a role in determining whether social learning will occur. Bandura (2004) identified four major components of a social learning process:

- information about the health risks and benefits of different lifestyle habits;
- development of social and self-management skills to assist in translating informed concerns into effective prevention practices;
- development of a “resilient sense of efficacy” to support the exercise of control in the face of difficulties and setbacks that inevitably arise; and
- enlistment and creation of social supports for the desired personal changes.

### ***Common Measures of Effectiveness***

As with condom social marketing, the peer education literature tends to focus on outputs and outcomes, rather than process indicators, and does not tend to scrutinize the links between outcomes and ultimate health impact. Thus, it is unclear whether or not the components of the cognitive-social learning model have been effectively incorporated into typical peer education programmes as they have evolved to address HIV and prevention. Published process evaluations of peer education programmes are relatively rare, leaving a major gap in knowledge surrounding the development and implementation of peer education programmes. Our review, however, did identify one study that also published impact and process evaluations in addition to their primary outcomes—the MEMA kwa Vijana trial conducted in rural United Republic of Tanzania. This trial implemented a multifaceted prevention programme with a peer education component to reduce incidence of sexually transmitted infections including HIV. The trial curriculum was a teacher-led peer-assisted programme based on the social learning theory (Hayes et al., 2005; Plummer et al., 2007). According to Plummer et al. (2007),

‘Self-efficacy’ was promoted through the development of negotiation and problem-solving skills in role plays and condom demonstrations at health centres ... ‘Knowledge of risks and benefits’ of specific behaviours was promoted through teacher explanations and illustrations in stories and the peer-educator drama-serial. Real and perceived ‘environmental impediments’ to condom access were addressed through class visits to health centres, where free condoms were available, and through out-of-school youth condom promotion and distribution.

At the completion of the trial, the authors reported significantly higher knowledge and attitude scores, greater initiation of condom use and fewer reports of genital pus or abnormal genital discharge among both male and female respondents in the intervention arm compared with the control arm. However, no statistically significant effect on sexually transmitted infection or HIV incidence was observed (Ross, 2007). Despite the absence of a statistically significant effect on biological outcomes, much can be learnt from the implementation and evaluation of the. The published reports on implementation, design and process evaluation provide critical information regarding the content of the programme, the quality of programme implementation, the completeness of its delivery and its acceptability among participants.

The outcome measures used in the trial are similar to those used in other peer education assessments. Though the majority of studies reviewed besides MEMA kwa Vijana did not measure biological outcomes (sexually transmitted infection/HIV



incidence or prevalence), several studies attempted to measure biological outcomes indirectly through self-reported symptoms and treatment of sexually transmitted infections (Okonofua et al., 2003; Laukamm-Josten et al., 2000; Williams et al., 2003) and one prospective study measured outcomes of sexually transmitted infections, excluding HIV (Williams et al., 2003). The vast majority of studies focused instead on changes in knowledge, attitudes and behaviour, such as knowledge about HIV and/or other sexually transmitted infections, attitudes about people living with HIV, perceived risk of acquiring HIV, condom use at last sex (with regular, non-regular and/or commercial partners), correct and consistent condom use (with regular, non-regular and/or commercial partners), and self-efficacy of condom use (i.e. ability to negotiate condom use with a partner) (Norr, Tlou and Moeti, 2004; Sloan and Meyers, 2005; Agha and Van Rossem, 2004; Speizer, Magnani and Colvin, 2003; Basu et al., 2004; Walden, Mwangulube, Makhumula-Nkhoma 1999).

The knowledge and behavioural results of the MEMA kwa Vijana trial are similar to other peer education assessments. The majority of studies reported significant increases in sexually transmitted infection/HIV knowledge and attitudes (Okonofua et al., 2003; Laukamm-Josten et al., 2000; Norr, Tlou and Moeti, 2004; Agha and Van Rossem, 2004), general condom use (Okonofua et al., 2003; Laukamm-Josten et al., 2000; Williams et al., 2003; Basu et al., 2004; Walden, Mwangulube, Makhumula-Nkhoma 1999), consistent condom use (Laukamm-Josten et al., 2000; Basu et al., 2004) and treatment-seeking behaviour for symptoms of sexually transmitted infection (Okonofua et al., 2003).

Of the studies that measured sexually transmitted infection outcomes through biological testing or self-report, we see mostly negative results. Although one school-based programme in Nigeria reported that the prevalence of sexually transmitted infection symptoms in the previous six months was significantly reduced compared with control schools (Okonofua et al., 2003), the results from two other studies reported no reduction in diagnosed or self-reported sexually transmitted infections. First, a peer education programme among truck drivers and their partners in the United Republic of Tanzania showed an increase in the proportion of men and women having a sexually transmitted infection episode, despite reported increases in general condom use and the proportion of respondents reporting consistent condom use (Laukamm-Josten et al., 2000). Second, a prospective study of a multicomponent programme among miners in South Africa, which included peer education and syndromic management of sexually transmitted infections, reported an overall improvement in behaviour associated with HIV risk, including a reduction in the number of non-regular partnerships and increases in condom use (especially with non-regular partners). However, the authors state that “these modest but significant changes were accompanied by an increase in all three curable sexually transmitted infections [syphilis, *Chlamydia* and gonorrhoea] and in the proportion of men who had experienced a genital sore in the previous year” (Williams et al., 2003).

In sum, as with condom social marketing, the literature review revealed significant weaknesses in the evidence base in favour of peer education for HIV prevention, despite the fact that peer education appears to rest more solidly on the foundations of a well-developed conceptual model of behaviour change compared with condom social marketing. Concerns about weaknesses in the evidence base remain virtually the same as those cited by a UNAIDS report on peer education and AIDS nearly a decade ago (UNAIDS, 1999). The report concluded,

Very few of the evaluations of HIV/AIDS peer education programmes found in the literature use rigorous research designs such as randomized controlled trials or STI/HIV incidence as outcome measures. Instead, many programmes collect only proxies of outcome measures, such as HIV-related knowledge, self-efficacy, and/or attitudes and beliefs, through the use of uncontrolled pre-test/post-test or post-test only research designs. Review of some of the studies that have evaluated HIV/AIDS peer education programmes using experimental or quasi-experimental designs, with outcome indicators such as reduction of HIV-related risk behaviour and/or STI/HIV incidence, shows that PE [peer education] (in combination with other prevention strategies) is very effective in several populations and geographical areas. However, researchers and programme planners are still faced with the task of determining what the critical elements of PE are within the context of a comprehensive HIV-prevention strategy that will reduce HIV risk behaviour and incidence in a given population and context.

### ***Views of Key Informants***

Compared with condom social marketing, opinions about quality standards for peer education tended to emphasize the importance of process—e.g. how peer education is carried out and implemented in the field. Key informants offering specific insight into peer education expressed similar concerns not only about the quality of the evidence base, but also about the quality of the peer education programmes that they had had the opportunity to observe in the field. Even so, their views about which aspects of implementation were more or less important to the quality of peer education programmes differed. They acknowledged that their views were based primarily on years of practical experience and observation rather than rigorous research.

By far, the greatest emphasis was given by key informants to verifying and/or building the capacity of peer educators (i.e. the modellers of the desired behaviour change in terms of the social-cognitive model) to serve as role models to their peers. Discussion tended to focus on the level of education of the peer educator or on the quality of the training to be offered—such as the length of the training, pre- and post-testing of knowledge and attitudes of the peer educator, whether or not certification should be required and if peer educators should receive a payment or stipend for their work.

There was also interest expressed by those interviewed in developing capacity to monitor the specific activities of the peer educator. Key questions included: what should be the ratio of peer educators to their peers? How frequently should the peer educators meet with their peer groups? How scripted should their messages be? These are clearly issues related to training processes but, unfortunately, cannot be easily linked to the performance of the peer educator in relation to his or her target group.

The question regarding how scripted the messages should be provoked perhaps the most interesting debates and discussions in the interviews. While it was frequently emphasized that the community or key populations at higher risk targeted by the intervention should be involved in the development of the messages, it was also recognized that the quality of the messages could be compromised if they were crafted entirely by the local community. While it was clear that some elements of both were needed, it was unclear how one would objectively determine whether the proper balance between local input and external guidance was maintained.

Several people among those interviewed emphasized the importance of using peer education to challenge social norms and, in particular, those regarding gender, power and sexuality. At least one key informant also stressed the importance of teaching problem-solving skills in addition to factual knowledge since it is necessary to know how to respond effectively to a wide range of situations and circumstances that may not have been covered by group discussions. Finally, several others emphasized the importance of using continuing surveys of the target population to monitor changes in knowledge, attitudes and practice and to continually update the messages to be delivered by the peer educator in response to these findings.

Many of the key informants were concerned about managing the risks inherent to peer education. For example, peer educators themselves may not always be the best role model for their target population: they may give out incorrect information and may reinforce negative social norms and stereotypes. Nonetheless, it was acknowledged to be virtually impossible to monitor the activities of the peer educators if peer education is to be administered on a large scale. This explains in large part the reason for the emphasis on the quality of the training for the peer educators, rather than monitoring the quality of the peer educator directly. However, Avahan, the India AIDS initiative of the Bill & Melinda Gates Foundation, hopes to develop ways of getting feedback from the target group on the performance of the peer educators under the organization's charge.

Guidelines and protocols for ensuring quality standards have already been developed for peer education by some groups. The most comprehensive of those we reviewed included materials from the Youth Peer Education Network, Y-PEER, led by the United Nations Population Fund and Avahan. However, it is clear that many of the quality standards promoted by these groups are not supported by a solid evidence base. When pressed, one key informant acknowledged that process indicators for monitoring the activities of the nongovernmental organizations under their supervision are based on "experiential learning", not evidence derived from research.

In sum, what stands out from these discussions as a central concern is the quality of the relationship between the peer educators and their peers. Thus, the perception of the practitioners interviewed is consistent with the primary concern identified by social-cognitive learning theory, the causal model that underpins peer education. Thus, an obvious conclusion is that the development of quality standards for peer education is further along than, for example, for condom social marketing, since the focus is already on processes, rather than the usual focus on outputs and outcomes. However, the previous caveats still apply—how to relate specific processes to outcomes and impact and how to confirm the relationship between outcomes and impact (or self-reported behavioural data and biological data)?

The problem of relating specific processes to outcomes merits closer consideration. There are clearly different ways of monitoring and evaluating the nature of the relationship between educator and peer, but what standards should be used in selecting the indicators? For example, strict standards could be established for training peer educators based on their ability to be standardized and used as a management tool for monitoring the performance of the trainers of educators (rather than the trainees). For example, it would also be possible to develop guidelines for peer education programmes that are designed and implemented, using criteria that have been developed through experiential learning rather than rigorous research. However, we favour a third approach that recaptures the conceptual foundations on which peer education has been developed. Process indicators should be linked to the

four components required for inducing behaviour changes—information acquired, social and self-management skills developed, resilient self-efficacy, and the creation of social support. While these are certainly related to the quality of the teaching process for peer educators, they strike closer to the heart of the causal chain that is required to encourage the necessary behaviour change. However, as before, the linkages between self-reported behaviour change and health impact must also be confirmed.

## **Microcredit**

Microcredit programmes have garnered a tremendous amount of attention in recent years as a poverty-reduction strategy in developing countries. The concept is relatively simple, even if the technical details can be daunting. One of the reasons that poor people remain poor is that they do not have access to capital to engage in self-employment to boost their incomes and lift themselves out of poverty. Microcredit involves the granting of small loans to the unemployed, poor entrepreneurs and others who are not considered credit-worthy by formal banking structures (Microcredit Summit Campaign, 2007).

Due to the dramatic success and popularity of microcredit as an anti-poverty device in many parts of the world, questions have arisen about its applicability as an HIV prevention strategy. Proponents of the latter argue that, given that poverty and gender inequities together are significant drivers of the AIDS epidemic, particularly in sub-Saharan Africa, microcredit programmes serve not only as a means to address these drivers but, by extension, also as a way to reduce HIV transmission in heavily affected populations (Hallman, 2005; UNAIDS, 2006).

### ***Conceptual Foundations***

The rationale for why this should work is related to the hypothesized impact of microcredit on the external risk environment of poverty and gender inequality that limits the options and opportunities available to young people (and young women and girls, in particular). Most intervention approaches have presumed a degree of individual agency in decision-making that does not speak to the reality of women and girls' circumstances in many parts of the world. An overemphasis on the primacy of individual agency ignores critical characteristics of the risk environment, most notably, poverty and gender–power inequities, which undermine individual decision-making capacity and lead to sexual behaviour placing the individual at higher risk of exposure to HIV. The microcredit approach addresses the root causes of risky behaviour, or structural factors, rather than individual behavioural choices, and thus presumes to have an impact on the underlying dynamic of the epidemic rather than the proximate drivers (e.g. risky behaviour). However, by increasing women's earning power and self-sufficiency, microcredit is hypothesized to improve women's control over their own decision-making regarding when, where and under what conditions to engage in sexual relations.

### ***Common Measures of Effectiveness***

Historically, microcredit programmes have focused on sustainability and financial indicators (e.g. types of financial products available, interest and repayment rates, rates of default and so forth). They have not taken a direct interest in health or other social measures as outcomes of interest in their own right (Hashemi, Foote and

Badawi, 2007). Despite limited data on the integration of health education and microfinance, many microfinance institutions are in the early stages of implementing joint microfinance–health education programmes (UNFPA, 2006). International microfinance institutions such as BRAC in Bangladesh, the Foundation for International Community Assistance (FINCA) and the Foundation for Credit and Community Assistance in Uganda, FINCA in the United Republic of Tanzania and Opportunity International throughout Africa, are just a few of the microfinance institutions that have begun to integrate HIV prevention education into their microcredit programmes (Parker, Singh and Hattel, 2000). In order to increase the impact of combined microcredit–health education programmes, many of these institutions require their clients to attend regular health education sessions as one of the conditions of receiving the loan.

In spite of its growing popularity, microcredit as an HIV prevention strategy has not yet been extensively evaluated. The emphasis of microcredit work has been on establishing feasible models for joining the programmes from economic development and health-promotion fields, which have different intellectual histories and institutional basis. One rigorous evaluation available is the IMAGE study. Based in South Africa, this cluster randomized trial sought to evaluate the role of a microcredit intervention in behaviour change, the prevention of HIV and gender-based violence (Pronyk et al., 2006). The researchers reported a significant decrease (55%) in intimate partner violence among women receiving loans in the eight communities taking part in the study. However, there was no effect on the rate of unprotected sexual intercourse at last occurrence with a non-spousal partner or HIV incidence in the community. Nonetheless, the study did find that the intervention resulted in a decrease in (reported) domestic violence and an increase in measures of independence and self-efficacy among female participants. Since these are important elements along the hypothesized causal pathway leading to improved health outcomes, it could be argued that the longer-term consequences for health were not observed simply due to the limited time frame of the intervention. However, this does not change the fact that microcredit has not yet been proven efficacious (much less, cost effective) at reducing rates of HIV infection.

### ***Views of Key Informants***

Based on our interviews with key informants, at least two types of organizational models are currently being pursued by groups working in this area. The first model involves a partnership between a well-established microcredit institution with a strong record in financing and a public-health advocacy or service-delivery group. The second model involves a public-health advocacy or service-delivery group that begins offering financial services to help its clients. The distinction is important because, once again, the question arises regarding the specific intention of the minimum quality standards initiative. If the goal is to develop standards that would facilitate the management and operational aspects of the microcredit intervention, regardless of its impact on health-related outcomes, the focus might well remain on widely accepted financial standards, such as interest rates and rates of repayment and default. However, if the goal is to ensure that microcredit programmes are having the desired impact on HIV infection rates, it may be necessary to monitor the quality of the health-education component of microcredit programmes as well. This, of course, begs the question of whether the hypothesized causal pathway linking increased earnings to higher self-esteem, greater control over decisions relating to sexual activities and lower rates of infection can be confirmed. This is obviously a question

that must be addressed prior to embracing microcredit as an effective HIV prevention intervention.

Of course, it may be possible to stake out a middle ground. A review of technical reports and other grey literature suggests that certain standards can be developed based on common sense and lessons from experience. For example, a recent report of the Consultative Group to Assist the Poor (Parker and Pearce, 2001) offered the following perspective on developing an effective microcredit programme.

- Microcredit programmes are most relevant for epidemics fuelled by poverty and gender–power inequities.
- They require strong partnership with an established microfinance institution.
- They are most appropriate for countries with growing economies and access to viable markets.
- They may not be appropriate in situations of extreme rural poverty or hyperinflation, or for the chronically destitute, or highly mobile populations.
- Have appropriate and safe occupational activities been identified for the target population?
- Have alternate strategies (such as micro-grants) been considered for the very poor?
- Is the programme linked to life-skills training, health promotion, etc.? (And how are these components to be evaluated?)

In sum, the most basic quality indicators relating to financial health and sustainability have already been identified and are widely used in the assessment of microcredit programmes as a strategy for poverty reduction. However, if HIV prevention is an additional goal for microcredit, clearly different quality standards will be needed. It may be possible to identify minimum quality standards based on common sense, relating to the design of the intervention, appropriate target populations, and life skills and educational components that are at least roughly related to the causal pathway through which microcredit is hypothesized to work. However, conclusive evidence linking microcredit programmes to reductions in HIV incidence and other health-related outcomes will require more rigorous investigation.

## V. Discussion

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At least two distinct approaches to developing quality standards for HIV prevention interventions have emerged from these discussions. First, it may be possible to identify quality standards that are explicitly linked to the conceptual model upon which the intervention has been based. The objective would be to devise a set of quality standards that would ensure fidelity of the core components of a scaled-up programme to the original intervention. Second, drawing from experiential learning and/or good management sense, it may be possible to identify quality standards that will facilitate the proper management and oversight of large-scale programmes, and ensure a degree of standardization of the intervention, regardless of which agency or nongovernmental organization is responsible for its implementation. Obviously, some blend of these two approaches may be inevitable and even desirable. Thus, the black box of processes in the modified monitoring and evaluation framework would embrace both conceptual propositions regarding the core components of the intervention, as well as the management and oversight functions.



Less clear is how or whether to link the development of quality standards with what is essentially an operational research agenda to programmatic attributes, such as improved delivery strategies, to health outcomes and impact. Current initiatives on quality standards, such as the United States President's Emergency Plan for AIDS Relief and the World Health Organization's Integrated Management of Adolescent and Adult Illness, are not embracing an operational research agenda and are not overly concerned about linking outcomes and impacts to the process indicators of interest. Rather, as with Y-Peer and Avahan, the focus is on standardizing processes that are based on common sense and facilitate the management and oversight responsibility of the supervising agency.

There are many benefits to adopting such an approach, including the one most frequently cited by those interviewed for this study: the need for speed. The process of scaling up HIV prevention interventions is already firmly under way in many countries and care should be taken not to lose momentum. However, should UNAIDS adopt a similar strategy, three caveats would apply.

First, in most cases, it will not be possible to find supporting (scientific) evidence for selecting and prioritizing specific programmatic attributes over others, although there may be a clear management rationale that informs the selection process.

Second, the lack of data to support strong linkages between self-reported behaviour change and specific health outcomes presents a serious credibility gap that threatens to undermine claims regarding the effectiveness of even the most basic HIV prevention activities, such as condom social marketing and peer education, in particular.

Third, the emphasis on the quality of individual initiatives begs the question of how these should be bundled together as part of a comprehensive HIV prevention package.

## **VI. Conclusions and Recommendations**

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Our overarching conclusion is that current shortfalls in prevention efforts are probably due to a combination of theory failure (i.e. models that do not work), and the lack of specificity and quality assurance regarding processes or the programmatic elements that are required to achieve the desired reductions in risky behaviour.

In view of this broad conclusion, we recommend that UNAIDS pursue a threefold strategy. The first is to situate HIV prevention interventions more solidly within a framework or theory of behaviour change that is falsifiable. The second is to tease out—based on experiential learning, an existing evidence base, or basic reasoning—which processes or programmatic attributes are needed to elicit the desired response from the target population. These could be used as the basis for developing quality standards or guidelines. However, we feel it would be necessary to acknowledge the weaknesses in the evidence base used to generate the standards. The third is to encourage operational research to confirm these hypothesized relationships and to explore how interventions should be bundled together as part of a comprehensive HIV prevention package.

Finally, we feel these actions should be part of a larger campaign to confirm the efficaciousness of common HIV prevention interventions in cases where the evidence base is weak and/or overly reliant on self-reported behaviour change. It is important to pursue such a strategy in tandem with the effort to develop quality standards; otherwise, credibility of the effort could be diminished, especially if quality standards are developed for interventions that are later shown not to be as effective as previously believed.

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## Annex 1

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### Semi-structured Questionnaire for Understanding Minimum Standards in HIV Prevention Interventions

#### Introduction

As part of UNAIDS' support to the goal of achieving universal access, UNAIDS is currently developing a framework for defining minimum quality standards in HIV prevention interventions and particularly those focusing on behaviour change strategies. A recently convened meeting of the UNAIDS Prevention Reference Group focused on the opportunities and needs for more clarity on nomenclature in behavioural interventions (definitions, critical components, methodologies); and on identifying and/or developing agreed quality standards for those interventions. As a follow-up of the meeting, we have been contracted by UNAIDS to write a paper reviewing current practice in setting and meeting quality standards and proposing a general framework that identifies the key dimensions relating to the minimum quality standards in behaviour change interventions. As part the assignment, we are consulting with HIV prevention and behaviour/social change experts such as yourself, to determine whether and in what ways, minimum standards are established and addressed by various groups in implementation of projects on the ground. The aim is to examine actual programmes rather than research contexts.

We would be grateful if you would be willing to answer a few questions to contribute to our understanding of what quality standards are used—formally or informally—to gauge the effectiveness of HIV prevention activities in the areas of condom social marketing; peer education; and microfinance.

1. Do you have specific programmatic or field experience in AIDS prevention activities, especially if it pertains to any of the following:
  - condom social marketing;
  - peer education;
  - microfinance.
2. If yes, please explain the nature of your experience—for example, your role or involvement on the project(s) and the relevant implementing and/or funding agency(ies).
3. Please briefly describe the project(s): main objectives, epidemiological context/geographic setting, target population, delivery mode, years of operation, relevant stakeholder groups, relationship to the broader health system, etc.
4. Within the community of international health experts working in this area, would you say there is relative consensus or lack of consensus regarding critical aspects of the intervention? For example, is there a common understanding about how participants should be targeted and/or recruited? How frequently should participants have contact with project staff and/or project activities? What is the nature/duration/intensity of the contact?

5. Please describe the *best* and the *worst* example that come to mind of a condom social marketing/peer education/microfinance project with which you are familiar.
  - a. In your view, what are the attributes that characterize a successful project and what are those that are more likely to be associated with an unsuccessful project?
  - b. In your view, is it important for projects to collect biological outcome data such as HIV incidence or prevalence in order to evaluate their overall effectiveness? If yes, why? If not, what would be some useful “proxy” indicators for effectiveness?
6. Has this project ever been formally evaluated and/or are you aware of any plans to conduct a formal evaluation? If yes, please describe.
7. Are you aware of any efforts to regularly monitor progress or conduct quality assurance (QA)? If yes, please describe.
8. Have the formal evaluation, the regular programme monitoring or the QA systems with which you are familiar provided useful information for evaluating the project’s effectiveness? If yes, what types of data have been particularly useful? If not, what other types of information could be collected that you feel would be useful for this purpose?
9. In your view, is this type of behaviour change intervention (condom social marketing/peer education/microfinance) relatively *standardized* across different geographical and epidemiological settings or is it highly *variable*, depending on the specific context in which it is implemented? Please elaborate.
10. Whether relatively standardized or highly variable, what would you say are the *core components* or activities? That is, which activities are absolutely essential for changing behaviour and/or achieving reductions in HIV incidence?
11. Which are the nonessential components?
12. UNAIDS has observed that reliable quality standards, such as assessing the correct dose of a drug or treatment that will produce the desired response in a patient or client, are often available for evaluating clinical or technology-based interventions. However, prevention/behaviour change interventions suffer from the lack of a clear consensus on what quality standards should be used to evaluate the quality or effectiveness of programmes. We would like you to brainstorm with us about possible standards that could be used to evaluate the quality of a condom social marketing/peer education/microfinance project. This might involve developing a new understanding of coverage and/or the duration or intensity of exposure that is needed to elicit the desired behaviour change.

We have developed a general framework for planning and evaluating behavioural interventions and hope to apply the framework specifically to condom social marketing/peer education/microfinance. We would be grateful if you would take a look at this, and offer your thoughts on how to fill in certain aspects of the framework, such as:

- a. What is the minimum coverage required to be effective?
- b. What is the minimum the intensity of coverage (e.g. duration or frequency of contact) required to elicit the behavioural response?
- c. What other minimum quality requirements would you say are needed to ensure the success of the project?

## Annex 2

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### Online Survey for Developing Minimum Quality Standards for HIV Prevention Programmes: Questions and Responses

1. Do you have specific programme or project experience in one of the three areas of focus of this study (e.g. condom social marketing, peer education or microfinance)?

*Number of respondents: 17      Yes: 16 (94.1%)      No: 1 (5.9%)*

2. If yes, do you have standard operating procedures or protocols in place that are used to provide guidance to implementers, standardize the delivery of your programme or services and/or to promote quality standards?

*Number of respondents: 16      Yes: 12 (75.0%)      No: 4 (25.0%)*

3. If, yes, do you monitor and/or evaluate the implementation of these procedures, guidelines, or protocols on a regular basis?

*Number of respondents: 13      Yes: 9 (69.2%)      No: 4 (30.8%)*

4. Do you believe that the procedures you have described in response to Questions 2 and 3 above are SUFFICIENT to ensure the highest quality standards for your programmes and/or services?

*Number of respondents: 15      Yes: 5 (33.3%)      No: 10 (66.7%)*

5. In your view, could any of the procedures, guidelines, or protocols referred to above be used to improve the quality or raise the standards of similar projects or programmes managed by a different implementing agency? That is, are they relevant or could they be integrated into a national or global programme to develop quality standards for HIV prevention interventions?

*Number of respondents: 13      Yes: 13 (100%)      No: 0 (0%)*

6. In your view, is additional research (e.g. surveillance or operational, behavioural, or other) needed to improve the potential health impact of the HIV prevention interventions you are responsible for implementing?

*Number of respondents: 15      Yes: 14 (93.3%)      No: 1 (6.7%)*

7. Please feel free to offer comments or clarification on any of the above points in the text box below.

*Number of respondents: 8      Each bullet point represents one respondent's comments.*

- Standards to improve QA must be based on local realities. Thereby, every country/region or culture should have its own procedures and guidelines.
- We have developed standards and QA/QI procedures which we think work for us. There is need too for UNAIDS to develop universally acceptable standards for all to follow as we have WHO standards on various clinical procedures.
- There is a lot of very poor programming being supported at the moment and counting of numbers reached etc. overlooks quality problems.
- Most experience in microfinance: much to learn about the impacts of this intervention, its combination with other types of interventions etc. Also much to learn about partnerships between specialist microfinance institutions and public health groups as this strongly seems the best hope for implementation of these approaches rather than non-specialists implementing.
- Question 4: To ensure quality you need supervision (on site, hands on, one on one) – I am not sure this is the same as monitoring which could just imply reviewing process indicators. Question 6: I think that much can and should be done in prevention WITHOUT formal research – just a presence of basic services. I think that academics over-complicate this and paralyse the implementation of basic service packages. Obviously, refinement, accomplishing the last mile etc requires some research but needs are so great and basic I would not complicate [them] by the usual laundry list of research needs and priorities. And the cynic that I am, I would be interested in 10 formal OR questions in prevention that have actually changed practice in any way.
- To question 7: We have good and enough surveillance and evaluation and use the data for adapting our programmes. What we lack are standard operating procedures. However, you might be interested in the quality checklist for prevention as health promotion programmes as described in <http://www.quint-essenz.ch/> (also in English). (We do not systematically apply it ...)
- Additional research on the direct effects of microfinance is ongoing.
- My responses may seem contradictory ... I work as Advisor for ... and as such I advise ... offices in countries and the support Government and NGO programmes. We have some GUIDANCE on peer education but the guidance is not always adhered to.

## Annex 3

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### Key Informants Interviewed

Name	Institution	Country
Aral, Sevgi	Centers for Disease Control and Prevention	USA
Barker, Gary	Instituto PROMUNDO	Brazil
Barry, Souleymane	Social & Scientific Systems, Inc.	Uganda
Bertozzi, Stefano	Instituto Nacional de Salud Publica	Mexico
Bodiroza, Aleksandar Sasha	United Nations Population Fund	
Bouey, Paul	United States President's Emergency Plan for AIDS Relief	USA
Dallabetta, Gina	Avahan (Bill & Melinda Gates Foundation)	India
Goldstein, Sue	Soul City: Institute of Health and Development Communication	South Africa
Gopinath, CY	PATH	Thailand
Gove, Sandy	World Health Organization	
Gray, Bobbi	Freedom from Hunger	USA
Heiby, James	United States Agency for International Development	USA
Kopp, Christine	Swiss National HIV/AIDS Programme	Switzerland
Parker, Warren	Center for AIDS Development, Research and Evaluation	South Africa
Pronyk, Paul	University of the Witwatersand School of Public Health	South Africa
Ryan, Caroline	United States Agency for International Development	USA
Smyrnov, Pavlo	International HIV/AIDS Alliance	Ukraine
Sweat, Michael	Johns Hopkins Bloomberg School of Public Health	USA