COST OF BEHAVIOR CHANGE COMMUNICATION INTERVENTIONS FOR HIV PREVENTION IN NAMIBIA

MASS MEDIA, COMMUNITY MOBILIZATION AND INTERPERSONAL COMMUNICATIONS

AUGUST 2013
This publication was produced for review by the U.S. Agency for International Development (USAID). It was prepared by Zana Somda (Futures Group), Frieda Katuta and Justice Gweshe (Namibian AIDS Coordination Program), Brad Corner (USAID/Namibia), Steven Forsythe (Futures Institute), Matthew Hamilton and Sarah Alkenbrack (Futures Group).

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The views expressed in this publication do not necessarily reflect the views of the U.S. Agency for International Development or the U.S. Government.
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Two principal investigators led the study: Zana Somda (USAID | Health Policy Initiative Costing Task Order, Futures Group) and Frieda Katuta (Namibian AIDS Coordination Program (NACOP/MOHSS)). The co-investigators included:

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Nicole Perales, Futures Group, also played a key role in analyzing the data and writing the report.

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EXECUTIVE SUMMARY

Background

Namibia, with a HIV prevalence of 13.2 percent, is one of the most heavily affected countries in the world. In an effort to address the high prevalence of HIV, the Government of the Republic of Namibia (GRN) developed a National Strategic Framework (NSF 2010/11 - 2015/16) with an overall goal of reducing HIV incidence by 50 percent by 2015. This goal is to be achieved through a combination of behavioral, biomedical and structural interventions and a focus on the key epidemic drivers. As part of this goal, the GRN identified behavior change communication (BCC) as a priority strategy. However, significant gaps in country knowledge of the cost of these BCC strategies have made it difficult for scaling up BCC intervention programs. In this context, the United States Agency for International Development (USAID), through the USAID | Health Policy Initiative Costing Task Order, provided assistance to the Namibian Ministry of Health and Social Services (MOHSS) to conduct a comprehensive analysis of costs and requirements for existing BCC interventions for HIV prevention in Namibia.

Objective

The main objective of this study was to analyze the total financial cost for the three most frequently implemented BCC strategies for HIV prevention in Namibia: mass media (MM), community mobilization (CM), and interpersonal communication (IPC). This study also evaluated the cost drivers of each BCC approach to identify opportunities for increasing efficiencies.

Methodology

The study team developed surveys to retrospectively capture direct and indirect costs for four MM, one CM, and eight IPC HIV prevention interventions for the time period between October 2009 and September 2012 in Namibia. The data were entered into a BCC costing tool developed as part of this project, and data were analyzed by calculating aggregated costs per BCC intervention and the composition of the cost of MM, CM and IPC programs. For the CM and IPC programs, the team also collected data on number of people reached in order to estimate the unit costs. Since it is not possible to ascertain numbers reached through mass media, unit costs were not derived for this intervention. All costs were calculated in Namibian dollars (NA$) and then adjusted into 2010 US dollars equivalent using the general consumer price index from Namibia and a discount rate of three percent.

Results

Of the individual programs costed, the most expensive was IPC (US $523,000), followed by community mobilization ($438,000) and mass media ($324,000). The largest component of IPC programs was labor costs, which accounted for about half of all resources utilized. This suggests that any gains in efficiency to be made in these programs will likely need to focus on reducing labor costs.

The average unit cost for IPC was $9.94 per person reached, although this varied widely from as low as $5.47 to as high as $55.72. The average unit cost for CM programs ($9.11 per person) was determined to be similar to IPC programs. The cost of CM was $9.54 per person reached in 2010 and $8.01 in 2011.
Conclusions and Policy Implications

Results from this study are useful for planning and budgeting in Namibia, particularly for the implementation of BCC and combination prevention strategies. This study can also help to inform other agencies and countries interested in providing HIV/AIDS BCC services by providing some indication about how much of the resource budget is required for BCC programs in the future and identifying potential for greater efficiencies.

As part of this study, a desk review of existing studies in Namibia that documented the cost of implementing ART, PMTCT, voluntary medical male circumcision (VMMC) and condom distribution interventions was also undertaken and is presented in a separate paper. Taken together, the BCC cost analysis and desk review identify persistent gaps in expenditure and cost data that can aid the GRN’s understanding of the cost of establishing and subsequently implementing a combination HIV prevention strategy.
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>ABC</td>
<td>abstinence, be faithful and use condom</td>
</tr>
<tr>
<td>AIDS</td>
<td>acquired immune-deficiency syndrome</td>
</tr>
<tr>
<td>ANC</td>
<td>antenatal care</td>
</tr>
<tr>
<td>ART</td>
<td>antiretroviral therapy</td>
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<tr>
<td>BCC</td>
<td>behavior change communication</td>
</tr>
<tr>
<td>CAF</td>
<td>community action forum</td>
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<tr>
<td>CBO</td>
<td>community-based organization</td>
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<tr>
<td>CPI</td>
<td>consumer price index</td>
</tr>
<tr>
<td>CM</td>
<td>community mobilization</td>
</tr>
<tr>
<td>COH</td>
<td>Corridor of Hope</td>
</tr>
<tr>
<td>CSW</td>
<td>commercial sex worker</td>
</tr>
<tr>
<td>FY</td>
<td>fiscal year</td>
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<tr>
<td>GRN</td>
<td>Government of the Republic of Namibia</td>
</tr>
<tr>
<td>HIV</td>
<td>human immune-deficiency virus</td>
</tr>
<tr>
<td>HTC</td>
<td>HIV testing and counseling</td>
</tr>
<tr>
<td>IEC</td>
<td>information, education and communication</td>
</tr>
<tr>
<td>IPC</td>
<td>interpersonal communications</td>
</tr>
<tr>
<td>PEPFAR</td>
<td>United States President’s Emergency Plan for AIDS Relief</td>
</tr>
<tr>
<td>PMTCT</td>
<td>prevention of mother-to-child transmission (of HIV)</td>
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<tr>
<td>MCP</td>
<td>multiple sexual and concurrent partnership</td>
</tr>
<tr>
<td>MAPP</td>
<td>Military Action Prevention Program</td>
</tr>
<tr>
<td>MARPs</td>
<td>most-at-risk populations</td>
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<tr>
<td>MICT</td>
<td>Ministry of Information and Communication Technology</td>
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<tr>
<td>MM</td>
<td>mass media</td>
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<tr>
<td>MOHSS</td>
<td>Ministry of Health and Social Services</td>
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<tr>
<td>MSM</td>
<td>men who have sex with men</td>
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<tr>
<td>M&amp;E</td>
<td>monitoring and evaluation</td>
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<tr>
<td>NGO</td>
<td>non-governmental organization</td>
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<tr>
<td>NSF</td>
<td>National Strategic Framework</td>
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<tr>
<td>PEPPE</td>
<td>Peer Education Plus Program</td>
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<tr>
<td>PHDP</td>
<td>Positive Health Dignity and Prevention</td>
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<tr>
<td>PLWHIV</td>
<td>people living with HIV</td>
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<tr>
<td>PolAction</td>
<td>Police HIV Action Program</td>
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<tr>
<td>PwP</td>
<td>Prevention with Positive</td>
</tr>
<tr>
<td>SBCC</td>
<td>Sexual behavior change communication</td>
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<tr>
<td>SMS</td>
<td>short message service</td>
</tr>
<tr>
<td>TCE</td>
<td>Total Control of the Epidemic</td>
</tr>
<tr>
<td>TO</td>
<td>Task Order</td>
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<tr>
<td>TV</td>
<td>television</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
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<tr>
<td>VMMC</td>
<td>voluntary medical male circumcision</td>
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<tr>
<td>YEP</td>
<td>youth education program</td>
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</tbody>
</table>
1. INTRODUCTION

1.1 Background Information

In 2011, an estimated 34 million people worldwide were living with HIV, 69 percent of whom live in sub-Saharan Africa, where nearly one in every 20 adults is HIV-positive. Countries across the region are adopting multi-pronged strategies to confront the disease. An increasingly common component of these strategies is combination prevention. In 2011, PEPFAR recommended behavioral, biomedical, and structural interventions for the prevention of sexually transmitted HIV infections to maximize impact (PEPFAR 2011).

1. **Behavioral interventions** include a range of sexual behavior change communication (SBCC) programs that use various communication channels (e.g., mass media, community-level, and interpersonal) to disseminate behavioral messages designed to encourage people to reduce behaviors that increase risk of HIV and increase protective behaviors.

2. **Biomedical interventions** are those that directly influence the biological systems through which the virus infects a new host, such as blocking infection (e.g., male and female condoms), decreasing infectiousness (e.g., treatment as prevention), or reducing acquisition/infection risk (e.g., voluntary medical male circumcision).

3. **Structural interventions** address the critical social, legal, political, and environmental enablers that contribute to the spread of HIV such as stigma and discrimination against people living with HIV and marginalized groups, gender inequality and gender-based violence, economic empowerment, and education.

This approach to prevention is appealing because it allows a country, or region, to carefully choose the mix of interventions that best responds to population needs, and because there are expected synergies between interventions.

As countries are implementing new approaches to fighting HIV, the recent global economic crisis has compelled countries to make the most efficient use of limited resources. One of the key elements for effective use of limited resources is to know the costs associated with different prevention options. Knowing the unit costs of different prevention strategies is useful because it informs more realistic budgeting and planning, and identifying cost drivers can help to identify potential efficiency gains that can be made. While a number of studies report the costs of voluntary medical male circumcision (VMMC) and HIV testing and counseling (HTC) interventions in sub-Saharan Africa (Forsythe et al. 2002; Menzies et al. 2009; Hankins et al. 2011; Bollinger et al. 2009), virtually no published study examines the costs of behavior change communication (BCC) interventions for changing HIV-related behaviors in sub-Saharan Africa. The costs of these interventions are also among those poorly understood in Namibia.

Although there is a general consensus on the value of incorporating well-designed BCC interventions in Namibia’s combination HIV prevention programs to promote behavior change, little is known about the costs of implementing the three most commonly used BCC intervention strategies: mass media (MM), community mobilization (CM), and interpersonal communication (IPC). Without this information, it is difficult for the Government of the Republic of Namibia (GRN) and its partners to scale up BCC intervention programs, especially at the regional and community levels.

To respond to the need for better cost estimates about BCC interventions for HIV prevention, the United States Agency for International Development (USAID) through the USAID | Health Policy Initiative...
Costing Task Order provided assistance to the Namibian Ministry of Health and Social Services (MOHSS) to conduct a comprehensive analysis of costs and requirements for existing BCC interventions for HIV prevention in Namibia. With this information, the health authorities will be better equipped to budget and plan for scaling up BCC intervention programs by answering questions such as: How much will it cost? What are the cost drivers of each intervention and how can this information be used to identify opportunities for increasing efficiencies? Given the scarcity of data on this topic, the answers to these questions can also inform other countries about the costs associated with establishing and operating their BCC interventions for HIV.

1.2 Objectives of the Study

The main objective of this study was to analyze the annual cost of operating BCC activities in Namibia. The specific objectives of this study were:

- To identify the total annual financial costs associated with mass media campaigns, community mobilization and interpersonal communications programs being funded by USAID.
- To evaluate the cost drivers for each approach (e.g., resources, facilities, equipment, message development and production inputs) in order to understand the major components of the costs and to identify opportunities for increasing efficiencies.
- To calculate the cost for reaching one individual through community mobilization and interpersonal communication programs.
- To determine how unit costs vary across interventions and implementing organizations.

As part of this cost analysis, the USAID | Health Policy Initiative conducted a desk review of existing studies that document the cost of implementing antiretroviral therapy (ART), prevention of mother-to-child transmission (PMTCT), VMMC, and condom distribution interventions in Namibia. Very few documents were identified, but the review is presented in a separate paper.

The findings from both the BCC costing and the desk review help to identify persistent gaps in expenditure and cost data, and help to inform budgeting and planning as the GRN finalizes its plans and begins implementing its combination HIV prevention strategy.

2. OVERVIEW OF HIV IN NAMIBIA

2.1 Epidemiology of HIV and AIDS in Namibia

Namibia is among the countries in sub-Saharan Africa with the highest HIV prevalence. HIV prevalence among pregnant women attending antenatal care (ANC) clinics increased from 4.2 percent in 1992, peaked at 22.3 percent in 2002, and then declined to 17.8 percent in 2008 (MOHSS 2008). Although the epidemic has already peaked, HIV prevalence remains extremely high among the general population. In 2012, the HIV prevalence for Namibians aged 15 to 49 years was estimated at 13.2 percent and the number of AIDS-related deaths amounted to 3,725 (Figure 1). Evidence shows that the epidemic has sustained itself through heterosexual contacts, community norms and practices, and low levels of HIV risk perceptions (MOHSS 2009).
In an effort to address the main drivers of the epidemic, the GRN developed a five-year national strategic plan (NSF 2010/11 - 2015/16) and committed to double its domestic spending on HIV to scale up combination prevention interventions over the five-year period. As part of the country’s HIV response, Namibia has intensified interventions that increase exposure to BCC messages among individuals and communities. The aim of the NSF is to increase the age of sexual debut, reduce multiple sexual and concurrent partnerships (MCP), and advocate for the use of condoms in high-risk sex. For behavioral interventions, the NSF addresses strategic epidemic drivers that include MCP, inconsistent condom use, excessive alcohol use, early sexual debut, inter-generational sex, transactional sex, and mobility and migration (de la Torre et al. 2009). Thus, BCC interventions are designed to address these drivers.

Although the GRN provides the majority of the funds for its national response, it still requires donor augmentation to ensure the delivery of effective prevention services. According to the latest National AIDS Spending Assessment in Namibia (2010/2011), public funds formed 59.7 percent of the N$1,996.6 million allocated towards HIV and AIDS related activities in 2010/11 fiscal year (MOHSS 2008). However, government investment has been skewed in favor of treatment, care and impact mitigation. For example, 43.9 percent of the 2010/11 budget was spent on treatment and care, and only 10.8 percent spent on prevention programs. Furthermore, the domestic investment in HIV prevention has not been
commensurate with the need, and these programs have to a large extent been funded by development partners. In 2010/11 fiscal year, for example, only 3.2 percent of the public sector funds went to prevention programs, while 26.5 percent of funds from donors went to prevention programs. The MOHSS, which is responsible for coordinating and implementing the national response activities, also remains largely dependent upon civil society organizations receiving external support to expand prevention efforts at the community level.

2.2 The Role of Behavior Change Communication in Namibia’s HIV/AIDS Response

The NSF identified combination behavioral, biomedical, and structural interventions as the main strategy aiming to reduce the HIV incidence by 50 percent by 2015. This strategy allows for programming of quality BCC prevention interventions targeted to high-risk populations across all sectors and communities to address the behavioral and structural drivers of the epidemic and to increase the number of individuals seeking biomedical interventions (VMMC, HTC, condoms).

Behavioral interventions directly and indirectly influence knowledge, attitudes and practices that are important factors in changing specific unsafe sexual behaviors at the individual and community levels. With greater exposure to messaging through BCC, uninfected individuals can take steps to avoid becoming infected, while infected individuals can avoid transmission to their sexual partners. Behavioral interventions are also aimed to increase the acceptability and demand for biomedical interventions. Moreover, BCC is important for increasing access to prevention, treatment, care and support services, including HTC, PMTCT, and ART. BCC interventions may utilize radio, television, and other outlets and ideally operate as part of multi-level efforts, in which mutually reinforcing messages are offered through interpersonal, community, and national channels.

Virtually all communities in Namibia are directly affected by HIV/AIDS. Since 1999, Namibia has rolled out successive mass media, community mobilization, and interpersonal communication campaigns to raise awareness and knowledge as well as to influence risky sexual behavior. The successive campaigns have addressed a broad range of themes ranging from abstinence, be faithful, and promotion of condom use (ABC), MCP, excessive alcohol abuse, HTC, and gender-based violence. These mass media campaigns were complemented by community-level interventions. Community members have been elected to form a Community Action Forum (CAF) to address the factors that fuel the HIV/AIDS epidemic locally. To date, CAFs have been involved in creating social change by building awareness and demand for HIV testing, educating communities on HIV, alcohol misuse and gender issues and as partners in national HIV prevention campaigns. Efforts have been made to scale up a number of community-based IPC campaigns in social institutions such as workplaces, schools, and faith-based organization sites. Innovative HIV prevention education interventions have been incorporated in youth activities and sports and community outreach events. Traditional leaders and authorities have also been engaged to accelerate outreach to large numbers of people at risk.

In addition, extra-curricula life skills-based HIV education programs were implemented in 85 percent of primary schools and 48 percent of secondary schools nationwide in 2008. Also, 60 percent of out-of-school youth were reached with small group (25 people or less) or individual social and behavior change programs. According to the last Namibia Demographic and Health Survey, 80.2 percent of women and 82.7 percent of men aged 15-49 years know that people can reduce the risk of getting HIV by using condoms and having one sex partner who is not infected (MOHSS 2008). However, it is difficult to link knowledge of HIV prevention methods to BCC campaigns. Also, there are still challenges to maximize
synergies and efficiencies between these programs due to the unavailability of adequate cost data to drive and scale up the BCC component of the combination prevention strategy envisaged in the NSF.

This study was therefore conducted to fill that information gap, thereby strengthening the capacity of the government and civil society structures to plan, mobilize and coordinate domestic resources, and ensure the delivery of effective prevention services, especially at the regional and community level.

3. METHODOLOGY

3.1 Costing Approach

The BCC costing activity was executed by the USAID | Health Policy Initiative Costing Task Order team in collaboration with the Namibian MOHSS and USAID-Namibia. The MOHSS and the HIV Prevention Advisor at USAID-Namibia helped to identify the organizations, campaigns and programs included in the study. The programs selected had been operating for at least two years. The study team developed a survey instrument to collect cost retrospectively from four MM, one CM, and eight IPC HIV preventive activities for the time period between October 2009 and September 2012 in Namibia. Three different campaigns are described below and the programs included in the study appear in Table 1.

The mass media programs were creatively implemented to target various populations through print, radio, and television formats such as advertisements, talk shows, dramas, and films. Small media (booklets, manuals, leaflets, posters, pamphlets, and flyers) with messages promoting branded products and programs were also distributed locally.

The CM activities were promoted through community meetings and events such as World AIDS Days, health days at tertiary institutions, and exhibitions at regional shows and trade fairs. The CM program also used the excitement of cinema and sport to capture the attention of young people in an environment where they feel comfortable exploring serious and sensitive issues. Community members are identified and trained in NawaSport Coaches Guide, a Namibian adaptation of an international soccer and life-skills curriculum. Trained coaches then work with formal and informal soccer teams through 12 training sessions. NawaCinema was another interactive platform used to educate and entertain communities with HIV prevention-related messaging. The featured films used include real-life and personal stories of people in the field of HIV, bringing a true-to-life aspect to the program.

The activities chosen for IPC aimed to engage small groups of individuals (< 25 people) in urban and rural areas with a series of targeted messages on key drivers of HIV. This was done primarily through in-depth interpersonal HIV prevention sessions conducted by trained facilitators, peer-educators, or volunteers using interactive tools such as training guides, picture codes, MCP flannelgrams (i.e., visual illustration of how sexual networks are formed), posters, etc. Based on the targeted audiences, IPC activities were delivered in household, workplace, school and out-of-school, and other settings.
<table>
<thead>
<tr>
<th>BCC Intervention</th>
<th>Campaign or Program Description</th>
</tr>
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<tbody>
<tr>
<td><strong>Mass Media</strong></td>
<td>A multi-channel integrated campaign designed to reach target audiences (15-49 year olds) at multiple levels through mass media messaging to reduce multiple and concurrent sexual partnerships (MCP) and increase consistent and correct use of condoms during the practice of MCP.</td>
</tr>
<tr>
<td></td>
<td>A multi-channel approach to get more men to utilize HTC by promoting VCT as the “strong” thing to do.</td>
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<tr>
<td></td>
<td>Advocacy and social movement campaign aiming to raise awareness on the many negative effects of alcohol misuse and the HIV epidemic.</td>
</tr>
<tr>
<td></td>
<td>Campaign targeting adults (16 and older) with HIV preventive messages focused on multiple and concurrent sexual partnerships and inter-generational relationships and risk of HIV.</td>
</tr>
<tr>
<td><strong>Community Mobilization</strong></td>
<td>Participatory HIV/AIDS intervention program that uses the medium of film, sport, and community action fora to educate and entertain a broader audience between the ages of 15 to 60 years.</td>
</tr>
<tr>
<td><strong>Interpersonal Communications</strong></td>
<td>A cross-border program aiming to reduce the incidence of HIV among most-at-risk populations (MARPS) including truck drivers, female and male out-of-school youth, female sex workers and seafarers in towns where the incidence of transactional sex is high.</td>
</tr>
<tr>
<td></td>
<td>A workplace program targeting the Namibian Defense Force in their communities with messages that promote abstinence, mutual fidelity, correct and consistent use of condoms, partner reduction, reduction of HIV-related stigma, and access to and use of counseling and testing services.</td>
</tr>
<tr>
<td></td>
<td>A workplace HIV prevention program aiming to reduce the incidence of HIV among Namibian police members.</td>
</tr>
<tr>
<td></td>
<td>A peer education program targeting key populations such as truckers, seafarers, commercial sex workers, and men who have sex with men (MSM).</td>
</tr>
<tr>
<td></td>
<td>A sexual and behavior change program aimed at mobilizing individuals and communities to take control of the HIV epidemic through a door-to-door and face-to-face approach to create an open dialogue about sexual behaviors and HIV/AIDS and provide education, counseling and referrals.</td>
</tr>
<tr>
<td></td>
<td>A curriculum-based training program aiming to reduce the likelihood of further HIV transmission through the involvement of people living with HIV (PLWHIV).</td>
</tr>
<tr>
<td></td>
<td>A curriculum-based training program targeting children and adolescents in school and out-of-school settings and to adults in community and other settings.</td>
</tr>
<tr>
<td></td>
<td>Youth education program using two approaches to empower younger children and older youth and adults with life skills and new behaviors to prevent HIV infection.</td>
</tr>
</tbody>
</table>
Regional population densities vary enormously in Namibia, with almost two-thirds of the population living in the northern regions and less than one-tenth of the population living in the south. The vast majority of the programs are located in the following regions: Caprivi, Khomas, Erongo, Ohangwena, Omusati, Oshana (see Figure 2). These regions are also known to represent much of Namibia’s social, demographic, geographic, and economic heterogeneity. In this study the research team tried to capture programs operating across the country to better understand variation in the costs of prevention programs.

Figure 2. Regional population and distribution of community mobilization and interpersonal communication programs implemented between October 2009 and September 2012 in Namibia

Source: Namibia 2011 Census Provisional Results: Population Distribution by Region (www.gov.na/population)
3.2 Building Capacity to Fill Analytical Gaps

Before undertaking the costing exercise, a two-day capacity building workshop was held in December 2012 in Windhoek, Namibia. This training workshop was mainly organized with two key purposes in mind: (a) to raise awareness of the importance of costing BCC interventions by implementing organizations and equipping key staff with costing skills, and (b) to become acquainted with the programs and interventions that would be costed, and ensure that the data collection tool was structured in a way that would capture this information. A total of 16 participants from the MOHSS, six USAID funded organizations, and two local consultants completed the training. At least one employee from each of the organizations analyzed participated in the training workshop, which served as an opportunity to network and create awareness around the costing exercise.

3.3 Data Collection

Survey instruments were developed to analyze costs for the 14 programs. Two data collectors were trained to collect program cost data from financial and program records using survey instruments, and to conduct interviews with BCC program coordinators, key senior accountants, and human resources staff. For each BCC program level, all resources were grouped into direct program-related items and indirect costs (e.g., personnel; transportation; office consumable goods; and capital items) (see Figure 3 below). The direct program-related costs were accordingly classified into specific BCC activities or delivery channels. The major activities involved in the BCC HIV prevention programs identified include the following:

- Message production and transmission via local and national print, radio, and television channels. This includes IEC material development and distribution (promoting HIV prevention messages by disseminating posters, leaflets, and brochures)
- Individual and/or small group (< 25 people) sensitization and education
- Community and/or large group (> 25 people) awareness raising meetings and events at community film shows, sport events, trade fairs, and other special days (e.g., World AIDS Day celebration)
- Capacity building of community members and training volunteers (as peer educators) on different prevention topics
- Advocacy meetings and workshops organized to build support of stakeholders at different events and to promote prevention through BCC messages
- Supportive supervision activities and meetings to review activities (research and M&E)
- Travel and transportation taken in line with the above activities

For each CM and IPC program, the study team also obtained the annual number of people reached in order to calculate unit costs by CM and IPC intervention programs for each of the three years.
3.4 Collection of Financial Information

In order to establish a clear understanding of the individual implementing organizations and their activities, a site visit of three to five days at each organization selected was conducted by the data collectors. Site visits included a review of the activities run by the organization, collection of financial information for the establishment of costs incurred for specific MM, CM and IPC activities, and interviews with key finance and program managers of the implementing organization. While most of the cost data were collected at the level of the headquarters office, the data collectors also visited an actual activity in the field, which gave a greater insight and understanding of the intervention. The following key steps were followed at each implementing organization:

1. The study team first established the period of performance and data availability for each organization. Three MM programs have fiscal year (FY) 2010–2011 data and the fourth campaign has data available for FY 2010–2012. The data period for the CM program was FY 2010–2011. One IPC program has FY 2010–2011 data; another one has data available for FY 2011–2012; and the data period for the remaining six IPC programs was FY 2010–2012.
2. The general ledger and/or financial reports were reviewed to identify indirect "head office" costs that needed to be shared among all organization programs and those costs that were specific to one of the three BCC interventions (i.e., MM, CM and IPC).
3. Activity codes were then identified and used to allocate "head office" and direct program costs to BCC intervention activities.
4. Information about numbers of persons reached through the CM and IPC programs was obtained from quarterly M&E data reports.
3.5 Data Analysis

The data were entered into an Excel-based costing tool developed as part of this project. Data were then analyzed by calculating costs per BCC intervention. The cost composition of programs by major BCC category was analyzed to identify the key cost drivers. This analysis included the proportion of those indirect cost data (such as staff workload or actual use of resources) attributable to specific BCC intervention activities. All capital costs were annualized using a 3 percent discount rate, which is the standard discount rate applied to health economic analyses (Mathers et al. 2001). Unit costs of CM and IPC interventions were calculated with respect to the total cost and coverage achieved by the various programs. Costs were calculated in Namibian dollars (NA$) and then converted to U.S. dollars using an average exchange rate of 1 NA$ to 0.145 US$ (exchange rate obtained from http://www.oanda.com/currency/converter, accessed on May 15, 2013). The general consumer price index (CPI) from Namibia and a discount rate of 3 percent was used to adjust all costs into 2010 US dollars equivalent (CPI obtained from International Financial Statistics, http://elibrary-data.imf.org/FindDataReports.aspx?d=33060&e=161967, accessed on May 15, 2013). The calculated unit costs were then confirmed with NGO management and program coordinators. Given the variation in inputs across programs, the data are presented separately and as average costs within each BCC category.

3.6 Limitations of the Study

This study analyzed data for a three-year period (October 2009 to September 2012) in an effort to get estimates of the costs of BCC programs and how they differ over time, with scale, and across different modes of message delivery. The results also give some insights into where efforts to increase efficiency should be targeted, but program managers who are familiar with different ways of offering services will need to identify and test more efficient modes of delivery. One key limitation of this study is the relatively small sample sizes: four MM, one CM, and eight IPC programs. These small numbers may permit small variations to significantly influence conclusions in one direction or another. Also, comparability across programs is reduced mainly due to the fact that programs vary widely in their approaches and inputs. Moreover, the different ways in which reach is defined may affect unit costs and reduce comparability. Comparing across years also has limitations as a single program may vary from one year to another, especially if the program is closing out.

The main limitation is that the study can provide insight into the cost of programs, but because it did not measure outcomes, it is not possible to determine which program is more cost-effective in terms of reducing HIV incidence. This costing study may be considered as the first step in better understanding the cost-effectiveness and impacts of BCC interventions for HIV prevention.

The study looks only at the cost of the communication interventions that were implemented in Namibia but not the effectiveness or quality of the interventions. Therefore, costs of the different categories of the communication interventions can be compared but the context regarding the use/strengths/weaknesses of the interventions also important when “comparing” interventions is not addressed.
4. RESULTS

4.1 Overview of BCC Activities and Coverage in Namibia

4.1.1 Mass media campaigns
Access to mass media communication resources is relatively high in Namibia, allowing the campaigns to achieve high levels of reach and awareness. The mass media channel most widely used by the BCC programs studied was radio, with a total of 15,781 HIV campaign adverts placed in 10 different radio stations with an estimate of 2.230 million listeners (see Table 2 below). This was followed by television, with 1,432 adverts placed in two TV stations. For print media, 333 HIV-related adverts were inserted in six daily and weekly newspapers with an average readership of 50,700 persons.

Table 2. Number of HIV related adverts and estimated listenership and readership by media channel used, October 2009 – September 2011

<table>
<thead>
<tr>
<th></th>
<th>Print media adverts</th>
<th>Radio media adverts</th>
<th>Television media adverts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campaign No. 1</td>
<td>255</td>
<td>9,357</td>
<td>970</td>
</tr>
<tr>
<td>Campaign No. 2</td>
<td>43</td>
<td>3,651</td>
<td>283</td>
</tr>
<tr>
<td>Campaign No. 3</td>
<td>35</td>
<td>2,773</td>
<td>179</td>
</tr>
<tr>
<td>Campaign No. 4 (see text below)</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Number of media channels used</td>
<td>6</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Estimated station listeners or issue readers (Media Metrics 2008)</td>
<td>8,651 - 125,688</td>
<td>25,000 - 450,000</td>
<td>NA</td>
</tr>
<tr>
<td>Total radio listeners or issues readers (Media Metrics 2008)</td>
<td>304,419</td>
<td>2,230,000</td>
<td>NA</td>
</tr>
</tbody>
</table>

The materials for Campaign No. 4 were adapted from other Southern African countries, but re-designed to incorporate Namibian images and perspectives. Specifically, the campaign produced one radio drama of 35 episodes, one live magazine show of 20 episodes in English and three local languages, and a 24-minute TV film, including 16,800 copies of a booklet, 180 copies of toolkits and 1,443 posters distributed throughout the country. Other outreach activities included billboards and an animated video screened in banking halls and post offices.

4.1.2 Community mobilization and interpersonal communication
A number of the costed CM and IPC programs focusing on various groups of the general population were implemented across the 13 regions of the country. The CM activities took place between October 2010 and September 2011, reaching a total of 96,000 persons through interactive video and film presentations, sport events, special health days, and trade fairs (see Table 3 below). As interactions during these activities are often brief and with large numbers of audience members, contact numbers are estimated based on distributed IEC or used activity materials.
Eight IPC programs were conducted at various sites over a year period, reaching a total of 1.2 million people from the targeted population. However, the number of people reached by each program varied substantially. This was probably due to the dose (i.e., number of times the individual is reached, for how long, etc.) associated with the coverage defined by each program. For example, field officers for the door-to-door IPC program guide individual household members during repeated home visits through five steps on taking control of HIV/AIDS in their own lives and in the community; whereas facilitators of curriculum-based IPC hold group sessions with a maximum of 25 participants per group twice a week for a period of six to eight weeks with each session being one and a half hours long. In contrast, key populations and workplace IPC programs define a person reached as an individual who attends at least one hour-long peer-education session, but for edutainment or group meetings the indicator changes to number attending the event. This may also account for some of the variability seen in costs at the different program levels. The scale of the program appears to strongly influence the unit cost, with large programs having a much lower cost per person reached than smaller programs.

### Table 3. Estimated number of persons reached by CM and IPC program, FY 2010 - 2012

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CM</td>
<td>68,822</td>
<td>27,352</td>
<td>NA</td>
<td>96,174</td>
</tr>
<tr>
<td><strong>IPC setting</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Door-to-door</td>
<td>499,019</td>
<td>218,120</td>
<td>231,281</td>
<td>948,420</td>
</tr>
<tr>
<td>Workplace-1</td>
<td>6,473</td>
<td>10,974</td>
<td>20,600</td>
<td>38,047</td>
</tr>
<tr>
<td>Workplace-2</td>
<td>4,855</td>
<td>5,674</td>
<td>12,990</td>
<td>23,519</td>
</tr>
<tr>
<td>Curriculum-1</td>
<td>5,698</td>
<td>7,869</td>
<td>4,670</td>
<td>18,237</td>
</tr>
<tr>
<td>Curriculum-2</td>
<td>10,683</td>
<td>11,997</td>
<td>10,262</td>
<td>32,942</td>
</tr>
<tr>
<td>Curriculum-3</td>
<td>22,223</td>
<td>7,327</td>
<td>6,327</td>
<td>35,877</td>
</tr>
<tr>
<td>Key populations-1</td>
<td>26,993</td>
<td>5,459</td>
<td>NA</td>
<td>32,452</td>
</tr>
<tr>
<td>Key populations-2</td>
<td>NA</td>
<td>8,091</td>
<td>19,744</td>
<td>27,835</td>
</tr>
<tr>
<td><strong>Total IPC</strong></td>
<td>575,944</td>
<td>275,511</td>
<td>305,874</td>
<td>1,157,329</td>
</tr>
<tr>
<td><strong>Estimated annual number of persons reached</strong></td>
<td>644,766</td>
<td>302,863</td>
<td>305,874</td>
<td>1,253,503</td>
</tr>
</tbody>
</table>

Source: Annual Program Reports of organizations included in the study.

### 4.2 Costs of BCC Interventions

#### 4.2.1 Average annual cost per BCC intervention

Table 4 below summarizes the mean annual cost of the three different BCC interventions studied. As expected, the cost varied substantially by BCC intervention type. The average cost of conducting a mass media campaign was $324,000. The average annual costs of CM and IPC were $438,000 and $522,700, respectively. The unit costs for CM and IPC were very similar: $9.11 per person reached through CM, and $9.94 per person reached through IPC.
Table 4. Average annual cost per type of BCC interventions

<table>
<thead>
<tr>
<th>Type of Behavior Change Communication</th>
<th>Mass Media</th>
<th>Community Mobilization</th>
<th>Interpersonal Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average annual cost per campaign/program (FY 2010 USD)</td>
<td>$324,330</td>
<td>$437,878</td>
<td>$522,700</td>
</tr>
<tr>
<td>Average annual number of persons reached per campaign/program</td>
<td>N/A</td>
<td>48,087</td>
<td>52,606</td>
</tr>
<tr>
<td>Average annual cost of reaching one individual</td>
<td>N/A</td>
<td>$9.11</td>
<td>$9.94</td>
</tr>
<tr>
<td>Number of campaigns/programs in study sample</td>
<td>4</td>
<td>1</td>
<td>8</td>
</tr>
</tbody>
</table>

4.2.2 Composition of average annual cost per BCC intervention

Figure 4 below shows the breakdown of the average annual costs of all BCC interventions into three major categories: personnel, direct program, and other indirect costs. Direct program costs accounted for the highest proportion of the annual cost of MM and CM. These represented 48 percent and 46 percent of MM and CM costs, respectively. The largest component of IPC was labor, which accounted for about half of all resources utilized. This suggests that any gains in efficiency to be made in IPC programs will likely need to focus on reducing labor costs. The following sections provide a detailed composition of direct costs per BCC intervention type.

Figure 4. Breakdown of average annual cost per BCC intervention type, FY 2010–2012
4.2.3 Composition of average annual cost per mass media campaign

Disaggregated costs per MM campaign indicated that labor accounted for 32 percent of all resources utilized during the study period (see Figure 5 below). The program’s core team of seven media and marketing specialists produced and implemented the campaigns. The direct program component, consisting of mostly print, radio and TV media, represented the largest proportion of all MM resources used (48 percent). The new media (SMS text messaging) was used by one campaign only and therefore does not represent a large share of the overall costs. Although radio media was the most widely used medium by all MM programs (see Table 2 above), print media accounted for the largest share of direct program costs (22 percent of total MM or 46 percent of direct program costs). Among the three main message delivery channels, TV media accounted for the smallest share of MM direct program costs because one MM program produced only one TV film but aired 35 episodes of a radio drama and 25 episodes of a live radio magazine show. Based on these results, the radio media can be considered a low cost communication channel for HIV prevention although its effectiveness and impacts on HIV incidence have yet to be quantified.

It is also worth noting that one MM program has re-designed all of its campaign materials that were adapted from other Southern African countries. As a result, its average annual cost was about the same as the combined annual cost of the three other programs ($641,000 versus $600,000). The low costs of these three programs may also be due to the fact that they were conducted by the same organization and, therefore, shared some of the overhead costs. For these three programs, the average indirect program costs ranged from $43,000 to $58,000 compared to $99,000 for the program implemented separately. This suggests some gains in technical efficiency through economies of scope. Economies of scope, or reductions in program costs from combining services, may be found through shared use of a common infrastructure, overheads and certain "indivisible" operational resources.

Figure 5: Composition of average annual of mass media campaign, FY 2010–2012
4.2.4 Cost of community mobilization

In this study, CM is defined as community outreach and events with indirect interactions with a large group (> 25 people). In these CM programs community members are identified and trained to work with community leaders, as well as church and youth groups, to lead interactive discussions about HIV risk and prevention. One recurring problem was the loss of CAF members to employment. As part of the community mobilization activities, the program conducted large-scale outreach events such as regional trade fairs, National and World AIDS Days, and interactive NawaCinema\(^1\) and NawaSport\(^2\) activities. One of the key resources employed to unmask the practice of MCP was through an interactive community outreach tool.

Figure 6 below shows the distribution of CM cost per category of resources. Because the program utilized volunteers and community mobilizers, labor accounted for the smallest share of all CM resources (15 percent). Although the CM program was centrally managed, it involved extensive travel to the different constituencies across this vast and sparsely populated country. Travel and vehicle operation costs alone accounted for 47 percent of indirect program (overhead) costs, which represented 39 percent of the total CM cost. The largest share (46 percent) of all CM resources was direct program component. For example community-level events (e.g., group education, Nawacinema, NawaSport, and CAF engagement) absorbed 33 percent of all resources utilized.

**Figure 6. Composition of average annual cost per community mobilization program, FY 2010–2012**

\(^1\) NawaCinema is an interactive platform that uses the medium of cinema to inform and facilitate discussions on HIV and related issues.

\(^2\) NawaSport is an interactive platform which use the medium of sport tournaments and soccer games to capture the attention of young people in an environment where they feel comfortable discussing HIV and related sensitive issues.
4.2.5 Unit cost analysis of community mobilization

The CM program involved a series of community meetings and events to bring BCC HIV prevention messages to communities in all 13 regions of the country. However, the USAID-funded program ended in 2011, and since this study only collected information about USAID-funded projects, it is not clear whether these activities were picked up elsewhere during the study period. Nevertheless, the scope was reduced in the final year. As a result, the program reached 68,822 individuals in 2010 but reached only 27,352 individuals in 2011 (see Figure 7 below). During the same period, the unit cost of CM decreased by 16 percent but this may be due to the decreased intensity of the program rather than the maturity of the program.

The lack of regional human resources has also hampered the ability to fully meet the demands at the community level. With the closure of the regional offices, and limited CAF members still in the program, little was spent on community outreach activities. For example, investment in capacity building decreased by 97 percent ($83,000) from FY 2010 to FY 2011. If the financial resources were still available to train volunteers to sustain the implementation of community-level activities, the unit cost would be about $10 in FY 2011. However, due to the lack of spending on such capacity building, the unit cost for CM declined between 2010 and 2011.

Figure 7. Unit cost and persons reached by community mobilization (CM), 2010–2011
4.2.6 Cost of interpersonal communication
This study defined IPC as prevention activities with direct interactions with individuals in small group (< 25 people). The most significant cost drivers of IPC were labor and overheads (see Figure 8 below). These two components alone accounted for 79 percent of all IPC resources utilized and direct program costs accounted for only 21 percent. IPC programs were implemented by trained staff from five different organizations. IPC programs are generally labor-intensive and, thus, it may not be possible to reduce personnel costs in order to increase efficiency. However, efficiency can be gained by lowering overhead costs or by engaging additional volunteers to scale up the implementation of community-level activities.

Figure 8. Composition of average annual cost per interpersonal communication program, FY 2010–2012

4.2.7 Cost composition by interpersonal communication program type
To better understand whether costs differed by technical area, the eight IPC programs were grouped into the following four categories based on program mode of delivery: door-to-door, workplace, curriculum-based, and key populations. The one door-to-door program mobilizes individuals and the community through household visits and discussions. The two workplace programs provide HIV prevention outreach activities for the Namibian Defense and Police Forces in their barracks and stations. The three curriculum-based programs utilize education targeting children and adolescents in school and out-of-school settings and adults in community and other settings. The two key populations programs deliver core messages through peer educators. Figure 9 below shows the composition of personnel, direct and indirect program costs per IPC mode.
Regardless of the IPC mode of delivery, labor accounted for the largest share of all resources utilized. Personnel alone accounted for 56 percent of the annual cost of key populations and workplace-based IPC, 53 percent for curriculum-based programs, and 44 percent for the door-to-door approach. In general, IPC programs involve labor-intensive activities. Besides the program staff, the workplace and key populations IPC program also trained and used community mobilizers from each targeted population group (uniformed service men, seafarers, transport workers, MSM, CSW, etc.) to conduct interpersonal HIV prevention sessions. The curriculum-based IPC programs focused on group-level interventions whereby group sessions are conducted by one trained facilitator over a period of six to eight weeks. The door-to-door programs are implemented by trained field officers living in the communities where they work.

The proportion of direct and indirect program costs varied with the IPC setting. When IPC was conducted in a curriculum-based setting, the proportion of direct program costs (34 percent) was higher than that of indirect costs (13 percent). This was the reverse when the door-to-door approach was used with indirect costs amounting to 42 percent compared to only 14% direct costs. Direct (21 percent) and indirect (23-24 percent) costs were relatively equal in the workplace and key population programs.

**4.2.8 Unit cost analysis by interpersonal communication program type**

The average unit cost per IPC mode of delivery is presented in Figure 10 below. The variation in the program costs is in part related to scale, and in part related to the types of services required. For example, the door-to-door model operates on a large scale, reaching an average of 316,000 individuals per year between October 2009 and September 2012. However, the door-to-door program is also relatively inexpensive ($5.47 per person reached) because the field officers live in the community where they walk or bike from house to house engaging face-to-face with family members, community leaders and volunteers. The unit cost of the workplace model was relatively low ($21 per person reached), probably due to the presence of mobilizers who organized outreach activities in their place of work. The two most costly IPC models ($33 per person) were the curriculum-based and hard-to-reach key populations. These IPC models operated on a small scale with groups of 25 or less participants over a six to eight week
period. As a result, they reached the fewest individuals annually (9,600 to 10,000 persons). However, it is not possible to tell from the data which program is most cost-effective as the study did not collect data on effectiveness.

**Figure 10. Average cost per person reached by IPC, by IPC type, FY 2010–2012**

Because the unit costs varied by IPC model, each IPC group was analyzed to better determine whether the variations are due to economies of scale or program maturity.

4.2.8.1 **Workplace-based IPC setting**

The average unit costs of the two workplace IPC models decreased by 66 percent from $36 in FY 2010 to only $12 in FY 2012 (see Figure 11 below). During this time, the interventions remained largely the same but program reach increased by 50 percent. Thus, the results suggest economies of scale or program maturity effects.

The strategy used to implement the workplace-setting IPC program was a combination of peer education and outreach activities in the workplace, such as military bases and police stations. The program engaged with the base commanders to train some military members as mobilizers and peer educators. For example, the military organized a number of outreach activities per year, which allowed for large numbers to be reached since the entire base is targeted. The mobilization of base commanders also increased the opportunity to include more bases in the program (e.g., navy and air force), which led to an increase in numbers reached.
4.2.8.2 Curriculum-based training IPC setting

The average unit costs for the three IPC programs utilizing a curriculum-based approach increased by 69 percent between 2010 and 2012. This increase in unit costs coincides with a decrease in program reach by 45 percent during the same time period (see Figure 12).

The strategy used to implement the curriculum-setting IPC program was a combination of in-school and out-of-school youth and adult training and outreach activities in the community. For example, the program targets group-level interventions whereby group sessions are held based on a curriculum. Sessions are conducted weekly for a period of six to eight weeks. Consequently, a maximum number of 25 participants per group are taken through a one-month program. It is conceivable that the number of participants in sessions varied during the study period. However, the program counted only those who had been through at least six sessions around themes such as self-esteem and safer sexual relationships and practices, including delayed sexual debut, abstinence, alcohol and HIV, MCP and cross-generational and transactional sex, condom use, VMMC and HTC. Therefore, a high drop-out rate can reduce the program coverage number with no effect on the total cost. It is also important to note that 2010 was the year that the national “Break the Chain” campaign was active. This multi-year BCC program focusing on multiple and concurrent partnerships was implemented by a wide range of partners from government, civil and development partners, as well as the organizations included in this study. Thus, some organizations involved in the campaign may have changed their work plan thereafter. This suggests that any gains in efficiency to be made in curriculum-based IPC programs will likely need to focus on making sure all enrollees complete the required number of lessons.
4.2.8.3 Door-to-door IPC setting

The door-to-door IPC approach divides the operational area into clusters of households allowing one field officer to work in one cluster for five months before moving to the next cluster. Because the field officers live in their community, they can walk or bike from house to house engaging face-to-face with family members, community leaders and volunteers. As a result, the program was able to reach out to many people at a relatively low cost. For example, 499,019 people were reached in 2010, at a cost of $4.88 per person reached. The cost per person reached in 2011 and 2012 was $6.55 and $5.74, respectively. These higher unit costs were the result of the program reach being reduced by roughly half after 2010.

Figure 13 shows the distribution of unit costs and total persons reached on a quarterly basis through the door-to-door IPC approach. Overall, unit costs were decreasing with increasing number of persons. This indicates clear economies of scale. However, the rate of decrease of the unit costs was much larger at lower levels of coverage, and then tailed off after more than 100,000 were reached. By program design, one field volunteer covers a geographical area of 100,000 people. Therefore, if this program is expanded to regions and additional community volunteers are engaged, more people will be reached quickly with HIV preventive messages at a relatively low cost.
4.2.8.4 Key populations IPC setting

The approach to reaching key populations through IPC consists of two programs. Most activities are currently carried out by a consortium of partners who make use of trained key populations to implement the program. Altogether, the partners reached over 26,900 persons in 2010 but coverage decreased by nearly half by 2011, and then increased to 19,700 people in 2012. However, these two programs were not implemented at the same time even though they target the same group of key populations. One program phased out in 2011 while the other started during the second quarter of 2011. Therefore, the data were analyzed separately on a quarterly basis to better understand whether unit costs changed when the programs matured.

For the program in phase-out, the quarterly number of persons reached decreased by 93 percent from FY2010 to FY2011 while the unit cost increased to a maximum ($29 per person) before it decreased to less than $5 by the end of FY 2011 (see Figure 14 below). This parallel decrease in numbers reached and unit costs are indicative that any gains in efficiency made were maintained throughout the last year of the program.

The peak of unit cost coincided with a last surge in IEC investment followed by a rapid decrease in capacity building resources for the pool of 400 volunteers from CBOs. Selection criteria of volunteers required that they be resident within their area of operation and therefore the transportation cost was relatively low. Because this was also an active volunteer system which focused on outreach, peer education and quarterly community activities, high numbers of people were reached. However, the imminent end of the program resulted in the termination of some outreach activities.

Figure 14. Quarterly unit cost and total persons reached by key populations program during phase-out, FY 2010 Q1 – FY 2011 Q4
For the IPC program in start-up, the quarterly unit cost and total numbers reached are represented in Figure 15 below. When the program started in 2011, it was reaching about 2,700 people quarterly, but the quarterly coverage numbers more than doubled by the end of FY 2012. During the same period, the unit costs increased to a peak during the first quarter of FY 2012 and then stabilized around $50 per person during the last three quarters. The first quarter of FY 2012 coincided with the end of the calendar year. Because there were fewer program activities taking place in the communities, the numbers reached declined steeply. The peak in unit cost was related to initial investment in capacity building in addition to the program personnel costs.

This program started off on a high note with the first month dedicated to training 100 key populations over a four week period after which they were immediately deployed in the field. The trained persons were recruited from five partners who brought in huge numbers since the focus was on reaching targets at the time. The low unit cost can be ascribed to the fact that some partners shared the training costs.

Figure 15. Quarterly unit cost and total persons reached by key populations program during start-up, FY 2011 Q2 – FY 2012 Q4
5. DISCUSSION

Namibia has undertaken several activities to support the development and implementation of a BCC strategy for HIV prevention in the country. A broad range of HIV prevention partner organizations have already adopted a multi-level, multi-channel, multi-media approach to social and behavior change. Respective partners focused on their core strengths, whether designing mass media campaigns, performing community outreach activities or individual and small group sensitization and education.

This study analyzed the cost of four mass media campaigns, one community mobilization program, and eight interpersonal communications programs that were implemented during the 2010–2012 fiscal years. Of the individual programs costed, the most expensive were IPC ($523,000), followed by CM ($438,000) and mass media ($324,000). The implication is that MM interventions offer a cost-efficient way to reach a large number of people, including people who may be difficult to reach through IPC approaches. The consequence, however, is that the effectiveness and impact are difficult to measure. The average unit cost for IPC programs was $9.94, although this varied widely from as low as $5.47 to as high as $55.72. This variation was due to the differences in mode of delivery for each program. The average unit cost for CM programs ($9.11) was determined to be similar to the average cost of IPC programs.

It appears from this study that the scale of the program strongly influences the unit cost, with large programs having a much lower cost per person reached than smaller programs. For example, the door-to-door approach reaches the largest number of people and has the lowest unit cost among all types of IPC programs. Conversely, IPC programs implemented in curriculum-based settings reach the smallest number of people and have the second highest unit cost. Within a given intervention, such as IPC, the results also indicated that the costs are inversely proportional to scale.

The variation in the program costs is also in part related to the types of services required, organizational program structure, and settings of CM and IPC interventions. Because these programs are centrally managed, they involved extensive travel to different constituencies across all communities differently affected by HIV/AIDS. As a result, these programs incurred high travel and vehicle costs. In addition, the allocation of overhead and other central administration costs to programs varied considerably across organization. This contributes to the different indirect program costs. For example, because the door-to-door IPC program employs a multi-layered coordination and management structure, its indirect costs were the highest amongst all IPC programs. In general, these programs also rely on field officers who have little education, which makes ongoing capacity building and on the job training essential. Furthermore, the way reach (i.e., dose of reach) is defined for each CM and IPC program may explain the difference in unit costs. Some programs such as curriculum-based IPC setting take participants through a series of weekly sessions of one and a half hours but for other programs (e.g., workplace and key populations) the reach becomes number attending one or two hours meetings.

While economies of scale appear to be an important factor, it is also important to recognize that high program coverage may not necessarily lead to large numbers of people practicing safer sexual behaviors or seeking HIV treatment and care services. It is possible the low coverage of curriculum-based IPC programs was due to enrolled individuals who did not complete the required six sessions to be counted as persons reached. However, it is possible that those who dropped out from the IPC programs have learned some lessons about underlying issues like gender and cultural values around HIV prevention, treatment and care.

The findings from this study fill a gap in information about BCC costs. In addition, the findings help to validate what currently exists. For example, this study found that the cheaper IPC program was the door-to-door model ($5.47 per person reached). An evaluation study of the same door-to-door IPC program in Namibia also reported a unit cost of $6 per person reached (Mameja and Baatsen 2008). Similar analyses
of PEPFAR funded community mobilization interventions in South Africa also found a unit cost of $1 per person reached through a door-to-door IPC delivery mode at a sister organization site (Schutte and Pfeiffer 2010).

6. CONCLUSION AND RECOMMENDATIONS

As governments take over a greater share of responsibility for financing their health and HIV programs with domestic resources, they require up-to-date information about what programs cost. Donors, who often fund a large share of HIV programs, especially prevention, also need reliable estimates of costs for budgeting purposes. This report provides some indication about how resources might be better allocated for BCC intervention programs in the future. First, this report provides a range of MM campaign costs and unit costs of CM and IPC programs that should serve to guide budgets in the future. While donors should recognize that comparability between BCC interventions and also IPC programs is not always possible, BCC programs that greatly exceed the range of unit costs indicated in this paper should be looked at with greater scrutiny.

Second, as donors try to create more value for money with their HIV/AIDS prevention resources, this analysis suggests that there can be significant gains achieved by funding a small number of projects that reached a large number of people rather than a large number of small projects that reached fewer people. In this analysis, the economies of scale appear quite clear for the door-to-door IPC setting.

Third, because IPC and CM programs are highly labor intensive, donors and implementing organizations should pay particular attention to their labor costs while assuring the quality and efficiency of those working on these programs. This makes ongoing capacity building and on-the-job training essential. Also, some of the programs in this study rely upon community volunteers. While it is possible to view volunteers merely as “cheap labor,” it is also important to sustain their long-term participation and enthusiasm.

Although the results from this study are particularly useful for planning and budgeting in Namibia, particularly for the implementation of BCC and combination prevention strategies, other agencies and countries interested in knowing what it costs to provide HIV/AIDS BCC services can benefit from the study findings. For example, the results provide some indication about how much of the resource envelope is needed for BCC programs in the future. Also, comparing cost categories across programs can help to identify potential for greater efficiencies and thus reduce unit costs and assure that programs are achieving good “value for money.”
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