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MEETING REPORT

INNOVATIVE USES OF COMMUNICATION TECHNOLOGY FOR HIV PROGRAMMING FOR MSM & TG POPULATIONS

MAY 2-3, 2013, WASHINGTON, DC

AIDSTAR-One
AIDS SUPPORT AND TECHNICAL ASSISTANCE RESOURCES

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ACRONYMS

AIDS	acquired immunodeficiency syndrome
amfAR	The Foundation for AIDS Research
ART	antiretroviral therapy
ARV(s)	antiretroviral(s)
CBO	community-based organization
CDC	Centers for Disease Control and Prevention (U.S.)
GLB	gay, lesbian, and bisexual
GMT	gay men, other men who have sex with men, and transgender persons
HIV	human immunodeficiency virus
ICT	information and communication technology
IMB	information-motivation-behavioral skills
LGBT	lesbian, gay, bisexual, and transgender
MSM	men who have sex with men
MSMGF	Global Forum on MSM and HIV
NIH	National Institutes of Health
NIMH	National Institutes of Mental Health
OGAC	Office of the U.S. Global AIDS Coordinator
PEPFAR	U.S. President's Emergency Plan for AIDS Relief
PrEP	pre-exposure prophylaxis
SMS	short messaging services
STI(s)	sexually transmitted infection(s)
TG	transgendered persons
TLBz	Thai Lady Boyz Sexperts
UNAIDS	Joint United Nations Programme on HIV and AIDS
USAID	U.S. Agency for International Development
YBMSM	young black men who have sex with men

EXECUTIVE SUMMARY

BACKGROUND

Although human immunodeficiency virus (HIV) incidence is stabilizing across the general population globally—and even decreasing in some countries—there is an alarming upward trend of new infections among key populations, namely men who have sex with men (MSM) and transgender persons (TG) (Beyrer et al. 2012; Baral et al. 2012). In response, the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR) has prioritized these key populations in the 2012 *PEPFAR Blueprint* and in the 2011 *Technical Guidance on Combination HIV Prevention for MSM* and is exploring new ways to reach MSM and TG. These documents speak to the urgent need to strengthen and expand mobilization of key population communities for HIV prevention and testing services and to remove barriers that keep MSM and TG from accessing HIV care and treatment (PEPFAR 2011; PEPFAR 2012).

Global trends in public health research and information and communication technology (ICT) suggest that MSM and TG use social and mobile tools for advocacy as well as social and sexual networking (Liau, Millett, and Marks 2006). For example, mobile phones or computers can be used for chatting or for engaging on informational or social networking sites, such as Facebook. With the rapid expansion of mobile phones, many lower- and middle-income countries are leaping into the mobile era, skipping desktops altogether. As such, ICT, particularly mobile communication, provides new opportunities to more effectively reach and engage MSM and TG populations in HIV prevention and across the HIV testing, treatment, and care cascade (Millett et al. 2012; Sullivan et al. 2012).

From behavior change communication messages to HIV educational games to virtual sampling in HIV research studies, ICT tools are incorporated into activities to increase the reach of HIV prevention messages, to improve retention and adherence to antiretroviral therapy (ART) programs, to encourage HIV testing, and to enroll MSM and TG into HIV research studies (Robertson 2009; Hightow-Weidman et al. 2011). PEPFAR and the Foundation for AIDS Research (amfAR) have funded initiatives that incorporate mobile and social technology into HIV programs for MSM and TG. The National Institutes of Health (NIH) has also funded research in this area. Some missing links, however, are documenting and sharing community-based experiences in using ICT in HIV programs and advocacy, providing effective private-sector partnerships, and strategizing to improve public health’s lagging behind in adopting the latest technological approaches more widely for programs with MSM and TG. Moreover, a deeper understanding of diverse technological approaches and their respective challenges can improve technical assistance and program design for PEPFAR and its partners.

These experiential and knowledge gaps provided a springboard for this consultation on innovative uses of technology for HIV programming for key populations. A product of a partnership among PEPFAR, the U.S. Agency for International Development (USAID), amfAR, and the National Institutes of Mental Health (NIMH) and representatives from Africa, Latin America, the Caribbean, Asia, Europe, Australia, and the United States, the meeting facilitated sharing of innovative uses of communication technology across HIV research, programs, outreach, advocacy, and public-private partnerships.

OBJECTIVES

The goals of the Organizing Committee for the Technical Consultation on Innovative Uses of Communication Technology for HIV Programming for MSM and TG Populations included:

- Provide a technical update on emerging trends in key populations' use of technology.
- Identify innovative programmatic approaches and lessons learned for reaching key populations using technology.
- Inform PEPFAR's strategy for key populations programming and research.
- Engage the private sector and public health partners in the use of electronic technology to better reach key populations for HIV prevention messages and linkage to services.

About 44 attendees from Australia, Cameroon, China, Ecuador, Ghana, Jamaica, Philippines, South Africa, Thailand, the United Kingdom, and the United States participated in the Washington, D.C. meeting. Over the course of two days, participants shared experiences, learned about current applications of communication technology in research and programs, and discussed key recommendations to improve key populations' access to HIV services.

CONCLUSIONS

The consultation provided a valuable platform for providing technical updates, identifying innovative programmatic approaches and lessons learned in using ICT tools to reach key populations with HIV services and informing PEPFAR's strategy for key populations for programming and research. Over two days, a broad range of topics, issues, and innovations addressed the private sector, research highlights, and program implementation. Each of the presentations and panels prompted in-depth discussion and offered an important opportunity to share experiences and ideas.

Several recommendations emerged:

- **Develop targeted content that specifically addresses TG populations' needs.** Throughout the consultation, it was noted that some programs and studies include MSM and TG together, but many are aimed solely at men. This approach does not appeal to transgender women who do not identify as men and require different HIV information. Nor does it reflect the realities of transgender men, who also have specific sexual health needs. As such, it is important to develop TG-appropriate content and to tailor messages and services accordingly.
- **Foster intersectoral collaboration.** Strategic partnerships across the public, private, and community-based sectors are urgently required to identify unique approaches to HIV prevention and service delivery. Government agencies are often hampered by regulations, funding restrictions, and timelines that make it difficult to develop and implement effective initiatives incorporating technology. Organizations and private companies can circumvent these challenges. Also, these organizations may be better connected to targeted communities, as private companies have greater knowledge of their consumers' behavior, and community organizations often have developed greater trust within the communities they serve. In the development of new interventions, partners—technology application developers, website owners, researchers, civil society, and other community organizations—should be identified to strategically fill gaps. No one sector should go it alone.

- **Understand the strengths and limitations of virtual and physical spaces and identify opportunities to incorporate both into HIV programs.** Although mobile and web technology tools are providing unprecedented access to key populations for HIV research and interventions, none of these tools are standalone “silver bullets.” Face-to-face interventions are still very much needed. The consultation covered many of the advantages of both digital and face-to-face approaches and the types of interventions that work best in those spaces. Moreover, participants determined that it is important to begin bundling traditional, face-to-face approaches with online channels to enrich the quality, impact, and evaluation of HIV programs.
- **Present the human face of HIV.** New technology may necessitate unique approaches to HIV projects. There is tremendous potential to access MSM and TG who are not currently connected to HIV services. Technology can help demystify and destigmatize HIV services, such as counseling and testing, by featuring real stories of local community members and providers to model health-promotion and risk-reduction approaches. HIV content must be rich, personal, visual, clear, interactive, and short. Programs should encourage user-generated content, sharing videos, embedding content into real-life scenarios, and fostering two-way conversation between beneficiaries, patients, providers, and communities. In communities with low broadband access or among participants with limited literacy, programs will have to find innovative ways to display robust content in simpler formats.
- **Think of health providers as users too.** Health providers also benefit from online and mobile tools designed to facilitate their relationships with their patients and to ensure that they are providing appropriate care.
- **Improve monitoring and evaluation for ICT programs.** Limitations still exist in evaluating outcome and impact indicators for some technology programming. Matching process indicators, such as visits to a website or number of HIV-related chats in a forum, to longer term goals—either project goals or development goals—may be an important step in demonstrating the impact of technology interventions for key populations.
- **Know the audience.** Any sector incorporating technology into a program for MSM or TG must take care to fully understand the nuances of the technology working with the community and the defining characteristics of the target population before beginning a new activity.
- **Respect and protect.** With a push of a button, a person’s entire private life can be revealed. Program managers of mobile and social initiatives should take care to protect the privacy and identity of any participant, particularly in rights-challenged settings where MSM and TG may be persecuted or jailed.
- **The time is now.** Public health programs are just beginning to innovate in their use of mobile and social tools for HIV prevention and care; however, there is so much potential to incorporate these tools along the “leaky cascade” from identification of and communication with key populations to retention in care to adherence to antiretroviral (ARV) medications.

For a list of planning committee members, please refer to Appendix 1. The meeting agenda is included in Appendix II.

DAY I

WELCOME

Cameron Wolf of USAID and Tonia Poteat of the Office of the Global AIDS Coordinator's Office (OGAC) opened the consultation with an overview of the objectives and inspiration for the meeting: think collectively about a vision to help enhance PEPFAR programming globally. Wolf then challenged participants to consider the question: Are we at the beginning of the end of acquired immunodeficiency syndrome (AIDS)? The audience consensus was that, although the means and tools to reach our target audiences and connect them to services have advanced, access to those tools and services is not yet universal, and consequently, many countries are struggling to control their epidemics, particularly for key populations.

CURRENT STATE OF TECHNOLOGY USE FROM THE COMMUNITY PERSPECTIVE

Laurindo Garcia of B-Change Foundation in the Philippines kicked off the consultation with an overview of social and mobile technology trends from a private-sector and community perspective, highlighting how technology has been used by gay men, other men who have sex with men, and transgender persons (GMT) for sexual networking.

From wearing colored bandanas to using code words and phrases, MSM have historically embraced creative means to find each other and communicate sexual preferences and risks, particularly in communities where stigma and discrimination have forced them to network discreetly. As technology has changed, MSM have been quick to adapt new tools for social and sexual networking. For example, during the 1990s MSM used online chats and public forums, such as Gay.com or Craigslist, to post classified ads and communicate anonymously. With the shift toward social networking in both general market websites (e.g., Facebook) and MSM-specialized applications (e.g., Mister), MSM increased the efficiency of finding preferred partners in their proximity.

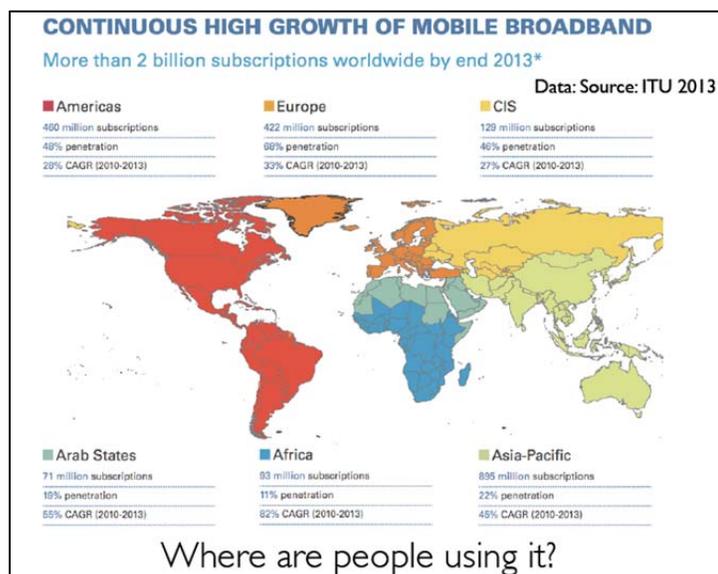


Figure 1. Garcia 2013.

The Rapid Analysis of Positive Life survey outlined in this presentation showed that not only are MSM accessing the Internet on their laptops and desktops, but they are also using their mobile phones (see Figure 1). Mobile growth has been tremendous in Asia Pacific, Africa, and Latin America because it is cheaper for countries in these regions to roll out infrastructure for the Internet via mobile. As the Positive Life survey showed, most surveyed participants reported that the Internet is their primary source of information about HIV. The exponential growth in mobile use globally has also been reflected in sexual networking, with the rapid uptake of smart phone applications, such as Grindr, Jack'd, and Badu. The appeal of phones over computers is that they allow MSM to be more mobile, to take pictures and video, to broadcast preferences, and to connect with potential partners more quickly because of notification and tracking features.

Some of the web and mobile applications have begun incorporating features to address HIV to encourage safer sex behavior in online sexual networking. For example, in 2008 Fridae.com, an international lesbian, gay, bisexual, and transgender (LGBT) social and sexual website based in Southeast Asia, conducted a “Know Your Status” campaign, whereby it encouraged members to talk about their HIV status in their profile. Members could indicate whether they were positive or negative at their last test, and they were required to list the date of that test. Fridae then used that date to remind members when to go for their next test. Also, other users on the network could see how old a potential partner’s test was.

“People are people both online and offline. They're as likely to be safe or unsafe online as they are offline.”

—Participant

Key Themes

- Mobile and social technology channels are not driving people to engage in riskier behavior. They are just creating opportunities for key populations to be more efficient about finding each other and locating the sex they prefer. Technology may also be helping people discuss HIV status and better negotiate condom use before meeting face-to-face and facilitating linkages to HIV prevention, care, and treatment services.
- The social and sexual partner-seeking behavior of MSM is relatively unchanged. Gay men have a history of adopting new technologies to find each other, especially when stigma and discrimination force many underground. Mobile and social technology channels offer these key populations—particularly youth—a channel through which they can find someone like them, which can make them feel less alienated.
- There has been little investment in programs targeting TG; hence, very little is known about the use of communication technology in this key population.
- Many MSM and TG populations are using the Internet as their primary source of information about HIV. Although mobile is the dominant trend globally, it is difficult to communicate in-depth information about HIV via a mobile application. Websites provide an opportunity to share more comprehensive information.
- Human rights issues are a concern both offline and online; any HIV program utilizing these technologies must also reinforce information about human rights online.
- Public health programs are just beginning to innovate in their use of mobile and social tools for HIV prevention and treatment adherence; however, there is so much potential to incorporate

these tools along the “leaky cascade” from identification of and communication with key populations to retention in care.

Related Presentation

- [Laurindo Garcia, Founder, B-Change Foundation. “At the Push of a Button: Sexual Networking among Men in the Digital Age.”](#)

CURRENT STATE OF TECHNOLOGY USE FROM THE PUBLIC HEALTH RESEARCH PERSPECTIVE

Susannah Allison from the NIMH (USA), along with NIMH-funded researchers from U.S.-based universities, provided an overview of completed and ongoing HIV prevention and care research by highlighting innovative approaches to measurement and technology-based interventions for key populations. NIMH’s HIV research priorities—to reduce new HIV infections and decrease the burden for people living with HIV—necessitate a strong focus on MSM and TG. Current research questions have considered the drivers of the epidemic among MSM, how MSM are using the Internet to find partners or information about HIV and sexual health, and how researchers can ethically recruit key populations into research studies using the Internet and/or mobile devices, while keeping data secure. Research studies have included testing the use of a structured daily diary to assess mood, stress, support, substance use, and sexual behavior in HIV-positive young MSM; recruitment and engagement strategies; intervention testing for prevention and care; using short messaging services (SMS) to improve adherence to pre-exposure prophylaxis (PrEP), such as in Project PrEPare and the San Francisco PrEP Demonstration Project¹; developing online social support intervention for MSM living with HIV; and real-time adherence testing using the Wisepill device in Uganda (Haberer et al. 2010). Following a broad introduction from NIMH, three researchers described their related research activities and areas of interest in more detail.

KEEP IT UP!, GUY2GUY, AND QUEER SEX ED PROJECT BRIAN MUSTANSKI, NORTHWESTERN UNIVERSITY

These three technology-based interventions target young MSM or LGBT youth who are beginning to explore their sexuality. The high rates of technology use by youth for engaging with peers make digital and mobile channels excellent mediums for delivering HIV prevention interventions. However, there is a dearth of evidence-based interventions for these populations, even though they are experiencing some of the highest rates of infection. To reach these populations effectively, researchers and public health practitioners need to identify settings where MSM and TG find themselves regularly and embed HIV prevention messaging into those settings.

¹ Project PrEPare is an open-label demonstration project, which will evaluate patterns of use, adherence, and sexual risk behavior among young MSM taking Truvada. This activity hopes to answer the question: Can PrEP be used safely and effectively among young MSM? For more information about Project PrEPare, visit <http://www.projectprepare.net/>. The San Francisco PrEP Demonstration Project assesses whether people are interested in taking PrEP, how they will use it, and whether their sexual habits will change while taking it. In addition, the project seeks to assess feasibility of offering PrEP in sexually transmitted infection (STI) clinics and identify the safety concerns of offering PrEP in the real world, outside of a clinical trial. To learn more about the San Francisco PrEP Demonstration Project, visit <http://prepfacts.org/seeing-if-prep-works-in-our-community/>.

Keep it Up!²

Keep it Up! is an online STI prevention program for young, recently tested, negative MSM. The intervention is based on the information-motivation-behavioral skills (IMB) behavior change model³ and incorporates elements of e-learning. Keep it Up! was initially pilot tested with 102 young MSM. Given the positive results from the pilot, it is currently being tested in a larger randomized control trial in three cities with 750 MSM. Young MSM are recruited to participate in Keep it Up! at HIV testing clinics.

Keep it Up! is innovative as it embeds intervention content into sample situations that MSM are familiar with, such as dating. This approach differs from other HIV prevention programs, which tend to focus on a single aspect of HIV, while ignoring the context or experiences in which young, minority MSM may encounter risk. In five online modules plus long-term booster material, Keep it Up! addresses peer and social norms, personal risk, the danger of making assumptions about status, assertive communication, behavioral intentions, and the pros/cons of condom use through videos, games, animations, and light humor.

Guy2Guy⁴

Guy2Guy is a formative SMS-based HIV prevention research intervention for adolescent MSM. Similar to Keep it Up!, Guy2Guy is grounded in the IMB behavior change model and aims to use technology channels that young MSM are already using to share rich HIV prevention messages. Features of this program include modules through which young MSM receive between five and seven HIV prevention text messages every day for six weeks, are paired with a text buddy in a different city, and have access to a “genie”—an HIV prevention expert—for any questions. Guy2Guy is about to enter a pilot randomized control trial.

Queer Sex Ed Project⁵

The Queer Sex Ed Project is designed to create an online, comprehensive sex education curriculum for gay, lesbian, and bisexual (GLB) youth, who often do not learn this information from more traditional sources such as school health classes, families, peers, or communities. Due to a lack of appropriate sex education for GLB youth, the Queer Sex Ed Project is conducting qualitative research on their use of the Internet and how it is linked to GLB sexual health. Researchers are then using longitudinal data collected to create evidence-informed online health promotion materials. To make sex education accessible and engaging for GLB youth, the Queer Sex Ed Project uses various multimedia strategies to deliver sexual health information to GLB youth, including animated videos of doctors explaining protection issues in plain language as well as videos of young gay and lesbian couples discussing their sexuality and how they address condom use with their partners.

² Keep it Up! is meant to be both a sexual reference and a reference to the philosophy of “keeping up the behavior that keeps you safe.” Keep it Up! is implemented through IMPACT, the HIV Health and Development Program at Northwestern University. For more information about Keep it Up!, visit <http://www.impactprogram.org/research/projects/keep-it-up/>.

³ The information-motivation-behavioral skills behavior change model allows that cognitive, affective, and psychomotor domains must be accounted for in any behavior change program. This model is delineated in Fisher, Fisher, and Harman (2003).

⁴ Guy2Guy is implemented through IMPACT, the HIV Health and Human Development Program at Northwestern University. For more information about Guy2Guy, visit <http://www.impactprogram.org/research/projects/guy2guy/>.

⁵ The Queer Sex Ed project is implemented through IMPACT, the HIV Health and Human Development Program at Northwestern University. For more information about the Queer Sex Ed project, visit <http://www.impactprogram.org/research/projects/queer-sex-ed/>.

HEALTHMPOWERMENT

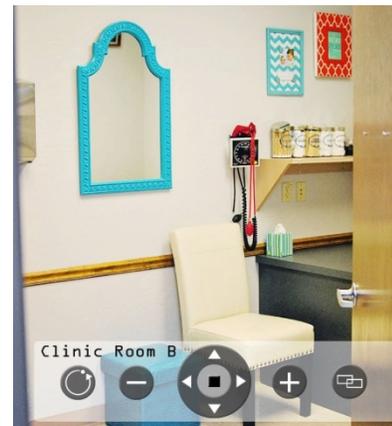
LISA HIGHTOW-WEIDMAN, UNIVERSITY OF NORTH CAROLINA

HealthMpowerment is a theory-based, online behavioral intervention for young black MSM (YBMSM) in North Carolina. This virtual community is intended to help meet the needs of YBMSM in a more engaging way to potentially reduce social isolation, establish positive behavioral norms, and improve health outcomes. HealthMpowerment is in its second iteration, and has evolved from its initial desktop-based, human-to-computer interaction model into a mobile-friendly version that incorporates gaming, peer interaction, and connections to care. Key components of healthMpowerment include:

- A space where users can upload videos, audio, stories, or poems.
- A forum focused on issues related to HIV, empowerment, and wellness.
- Features to help connect HIV-positive YBMSM to HIV care and demystify the experience of going for an HIV test, for example, by having a provider respond to their questions in real time or giving virtual tours of a testing experience.
- Quizzes, risk screeners, goal-setting exercises, and decision-making tools.
- Games and role-playing to encourage YBMSM to engage with the site to earn points, badges, and increased reputation, which can be used to buy real items in an online store.

The next steps for healthMpowerment version 2 include analyzing field test data, modernizing the website, and conducting a statewide randomized control trial (Hightow-Weidman et al. 2011).

From healthMpowerment emerged an initiative to use SMS reminders to support adherence to medications: Daily Dose. Consistent adherence to HIV medications is important for positive health outcomes; however, there are no known interventions that have improved ART adherence among YBMSM. This formative project aims to use lessons learned from healthMpowerment to create a smart phone application to help YBMSM increase and maintain adherence to their ARV medications. The app will use gaming principals and social networking to achieve these goals.



Connection to care features within healthMpowerment provide a virtual walk-through of an HIV testing experience (Hightow-Weidman 2013).

MEN'S INTERNET STUDY AND SEXPULSE

B.R. SIMON ROSSER, UNIVERSITY OF MINNESOTA

In the United States the Internet is a primary venue where MSM seek sexual partners. Given the accessibility, anonymity, and popularity of the Internet, online interventions hold significant promise for addressing the HIV epidemic among MSM (Rosser et al. 2010). The Men's INTeRnet Study-II (MINTS-II) was a randomized control trial to test whether SexPulse, an Internet-based sexual health promotion intervention for MSM, can reduce unprotected anal intercourse (Rosser et al. 2010). SexPulse is the outcome of formative research with over 2,000 MSM recruited online, which showed that online HIV prevention must be comprehensive, visual, and more sexually explicit than conventional prevention programs to reach the target population (Rosser et al. 2010). Furthermore, online interventions should be user-oriented, engaging, informative, and fun. By completing different modules, SexPulse users build a comprehensive portrait of their own sexual health. Modules address topics such as body image, variables that contribute to risk-taking or risk-avoidant behaviors, sexual vocabulary, understanding sexual preferences, clear communication online, and the impact of intimacy or other emotional issues on decision making. Modules include interactive features, games, and videos that are meant to be light, funny, sexy, or otherwise unexpected and engaging. Once completed, users are presented with an overview of their life journey and are encouraged to rate the importance of sexual health and willingness to lead healthy lives (Rosser et al. 2010).

"We have done a great job of turning people off and disengaging the community. We need to start thinking about HIV prevention in different, novel ways."

—Participant

Dr. Rosser also presented several points of consideration for researchers considering new approaches to HIV prevention and care interventions. First, unlearning previous assumptions about MSM may improve efforts to reach them. It may help to think of MSM as a virtual community that meets occasionally in person, rather than as a physical community that goes online. Much of the interaction between MSM is through technology, and so health interventions must also use these channels. Second, men are traditionally visual learners, yet much of HIV information is presented in speech or text; providing information visually, without words, may change how MSM understand and internalize it. Finally, like a language, people tend to internalize information if they are exposed to it more often. Rosser asked: Is it possible to do micro-interventions, interacting with key populations for 15 seconds every day? Identifying activities that many MSM do every day—for example, watching pornography—may provide avenues for daily health and HIV education.

Key Themes

- There are few technology-based studies that focus solely on TG. This is a known gap. Although some studies include both MSM and TG, many are targeted to men, which do not appeal to transgender women who do not identify as men and have different HIV prevention and care needs regarding content and tailoring of messages and services.
- It is important to find a balance between technology-based research activities and face-to-face research activities. Not all aspects of a study have to move online to reach and retain key populations. There is still a place for face-to-face research activities to recruit individuals into online studies.

- When developing HIV prevention and care content, researchers must weave relatable, accessible information about HIV into features and modules. Content should focus on the issues that MSM and TG face beyond HIV, such as dating or overall sexual health; should consider the many situations where MSM and TG may be at risk for exposure to HIV; and should address other factors that may impact behavior, such as substance use, mental health, or relationship power dynamics.
- Most interventions focus on changing the behaviors of the beneficiaries, but another approach is to target HIV care providers. For example, is it possible to use technology to facilitate better provider-patient relationships and to support providers to encourage testing, discuss risk, and monitor treatment, such as PrEP?
- Through NIMH’s research, key research questions and challenges have emerged: Once something has been demonstrated to work, how can it be scaled up and adapted for new settings? When a research trial comes to an end, is it possible to open an intervention to anyone who is interested? Is it possible to adapt the current evidence base to low- and middle-income countries, or do we need new interventions for these areas? Are technology-based HIV prevention and care interventions for the general population effective for MSM and TG populations?

Related Presentations

- [Susannah Allison, Health Scientist Administrator, Division of AIDS Research, NIMH: Current State of Technology Use from the Public Health Research Perspective](#)
- Brian Mustanski, Associate Professor in Medical Social Sciences and Director of the IMPACT Program at Northwestern University: Keep it Up!, Guy2Guy, and Queer Sex Ed (presentation not available)
- [Lisa Hightow-Weidman, Associate Professor, University of North Carolina School of Medicine: healthMpowerment.org: Development of a Model, Theory-based Internet Intervention for Young, Black MSM](#)
- B. R. Simon Rosser, Professor, University of Minnesota: The Men’s INternet Study and SexPulse (presentation not available)

LUNCHTIME SHOWCASE

Representatives from the Global Forum on MSM and HIV, ACON, and MISTER App provided demonstrations of a global research study of MSM and human rights, Australia’s national end-of-HIV campaign, and a private-sector sexual networking application, respectively.

GLOBAL MEN’S HEALTH AND RIGHTS SURVEY (GMHR) JACK BECK, GLOBAL FORUM ON MSM AND HIV (MSMGF)

Using an online tool, MSMGF conducted a global survey of over 5,700 MSM to identify their levels

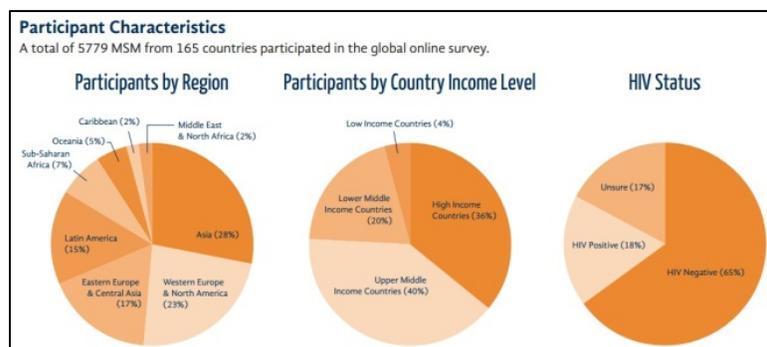


Figure 2 (Beck 2013).

of access, barriers, and facilitators to HIV services. This survey was conducted in 165 countries and was translated into over 4 languages (See Figure 2). MSMGF used its network of over 4,000 members to identify best practices for disseminating the survey, which gave the research team insight on the most appropriate social networks to use for advertising, the languages and formats (online and print) to use in different regions, and the importance of training community partners to help it disseminate the survey.

Of the 5,779 MSM who participated in the study, only 30 percent reported that they had easy access to condoms; 21 percent reported easy access to lubricant; 36 percent reported easy access to testing; and 42 percent reported easy access to treatment services. Stigma and homophobia were highly associated with reduced access to services and condoms. Community engagement and comfort with health care providers were some of the biggest facilitators to testing and having access to condoms. The survey results demonstrate a need for increased advocacy and funding to address homophobia, to foster community engagement, and to provide sensitivity training for health care providers.

ACON: ENDING HIV CAMPAIGN IN AUSTRALIA

YVES CALMETTE, ACON

The global call to action to end AIDS is transforming Australia's engagement strategy. Australia has made a commitment to reduce the HIV incidence of gay men by 80 percent by 2020. To match the national commitment to this effort, it was clear to ACON that it needed to rethink how the health community engaged with gay men, and technology was an important means of reaching this community. ACON consulted a local media relations company that provided valuable insight and advice in the development of a new HIV campaign. The resulting "Test More + Treat Early + Stay Safe = Ending HIV" campaign has five key components (See also: Figure 3):

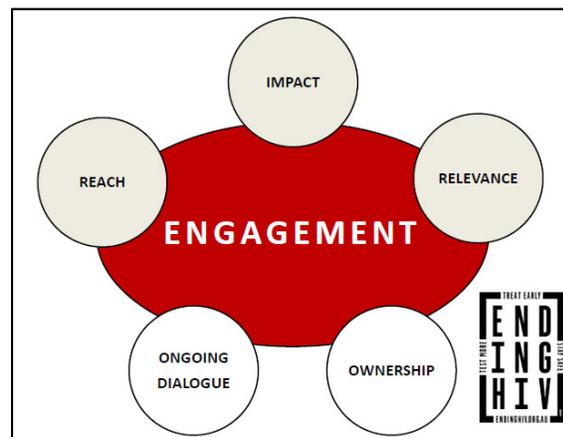


Figure 3 (Calmette 2013).

1. ACON needed to ensure that the campaign would have a strong **impact**. Because its logos and messages needed to be shared in many different channels and settings, it elected for a clean, black-and-white, text-only logo and messaging that followed very direct, simple language.
2. ACON wanted to make sure that its campaign had widespread **reach** throughout the community. To do so, it worked with a media partner to learn how to combine traditional, outdoor print marketing with online marketing on demand-side platforms, dedicated sections on partner websites, YouTube, Google AdWords⁶, and other social networks.

⁶ Google AdWords pairs advertising with keywords or search terms that users may type into Google's search engine. Any organization can purchase relevant ad words to ensure that its website will appear in the top search options when any user enters those specific keywords into Google's search engine. (<https://support.google.com/adwords/>)

3. “Ending HIV” would mark a shift from a one-off campaign to an **interactive** ongoing dialogue, so ACON incorporated blogs, social networks, and other channels through which MSM could engage online.
4. ACON needed to establish the **relevance** or value-added of the campaign for MSM, which it accomplished through its website and mobile applications. The website was designed to clearly point users toward content they were seeking and incorporated a number of technology tools—service locators, reminder surveys, and a space for asking questions—to provide a clear benefit for MSM.
5. Finally, ACON wanted to ensure that users felt **ownership** of the campaign and its messages, so it used technology channels to encourage sharing of user-generated content, which could then be incorporated into further “Ending HIV” activities.

MISTER APP: PRIVATE-SECTOR SHOWCASE

CARL SANDLER, MISTER APP

MISTER is a geosocial⁷ social networking mobile application that is an offshoot of the web-based social network DaddyHunt. MISTER is intended for users 30 years and older and aims to empower gay men to lead happy, healthy, fulfilling sexual lives. There are several unique features that set MISTER apart from other sexual networking applications. For example, when users join MISTER, they are asked to sign a code of conduct, promising to protect themselves and their partners. By signing the pledge, they get a badge on their profile. Additionally, the application has a no-tolerance policy for racism or other public displays of discrimination. The application also provides designated space for HIV-status disclosure and supports early discussions about protection and intentions. Such characteristics distinguish MISTER as a positive social-mores building community, see Figure 4.

Sandler presented several positive opportunities to use mobile applications and social sexual networks to foster conversation around difficult subjects. Mobile applications offer immense opportunities to broadcast public health messages by interrupting the user’s experience in the application to draw attention to key messages about HIV testing or a meningitis outbreak. Also, irreverent or novel blogs, banner ads, videos, and other content on applications and online sexual networks can pique interest and help drive richer conversation about difficult topics.

Partnerships between website owners and public health researchers or implementers are necessary to re-engage people in conversations about PrEP, HIV testing, shame around HIV status, and what it means to be undetectable. However, Sandler stressed that such partnerships must be truly collaborative, and that to foster public-private relationships, gains are justifiably warranted from all parties.



Figure 4 (Sandler 2013).

⁷ Geosocial mobile applications incorporate mapping or other geographical data features to enrich the user’s experience by suggesting options—other users nearby or activities within a certain vicinity—based on the user’s physical location.

Key Themes

- ICT facilitates, but does not replace, traditional outreach. It does create new opportunities to efficiently establish and activate new networks of key, marginalized populations on a larger scale.
- Neither mobile applications nor social networks are a panacea. Rather, these tools must be part of a much broader outreach strategy, incorporating different kinds of approaches and varying messages to foster rich discussion and encourage action. However, program implementers must also be careful not to “throw the kitchen sink at everyone,” meaning, there must be sufficient formative research to figure out what key populations are likely to use and what information they will be exposed to.
- In countries where there is limited literacy or Internet access, it may be necessary to be innovative in finding ways to share content with users. For example, a peer educator can show an animated condom demonstration on a mobile phone.
- Partnerships with media organizations can be tremendously helpful for public health organizations with limited media expertise or reach.
- To capture a user’s attention online, public health messaging must be engaging and relevant. Staid and two-dimensional messages may miss their targets. In developing messages for these populations, consider their motivations and the reality in which they are making decisions about risk, and develop messages that address those situations.
- Partner with for-profit companies and community-based organizations (CBOs) that have access to large user-bases and varied experiences in reaching wide audiences. Allow these partners to take some ownership of the content and adapt it for their audiences.
- Look to other successful programs, such as diabetes and weight loss, for insight into how to use mobile applications and other social networking tools for HIV prevention and care.

Related Presentations

- [Jack Beck, MSMGF: Using ICT for Global Research with MSM: The Global Men's Health and Rights Survey](#)
- [Yves Calmette, ACON: Ending HIV Campaign](#)
- [Carl Sandler, MISTER: MISTER App](#)

PRIVATE-SECTOR PARTNERSHIPS WITH PUBLIC HEALTH

Dan Wohlfeiler of the University of California, San Francisco (UCSF) presented results of a U.S. national survey⁸ of 82 HIV public health experts, 18 social networking website owners, and 3,050 MSM users of these websites to identify low-cost, online strategies to reduce HIV transmission that would be supported by all three stakeholders. The session began with an acknowledgment that for public health programmers to demonstrate impact and leverage limited resources effectively, they need to better understand the types of online interventions that will work. The three stakeholders—HIV researchers, website owners, and MSM website users—were asked to rank existing and potential online risk reduction and HIV prevention interventions. The pool of interventions was

⁸ For more information about the study and for additional results and data, see Wohlfeiler et al. (2013), or visit Stopaids.org.

gleaned from literature and program reviews and preliminary surveys of website owners and HIV researchers, and the interventions were divided into eight categories: partner search, profile options, website reviews, HIV testing, partner notification, social health, physical health, and online education.

Survey results showed that there were eight interventions that were supported by the majority (greater than 50 percent) of all three stakeholder groups: (See Figure 5)

- An option to filter partners according to their profile information (e.g., sexual or risk preferences, age, or HIV status)
- A sexually transmitted infection (STI) testing site directory that would be searchable by zip code
- Creating niche sexual networks within existing sites for specific sex interests (fetish, bareback, etc.)
- An option to include preferences for safe sex as a profile option
- Providing access to sexual health experts with clinical knowledge as opposed to outreach workers
- Providing access to sex-positive videos (e.g., negotiating condom use)
- An option to receive automatic HIV testing reminders at the user's choice of intervals⁹
- Online partner notification regarding STI and HIV exposure using e-cards.

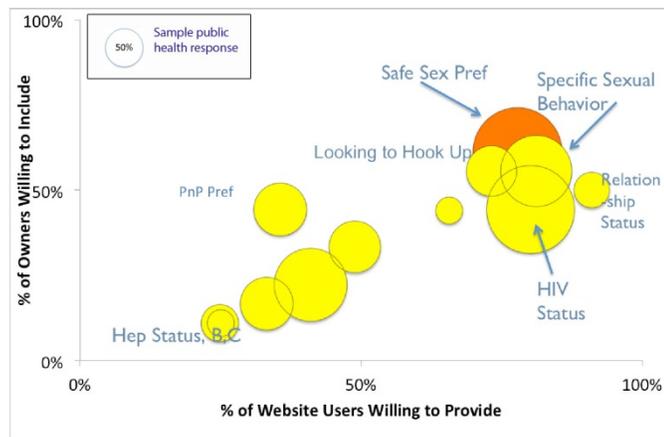


Figure 5 (Wohlfeiler 2013). This graph shows interventions that were preferred by website users (x-axis), website owners (y-axis), and public health professionals (circle size).

The next steps following the survey are to form workgroups to figure out how to move ahead with the interventions that all three stakeholders liked; to explore which interventions stakeholders disliked and why; and to identify how to make these strategies more interesting to key populations.

Key Themes

- The public health sector does not need to build from scratch all the parts of a research study or intervention—particularly when there are limited resources to do so, for example, for high-cost technology. Key populations are already using private-sector tools. When possible, it is advisable to partner with private websites to establish systems that continue to foster risk reduction behaviors in these private spaces where MSM and TG are already engaging long after the public health program or grant ends.
- Regarding messaging and design, the target population's preferences and taste matter more than the funder's.

⁹Users preferred to be able to set their own testing interval reminders, rather than have the site determine that for them. A tool, such as findyourfrequency.com, can help users figure out appropriate intervals according to their behavioral patterns.

- Building an online tool or website through which to provide information is not an intervention in and of itself. The selection and development of technology is part of the broader intervention development process that also includes identifying key audiences, crafting and testing appropriate messages, and processing evaluations.
- Website owners in the United States are looking for clearer recommendations from the public health community regarding status disclosure, serodiscordant sexual relationships, the role of acute HIV status in transmission, and other relevant information. Website owners are well positioned to disseminate that information to users; they just need key messages and a process for engaging public health partners.

Related Presentations

- [Dan Wohlfeiler, UCSF: What Should We Do to Reduce HIV and STD Transmission among MSM Online?](#)

PANEL DISCUSSION ON PRIVATE-SECTOR PARTNERSHIPS WITH PUBLIC HEALTH FROM DIFFERENT PERSPECTIVES

Cameron Wolf of USAID moderated a panel of spokespersons representing the private-sector, research, public health, program implementation, and Internet start-up perspectives who addressed challenges and opportunities in forming partnerships to improve outreach to key populations through technology.

Partnerships with the private sector can benefit the public sector in several ways. First, it can be difficult for public health professionals and researchers to find, fund, and manage website and application developers and designers who can produce the kinds of high-quality products public-sector projects need to reach key populations. Second, private-sector initiatives do not have the expiration date that tends to plague public-sector activities—for example, once something good gets going, the project ends. The private sector has access to key populations who may not want to engage with the public sector for various reasons. The private sector can also afford to be more timely or explicit in its outreach than the public sector can due to political and administrative restrictions.

Although the benefits of public-private partnership are not as clear for the private sector, there are many opportunities to improve collaboration. Private website owners are invested in keeping their communities safe, so working with public-sector agencies to do so would be of interest. However, the public sector needs to cultivate relationships with the website owners before calling on them for support; incentivizing website owners through a seal of approval was suggested.

Challenges to consider in creating partnerships include competition, control, communication, and costing. There is tremendous competition for research and program funding, but there is also rivalry in the private sector between different websites and companies; competition could make it difficult to get all the stakeholders collaborating toward a unified goal. Moreover, public health agencies have stricter rules about branding and messaging, which limits collaborations between the private sector and public health agencies. Largely, public health does not speak the same “language,” nor can it operate on the same timeframe, as technology developers or private-sector website owners; it is

important for public health representatives to learn how to communicate effectively with their private-sector and technology partners. Finally, the budgets and timeframes for many public health initiatives are often insufficient to develop the kind of tools or materials that would appeal to MSM or TG.

Key Themes

- Collaborative dialogue is essential to effectively reach key populations. By pulling in partners with specialized expertise—technology, research, and access to key populations—all sectors may be able to improve outreach to MSM and TG.
- The public sector can benefit from the private sector’s resources, funding structure, and access to key populations. It is advisable to develop relationships with website owners before reaching out to them for research or program support.
- Engage others, such as key populations and representatives of other sectors, to create content and disseminate it; other perspectives can be interesting, effective, or unexpected, and, consequently, can have more impact.
- Public health needs to develop more project management, technical, and media skills to effectively implement cross-sector projects.

CASE STUDY BREAKOUT GROUPS

During the afternoon participants broke into small groups to discuss more specific programmatic experiences using technology to reach key populations. One participant in each group was asked to present a brief case study that highlighted different program areas. Case studies were given from participants who are involved with programs from Ghana, China, Thailand, South Africa, and the United States.

TEXT ME! FLASH ME! AND OTHER OUTREACH AND PSYCHOSOCIAL SUPPORT **JACOB LARBI, FHI 360, GHANA**

This case study covered the ICT components of the USAID-funded Strengthening HIV and AIDS Response Partnership with Evidence-based Results (SHARPER) project in Ghana. Specifically, the Text Me! Flash Me! helpline uses SMS-messages to provide key populations with friendly and accessible HIV information, referrals, and counseling services from health providers. The helpline, which is advertised through peer educators, social networks, and posters, is set up to disseminate health information through text-blasts and to connect users to providers for different health issues.

Following the presentation of Text Me! Flash Me! the small group discussed challenges of reaching MSM through ICT in Ghana. Stigma from health care providers, religious sodomy laws, and limited Internet penetration were some of the issues identified. Also, group members discussed monitoring and evaluation concerns around ICT, specifically, measuring the impact of multiple outreach approaches without double-counting.

Key Themes

- There is low Internet penetration in Ghana, so technology-based interventions must use mobile technology, relying on SMS, phone calls, and social networks.
- Sodomy laws and threats of gender-based violence make key populations, such as MSM, difficult to access, even when using mobile or social technology channels. Pairing STI and HIV testing with other health services may encourage MSM to come into a health clinic.
- Stigma from providers is a major issue. It is important to make certain that providers at clinics are sensitive to MSM-specific issues, perhaps through nurse trainings.
- It is difficult to measure the impact of multiple ICT strategies and to ensure that these approaches are reaching different segments of the MSM population.

TECHNOLOGY AND HIV TESTING

PATRICK SULLIVAN, EMORY UNIVERSITY, USA

This small group discussed opportunities for using mobile and social technology to promote more frequent HIV testing among MSM in the United States. New models of HIV testing—based on outcomes from focus groups—incorporate SMS messages, quick codes, voice recognition, and other technology tools to improve and facilitate the testing experience. Coupled with medical advances, such as rapid test results, the use of technology around HIV testing has tremendous potential to increase access to services and decrease some of the common barriers.

Key Themes

- Technology provides public health researchers with the tools to conduct quick needs and preference assessments among MSM. Also, technology offers new paradigms for giving test results—through email, SMS, and phone calls—enabling MSM to tailor their testing experience and patterns to their own needs. There is great potential for future innovations in this area, including providing CD4 counts at the first HIV test or tracking timing of previous tests for patterns.
- It is important to streamline the HIV testing process to encourage early and repeat screenings. An opportunity in this area may include development of an application that MSM could use in consultation with providers to identify the best kind of test for them as well as following the clinic visit to receive results and reminders for future testing.
- Mobile and social technology channels should be used to fill a gap in existing services; technology should not be used just for the sake of using a new tool. These tools do not replace the need for human interaction; a provider—not an application—should be responsible for linking someone who is newly positive to further services.
- How can we know that mobile applications work and that they are driving people to get tested? It will be worthwhile to consider functionality—such as a mobile coupon—that can help draw the connection between the online outreach and the in-person testing experience, to better evaluate the uptake and efficiency of HIV testing.

ICT IN THE PEPFAR/SOUTH AFRICA EXPERIENCE

CARLOS TOLEDO, CDC/SOUTH AFRICA, SOUTH AFRICA

This case study covered PEPFAR-funded programs, including the USAID-supported Health4Men MSM initiative at ANOVA Health Institute in South Africa. ANOVA is an MSM service provider that has branched out into using social messaging and social media to reach its target population. It uses Facebook and Twitter to disseminate information and mobile websites to enable MSM to ask questions to a provider and get a response.

Following the presentation of the ANOVA experience, the group discussed the general South African experience in using technology to reach MSM and other key populations. MSM have used Facebook to identify sexual partners and create alternate Facebook pages for different aspects of their lives. As such, there are a number of virtual communities of MSM through which HIV prevention and services information may be provided anonymously.

Key Themes

- Virtual mobilization to HIV services does not necessarily replace traditional, face-to-face mobilization. These can be complimentary, and programmers should look into how to combine online and face-to-face outreach.
- South Africa has very distinct ethnic groups, necessitating careful audience segmentation in HIV outreach through traditional or technological means.
- Technology systems should be set up in line with cultural trends in information-seeking behavior. Researchers and program implementers should consider how other cultures process information and where or from whom they seek information.
- We need to match technology indicators to program behavioral goals. “Hits” or “reach” do not tell us anything about our target populations or their behavioral intentions.

COMMUNITY MOBILIZATION AND TESTING IN CHINA

MATT AVERY, FHI 360, ASIA REGIONAL

FHI 360 presented a case study on a USAID-supported six-month-long HIV testing campaign that was run in three clinics in China. One goal of this campaign was to make testing appear more accessible and friendly. A website featured video clips of providers talking about how they provided testing in a friendly way. Users were encouraged to post their own videos of their testing experience and their reasons for getting tested, and the video with the most likes at the end of the campaign won a prize. Following the campaign, there was a 26 percent uptake in HIV testing and a 22 percent increase in the number of new HIV-positive cases reported during that period. However, due to data issues, it is not possible to directly attribute either of these statistics to the campaign.

Key Themes

- Monitoring and evaluation of these programs can be tricky. It is not always easy to attribute results or impact to the program.

TRANSGENDER PERSPECTIVE—HIV TESTING AND PSYCHOSOCIAL SUPPORT

NADA CHAIYAJIT, TLBZ SEXPERTS, THAILAND

The case study presented in this group covered the Thai Lady Boyz (TLBz) Sexperts¹⁰ program in Thailand. TLBz Sexperts, and its MSM-focused predecessor MPlus Sexperts, are online peer outreach and prevention programs for TG and MSM, respectively (Chaiyajit and Walsh 2012). Both programs were created in response to studies that showed a sharp increase in HIV incidence among key populations in Thailand¹¹, inconsistent condom use, and an increased use of social networking sites and mobile phones to access more partners (Chaiyajit and Walsh 2012). “Sexperts” are experts about MSM and TG sex, who specialize in helping peers discuss sexual activities while sharing HIV, sexual health, and human rights education in a nonthreatening, anonymous, and virtual chat setting, such as Facebook, SMS, and other sexual networking sites, such as Pirsch or MissLadyBoyz (Chaiyajit and Walsh 2012). Following the presentation of the case study, small group participants discussed transgender issues.

Key Themes

- There is a sense that TG issues are ignored. TG should not be lumped into research and programs for MSM, as it is confusing if research and programming is TG inclusive. TG women are not men.
- TG-specific research, intervention, and advocacy are needed. It is insufficient to say that there is a lack of data; it is time to start doing research to better understand the needs of TG populations. Potential research topics include the effects of ART on hormone use and sexual reassignment surgery and vice versa; sexual risks for neo-vaginas; epidemiological and behavioral data on TG populations (including TG men); and linkages between human rights violations and increased HIV vulnerabilities.
- TG-specific organizations need investment and capacity-building to reach their community.
- Communication technology is a good way to reach TG anonymously online. However, to best engage TG individuals, we need to focus on needs beyond HIV—such as self-esteem, body image, and sexual pleasure in a new body—and then weave in information about condoms, lubricant, testing, and treatment.
- Evaluating the long-term impact of online outreach programs—such as a Peer Opinion Leader program like Sexperts—is very challenging. Monitoring is easy, but better methodologies are needed to measure impact.
- The lack of TG-friendly doctors is a huge deterrent for referral and access to services. Providers need to be trained to understand TG issues. For example, TG may go for testing and receive a packet of condoms and lubrication, but do not receive information about how to use these items with partners in a TG context.

¹⁰To learn more about the TLBz Sexperts program, listen to the AIDSTAR-One podcast and read some of the research available on that page: http://aidstarone.com/focus_areas/prevention/resources/msm_transgender_podcast.

¹¹In Bangkok alone, HIV incidence among MSM grew from 17 percent in 2003 to 31 percent in 2007 (Chaiyajit and Walsh 2012).

DAY 2

PROGRAMMATIC EXAMPLES

Day two started with a session moderated by Timothy Mah of USAID, highlighting programmatic examples, experiences, and barriers of using communication technology in health and HIV initiatives funded by amfAR in different regions of the global south. Speakers were asked to describe how they were using ICT to reduce HIV in key populations, to share the effectiveness of these initiatives, and to identify gaps where new technology tools may be needed.

ALTERNATIVES CAMEROUN EXPERIENCE: THE USE OF NEW TECHNOLOGIES IN THE REDUCTION OF HIV IMPACT AMONG KEY POPULATIONS *YVES YOMB, ALTERNATIVES CAMEROUN*

In Cameroon, the hostile legal and sociocultural environment that criminalizes and actively prosecutes homosexuality makes it extremely difficult to conduct mass media HIV prevention campaigns for key populations. In 2008 Alternatives Cameroun—an organization and accompanying health clinic that provides HIV prevention, care, testing, and treatment services for LGBT populations—conducted a survey of MSM and discovered that over 30 percent were using chat rooms to connect with each other. Consequently, with amfAR support, the health clinic devised an HIV prevention outreach strategy that incorporated chat rooms, Facebook, and SMS to disseminate prevention messages and appointment reminders to MSM. This approach to online and mobile outreach enables Alternatives Cameroun to discreetly engage MSM with information about condoms, testing, treatment, and risk-taking behavior and to help refer them for services at the health center. The organization faces challenges in using ICT, such as measuring impact, keeping up with the rapid pace of technological change, protecting the privacy and confidentiality of users, accessing key populations who do not have access to new technology, and integrating HIV information in spaces where MSM are primarily looking to find sex partners, not prevention tips. Key technology gaps include developing a new and engaging website and finding ways to provide free calls or SMS services to users.

ADAM'S LOVE IN THAILAND: ONLINE COMMUNICATION STRATEGIES FOR CLINICAL SERVICES UPTAKE AMONG GMT *TARANDEEP ANAND, ADAM'S LOVE*

In Thailand, 41 percent of new HIV infections occur among MSM, yet less than 20 percent have been tested and know their results. In part, this high incidence can be attributed to a lack of clear, integrated communication strategies to bridge MSM and health care providers. Created through the Thai Red Cross AIDS Research Centre, with support from amfAR's TREATAsia program, Adam's

Love¹² is a unified communications campaign that pairs social media and traditional print outreach to drive HIV testing among MSM and to share information around prevention, treatment, and care.

The Adam’s Love campaign disseminates its messages through national and international news media; magazines for GMT; billboards in Bangkok; online videos; and social networks and websites that are frequented by MSM (See Figure 6). Campaign branding incorporates slogans such as “Just like me,” “Enjoy Safe Love,” and “For men who love men” to foster a positive, personalized vibe around HIV testing.



Figure 6. (Anand, 2013).

Adam’s Love’s website is rich with current HIV content, which is presented through health expert videos, blogs about scientific breakthroughs, virtual clinic tours, question-and-answer forums, testimonies of real MSM who have gone for testing, and much more. Two strategies that have been particularly effective in the Adam’s Love campaign are celebrity spokesmen and giveaways. Adam’s Love works with Internet celebrities to chronicle their first HIV testing experiences in online videos and in print; these videos and print ads are posted online and on billboards, both of which have had a tremendous impact in driving fans to clinics to get tested. Also, Adam’s Love uses giveaways, such as t-shirts, underwear, a membership card, testing calendars, and other novel items, to encourage MSM to seek first-time and follow-up testing.

Since the launch of the campaign, Adam’s Love has closely followed analytics to track its success. About 25 percent of MSM who have gotten tested reported that they heard about Adam’s Love. A similar campaign, TemanTeman, is being launched for MSM in Indonesia, and it will incorporate some of the same features, including the videos from HIV experts on reducing viral load. A key challenge for the Adam’s Love campaign is cost; maintaining a robust and exciting website requires an annual budget of \$30,000.

**I LIVE OUT LOUD IN JAMAICA:
FACILITATING LGBT HIV NEEDS WITH TECHNOLOGY
JAEVION NELSON, JAMAICAN YOUTH ADVOCACY NETWORK
AND POLICY OFFICER, JAMAICAN FORUM FOR LESBIANS,
ALL SEXUALS AND GAYS**

The 2007 and 2011 men’s health surveys conducted by the Jamaican Ministry of Health revealed that HIV was one of the leading causes of death of people 18 to 24 years of age and that LGBT

¹² For more information about Adam’s Love, including campaign videos and other resources, visit <http://www.adamslove.org/en-index.php>.

populations were among the most affected. In Jamaica most HIV services are concentrated around the capital, Kingston; however, many young MSM living with HIV do not live near this geographic area. In response, the “I Live Out Loud” Internet campaign, funded by amfAR, was created by and for LGBT youth to provide information and a safe space online to ask about human rights and HIV. Six online peer educators were trained to write blogs and content on sexual orientation and gender identity for the “I Live Out Loud” website, which is also advertised on other social and sexual networking sites, such as Facebook, Twitter, and Adam4Adam. “I Live Out Loud” includes a strong human rights component; “We are Jamaicans” YouTube videos¹³ address discrimination, sexual identity topics, and other structural HIV issues. The campaign is also turning episodes of violence against LGBT youth into opportunities to raise awareness about human rights violations by writing advocacy pieces in newspapers. Partnerships with the Ministry of Health and other national government agencies lend critical support to the campaign and enable “I Live Out Loud” to broaden its reach.

Key Themes

- Online tools are helping to contact hard-to-reach LGBT populations and improve the reach of HIV services, especially in countries where same-sex sexual behavior is criminalized. Defining what success looks like for online outreach will be critical for continuing to evaluate its effectiveness.
- Although it is relatively easy to collect usage data from online or mobile outreach, it is much harder to collect qualitative feedback or to demonstrate impact. Difficulties arise in determining if online outreach results in uptake of in-person services. Innovative monitoring and evaluation strategies—such as coupons or other tech-based referral systems that can be verified in person—may be used to improve this connection.
- Using key opinion leaders and celebrities to help promote HIV testing is an effective strategy both offline and online.
- Technology can also be used to address structural barriers to HIV prevention and care services, such as violence and disclosure, through the use of videos or blogs to raise awareness and share personal stories and information in a visible and accessible way.
- Partnerships with government agencies and other in-country partners can provide tremendous support and visibility to online initiatives, while also potentially connecting campaigns and HIV services.

Related Presentations

- [Yves Yomb, Alternatives Cameroun: Alternatives Cameroun Experience: The Use of New Technologies in the Reduction of HIV Impact among GMT](#)
- [Tarandeep Anand, Adam’s Love, Online Communication Strategies for Clinical Services Uptake among GMT](#)
- [Jaevion Nelson, Jamaican Forum for Lesbians, All Sexuals and Gays, I Live Out Loud: Facilitating LGBT HIV Needs with Technology](#)

¹³ To view these videos, please visit <http://www.youtube.com/user/EqualityJA>.

ONLINE NORMS: CONFIDENTIALITY, PRIVACY, AND SAFETY

Kent Klindera of amfAR moderated a discussion on issues of confidentiality, privacy, trust, human rights, and safety in using ICT in HIV outreach and research. The panel included Frank Strona, National IPS Workgroup Coordinator and STD/HIV Unit Chief at the CDC; Diane Rodriguez, Chairwoman of Silueta X, a health organization for TG populations in Ecuador; Taylor Williamson, a health governance specialist at RT International in the United States and Ghana; and Edmund Settle of the United Nations Development Programme in Thailand.

RESEARCH

Data collection through mobile devices and the Internet allows researchers to amass a large amount of information about their target audiences. However, access to this level of data must be carefully managed, and researchers need to adopt practices to help protect the privacy of those they are trying to reach. This can be particularly important in countries where key populations exposed online can be subject to blackmail, assault, or imprisonment. In research studies with small sample sizes, data must be carefully secured and data de-identified to ensure that information provided does not draw attention to certain individuals. Researchers should also understand the terms of service for any technology tool they may employ in an intervention and communicate clearly to participants about privacy settings and any potential confidentiality issues. Researchers must develop risk-mitigation strategies—in case someone in the program is “outed” online. Also, researchers must find the right balance between data security and developing and maintaining an intervention that is easily accessible and something that individuals will use.

OUTREACH

Patient confidentiality is more often considered in the health setting, such as a clinic, but it is also critical to begin considering online and mobile privacy issues as well. Community programs, such as health clinics that incorporate online outreach, mobile reminders, or social media into their care practices, need to be especially transparent about their privacy policies so that users understand how data and personal information shared online or in the clinic will be protected. For example, Silueta X, a health organization for TG populations in Ecuador, uses Facebook community forums to conduct outreach and share health information. The organization’s activists carefully screen potential group members to block non-TG users and to preserve their members’ confidence in the security and privacy of these online forums. Accessing key populations online and getting them to trust the organization or clinic can also be a challenge. Training peer outreach workers to engage communities online is a good way to get a foot in the door; providing useful information is a tactic for establishing credibility.

“You [the program planner] need to understand the tools and know the nuances and limitations of your technology.”

POLICY AND HUMAN RIGHTS

Program developers must carefully consider all potential ramifications for security and privacy in their programs. In some countries, anti-pornography laws have been used to break confidentiality online; in others, law enforcement have trolled sexual networking sites and have published

photographs to the mainstream media. Working closely with national governments to understand the cultural context, the local laws around criminalization, and human rights regulations in place is critical. It is also important to communicate with national governments about the purpose and benefit of online interventions or programs that support key populations.

Key Themes

- As public health programmers integrate technology into their activities, they have an obligation to first learn about the nuances of their chosen tools and then inform their target audiences about any legal and privacy considerations. It cannot be assumed that everyone is intimately aware of the privacy policies, especially on some of the more public sites where security and privacy terms of agreement change often.
- Technology blurs the fine line between private and public information, which can have tremendous implications in countries where anti-pornography or other vague laws that condemn the “natural order” can be used to target users of websites that contain HIV prevention information on sexual transmission. Whenever possible, website owners, government agencies, and CBOs—particularly in countries where sexual behavior among key populations is criminalized—should be enlisted as partners in activities, to ensure that they understand and support the purpose of the initiative.
- In many countries, CBOs are leading in innovation because they are not held back by regulations. They know how and when to push the envelope, which partners to engage, the community context around HIV, and how to access key populations. Public health must do a better job of working with these types of partners to improve programs and avoid reinventing the wheel.
- Online outreach and human rights go hand in hand. Become familiar with national and international human rights laws and use them actively in online and mobile HIV outreach. Also, online tools can be used to refer human rights cases to the Human Rights Coalition or other community resources.

LUNCHTIME SHOWCASE

LAURINDO GARCIA, B-CHANGE FOUNDATION (PHILIPPINES)¹⁴

Laurindo Garcia of B-Change Foundation shared several new innovations that aim to improve HIV mental health and ameliorate the process of finding appropriate HIV services for key populations and youth. The first innovation, a crowd-sourced service map, pairs geographic information systems technology with user-generated information to place key HIV testing, treatment, and support services on a mobile map. The second innovation, a six-language Positive Life Survey, asks HIV-positive MSM and TG populations to delineate what types of mental health support they seek online; overwhelmingly, many respondents have noted that they enjoy using online spaces to share stories. The third innovation, a web and mobile platform called Plus Social Network, provides a space for MSM and TG to ask and answer peers’ questions and rate local HIV services, similar to how Yelp is used to rate local businesses. Finally, Project Happy promotes happiness among youth who are coping with sexual identity issues. Project Happy incorporates HIV service and human

¹⁴Learn more about B-Change online at <http://www.b-change.org/>.

rights referral components and engages nongovernmental organizations and private-sector organizations to involve them in civic participation and employment.

THE HIVE¹⁵

CHRISTOPHER WALSH, OPEN UNIVERSITY

Chris Walsh, co-facilitator for the HIVE, discussed the open-source, universal access research and education community. The HIVE highlights strategic collaboration among HIV research, policy, and practice sectors to share effective digital community-based and -led HIV prevention and care interventions across GMT communities.

In addition, Walsh is Editor for the journal *Digital Culture and Education*. The journal plans to publish a special issue following this consultation, with guest editors Kent Klindera, Chris Walsh, and Cameron Wolf, to highlight community-based experiences using innovative approaches to ICT for HIV programming.

FUTURE LANDSCAPE FOR TECHNOLOGY AND PUBLIC HEALTH FOR MSM/TG IN INTERNATIONAL SETTINGS

In the prelude to the afternoon breakout sessions, Helen Cornman from AIDSTAR-One moderated participants to highlight key issues that had been identified across the two-day meeting. The following is a list of some of the topics that were covered; the small groups that followed in the final session covered these issues in more depth. The objective of this session was to discuss the future landscape of technology and public health relative to the expansion of HIV programming to international developing country contexts based on the two-day consultation. The group was asked to identify the main themes that had resonated over the course of the meeting; these themes are presented in the following table (see next page).

¹⁵Learn more about the HIVE online at <http://www.hiv-e.org/public.html/>.

Partnerships	Program Development	Outreach	Monitoring and Evaluation
Public health must develop genuine partnerships and be more engaged and inclusive with social networks and private website owners.	Reach target audiences where they are. Be proactive about working with partners who intimately know those target audiences before beginning.	Technology must be part of a broader outreach strategy by incorporating both traditional and online channels. There is much to be learned by following standard marketing strategies.	Evaluating outcomes and impacts of ICT programs is challenging. More thinking and research is needed to improve the ability in monitoring and evaluation.
Collaborate, support, and trust community organizations in their creativity and growth in learning by doing.	Examine motivations, norms, online behavior, agency, and accessibility of key populations and their use of online spaces before beginning a new program. Consider how to use technology to address barriers.	It is critically important that messages and approaches be innovative, engaging, tested, and relevant.	Identify the goals of the project. What is the return on investment for this activity? Is it getting more people tested? Connecting people to services? Identify this first, then find indicators to match.
What are the U.S. government's and other national governments' roles in supporting use of technology in programs and research for key populations? Drawing linkages? Providing services? Advocating for human rights?	Think carefully about connections between virtual and face-to-face programs. Acknowledge the limitations of each.	Be prepared. Have content (videos, text, and messages) ready at all times to take advantage of key opportunities and partnerships as they present themselves.	
Each sector has certain strengths. For example, the technology sector knows how to build tools that people want to use. Anyone creating a program must prioritize these strengths, then find expert partners who can take on other components.	TG populations are distinct and separate from MSM with their own particular needs in health and human rights. TG need their own programs and services that have been developed in close collaboration with TG stakeholders and community members.	Test everything! Within each program, test many different messages, channels, and interventions simultaneously, and scale up only what is working.	

CONCURRENT BREAKOUT SESSIONS: DEVELOPING AN ACTION AGENDA TO MOVE FORWARD

The participants divided into five small groups to develop recommendations for using technology across the HIV continuum for key population service delivery and enhancement. The five facilitated small groups covered: 1) research, 2) prevention and risk reduction, 3) improved access to clinical STI/HIV testing, 4) improved access to clinical HIV treatment and care, and 5) MSM and TG advocacy and human rights. The groups were tasked with answering the following questions:

1. What are the unique aspects of technology for the five areas?
2. What should be the recommendations for working with MSM? TG? Should they be different or the same for this technical area and why?
3. What are the most effective methods for striking a balance between technology and face-to-face HIV programming?
4. What next steps are needed?

The following is a brief summary of the discussions and prioritized key recommendations.

RESEARCH

The research group provided six recommendations and considerations for further research incorporating technology to reach key populations.

Key Recommendations

- MSM and TG have unique HIV prevention and care needs; therefore, research in this area should target them separately. If an intervention is proposed for both MSM and TG, a thorough justification for how the intervention can address the needs of both groups should be made.
- Multilevel technology-based HIV prevention and care interventions are needed that address the individual (e.g., mental health or substance use), partner, and structural (e.g., discrimination, stigma, or high unemployment) factors that contribute to high rates of HIV among TG and poor health outcomes among those living with HIV.
- Most technology-based interventions for MSM have focused on HIV prevention and adherence to ARV medications. Although more work is needed in both areas, significant gaps exist in our understanding of linkage and engagement to care and the timely initiation of ART. ICT holds promise for both improved assessment in the treatment cascade and interventions to improve health outcomes for MSM living with HIV.
- In some countries or communities, further research is needed to estimate the size of key populations and their access to ICT to ensure that new interventions are reaching the majority of MSM and TG and that the most appropriate technologies are being used.
- Technology-based interventions are needed for MSM and TG that move beyond just targeting individual level factors but also address the contexts/situations of risk.
- Create a repository of online interventions that would be freely available to others.

PREVENTION AND RISK REDUCTION

The prevention and risk reduction group first reviewed some of the unique aspects of technology for use in HIV prevention for key populations.

Key Recommendations

- There is a need for both low-tech- (e.g., Ghana’s Text Me! Flash Me! using SMS) and high-tech-integrated campaigns (e.g., ACON’s “Ending HIV”).
- Whether low-tech or high-tech, technology must be part of an integrated strategy. A hotline, chat forum, or Facebook page alone is insufficient; these tools must be linked within a larger strategy to ensure that messages are reaching their intended targets.
- Innovative funding mechanisms are needed to keep up with the accelerating pace of technological development and the innovative use of technology by TG and MSM communities; both private and public sectors need to take advantage of each other’s expertise to best meet needs and reduce risk.
- Risk calculators should be used to help people improve their knowledge of and demand for services, such as partner notification support, providers who are friendly to MSM and TG, and places to acquire condoms and lubricant.
- Bring in website owners, developers, and community organizations early to inform intervention development, to better understand users, to better target the research or interventions, and to inform the feasibility of approaches.

INCREASED ACCESS TO CLINICAL SERVICES: HIV AND STI COUNSELING AND TESTING

The small group that discussed the use of technology to improve the HIV testing experience shared several considerations and suggestions.

Key Recommendations

- The public health sector must become more comfortable and flexible within its use of social technology to use it most effectively. A global coalition for digital and mobile HIV prevention and care and toolkits around this issue, specifically geared for international development, may help.
- Mobile technology can simplify the HIV testing process to make it more convenient, maintain privacy, incorporate client feedback, and provide alternate solutions, such as online counseling or home-based testing for groups who are afraid to be seen at a clinic.
- Mobile technology can help health care workers improve services. Mobile and online tools can be used to train providers to provide appropriate testing for key populations. For example, question prompts on a phone can help clinicians tailor services for TG populations.

- Use social technology to drive or create norms around testing. YouTube videos of testing experiences (e.g., Adam’s Love in Thailand and FHI 360 in China) and virtual tours of testing clinics (e.g., the University of North Carolina’s healthMpowerment) can lower barriers and increase self-efficacy for testing.
- Use ICT to better track testing and promotion outcomes. Linking testing with coupons can help close the loop between online and offline outreach.
- Mobile and digital channels can be used to both develop and test messages to respond to clients or situations more quickly.
- Meet people where they are in terms of their mobile and online use. Innovations and solutions can be found within communities and individuals without the need of reinvention of new concepts and superfluous tools.
- Provide more grants for digital and online operations research and implementation.
- Identify potential mentor relationships between media, implementation organizations, and national service organizations.

INCREASED ACCESS TO CLINICAL SERVICES: TREATMENT, CARE, AND SUPPORT

This small group identified several technology objectives within treatment and care:

- Find ways to link people to care (through the use of online maps or directories)
- Retain patients in care and improve case management (through SMS and calendar reminders)
- Increase clients’ treatment literacy or understanding of quality treatment and services (through web-based or mobile packages of programs, content, diaries, buddy systems, or video conferencing)
- Enhance service providers’ responsiveness to client needs (through electronic monitoring of the performance indicators of institutions, clinics, and hospitals and making that information available to provide opportunities for troubleshooting)
- Explore which services can and should be provided face-to-face and which can incorporate technology (e.g., HIV testing may require human connection to a provider, while psychosocial support may not, if technology can provide the social connectivity function that many crave).

Key Recommendations

- Address the technology gap for treatment and care services for MSM and TG populations.
- Initiate multi-arm implementation science initiatives in different socioeconomic status or communications infrastructure settings. These initiatives should pilot technology designed specifically for care and support for key populations. Their goal is to improve the link between testing and ongoing adherence and other community-based support to improve quality of life.
- Apply new technology around treatment and care within public-sector services, but be mindful about the risk of people getting identified for their sexuality or status within the health system records, which may lead to potential discrimination.

- Work with website and application owners to discover if key populations are disclosing their HIV status in these spaces, then try to use that disclosure as an entry point to referral to services. It was noted that if HIV status is recorded in a profile but not displayed publicly, targeted messages and HIV resources can still be distributed privately from the site.
- Set clear priorities. Develop boilerplate content around adherence and early entry to care that can inform website and application owners, so that they in turn can shape their own content on these issues for use on their sites.

ADVOCACY AND HUMAN RIGHTS

MSM and TG advocacy and human rights groups presented several considerations on using technology to address human rights issues, particularly in countries where key populations are criminalized.

Key Recommendations

- Lack of services for TG is a concern. The TG community is as diverse as the MSM community, so messages and approaches must vary accordingly.
- Consider the context and the environment in the use of technology to address human rights issues. Ask MSM and TG populations what rights are important to them, and then find ways to use technology to address those issues. However, remember, digital interventions do not replace traditional approaches, they complement them.
- Many countries are not yet ready to entertain discussions on human rights, TG and MSM populations, and technology, much less a conversation that incorporates all three. In these environments, a focus on health may be the entry point for support.
- In countries where key populations are criminalized, look into ways to provide discreet, legal office hours online so that people can ask questions about their rights and counselors can give advice on how to talk to the police.
- Do no harm. Be careful not to race to the most innovative project. Keep in mind the safety of populations, particularly in countries where even the SMS messages sent from a phone can be used against an individual.

CONCLUSION

This two-day consultation offered a forum for sharing perspectives, best practices, challenges, and lessons learned in using ICT tools to reach key populations with HIV services and to foster new research and programs. Bringing together stakeholders across many different sectors and geographic regions ensured that attendees benefitted from a rich discussion of different perspectives and experiences. At the close of the final day, participants shared their goals and how they are going to incorporate lessons learned from the meeting into their work in the future. Although some were specific—networking with other attendees to discuss future collaboration on a white paper, producing a special issue on the innovative use of ICT among MSM and TG in the journal *Digital Culture and Education*, starting up a Facebook page for HIV-positive TG, and sharing specific approaches from the meeting with colleagues and clients—others were broader, such as exploring new research opportunities or identifying possibilities for future partnerships. The meeting closed with a Thai dance performance, which fused traditional and modern movement.

The presentations on the first day addressed the meeting objective to provide a technical update on the current landscape of technology use among key populations across the private sector, in public health research, and by country programs. The next day's sessions built toward a second meeting objective: to establish recommendations for incorporating social and mobile technology into future public health programs and research for key populations. Panels, presentations, and small group discussions over the course of the two days covered opportunities, challenges, and lessons learned in incorporating technology into HIV programming and research for key populations. Ultimately, by bringing together thought leaders across public health, private sector, and community-based organizations, the meeting fostered collective interest in strategically incorporating lessons learned and recommendations from the meeting into future programs with key populations. These lessons learned and recommendations are delineated below.

Going forward, donors, programmers, and researchers are encouraged to include ICT tools in their toolboxes for future HIV interventions with key populations. However, it is important to be thoughtful and creative in the implementation of any technology-driven activity. Just like radio or print, mobile and Internet technology is ultimately another outreach channel, albeit one that demands new approaches to content creation, different strategies for audience engagement and segmentation, and a particular sensitivity for privacy and human rights. With sufficient formative and evaluative research and creative partnerships across technology companies, CBOs, and the private sector, ICT tools can and should be harnessed and incorporated into broader HIV prevention initiatives for key populations.

Lessons learned and recommendations:

- **Develop targeted content that specifically addresses TG populations' needs.** Throughout the consultation, it was noted that some programs and studies include MSM and TG together, but many are aimed solely at men. This approach does not appeal to transgender women who do not identify as men and require different HIV information. Nor does it reflect the realities of transgender men, who also have specific sexual health needs. As such, it is important to develop TG-appropriate content and to tailor messages and services accordingly.
- **Foster intersectoral collaboration.** Strategic partnerships across the public, private, and community-based sectors are urgently required to identify unique approaches to HIV prevention and service delivery. Government agencies are often hampered by regulations, funding restrictions, and timelines that make it difficult to develop and implement effective initiatives incorporating technology. Organizations and private companies can circumvent these challenges. Also, these organizations may be better connected to targeted communities, as private companies have greater knowledge of their consumers' behavior, and community organizations often have developed greater trust within the communities they serve. In the development of new interventions, partners—technology application developers, website owners, researchers, civil society, and other community organizations—should be identified to strategically fill gaps. No one sector should go it alone.
- **Understand the strengths and limitations of virtual and physical spaces and identify opportunities to incorporate both into HIV programs.** Although mobile and web technology tools are providing unprecedented access to key populations for HIV research and interventions, none of these tools are standalone “silver bullets.” Face-to-face interventions are still very much needed. The consultation covered many of the advantages of both digital and face-to-face approaches and the types of interventions that work best in those spaces. Moreover, participants determined that it is important to begin bundling traditional, face-to-face approaches with online channels to enrich the quality, impact, and evaluation of HIV programs.
- **Present the human face of HIV.** New technology may necessitate unique approaches to HIV projects. There is tremendous potential to access MSM and TG who are not currently connected to HIV services. Technology can help demystify and destigmatize HIV services, such as counseling and testing, by featuring real stories of local community members and providers to model health-promotion and risk-reduction approaches. HIV content must be rich, personal, visual, clear, interactive, and short. Programs should encourage user-generated content, sharing videos, embedding content into real-life scenarios, and fostering two-way conversation between beneficiaries, patients, providers, and communities. In communities with low broadband access or among participants with limited literacy, programs will have to find innovative ways to display robust content in simpler formats.
- **Think of health providers as users too.** Health providers also benefit from online and mobile tools designed to facilitate their relationships with their patients and to ensure that they are providing appropriate care.
- **Improve monitoring and evaluation for ICT programs.** Limitations still exist in evaluating outcome and impact indicators for some technology programming. Matching process indicators, such as visits to a website or number of HIV-related chats in a forum, to longer term goals—either project goals or development goals—may be an important step in demonstrating the impact of technology interventions for key populations.

- **Know the audience.** Any sector incorporating technology into a program for MSM or TG must take care to fully understand the nuances of the technology working with the community and the defining characteristics of the target population before beginning a new activity.
- **Respect and protect.** With a push of a button, a person’s entire private life can be revealed. Program managers of mobile and social initiatives should take care to protect the privacy and identity of any participant, particularly in rights-challenged settings where MSM and TG may be persecuted or jailed.
- **The time is now.** Public health programs are just beginning to innovate in their use of mobile and social tools for HIV prevention and care; however, there is so much potential to incorporate these tools along the “leaky cascade” from identification of and communication with key populations to retention in care to adherence to antiretroviral (ARV) medications.

REFERENCES

- AIDSTAR-One. 2012. "Reaching Transgender and MSM Populations through Social Media." Podcast. Available at http://aidstar-one.com/focus_areas/prevention/resources/msm_transgender_podcast (accessed May 2013).
- Allison, S. "Current State of Technology Use from the Public Health Research Perspective." Presentation at the Innovative Uses of Communication Technology for HIV Programming for MSM and TG Populations Technical Consultation, Washington, D.C., May 2–3, 2013.
- Anand, T. "Adam's Love: Online Communication Strategies for Clinical Services Uptake among GMT." Presentation at the Innovative Uses of Communication Technology for HIV Programming for MSM and TG Populations Technical Consultation, Washington, D.C., May 2–3, 2013.
- Arreola, S., P. Herbert, K. Makofane, J. Beck, and G. Ayala. 2012. "Access to HIV Prevention and Treatment for Men Who Have Sex with Men: Findings from the 2012 Global Men's Health and Rights Study (GMHR)." Global Forum on MSM and HIV. Available at http://www.msmsgf.org/files/msmsgf/documents/GMHR_2012.pdf (accessed May 2013).
- Baral, S., T. Poteat, A. Wirtz, S. Strondahl, and C. Beyrer. 2012. *Global Burden of HIV Infection among Transgender Persons: A Systematic Review and Meta-Analysis*. Nineteenth International AIDS Conference: Abstract no. THPDC0202 "
- Beck, J. "Using ICT for Global Research with MSM: The Global Men's Health and Rights Survey." Presentation at the Innovative Uses of Communication Technology for HIV Programming for MSM and TG Populations Technical Consultation, Washington, D.C., May 2–3, 2013.
- Beyrer, C., S. D. Baral, F. van Griensven, S. M. Goodreau, S. Chariyalertsak, A. L. Wirtz, and R. Brookmeyer. 2012. "Global Epidemiology of HIV Infection in Men Who Have Sex with Men." *Lancet* 380(9839):367–77.
- Burrell, E. R., H. A. Pines, E. Robbie, L. Coleman, R. D. Murphy, K. L. Hess, P. Anton, et al. 2012. "Use of the Location-Based Social Networking Application GRINDR as a Recruitment Tool in Rectal Microbicide Development Research." *AIDS and Behavior* 16(7):1816–20.
- Calmette, Y. "ACON: Ending HIV Campaign." Presentation at the Innovative Uses of Communication Technology for HIV Programming for MSM and TG Populations Technical Consultation, Washington, D.C., May 2–3, 2013.
- Chaiyajit, N., and C. S. Walsh. 2012. "Sexperts! Disrupting Injustice with Digital Community-Led HIV Prevention and Legal Rights Education in Thailand." *Digital Culture and Education* 4(1). Available at http://www.digitalcultureandeducation.com/volume-4/thehive_3012.html/ (accessed May 2013).
- Dennermalm, N., ed. 2009. "We Are the Sexperts! A Manual on How to Use Internet Chatrooms and Communities to Promote Sexual Health and Condom Use." Stockholm: RFSL Stockholm. Available at http://www.rfsl.se/halsa/public/RFSL_sexperterna_rapport.pdf (accessed May 2013).
- Fisher, W. A., J. D. Fisher, and J. Harman. 2003. "The Information-Motivation-Behavioral Skills Model: A General Social Psychosocial Approach to Understanding and Promoting Health Behavior." In *Social Psychosocial Foundations of Health and Illness*, edited by J. Suls and K. A. Wallston. Malden, MA: Blackwell.

- Garcia, L. 2013. "At the Push of a Button: Sexual Networking among Men in the Digital Age." Presentation at the Innovative Uses of Communication Technology for HIV Programming for MSM and TG Populations Technical Consultation, Washington, D.C., May 2–3, 2013.
- Google. "Advertising on Google AdWords: An Overview." Available at <https://support.google.com/adwords/answer/3207312?hl=en&rd=1> (accessed May 2013).
- Haberer, J. E., J. Kahane, I. Kigozi, N. Emonyonu, P. Hunt, J. Martin, and D. R. Bangsberg. 2010. "Real-Time Adherence Monitoring for HIV Antiretroviral Therapy." *AIDS and Behavior* 14:1340–46.
- Hightow-Weidman, L. B. 2013. "HealthMpowerment.org: Development of a Model, Theory-Based Internet Intervention for Young, Black MSM." Presentation at the Innovative Uses of Communication Technology for HIV Programming for MSM and TG Populations Technical Consultation, Washington, D.C., May 2–3, 2013.
- Hightow-Weidman, L. B., B. Fowler, J. Kibe, R. McCoy, E. Pike, M. Calabria, and A. Adimora. 2011. "HealthMpowerment.org: Development of a Theory-Based HIV/STI Website for Young Black MSM." *AIDS Education and Prevention* 23(1):1–12.
- Jobson, G. 2010. "HIV Prevention for MSM in Cape Town, South Africa: Context, Dynamics, Recommendations." Health4Men: Anova Health Institute. Available at http://www.anovahealth.co.za/images/uploads/ANOVA_-_HIV_Prevention_among_MSM_in_Cape_Town.pdf (accessed May 2013).
- Levebvre, C. 2009. "Integrating Cell Phones and Mobile Health Technologies into Public Health Practice: A Social Marketing Perspective." *Health Promotion Practice* 10(4):490–94.
- Liau, A., G. Millett, and G. Marks. 2006. "Meta-Analytic Examination of Online Sex-Seeking and Sexual Risk Behavior among Men Who Have Sex with Men." *Sexually Transmitted Diseases* 33(9):576–84.
- Millett, G. A., J. L. Peterson, S. A. Flores, T. A. Hart, W. L. Jeffries, P. A. Wilson, S. B. Rourke, et al. 2012. "Comparisons of Disparities and Risks of HIV Infection in Black and Other Men Who Have Sex with Men in Canada, UK, and USA: A Meta-Analysis." *Lancet* 380(9839):341–48.
- Nelson, J. "I Live Out Loud: Facilitating LGBT HIV Needs with Technology." Presentation at the Innovative Uses of Communication Technology for HIV Programming for MSM and TG Populations Technical Consultation, Washington, D.C., May 2–3, 2013.
- Robertson, J. 2009. *Case Study: CEPEHRG and Maritime, Ghana: Engaging New Partners and New Technologies to Prevent HIV among Men Who Have Sex with Men*. Arlington, VA: USAID AIDS Support and Technical Assistance Resources, AIDSTAR-One Task Order 1.
- Rosser, B. R. S., G. Kilian, and W. G. West. 2013. "The Emergency Public Relations Protocol: How to Work Effectively on Controversial Projects in an Academic Setting." *Sexuality Research and Social Policy Journal* 10:1–14.
- Rosser, B. R. S., M. H. Miner, W. O. Bockting, M. W. Ross, J. Konstan, L. Gurak, J. Stanton, W. Edwards, S. Jacoby, A. Carballo-Diéguez, R. Mazin, and E. Coleman. 2009. "HIV Risk and the Internet: Results of the Men's INternet Sex (MINTS) Study." *AIDS Behavior* 13(4):746–56.
- Rosser, B. R. S., J. M. Oakes, J. Konstan, S. Hooper, K. J. Horvath, G. P. Danilenko, K. E. Nygaard, and D. J. Smolensky. 2010. "Reducing HIV Risk Behavior of MSM through Persuasive Computing: Results of the Men's INternet Study (MINTS-II)." *AIDS* 24(13):2099–107.
- Sandler, C. "MISTER App." Presentation at the Innovative Uses of Communication Technology for HIV Programming for MSM and TG Populations Technical Consultation, Washington, D.C., May 2–3, 2013.

- Sullivan, P. S., A. Carballo-Diéguez, T. Coates, S. M. Goodreau, I. McGowan, E. J. Sanders, A. Smith, et al. 2012. "Successes and Challenges of HIV Prevention in Men Who Have Sex with Men." *Lancet* 380(9839):388–99.
- U.S. President's Emergency Plan for AIDS Relief. 2011. *Technical Guidance on Combination HIV Prevention*. Available at <http://www.pepfar.gov/documents/organization/164010.pdf> (accessed November 2012).
- U.S. President's Emergency Plan for AIDS Relief. 2012. *PEPFAR Blueprint: Creating an AIDS-free Generation*. Available at <http://www.pepfar.gov/documents/organization/201386.pdf> (accessed May 2013).
- Wohlfeiler, D. "What Should We Do to Reduce HIV and STD Transmission among MSM Online?" Presentation at the Innovative Uses of Communication Technology for HIV Programming for MSM and TG Populations Technical Consultation, Washington, D.C., May 2–3, 2013.
- Wohlfeiler, D., J. Hecht, J. Volk, H. F. Raymond, T. Kennedy, and W. McFarland. 2012. "How Can We Improve Online HIV and STD Prevention for Men Who Have Sex with Men? Perspectives of Hook-up Website Owners, Website Users, and HIV/STD Directors." *AIDS and Behavior*, e-pub ahead of print.
- Yomb, Y. "Alternatives Cameroun Experience: The Use of New Technologies in the Reduction of HIV Impact among GMT." Presentation at the Innovative Uses of Communication Technology for HIV Programming for MSM and TG Populations Technical Consultation, Washington, D.C., May 2–3, 2013.

ANNEX I: PLANNING COMMITTEE

Name	Organization	Title
Darrin Adams	AIDSTAR-Two	MSM Technical Advisor
Lauren Alexanderson	John Snow, Inc.	Communications Manager
Susannah Allison	National Institute of Mental Health	Health Scientist Administrator, Division of AIDS Research
Gillian Anderson	Centers for Disease Control and Prevention (CDC)	Key Populations Advisor
Esther Cha	John Snow, Inc.	Program Coordinator
Repsina Chintalova-Dallas	John Snow, Inc.	HIV Technical Advisor
Helen Cornman	John Snow, Inc.	Senior Technical Advisor
Laurindo Garcia	B-Change Foundation	Founder
Kent Klindera	The Foundation for AIDS Research (amfAR)	Director, GMT Initiative
Billy Pick	United States Agency for International Development (USAID)	Senior Asia Regional Advisor
Tonia Poteat	Office of the U.S. Global AIDS Coordinator	Senior Key Populations Advisor
Dan Wohlfeiler	Department of Obstetrics, Gynecology and Reproductive Sciences	University of California San Francisco
Cameron Wolf	United States Agency for International Development (USAID)	Senior HIV/AIDS Advisor for Key Populations

ANNEX II: AGENDA

Day 1: May 2, 2013	
9:00 AM - 9:20 AM	<p>Welcome and Opening</p> <p>Tonia Poteat, Senior Key Populations Advisor, <i>Office of the U.S. Global AIDS Coordinator (OGAC)</i></p> <p>Cameron Wolf, Senior HIV/AIDS Advisor for Key Populations, <i>U.S. Agency for International Development (USAID)</i></p>
9:20 AM - 9:30 AM	<p>Introductions/Review Agenda/Vision for Meeting/Twitter Guidelines</p> <p>Helen Cornman, Senior Technical Advisor, <i>John Snow, Inc. (JSI) / AIDSTAR-One</i></p>
9:30 AM - 10:30 AM	<p>Current State of Technology Use from the Community Perspective</p> <p>Laurindo Garcia, Founder, <i>B-Change</i></p>
10:45 AM - 12:10 PM	<p>Current State of Technology Use from the Public Health Research Perspective</p> <p>Susannah Allison, Health Scientist Administrator, Division of AIDS Research, <i>NIMH</i></p> <p>Brian Mustanski, Associate Professor, <i>Department of Medical Social Sciences Northwestern University</i></p> <p>Lisa Hightow-Weidman, Associate Professor, <i>School of Medicine University of North Carolina</i></p> <p>B. R. Simon Rosser, Professor and Director, <i>HIV / STI Intervention and Prevention Studies, School of Public Health University of Minnesota</i></p>
12:10 PM - 1:30 PM	<p>Lunchtime Showcase</p> <p>Laurindo Garcia, Founder, <i>B-Change</i></p> <p>Yves Calmette, Principal Planner, Engagement Strategies, <i>AIDS Council of New South Wales (ACON), Know the Risk.AU</i></p> <p>Jack Beck, Senior Communications Associate, <i>The Global Forum on MSM and HIV - Gay Men's Health and Rights Survey</i></p> <p>Carl Sandler, CEO, <i>MISTER - Private-Sector Experience</i></p>
1:45 PM – 3:30 PM	<p>Presentation and Panel Discussion on Private-Sector Partnerships with Public Health</p> <p>Moderator: Cameron Wolf, Senior HIV/AIDS Advisor for Key Populations, <i>USAID</i></p> <p>Presenter: Dan Wohlfeiler, Department of Obstetrics, Gynecology and Reproductive Sciences, <i>University of California San Francisco</i></p> <p>Panel:</p> <p>Private-Sector Perspective: Carl Sandler, CEO, <i>MISTER</i></p>

	<p>Research Perspective: Simon Rosser, Professor, <i>University of Minnesota</i></p> <p>Program Implementer Perspective: Yves Calmette, Principal Planner, <i>ACON</i></p> <p>Internet Start-up Perspective: Jessica Ladd, Director, <i>Sexual Health innovations</i></p> <p>Public-Sector Perspective: Dan Wohlfeiler, Chief of the Office of Policy and Communications, <i>CDPH</i></p>
3:45 – 4:45 PM	<p>Small Group Case Studies</p> <ol style="list-style-type: none"> 1. <i>Text Me/Flash Me/Psychosocial</i>: Jacob Larbi, Technical Advisor, Capacity Building, <i>FHI 360</i> Facilitator: Susannah Allison, <i>NIMH</i> 2. <i>Testing</i>: Patrick Sullivan, Associate Professor, <i>Emory University</i> Facilitator: Tonia Poteat, <i>OGAC</i> 3. <i>South Africa Experience</i>: Carlos Toledo, Prevention Chief, <i>CDC South Africa</i> Facilitator: Darrin Adams, <i>AIDSTAR-Two</i> 4. <i>Community Mobilization/Testing</i>: Matt Avery, Strategic Behavioral Change Specialist, <i>FHI 360</i> Facilitator: Gillian Anderson, <i>CDC</i> 5. <i>Testing/Psychosocial (TG Perspective)</i>: Nada Chaiyajit, Project and Research Development and Gender Issues Officer, <i>Bridges Across Borders Southeast Asia Community Legal Education Initiative (BABSEA CLE)</i> Facilitator: Kent Klindera, <i>The Foundation for AIDS Research (amfAR)</i>
4:45 PM - 5:15 PM	Summary/Report-out of Small Groups
Day 2: May 3, 2013	
9:00 AM – 9:15 AM	<p>Intro to Day 2 and Recap Day 1</p> <p>Gillian Anderson, Public Health Analyst, <i>CDC</i></p> <p>Gaston Djomand, Medical Officer, <i>CDC</i></p>
9:15 AM – 10:30 AM	<p>Presentations and Panel Discussion on Programmatic Examples</p> <p>Moderator: Tim Mah, Senior Prevention Officer, <i>USAID</i></p> <p>Presentations and Panel:</p> <p>Yves Yomb, <i>Executive Director of Alternatives (Cameroon)</i> - Using Websites/Social Media for Prevention Services</p> <p>Tarandeep Anand, Creative Director and Editor, <i>Adam's Love (Thailand)</i> - Using Websites/Social Media for Clinical Services Uptake</p> <p>Jaevion Nelson, Executive Director, <i>Jamaican Youth Advocacy Network and Policy Officer, Jamaican Forum for Lesbians, All Sexuals and Gays (Jamaica)</i> - Using Websites/Social Media for GMT-related Advocacy</p>

10:45 AM – 12:00 PM	<p>Panel Discussion: Online Norms: Confidentiality, Privacy, and Safety Moderator: Kent Klindera, GMT Director, <i>amfAR</i></p> <p>Panel: Frank Strona, National IPS Workgroup Coordinator, Unit Chief, STD/HIV, <i>CDC</i> (USA) Diane Rodriguez, Chairwoman, <i>Siluetas X</i> (Ecuador) Taylor Williamson, Health Governance Specialist, <i>RT International</i>, (USA/Ghana) Edmund Settle, <i>United Nations Development Programme</i> (Thailand)</p>
12:00 PM – 1:30 PM	<p>Lunchtime Showcase Laurindo Garcia, Founder, <i>B-Change Foundation</i>: B-Change Technology and Mapping Christopher Walsh, Senior Lecturer, <i>The Open University</i>: The HIVE</p>
1:30 PM - 2:00 PM	<p>Future Landscape for Technology and Public Health for MSM/TG in International Settings Helen Cornman, Senior Technical Advisor, <i>JSI / AIDSTAR-One</i></p>
2:00 PM - 3:30 PM	<p>Developing an Action Agenda to Move Forward: Small Group Discussions</p> <ol style="list-style-type: none"> 1. <i>Research</i> Facilitator: Susannah Alison, <i>NIMH</i> 2. <i>Prevention and Risk Reduction</i> Facilitator: Tonia Poteat, <i>OGAC</i> 3. <i>Increased Access to Clinical Services: HIV and STI Counseling and Testing</i> Facilitator: Kent Klindera, <i>amfAR</i> 4. <i>Increased Access to Clinical Services: Treatment, Care, and Support</i> Facilitator: Gillian Anderson, <i>CDC</i> 5. <i>Advocacy and Human Rights</i> Facilitator: Darrin Adams, <i>AIDSTAR-Two</i>
3:45 PM - 5:00 PM	<p>Small Group Report Back / Wrap Up</p>

For more information, please visit aidstar-one.com.

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