

PROMISING PRACTICE: Zambia U Report SMS pilot for VMMC demand creation among adolescents and young adults.

Key Promising Practices

- Innovative, youth-friendly SMS platform – “Zambia U-Report” – for adolescents and youth that provides real-time interactive counseling and education on HIV and STIs through short message service (SMS) that is free-of-charge and confidential.
- SMS platform allows for continuous and tailored demand creation for HIV high impact services (HIV testing, VMMC, Condoms, ART). It also captures in real-time feedback from adolescents about availability, barriers to utilisation and quality of HIV and SRH services.
- Successful integration of young people at the design and at the U-Report implementation frontline (SMS counseling, community mobilization, quality improvement).

INTRODUCTION

Every hour, about three Zambian youths (15–24 years) get infected with HIV (NAC, 2012). Young people are more vulnerable when they have limited comprehensive HIV prevention information, are not equipped with life skills to delay sexual debut, resist peer-pressure, and do not utilize HIV high impact prevention services (condoms, Voluntary Medicalized Male Circumcision, HIV testing and treatment).

With UNICEF support Zambia U-Report was designed under the leadership of the National HIV/AIDS/STI/TB Council (NAC) to

- Promote adolescent and youth participation in National HIV response by getting their opinions on issues that affect their vulnerability and risk to HIV
- Increase HIV knowledge through an individualised two-way interactive SMS model
- Increase demand for HIV high impact prevention services, (condoms, VMMC, HIV testing and treatment)
- Monitor availability, utilisation and quality of adolescents and youth sensitive HIV services.

In recent years UNICEF Zambia has worked with NAC to bring “Brothers for Life” to Zambia, as well as spearheading “Programme Mwana”, which uses mobile phones to improve early infant HIV diagnostic services (EID), patient tracing, and post-natal follow-up and care.

Mobile phones represent a potentially cost-effective channel to increase young people's participation in HIV programmes and their uptake of interventions, since mobile phone penetration is high in much of Sub-Saharan Africa and VMMC messages can be delivered inexpensively to large audiences via Short Message Service (SMS).

The Zambia Information and Communication Technology Authority (ZICTA) estimated mobile phone penetration in Zambia at 63% by the end of 2011. Furthermore, two-way communication could provide opportunities to tailor messages to the specific concerns of individuals prior and in the post intervention (e.g. VMMC) period, while maintaining their confidentiality and privacy. Data from a 2009 survey showed that youth and young adults (15–29) represented 52% of all mobile phone users in Zambiaⁱ There are a total of 2.8 million youths aged 15–24 in Zambia, according to 2012 estimates.

Zambia U-Report therefore harnesses this trend and uses interactive text messaging to increase comprehensive HIV knowledge of and demand for HIV prevention services, including advice and information on how to access HIV services. One important programmatic benefit of the SMS platform is its ability to provide real-time monitoring of the utilisation, availability and quality of adolescent and youth friendly HIV services.

U-Report Zambia takes its inspiration from Uganda where the U-report was first used as a crowd-sourcing tool, mainly for pooling opinions of young people about child rights issues in their communities. "Zambia U-Report" expanded the initial concept to meet the needs of young people in Zambia, and accelerate HIV national targets for young people, with their participation. UNICEF Zambia cites increasing evidence from recent experiences supporting effectiveness of SMS as a catalyst for HIV education, and broader health promotion among adolescents and youths.ⁱⁱ This evidence shows significant change on level of HIV prevention knowledge, adoption of safer reproductive health and sexual behaviours including reducing sexual partners, increased uptake of condom use, and increased uptake of STI/HIV testing.

This initiative was launched in Zambia on December 1st 2012 (World AIDS day) by NAC and Ministry of Youth and Sport, and is being piloted in Lusaka and Copperbelt provinces.

Target Groups

Beneficiaries by December 2013:

- Direct beneficiaries: 150,000 U-Reporters aged 10–35 years (adolescents and youths as per Zambia policy)

- Indirect beneficiaries: Secondary audiences include young people (non U-Reporters) who will be reached through the U-Report educational radio programme and peer-to-peer communication.

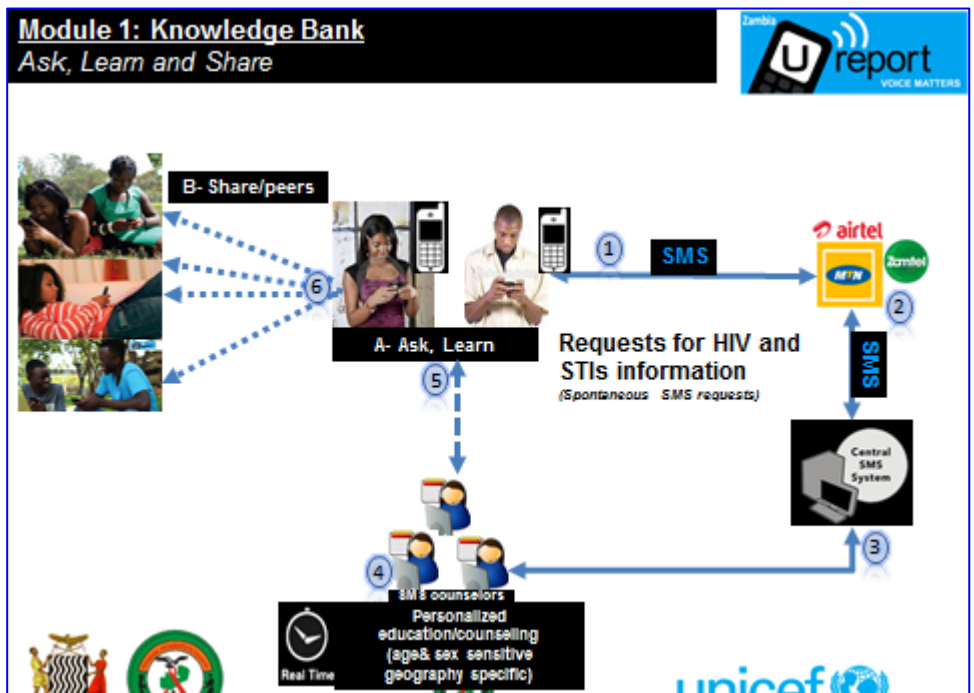
Scale and scope

- The pilot phase will run until December 2013 with a focus on Lusaka and Copperbelt provinces, followed by an evaluation in 2014. National scale-up of the Zambia U-Report is scheduled to start before end of 2014.
- Zambia U-Report scope includes two programmatic modules: (i) Knowledge Bank for HIV and STI; and (ii) Poll/Campaign. The software environment was built using open-source software (RapidSMS); the project negotiated reduced SMS cost with all 3 mobile companies in Zambia; established a reverse billing system to ensure free SMS to users and established a hub for SMS counselors through partnership with one local NGO (CHAMP). The programmatic modules (Knowledge Bank; and Poll/Campaign) were translated into a computer based SMS-platform, and the SMS counselors based at CHAMP were trained for its implementation.
- The platform provides confidential, free of charge, tailored and interactive counseling services on HIV, STI to adolescents and youths. The counselor web-interface allows for quality control of the SMS counseling.
- The platform enables tailored “SMS intervention package” to create demand for available HIV services, and referral to closer location. The programme tracks and report in real-time on young people key HIV knowledge gaps and emerging issues related to HIV and STI to inform a mass media strategy (radio and TV programme).
- The project uses various promotional activities (radio jingle, one TV show, flyers, and wristband) to market the initiative among young people in the two pilot provinces (Lusaka and Copperbelt).

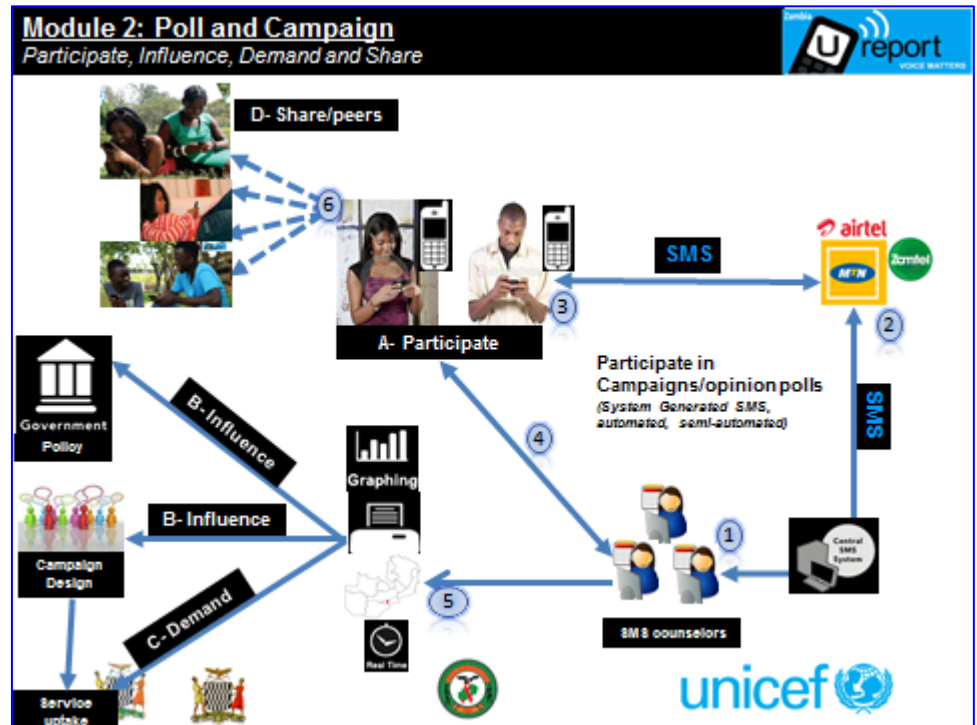
Organizations Involved

- **Government Lead:** National HIV/AIDS/TB/STI Council (NAC)
- **Technical Lead:** UNICEF Zambia
- **Implementer:** CHAMP

Funding:



- Funding for pilot phase: UNICEF
- Impact evaluation on VMMC demand creation: IDinsight (impact evaluation), 3iE (UNICEF was awarded a grant by 3iE for the evaluation of VMMC.)



Who is carrying out demand generation activities?
UNICEF ambassadors / U-reporters and CHAMP counsellors

APPROACH TO DEMAND CREATION

Key message(s)

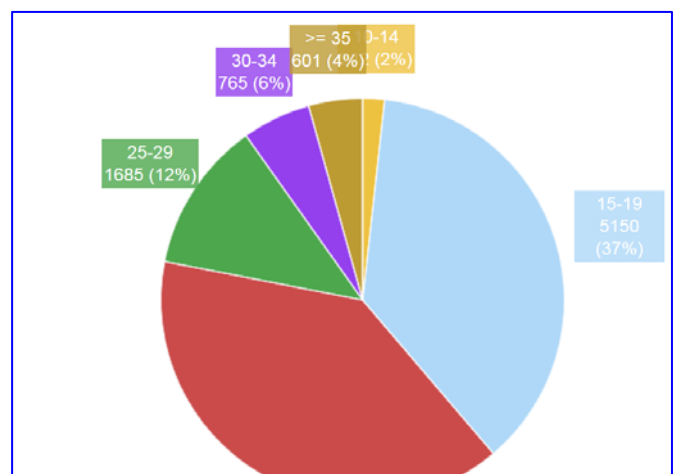
- Clear, comprehensive advice about VMMC, HIV and other sexually transmitted infections
- Emphasis on interactivity and sharing information and opinion: U-Reporters encouraged to share their knowledge with friends and empower them, and to use the SMS service to give their own opinions on HIV related issues, and to participate in polls and campaigns.

Type of Intervention

U-Report is a free to register interactive sexual health counselling service for adolescents and youth.

It comprises five fundamental components:

- Primary end users (beneficiaries): U-Reporters who send and receive SMS through their personal mobile phones,
- Secondary end users (promoters): Government, civil society organizations, partners who will use the platform to



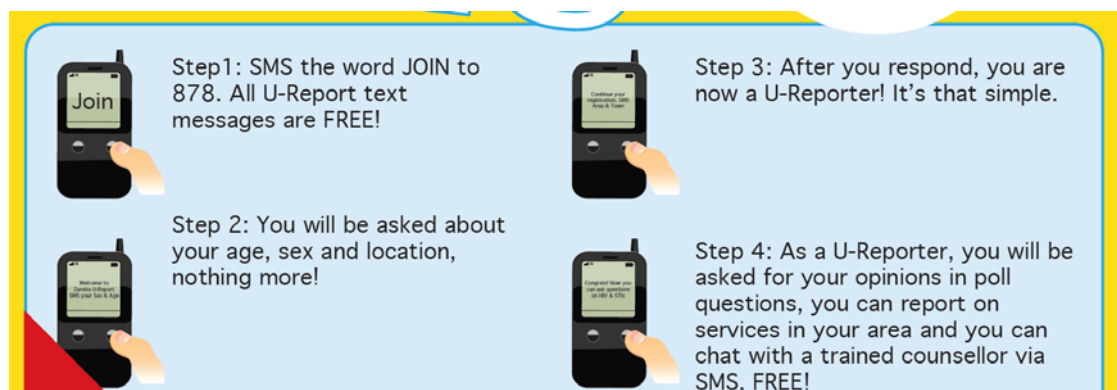
engage young people, and insights from the big data generated to customize interventions toward young people.

- Intervention agents (SMS counselors): SMS counselors manage the SMS requests; provide tailored feedback, based on age, sex and location of the U-Reporter.
- Delivery medium (Server's network, mobile phone intermediaries): One centralized server located in a secured area and connected to the telecom providers and to the secured SMS counseling portal. IT team monitors the central server and coordinate all the data that flows through the system ensuring data confidentiality and safety.
- Visualization (Web interface): One password protected web dashboard will provide information to key stakeholders and decision makers (NAC, line ministries, parliamentarians, civil society organizations). Data will be presented using graphs, and maps showing age and sex disaggregated information. The web dashboard will be thematic-based and updated regularly based on emerging issues/interests of young people and campaigns' results. A public web interface with no password will be developed and linked with social media-media platform to promote the service among youths.

Zambia U-report SMS counseling strategy applied to VMMC and HTC demand creation

Enrolment: Once registered as “U-Reporters” by texting “JOIN” to 878, users can text counsellors straight away, asking questions such as “Where can I go and get tested?” or “Where can I go for male circumcision?” Counsellors are advised to encourage U-Reporters to come back and report on how the services were for them. Users are only asked for their age, sex and location upon registration. Names are not required so the service remains completely anonymous. Counselling is given so that it is appropriate to the person’s age and sex, and referrals are to local services close to where the person lives.

The opt-in registration service ensures that SMS campaign messages are only sent to people who have requested to receive U-Report SMS’s as per national ICT guidelines.



Opt-in/Voluntary Registration by SMS

SMS counsellors: The NGO CHAMP, who specializes in HIV prevention counseling, is partnering on the project, trained by UNICEF in using SMS language to provide health advice and create demand for VMMC services. CHAMP provides all the counselors for the project while UNICEF manages the overall platform development, campaign messages customization, and data analytics. Counsellors are available seven days a week and attempt to respond to all SMS's received within 24 hours.

SMS-based campaigns: Only during campaign periods (e.g VMMC, HTC), will automated SMS's be sent out to the U-Reporters according to their profile. Knowledge-based questions that are posted to counsellors are used to provide insights into wider campaigns that will run on radio and TV. The service links to and is supported by the CHAMP toll free phone number (990) for counselling over the phone, which is particularly useful for those only speaking local languages, and also for emergency advice. SMS for campaigns are tested with young people, and endorsed by NAC and the national IEC/BCC committee prior to their roll-out.

Emergency request: key words have also been built into the platform from the very beginning – so if a user sends a message that has the words, rape, abuse, defiled, or similar it is flagged in red, and goes straight to the top of the counsellor's pending messages. An automated response is sent saying “please call 990 now and talk to somebody” while counsellor assist with SMS.

Rationale/theory of change

Zambia U-Report Theory of change (applied to VMMC):

Behaviour change rationale: The U-Reporter journey is not always a linear trajectory toward uptake of a HIV service. The project uses the “Stages of Changes” model based on the Transtheoretical Model (TTM) of behaviour change to inform design of tailored SMS campaign messages and the SMS counselling process:

A–Pre–contemplation (No intention to go for VMMC)

B–Contemplation (Intention to go for VMMC in the future)

C–Preparation (Intention to go for VMMC in near future and step taken towards that goal)

D–Action – Participant’s uptake of VMMC

In the project’s conceptual framework for the project, the Action stage (D) is also affected by a series of secondary moderators: e.g. distance to VMMC site; cost of transport; opportunity cost (time away from work/school); education level; cultural background; peers (circumcised) influence and parental/partner support.

Decision-making stages A–C will therefore be principally moderated by engagement in two-way interaction with a trained health counsellor via SMS. This ensures a very personal interaction with U-reporters. The project has found that some questions received during the pilot have been really sensitive and personal, and so it is important that the U-reporter can use the same individual counsellor and exchange messages as if with a peer educator/friend as opposed to a random or generic machine generated message.

The Tailored SMS Intervention extends the SMS approach further by tailoring messages to information known about the recipient's age, location, and attitude towards VMMC. In this way, the programme will maximise the likelihood of success for achieving VMMC uptake via SMS while extending the knowledge frontier regarding the use of SMS to encourage health seeking behaviour.

DEMAND CREATION ACTIVITIES

1) Mass Media Activities

Radio jingle: A radio jingle was produced for the pilot phased and aired in 3 local radio in Lusaka and Copperbelt provinces.

Radio show: CHAMP will also produce a pilot radio show, currently running to 8 episodes, to be broadcast weekly on ZNBC radio. The show will be hosted by two celebrities, including singer Pompi and another popular female figure called Hope. They are moving away from the “panel of experts” format, wanting to create a space that is more appropriate for youth audiences.

Celebrity endorsement: Zambian celebrities (from the Brothers for Life) have appeared on TV shows and mentioned U-Report – the service received many more registrations the following day as a result.

2) Social Mobilization – involvement of Youth Ambassadors

There is a network of 1000 trained youth ambassadors across the country, who participate in the Unite for Climate Programme supported by UNICEF. These are highly motivated youth leaders who were brought on board in 2010 as part of a child participation program, and received training in leadership and communication skills, work-plan development, and HIV. They are the “super connectors” in their communities, going to schools, youth groups and events to spread campaign messages. Some of the original ambassadors are now adults but continue as youth facilitators and carry out the training with the new recruits. There was a natural cross over with U-Report, and so UNICEF decided to make the ambassadors the first “U-Reporters”, to go out into their communities to encourage friends and peers to take up the SMS service. These pioneer U-Reporters have achieved a great deal of success. They

were highly visible in their t-shirts and full of enthusiasm at the launch events in Lusaka and Kitwe (Copperbelt), persuading hundreds of young people to sign up.

U-Report Design Process

The youth ambassadors have also been closely involved in the Zambia U-Report design phase – to ensure young opinions and voices are reflected in the project, particularly when it comes to the friendliness and effectiveness and impact of messaging and text polls designed for young people.

Ambassadors have attended stakeholders meetings to give their feedback. UNICEF regularly convenes a subgroup of 20 ambassadors to consult on messages, checking on ways to rephrase the medical message to interest and inspire young people. A notable example was the first text poll was a bit “flat and boring” for the ambassadors, who suggested ways to make it more appealing to people of their age group, making it “cool”.

At the Zambia U-Report Design Workshop in October 2012, NAC and UNICEF ensured more than 50% of the delegation was made of young people. During the three days, the delegates came up with objectives, a results framework and sample messages. Groups were organised into age categories: below 24, 24–29 and above 30. These were then asked for example, what kind of message they would want to receive if they were being persuaded to go for VMMC.

Case Study – U-Reporters Peter, Frisco, Natasha and Bianca:

Peter, one of the pioneer U-Reporters says he saw their role in the design process to make U-Report more relevant to Zambian youth. Peter thinks youth input on messaging is crucial. He talked to peers and friends throughout the process to get second opinions on how “cool” and therefore motivating the messages were, and to see their initial reactions to the new program. He is convinced that to appeal to young people, the medical message, however important, cannot come across as boring, or they will switch off. He made this point very strongly at the design workshop. An example of making the message youth friendly and fun is how to deal with the myth that men are fully protected from HIV once they’ve had VMMC. The ambassadors came up with the message: “Peel it, but still cover it.”



Fig 3. Natasha, Peter, Bianca and Frisco – pioneer U-Reporters

Frisco, another U-Reporter, is still at school and so uses his time outside of lessons to promote U-Report.

He goes to school clubs and markets, to hand out flyers talk to young people, who he says are always very interested in the wrist bands and t-shirts the U-Reporters wear. Often he gets asked where he got his t-shirt, and if they can do his job?! Wrist bands have been particularly popular with young people who sign up and wear their wrist band with pride. Frisco also regularly uses social media to promote U-Report. Frisco personally finds talking to groups is more effective as he gets asked different questions which everyone can listen to.

Bianca has had several “success” stories during her time as a U-Reporter. Her friend has recently gone for HIV testing as a result of joining the SMS service. She thinks the launch event was an effective way to spread the word, she gave out hundreds of flyers and even got quizzed about the project on the bus on the way home. This sparked a big group discussion and the bus driver put her poster up. She had people joining U-Report on the spot as a result of the discussion.

Youth Ambassadors and Social Media

One of the benefits of bringing on the young climate ambassadors is that they have been able to share U-Report with their contacts at climate change youth organisations, who have started posting on their social media pages. The Youth Ambassadors have run their own social media drives too, i.e. 'Catch the U-Report fever on our Facebook pages' – the first five respondents get a U-Report hamper (which is a t-shirt, a wristband).

3) Campaigns and Polls

As well as offering advice and information, the SMS service will be used to launch a series of HIV related campaigns and polls, which are aimed at stimulating discussion around certain topics. The first campaign, on HIV Testing & Counseling, was sent out June–July 2013, and VMMC was planned to be the next campaign area to coincide with National MC Month in December.

4) Counsellor Training and Monitoring

UNICEF chose to partner with local NGO CHAMP for the SMS Counselling component, as CHAMP had extensive experience in HIV counselling via a call–line (990) and could adapt their service to provide all the SMS counselling for the U–Report project. Their counsellors were already trained in terms of technical sexual reproductive health and HIV health expertise, and UNICEF conducted a one–day intensive training course with CHAMP counsellors on using SMS language so they can provide their advice by text. There are presently three counsellors dedicated to U–Report. Counsellors are monitored by CHAMP supervisors, and refresher training given every 6–months on knowledge–based health issues and latest treatment advice. They are also supplied with support materials such as a manual, which they can refer to if they do not immediately know how to respond to a U–Reporter question. Managers at UNICEF also have access to the SMS content via a portal, and so they can monitor remotely the messages coming in and going out, UNICEF can and give feedback or updates to counsellors on their SMS responses, but can't send SMS responses themselves.

Results

Expected Results include:

- Effective SMS–based mechanism to increase young people participation in the national HIV prevention response available;
- U–Reporters (male and female) have increased comprehensive knowledge of high impact HIV prevention measures and services; and
- U–Reporters (male and female) have doubled uptake of HIV high impact prevention services (VMMC, Condoms, HTC and treatment).

Results so far

- From December 2012 to August 2013, 13,900 U–Reporters joined the programme, 44 % female, 37% aged 15–19 and 39% aged 20–24.

- The highest daily registration rate occurred following the promotion of the programme on a TV-show by a male celebrity.
- About 71% U-Reporters engage counselors through SMS, generating 48,984 SMS.
- Most U-Reporters reside in Lusaka (51%) and Copperbelt (30%) provinces.
- From an analysis of thematic issues from 13,000 SMS requests sent by U-reporters in Zambia (Dec 2012–May 2013), 12% of were related directly to VMMC, the third most popular topic after symptoms of HIV and STI (28%), and Mode of HIV/STI transmission (18%). Mother to child HIV transmission (9%), Masturbation (8%), Condoms (8%), HIV treatment and cure (8%), other STIs (9%) were also asked about.
- UNICEF has also analyzed the messages received about VMMC, which reveals 44% of responders were interested in the effectiveness of VMMC against HIV/AIDS, 18% were interested in healing times and 15% in the effectiveness against other STI's. Pain and medication made up 11% of the messaging.
- One emerging misconception was the association between condoms use and cervical cancer among female.
- Registration peaked at launching events, during the ZNBC TV show "Smooth Talk" featuring a Brothers for Life celebrity talking about U-Report, and after outreach activities in schools.
- During the June–July HIV testing campaign organized by Government of Zambia, the SMS platform was used to reach 5700 U-Reporters in Lusaka provinces. This resulted in an increase of HIV testing among U-Reporters of 28% when comparing baseline HIV testing coverage with post-campaigning HIV testing coverage.

EVALUATION OF DEMAND CREATION

Evaluation of Demand Creation

Principal investigators: UNICEF and IDInsight. IDInsight will partner with UNICEF as joint principal investigator on the project's impact evaluation activities, with funding from 3iE. Evaluation districts include Lusaka and Chongwe

Implementing Partners: CHAMP is a UNICEF sub-grantee providing the SMS counseling component

National Coordination partners: National AIDS Council, The MCDMCH/ District Medical Offices and Provincial Medical Offices and members of the VMMC Technical Working Group,.

Funding: 3iE

The impact evaluation seeks to answer two primary evaluation questions:

- Conventional SMS Intervention: What is the effect of delivering standard packages of promotional and informational VMMC messages via SMS on VMMC uptake?

- Tailored SMS Intervention: What is the effect on VMMC uptake of delivering packages of promotional and information VMMC SMS messages tailored to individuals based on assessments of their Stage of Change (SoC) categories on VMMC uptake?

Successes/ Challenges

- Inviting young people to design and consult on the project is key to its success. Youth Ambassadors, now the front-line U-Reporters have been able to bring in their skills from working on previous UNICEF projects to help mould the messaging and work plan in the most engaging way, and make U-Report their own.
- Securing government buy-in and ensuring Government remains on the driving seat from the design phase has been key to build government ownership, achieve stakeholders' consensus and fast-tracking negotiations with private sectors (NGO and mobile providers).
- Collaboration with UNICEF Uganda to leverage the youth participation solution they had created (U-Report) helped in reducing the time to develop the Zambia prototypes for piloting.
- Ensuring participation during the design phase of key stakeholders, particular focus on young people, national programme experts on young people and HIV, stakeholders from ministries of health, education, youth and sport, NGOs, mobile companies, and the IT team (IT and software developers).
- U-Reporters emphasise how crucial the t-shirts, arm bands and other branded materials had been in attracting attention and ultimately helping people sign up for the service. However they feel they need more flyers and t-shirts in different languages to be able to reach out to everyone they'd like to, as it can be a challenge trying to explain it all in English.

Challenges and their mitigation

- Sending SMS's in vernacular language can be is tricky and the counsellors have on occasion been able to text back in the other main languages such as Bemba, but this is not easy to do. To counter the language issue, UNICEF stress the importance of having a toll-free phone number in tandem for people to use and talk to a counsellor direct. Counsellors will usually speak at least one of the seven main local languages.
- Getting to grips with 'Text Speak' is an area UNICEF would like to explore further if the project goes beyond the pilot phase. Counsellors sometimes have trouble deciphering the language people are writing in, and they want to be able to respond in a similar way in order to be credible with their audience. UNICEF will explore strategic partnership to develop this solution as part of the next phase.

- Messaging is not currently “templated” but it is hoped that once the service is established, there will be some popular questions that a template response may be appropriate for, as if the service scales up, it may be impossible for all texts to be responded to with tailored messages.
- Sustaining the increased cost of SMS during scale-up: When brought to scale, the SMS cost could reach about 100,000 USD per year. NAC and line ministries have engaged already negotiations with ZICTA for assigning a free short code to Zambia U-Report.

CONCLUSION

Zambia U-Report has the potential to increase comprehensive HIV knowledge among adolescents and youth, addressing misconceptions about HIV prevention and treatment, increase HIV treatment literacy and increasing uptake and linkages to HIV services (VMMC, Condom, HTC, and treatment).

Preliminary results show rapid adoption of the platform by young people, and a contribution to demand creation for HTC. The proof of concept of Zambia U-Report will be further evaluation for its impact on VMMC. Zambia

U-Report could be integrated durably into ongoing government and partner led social mobilisation campaign against HIV targeting youth and adolescents, and leverage other mass media communication channels (TV, Radio, road shows) for a maximum impact. This technological innovation will potentially accelerate the achievements of Zambia youth related HIV targets by 2015, and contribute to an AIDS free generation.

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ⁱ AudienceScapes National survey of Zambia April 2010: survey of adult (15+), n=2000

ⁱⁱ Megan S C Lim, Jane S Hocking, et al. **Impact of text and email messaging on the sexual health of young people: a randomized controlled trial**, J Epidemiol Community Health 2012;66:69e74. doi:10.1136/jech.2009.100396

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