Advances in science and technology have armed us with a global vision to accelerate an end to the HIV epidemic by linking more than 90 percent of people living with HIV (PLHIV) to diagnosis, linking more than 90 percent of those diagnosed with HIV to treatment, and achieving viral suppression among more than 90 percent of individuals receiving treatment. This ambitious vision calls upon HIV programs to focus beyond the provision of high-quality services to also make and sustain connections for people in ways that address their diverse and evolving preferences and needs.

In an increasingly connected world, information and communications technology (ICT) holds vast potential for improving the capacity of HIV programs to help people make important connections by reaching them where they are with personally relevant solutions at a low cost. Ultimately, innovative strategies to make online and virtual connections may prove critical in overcoming persistent access gaps for key populations (KP) groups – men who have sex with men (MSM), sex workers (SWs), transgender women, and people who inject drugs (PWID) – for whom HIV services can have the greatest benefits.

LINKAGES’s global call to action is for HIV programs to leverage ICT to help KPs facing the greatest risk for HIV to make connections to life-affirming and life-saving services. Although many KP members are already adept users of ICT, HIV programs are only beginning to translate its enormous promise into practices that tangibly improve their lives and accelerate control of the HIV epidemic. Examples of promising practices, a shared nomenclature, and a learning agenda are emerging and these will provide a substantial foundation to promote broader actions and accelerate needed advances in this critical area.

At a global level, LINKAGES is developing a vision for programs to navigate the potentially daunting mystique and complexity often associated with ICT by focusing on applications that build upon tried and true public-health and program-planning practices.

In particular, LINKAGES will put forward ICT applications with value added for the traditional planning cycle that involves the following four continuous and interrelated elements:

- Identifying the characteristics, preferences, and needs of KPs and planning accordingly
- Reaching and engaging KP members in services
- Providing ongoing support, guidance, and facilitation based on the differentiated needs of KP groups
- Assessing and improving the relevance, quality, and impact of KP programming

A major focus of this work will be on the need to engage large numbers of young, at highest-risk, and hard-to-reach KP individuals who have been beyond the reach of historical face-to-face and “feet on the ground” outreach strategies. The incorporation of a planning cycle perspective is intended to emphasize the complementary opportunities that exist to apply ICT to focus efforts efficiently, retain those with the greatest need in care, and use real-time data to continuously improve programming while maintaining a focus on priority—rather than all possible—applications of ICT.

Continued on page 2
LINKAGES and KP communities, globally, have already made great strides in designing and implementing innovative uses of ICT. Moving forward, the LINKAGES project is excited to contribute to this field and facilitate the sharing of experiences between communities. With a consolidated strategic vision and a set of approaches underway, the LINKAGES global project hopes to maximize modern technology to help reach an end to AIDS as a public health threat.

The LINKAGES Nepal project has begun planning and designing several of these new ICT approaches to boost outcomes along the continuum of HIV services. In Nepal, the use of ICT is a recommended innovation to fast-track the HIV response. The National HIV Strategic Plan (2016-2021) suggests that e-health and m-health have transformative potential to improve health literacy and offer access to health care systems at the press of a button. The use of ICT is a crucial modality to deliver prevention activities. Considering the growing coverage of mobile cellular networks, LINKAGES Nepal has initiated interactive voice response (IVR) technology integrated with existing web-based short message service (SMS) to increase dissemination of HIV and sexually transmitted infection (STI) information. WebSMS is also used for sending reminders for taking antiretroviral (ARV) drugs on time, picking up ARV pills, and having HIV tests and checkups for STIs. LINKAGES Nepal also utilizes social media platforms such as Facebook to reach and connect to new KP members and refer them for testing. With these ICT solutions, populations over a broader area who are at risk for HIV can be reached and engaged in ways that are more convenient, and in less time.

Use of Information and Communications Technology among Key Populations in LINKAGES Nepal Project

The use of ICT plays a crucial role in strengthening information dissemination and delivery of health care services. ICT can help bridge gaps in the health sector by providing innovative and more efficient ways of accessing, communicating, and storing health information. In Nepal, mobile subscriptions have reached 109 percent, and active mobile social media users’ penetration is 23 percent (January 2017). Traditionally, outreach and community support services have been using one-to-one or group methods to engage KP members at physical locations such as hot spots. These efforts require mobilizing outreach staff to do the legwork to maximize reach in KP communities and have typically resulted in about one-third of reached clients electing to receive an HIV test. Thus, the use of ICT is a highly desired and recommended innovation for fast-tracking HIV response. The National HIV Strategic Plan 2016-2021 suggests e-health and m-health have transformative potential to improve health literacy and offer access to health care systems at the press of a button.

The introduction of innovative ways of carrying out HIV prevention activities is a key added value of LINKAGES Nepal. ICT has been integrated into routine HIV service delivery, with plans to explore, adapt, test, and recommend for scale up of other ICT strategies to improve the program’s online reach and engagement of KPs. With technical assistance from LINKAGES headquarters, an online assessment was conducted among KPs on technology uses and preferences for receiving information on HIV and other sexual health services in August 2017 (see box for preliminary findings).

Key Findings from Information and Communications Technology Assessment, 2017

The aim of the assessment was to gather evidence on ICT use among KPs for information and access to services related to HIV and sexual health. The assessment was promoted through webSMS, the website of Pahichan Media, LINKAGES Nepal implementing partner agencies, the Federation of Sexual and Gender Minorities Nepal (FSGMN), Jagriti Mahila Maha Sangh (JMMS), target advertisements in online dating apps, Grindr and Hornet, and Facebook. The project also conducted online mapping of virtual hot spots, size estimation of virtually active KP members, and compiled lists of social media influencers. A total of 202 individuals (including KPs - 52 MSM, 22 MSWs, 24 transgender people, and 31 FSWs) participated. The preliminary findings showed that:

- Most of the respondents received HIV information and services from social media (59 percent) and NGOs (56 percent).
- Respondents used Facebook for social networking (63 percent), news (47 percent), dating (36 percent) and sex/sexting (25 percent); and used dating apps for sex/sexting (24 percent) and dating (22 percent).
- Many respondents found sexual partners/clients through social media (51 percent), dating apps/websites (24 percent), and physical venues (21 percent).
- Many respondents were interested to learn about human rights and services for violence (53 percent), general HIV prevention education (50 percent), options for self-testing for HIV and other STIs (45 percent), and friendly HIV testing services in their local area (44 percent) through social media outlets.
- Most popular mobile dating apps were Grindr (28 percent), Planet Romeo (13 percent), and Tinder (7 percent).

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Based on the findings from the assessment and considering the growing use and popularity of online and virtual platforms for interacting, dating, and soliciting sex partners among KPs, LINKAGES Nepal is developing an ICT strategy that prioritizes and focuses on implementing activities with peer outreach staff and peer navigators (outreach 2.0) and other technology-mediated and KP-controlled approaches (outreach 3.0) as part of outreach/demand generation approaches to reach hidden female sex workers (FSWs), MSM, MSWs, and transgender people. The strategy will also help to further systematize, strategize, and expand the scope and use of LINKAGES Nepal’s existing ICT activities.

Use of SMS and IVR are a few ICT tools used in public health programming including HIV. SMS and IVR services are used by various organizations in Nepal for collecting data and disseminating health-related information. Similarly, the web SMS was initiated in 2010 in Kathmandu district through a USAID-funded Advancing Surveillance, Policies, Prevention, Care, and Support to Fight HIV/AIDS (ASHA) Project to reach FSWs who had mobile phones and were reluctant to be reached through traditional HIV prevention services. Later the service expanded to those FSWs who were lost to follow-up for HIV, STI, gender-based violence (GBV) prevention, and family planning services as well as to send reminders to PLHIV to take ARV drugs in the Saath-Saath Project. For LINKAGES Nepal, innovation is driven by the use of new information and of available and emerging communications technologies. The current use of SMS has been expanded through integration with IVR to increase the coverage and intensity of prevention, care, and support efforts. WebSMS enables the project to provide real-time key messages to KPs and PLHIV on HIV prevention, sexual and reproductive health, importance of HIV testing, care, treatment, retention, and adherence to PLHIV, and automated reminders to PLHIV to take ARV drugs. Furthermore, KPs and PLHIV can participate in discussion forums by sending SMS using short code as well as directly sending their queries and concerns, and receiving expert advice/suggestions on their mobile phones anonymously. The IVR service offers information related to HIV and STI prevention, HIV testing, and adherence and retention, especially to individuals with limited literacy levels through audio messaging, which addresses the literacy-related barriers faced in the webSMS system. Callers can also listen to testimonials of KP individuals and PLHIV.

**Achievements**

Between October 2016 to September 2017, LINKAGES Nepal sent 91,480 HIV and STI-related messages to 1,856 KPs and PLHIV. The system also received 172 queries through webSMS and IVR. The IVR service received 4,694 interaction calls from 1,348 callers.

To further enhance demand generation among KP individuals, LINKAGES Nepal is currently utilizing existing popular virtual platforms such as social media (primarily Facebook), mobile applications (Viber, WhatsApp, imo, Facebook Messenger, etc.), online dating applications and websites (Grindr, Hornet, Planet Romeo, etc.) to reach hidden FSWs, MSM, MSWs, and transgender people with messages on HIV prevention, testing and treatment.

LINKAGES Nepal initiated several online and social media initiatives to engage and encourage KPs regarding HIV prevention, testing, and treatment such as:

- Outreach staff reaching KPs through online platforms (Facebook, imo, Viber, Grindr, etc.).
- Development of social media friendly content that is used/posted by implementing partner agencies in their social media outlets such as Facebook groups/pages.
- Collaboration with Pahichan (media partner of Blue Diamond Society) for feeding their media outlets (website, social media platform YouTube, and radio program) with LINKAGES Nepal Social media package.
- Plan to mobilize national networks of KPs to develop short advocacy videos on the human rights of KPs and PLHIV, importance of HIV testing, treatment adherence and retention involving renowned celebrities, sports persons, artists, media personnel, government officials, political leaders, KP members, and PLHIV activists.

LINKAGES Nepal project has initiated background work to pilot the service quality monitoring system via short message service (SMS2) for KP health services with technical and financial support from LINKAGES headquarters. SMS2 will be implemented to (1) monitor KP members’ experiences of stigma and discrimination at health facilities, (2) maintain feedback loop between KP individuals and service providers with actionable data, and (3) conduct behavior change campaigns with KP individuals and service providers.

SMS2 is operable through SMS on simple mobile phones. SMS2 monitors health facility service quality by administering surveys to end users or beneficiaries for their experience of the service provided—primarily on stigma and discrimination—which is compared with health care providers’ self-assessment. SMS2 generates facility service quality reports on a quarterly basis, which provides a feedback loop between service users and providers with quality improvement interventions.
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY FOR HIV PREVENTION, CARE & TREATMENT CONTINUUM

IDENTIFY, REACH, COLLECT DATA & INFORMATION OF KEY POPULATIONS & PEOPLE LIVING WITH HIV

OFFLINE ROUTE

- COMMUNITY-BASED SUPPORTERS (CBS)
  - Reach key populations (KPs) & people living with HIV (PLHIV)
  - Promote messages on the use of web-based short message service (SMS) & interactive voice response (IVR) services
  - Record individual-level data & mobile numbers in microplanning forms
  - Update service utilization in microplanning & carry out follow-up visits

- PEER MOBILIZERS

ONLINE ROUTE

- SOCIAL MEDIA APPLICATIONS
  - Connect KPs through various social media apps mainly used by KPs & closed user groups
  - Interact with KPs & understand their issues & experiences
  - Educate & promote IVR & webSMS services
  - Refer to LINKAGES Nepal static & mobile clinic

- Facebook
- Grindr
- imo
- Viber
- WhatsApp

KPs & PLHIV
(KPs - FSWs, MSM/MSWs & transgender people)

INTERACTIVE VOICE RESPONSE

- KPs call a toll-free number
- IVR receives the call & automated voice guides the process
- KPs listen & follow the process & send queries, concerns & testimonies
- Records the audio messages & responds to KPs via webSMS

MEROSATHI  (‘My friend’ is an integrated webSMS and IVR service.)

- It provides audio & text messages on HIV prevention, care, support & treatment services, & follow-up for the services.
- It responds to the query & concerns.

WebSMS

- Tailored group &/or individual text messages sent across to segmented KPs & PLHIV
- Send daily automated reminders to PLHIV for medicine intake & scheduled messages for follow-up on HIV testing for KPs
- Refer KPs to LINKAGES Nepal clinics & PLHIV to antiretroviral therapy (ART) centers
- Reply messages &/or send queries
- Respond to queries

Feedback mechanism - SMS²

Service quality monitoring system via short message service is a quality assurance tool designed for use by LINKAGES programs that can be used to support quality improvement activities.

It monitors facility-based KP-related stigma, discrimination, & overall client satisfaction with health services on a continuous basis.
Success Story

Reaching the unreached men who have sex with men, male sex workers, and transgender people through social media

In Nepali society where heterosexuality and binary gender is a norm, many young MSM, MSWs, and transgender people are increasingly attracted to online ICT media (such as Grindr, Facebook, Planet Romeo, Viber, imo, etc.) due to its anonymity, secrecy, hassle-free interaction with peers, and the ability to experiment with their sexuality. They use social media, dating websites, and applications for a variety of social and sexual purposes, including seeking sexual health information, engaging in cybersex, finding sex partners, dating, and building social support groups/networks. Findings from a study conducted in Nepal\(^6\) suggest that conventional venue-based outreach interventions for HIV prevention are not reaching all MSM subpopulations with high risk behavior in Nepal. Additionally, according to an ICT assessment conducted by LINKAGES Nepal,\(^7\) the majority of key population members (75 percent) solicit sexual partners through social media and dating apps/websites compared to physical venues (21 percent).

LINKAGES Nepal’s implementing partner agencies have started utilizing social media to reach KPs. One such user shared “when I first started using Facebook about eight or nine years ago, I was unaware of the hidden community of homosexuals and transsexuals that were living among us. Later, I came to realize the majority of homosexuals and transsexuals use Facebook, Planet Romeo, Grindr, and imo to communicate and interact with other peers. To maintain their anonymity, they use a fake profile with a picture of a celebrity, flowers, or something deemed attractive.”

LINKAGES Nepal has started using social media platforms (mostly Facebook) to reach this hidden community. “We disseminate key messages on HIV and STI, and motivate for HIV testing and treatment through Facebook chat and posts,” said Dev Narayan Shrestha, project coordinator, Human Conscious Society, Chitwan. To date, outreach staff from Chitwan, Kailali, and Lalitpur districts have reached 83 MSM, MSWs, and transgender people through social media, primarily through Facebook, out of which 45 were tested for HIV and STI. Among them, two tested HIV positive and five were diagnosed with and treated for syphilis. The HIV positivity rate is 4.4 percent for MSM, MSWs, and transgender people reached through social media and tested for HIV. Both HIV-positive KP individuals were linked with community-based supporters (CBS) and are enrolled in antiretroviral therapy (ART). Though the number of individuals found to be HIV-positive is low, the results suggest the importance of exploring possibilities for reaching high-risk hidden KP individuals online and encouraging them to be tested.

“MSM, MSWs, and transgender people are easy to reach through social media. They’ll talk with us in online conversation. However, due to self-stigma and fear of disclosure, they are reluctant to...
In July 2017, LINKAGES Nepal handed over 70,000 Determine HIV test kits received from Direct Relief International to the National Centre for AIDS and STD Control (NCASC) to contribute to the national PMTCT program.

**Handover of HIV Test Kits to National Centre for AIDS and STD Control**

In July 2017, LINKAGES Nepal handed over 70,000 Determine HIV test kits received from Direct Relief International to the National Centre for AIDS and STD Control (NCASC) to contribute to the national PMTCT program.

**Joint HIV Cascade Assessment**

In July 2017, LINKAGES Nepal organized and facilitated the joint HIV cascade assessment by PEPFAR/USAID and the Global Fund among KP members in Nepal. The assessment methods included desk review, field visits, record review, focus group discussions, and in-depth interviews. The assessment team included personnel from the AIDS Health care Foundation, Global Fund, JMMS, FSGMN, LINKAGES headquarters, LINKAGES Nepal, National Association of PLHIV in Nepal (NAP+N), National Centre for AIDS and STD Control (NCASC), Recovering Nepal, Save the Children, UNAIDS, USAID, and WHO. The findings and recommendations of the assessment were shared among government and non-government stakeholders and networks of KPs and PLHIV.

**Data Quality Assessment**

In September 2017, USAID Nepal conducted a data quality assessment (DQA) at LINKAGES Nepal country office and implementing partner agencies of Jhapa district. DQA was conducted for eight indicators based on USAID Nepal Performance Plan and Report and AID Tracker+ Report for fiscal year 2017. The objectives were to learn about the strengths and weaknesses in the data, to help determine and document the quality of the data, to find ways to improve quality, and to provide an opportunity to strengthen the capacity of implementing partners, host government ministries, and other partners. The overall findings of the DQA were as per the requirement of standard indicator DQA checklists and the team appreciated LINKAGES Nepal’s monitoring and evaluation (M&E) system, process, and tools.

**Orientation on Lesbian, Gay, Bisexual, Transgender, and Intersex Issues**

In September 2017, LINKAGES Nepal’s national network IA FSGMN provided an orientation on lesbian, gay, bisexual, transgender, and intersex (LGBTI) issues to UN Women, Standard Chartered Bank, Everest Bank, and Himalayan Challenges Trek for better inclusion of LGBTI people in the public and private employment sectors.
Monitoring visit to LINKAGES Nepal Project from District Public Health Office
LINKAGES Nepal staff facilitated monitoring visits for the representatives of the District Public Health Office in Bhaktapur, Jhapa, Kapilbastu, Lalitpur, Makawanpur, Morang, Rupandehi, and Sunsari districts from July to September 2017.

Similarly, representatives from the District Coordination Committee in Kathmandu and Jhapa districts visited LINKAGES Nepal project sites in the respective project districts. The team observed prevention, clinical services, and laboratory services as well as the setup of clinic and lab. The team also interacted with project staff and beneficiaries.

USAID visit into LINKAGES Nepal Project

During her visit, the following topics were presented and discussed: current scenario of HIV in Nepal and the national and project specific response to HIV in Nepal, impact of USAID’s intervention in HIV and LINKAGES Nepal project activities, progress and way forward. She also observed a clinical service site, and interacted with clinical staff and beneficiary groups including FSWs, MSM, MSWs, and transgender people.

Similarly, the USAID Nepal team visited and monitored LINKAGES Nepal activities in Kailali and Kanchanpur districts in July 2017. The team observed an outreach education session, clinical services, and office management, and visited the ART center of Seti Zonal Hospital.

USAID Headquarters visit into LINKAGES Nepal Project

They toured the clinic, observed the setup and process, and interacted with clinical and outreach staff. Nima also observed an outreach session with a beneficiary.

Technical Assistance from LINKAGES Project, FHI 360, Washington, DC, USA
LINKAGES Nepal received technical assistance from Benjamin Eveslage, technical officer, LINKAGES project, FHI 360, Washington, DC in August 2017.

He provided assistance with assessing the current use of ICT among KP’s for accessing HIV-related information and services, and with accelerating ICT activities under LINKAGES Nepal project. He supported the assessment on feasibility for implementing SMS². He also shared the role of ICT for the HIV continuum of prevention, care, and treatment services in line with the National HIV Strategic Plan 2016-2021 among key HIV stakeholders at NCASC.

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