



NAC - Zambia



Zambia U-Report

A Youth-led HIV Response Initiative using Short-Message Service (SMS) in Zambia.

Concept Note

- Abridged version-Sept 2012.



Outline

- I. Issues
- II. Proposed Solutions
- III. Expected Results
- IV. Design and Methods
- V. Monitoring and Evaluation framework
- VI. Budget
- VII. Priority actions

Issues

Every hour, about 3 youth (15-24 years) are infected with HIV in Zambia.

With an HIV prevalence stabilizing around 14% since 2007 (927,730 people are living with HIV), Zambia has made significant strides in increasing access to HIV treatment (ART) for people living with HIV (PLH), reaching 3 out of every 4 (78%) people (>15 years old) in need of treatment (2011).¹ While ART coverage increased by 3-fold (300%) between 2005 and 2011, the rate of new HIV infections only decreased by 1/5-fold (20%). In other terms, for every 85 people aged >15 years enrolled on ART, there were 100 new HIV infections on average during 2006-2011 (fig 1). Sustaining treatment advances calls for an urgent and greater refocus on HIV prevention.

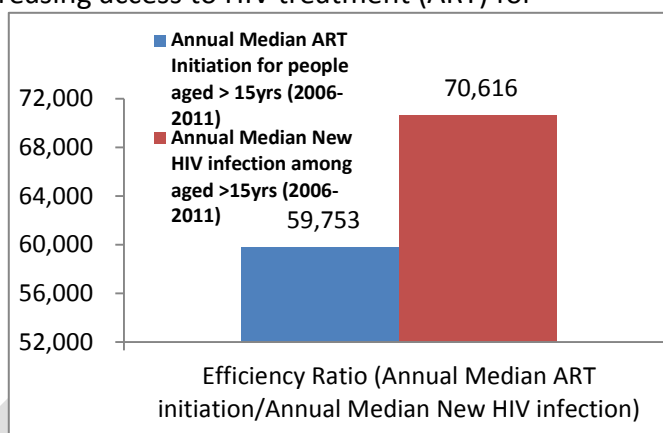


Figure 1: Estimate of Zambia Efficiency Ratio comparing (estimated from UNGASS Reports 2008-2012)

Of the 69,000 new HIV infections occurring in Zambia in 2011 among people aged > 15 years, about 27,000 were young people aged 15-24 years, 60% of them girls. In other terms, every hour, about 3 youth got infected with HIV in 2011, 2 of them girls. Although HIV prevalence among young girl (15-24) is twice as high as among boys counterpart, the HIV prevalence among boys has markedly increased, particularly among adolescents boys (1.9% to 3.6% among 15-19). The age differential of HIV prevalence among female remains a matter of concern - with HIV prevalence doubling from 5.7% (15-19) to 11.8% (20-24). (Fig 2)

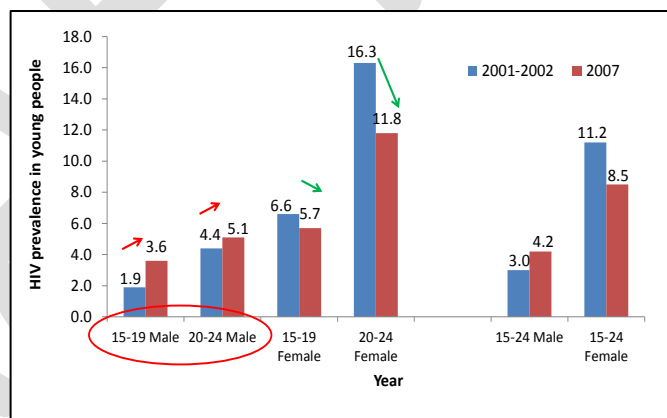


Figure 2: HIV prevalence among youth (15-24) by Sex, Zambia (DSH 2002-2007)

Zambia modes of HIV transmission study² estimates that 9 out of 10 new HIV infections occur when (i) individuals engage in casual heterosexual sex; (ii) their sexual partners engage in multiple casual heterosexual sex; and (iii) individuals are client of sex workers. This pattern applies to young people (15-24), who are even more vulnerability when they have limited comprehensive HIV prevention information, and they are not

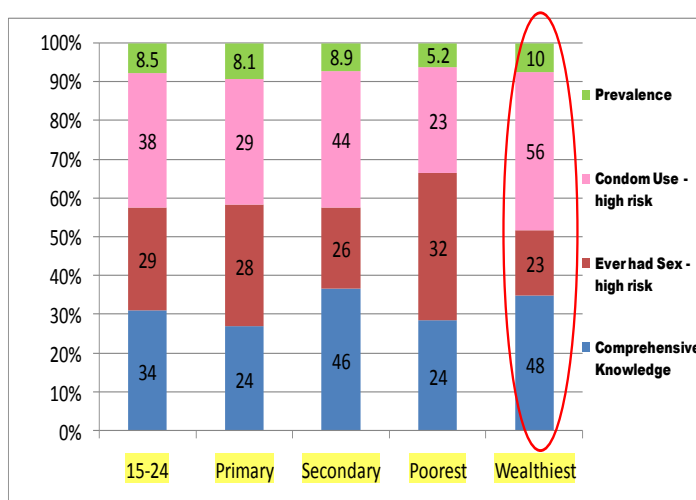


Figure 3: HIV Prevalence among female 15-24 by education and household income level, Zambia DHS 2007

¹ Zambia UNGASS Report 2012, Draft Report April 2

² Zambia HIV prevention response and Modes of trans... Republic of Zambia

equipped with life skills to delay sexual debut, resist peer-pressure, negotiate safer sex, reduce number of sexual partners, demand for an HIV test. (Fig 3)

Key determinants of HIV epidemic and bottlenecks among adolescents and young people. Comprehensive HIV knowledge remains low among youth in Zambia.

Comprehensive knowledge among young people remains low– at around 40%, with a significant drop from the 2005 levels. Young male are likely to demonstrate greater HIV knowledge competency than female. (Fig 4)

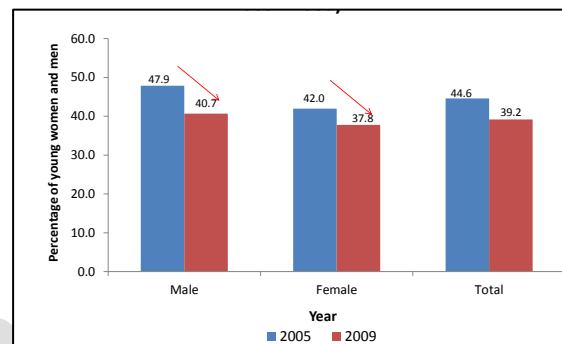


Figure 4: Young People (%) with comprehensive HIV knowledge in Zambia (BSS 2005-2009)

Evidence from a 2009 Zambia survey on HIV knowledge among teachers and Grade-6 adolescent learners (average age: 13.5 years) revealed an alarming low level of knowledge among pupils – only 4 out of 100 students has reached the desired level of HIV knowledge. (Fig 5) In addition, only 4 out of 10 pupils reached the minimal HIV knowledge level. In contrast, their teachers had high knowledge levels with respect to the HIV prevention education curriculum that had been officially specified for primary schools. Adolescent aged 11-15 years reported that radio (22%) and television (17%) were major source of HIV and AIDS information. Teacher and classroom was third source of information (15%).³

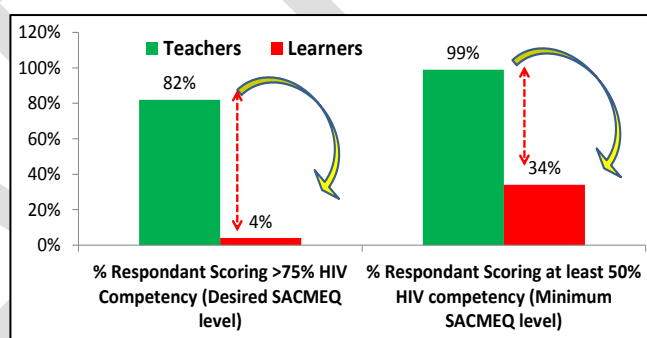


Figure 5: Limited transfer of HIV knowledge and skills from teachers to adolescents aged 12-15 years (ZAMBIA, SACMEQ III, 2009)

While it is a top priority to identify bottlenecks to HIV knowledge transfer from teachers to pupils within the formal school setting, it is becoming increasingly evident that other avenues should be explored to reach young people with HIV information and equip them adequately to adopt protective behaviours, as they enter in the vulnerable period of adolescence.

Adoption of HIV risk reduction behaviour and interventions is inadequate among youth in Zambia

Although young (15-24) females are more vulnerable to HIV, risk of HIV acquisition has increased among young boys in Zambia in the period 2002-2007.⁴ Multiple and concurrent sexual partnership, lack/inconsistent use of condom, low male circumcision, and misconceptions about HIV testing and treatment are among the critical behavioural and structural determinants of HIV epidemic among adolescents and young people in Zambia.⁵ Knowledge of condom among adolescents (15-19 years) as a mean of HIV prevention (~70%) does not translate into consistent condom use (less than 1 in 3 youth used a condom at last sexual intercourse), particularly among boys. Knowledge of individual HIV status among youth (15-24 years) has steadily improved since 2005 for both men and women (from 8.4 to 41.4 per cent in 2009 for women; from 4.9 to 19.7 percent for men). Yet, the HIV testing and

³ Regional SACMEQ III Report (15 countries), 2009

⁴ Zambia DHS 2002 and 2007 Reports

⁵ Zambia Mode of Transmission report 2009, and Zambia HIV&AIDS National Strategic plan (2011-2013)

counselling platform has not been optimized for young people to promote linkages with post-test services for HIV positives and HIV negative adolescents. Furthermore only 33.6 percent of adolescent people 15 – 19 years reported to have tested for HIV in the past 12 months and know their status. (BSS 2009)

Proposed Solutions and Justifications

Effectiveness of SMS for Health promotion and HIV/STI risk reduction

Increasing evidence from recent experiences are supporting effectiveness of using SMS as catalyst for HIV education, and broader health promotion, with significant change on level of knowledge,⁶ and adoption of safer reproductive health and sexual behaviours⁷ including reducing sexual partners, increased uptake of condom use, and uptake of STI/HIV test.⁸ The findings indicate that SMS appear to be a feasible, popular, and effective method to engage particularly young people. These interventions reported that young people were less likely to drop out of the SMS programme, and shared positive feedback about this innovative approach to reach and involve them in continuous education and behavioural change. Mobile phone text messages (SMS) are a promising method of health promotion, but a simple and low cost way to obtain phone numbers is required to reach a wide population.⁹

Adolescents and Youth in a digitalized world

In our century, adolescents and Youth live in a Digitalized World. The number of cell phone registration will soon surpass the human population (>6 billion). With about 2 billion (33%) users aged below 30. Ownership of cell phone by young people has never been so high (70% in India, 83% in Philippines), and will continue to increase independently to income and education levels. Cell-phone has the potential to foster open dialogue on issues of sexuality, reproductive health and HIV prevention. Adolescents and Young people want more information as they explore their sexuality – they want individualized channels that would respect their privacy –.they want to be at the center of the response to their challenges. Indeed, adolescents can make significant contributions to the solution of many of global challenges if their voices are heard on a continuous basis:

Reaching out to adolescents and Youth

Overcoming young people bottlenecks to access correct and comprehensive HIV information requires using new channels (SMS, Social Media platforms - Facebook, Twitter, etc.) in addition to traditional ones (mass media, schools, parents, peers groups). Mobile phones SMS can allow individualized age-specific information aligned with national life-skills and sexuality education framework. SMS would then provide a catch-up mechanism for young people in and out of school, provide evidence informed demand-driven communication for behavioral change (Right-based approach) and real time monitoring of trends in outcomes.

⁶ Megan S C Lim, Jane S Hocking, et al. Impact of text and email messaging on the sexual health of young people: a randomised controlled trial, *J Epidemiol Community Health* 2012;66:69e74. doi:10.1136/jech.2009.100396

⁷ Kelly L. L'Engle, Heather L. Vahdat, Elizabeth Ndakidemi et al. Evaluating feasibility, reach and potential impact of a text message family planning information service in Tanzania, *Contraception* (2012) (in-press)

⁸ Gold et al. Determining the Impact of Text Messaging for Sexual Health Promotion to Young People. *Sexually Transmitted Diseases* ; Volume 38, Number 4, April 2011

⁹ J. Gold1,2*, C. K. Aitken, et al. Mobile advertising to promote safer sex and sun safety, *Health Education Research*, March 29, 2011

Technology for improved health response and outcome in Zambia

The Government of the Republic of Zambia is committed to technology for development. The health sector is one of the most vibrant with various mobile and electronic health initiatives (m-health and e-health)-including the SMART-Care for HIV program, Mwana for early infant diagnosis of HIV, the NAC Call line 990 for HIV information targeting general population, the Childline for gender based violence (116).

Zambia's mobile phone landscape and access among youth and adolescents.

Mobile phone penetration in Zambia was estimated at 32% in 2009, with significant increase of mobile users from 400,000 in 2004 to over ~6 million, 2012. Three 3 mobile phone providers share the market: Airtel (~3 million - 50%); MTN (~2 million - 33%); Zamtel (~ 1 million 17%). The mobile sector is regulated by Zambia Information and Communication Technology Authority (ZICTA). Data from a 2009 survey showed that Youth and young adults (15-29) represented 52% of all mobile phone users in Zambia.¹⁰ Young people will increasingly access mobile as cost goes down further. Yet this platform is not optimized for use in HIV prevention programming for adolescent and young people in Zambia.

U-Report: an example of successful open source SMS Platform for Youth-led response

U-Report is an SMS-based innovative technology platform designed by UNICEF and initially piloted in Uganda from 2011 and has since received and transmitted over 8 million messages from 132,000 U-Reporters. Between 300 and 1000 youth (15-30) access the system daily. In Uganda, it has been used to discuss such issues as HIV/AIDS, malaria, breastfeeding, water standards, etc. It has also been used to connect Members of Parliament (MP) to their constituencies by providing a platform where the community can ask their MP a question and the answer gets published in newspapers. MPs can also send questions to the U-Reporter community.

Potential benefits of the U-Report to Zambia HIV response among adolescents and youth:

U-Report will ensure continuous access to personalized, emergency HIV information for young people through SMS, real-time feedback and referral and linkages to other toll free platforms including the NAC (990 voice) and the toll free Childline (116) for gender based violence. U-Report will be integrated into ongoing government led social mobilization campaign against HIV targeting youth and adolescents (Brothers for Life, Safe Love, etc.), and the SMS will leverage other communication channels (TV, Radio, road shows) for a durable behavioral change. 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 (HTC, Male circumcision, treatment and post-exposure prophylaxis). This technological innovation will potentially accelerate the achievements of Zambia youth related HIV prevention targets¹¹ by 2015, and contribute to an AIDS free generation.

¹⁰ AudienceScapes National survey of Zambia April 2010: survey of adult (15+), n=2000

¹¹ (i) % of Young People 15-24 with Comprehensive Knowledge Target (NASF - 2015) Females: – 70%, Male: – 70%; (ii) % of Young People 15-24 with multiple partners who reported condom use at last sex Target (NASF - 2015) Females: – 70% Male: – 70%, (iii) % of Young People 15-24 who have had an HIV test and received results in the past 12 months Target (NASF - 2015) Females: – 50%, Male: – 50%

Objectives and Expected Results

Objectives

Zambia U-Report objectives are to:

1. Promote youth and adolescent participation in HIV response and getting their opinions on issues that affect their vulnerability and risk to HIV, and their ability to mitigate AIDS impact at individual and community level
2. Contribute to increasing HIV comprehensive knowledge among adolescents and youth through an individualized two-way interactive model that continuously informs advocacy and youth sensitive HIV programming
3. Foster demand creation for HIV high impact prevention services among youth (HTC, Condoms, MC, ART)
4. Track availability and utilization of youth sensitive HIV services.

Expected Results

- **Result-1:** An effective sms-based mechanism to increase young people participation in the national HIV prevention response is available.
- **Result-2:** Young people have increased comprehensive knowledge of high impact HIV prevention measures and services.
- **Result-3:** Young people demand for and are referred to HIV high impact prevention services (HTC, Condoms, MC, ART)

Design and Methods

Design of U-Report

Strategic orientations for U-Report system design

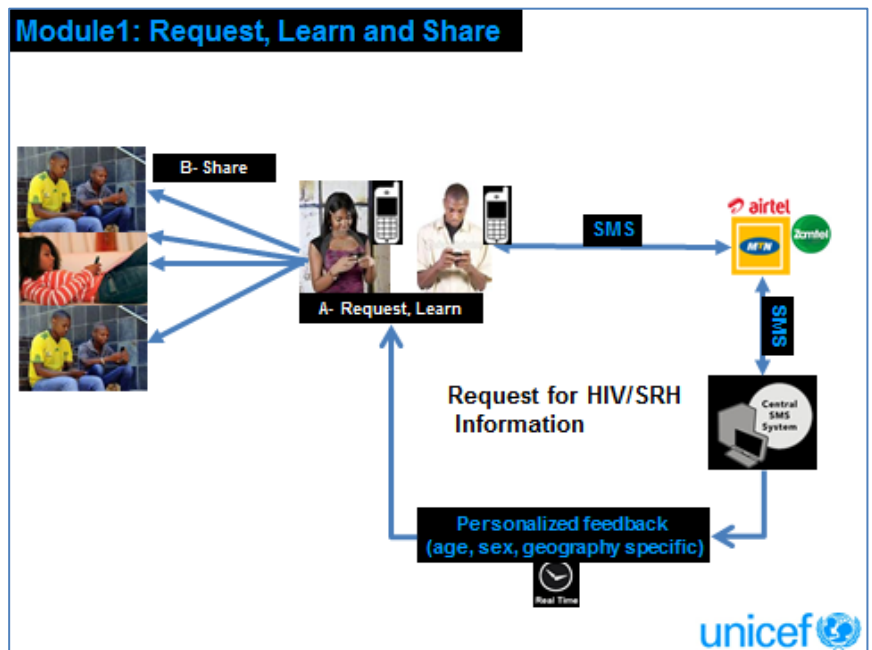
- **Promoting an Enabling Environment**
 - Government coordination and leadership
 - Alignment with National HIV Policy and Strategy
 - Right-based and respect of safety and confidentiality of users
 - Inclusive and gender sensitive (needs of all youth including those living with HIV, disable youth, illiterate youth)
 - Compliant with Zambia ICT regulations
 - Partnerships with local civil society organizations and phone providers
- **Stimulating Demand for knowledge and services**
 - Voluntary Registration of young people
 - Freeing SMS for system users (U-Reporters)
 - Mass media campaign to promote registration
- **Delivering individualized demand-driven information and linkages to HIV services**
 - Polls to assess/monitor knowledge/perceptions/Attitude of U-reporters on HIV prevention and impact mitigation among adolescent and youth
 - Provide tailored feedback in timely manner.

- Linkages with health and other services
- Timely dissemination of trends and priorities to inform policy discussion.

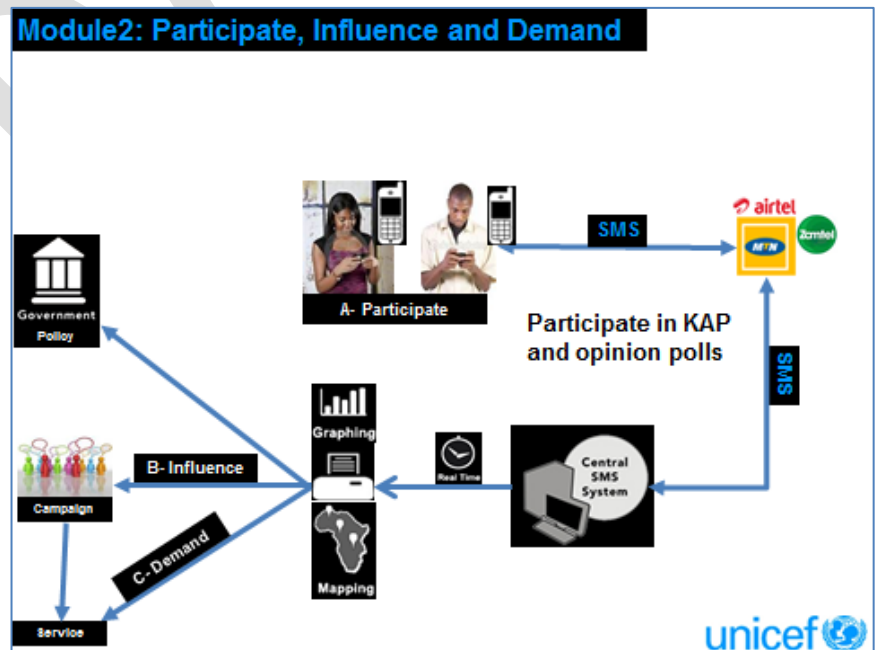
U-Report system Modules

The U-Report system will be customized through two SMS modules respectively:

- Module 1: ALS (Ask, Learn and Share) – this module will provide personalized feedback to a youth SMS request. Most queries will be managed by semi-automated, thematic-based decision trees to address knowledge gap, correct major misconceptions and link with HIV prevention and care services. U-Report SMS operators will manage the SMS flow, screening out emergency/priority request and linking with national experts for very specialized queries. U-Reporters will be prompted to share new information in their network or within the U-Reporters’ community.



- Module 2: PIDA (Participate, Influence Demand and Access) – this module will provide a systematic approach for real-time polling/monitoring youth opinions on issues that affect demand/access and utilization of HIV prevention and care interventions. This information will influence policy/strategies formulation to address bottlenecks for youth-sensitive HIV services demand and access. This information will also allow for evidence informed demand-driven communication for behavioral change interventions (e.g. mass media campaign, youth networks in and out of schools, etc.).



U-report system architecture

This will comprise three fundamental components:

- **End users:** (i) U-reporters who send and receive SMS through their personal mobile phones, (ii) U-report SMS operators who manage the SMS requests, customize feedback, and analyse the trends. Users (15-30 years old) will register freely (opt-in) use the system at no-cost.
- **Server's network:** (i) one centralized server and (ii) variable number of satellite servers. Central server will be hosted in UNICEF during the pilot period, and will be connected directly to the telecom providers. Central server will securely coordinate all the data that flows through the system ensuring confidentiality and safety of data. Satellite servers will be hosted in selected stakeholders' organizations that will participate in processing of SMS requests.
- **Web interface:** This password protected web dashboard will provide information to key stakeholders and decision makers (NAC, line ministries, parliamentarians, civil society organizations), and youth themselves on key polls trends. 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.

METHODS

U-Report programme design will be completed through a participatory, iterative process involving key stakeholders under the leadership of NAC, and including line ministries (education, youth, health, and gender), young people, cooperating partners, civil society organizations, mobile phone companies, software developers, and academia.

Strategic Determinants	Expected Results	Result-1: An <u>effective sms-based mechanism</u> to increase young people participation in the national HIV prevention response is available	Result-2: Young people <u>opinions on issues that affect their vulnerability and risk to HIV</u> are continuously informing effective advocacy and programming	Result-3: Young people exposed to the program have <u>increased HIV comprehensive knowledge</u>	Result-4: Young people exposed to the program <u>demand for and are referred to HIV high impact prevention services</u> (HTC, Condoms, MC, ART)
Enabling Environment	++				
Demand Creation		++	++	++	++
Supply (Knowledge and linkages to services)			++	++	++

U-Report will be an integral part of a comprehensive HIV communication and behavioural change national agenda, and will leverage other mass communication opportunities to enrol new U-reporters, conduct polling, and sharing the views of U-reporters. Following a pilot phase, U-Report will undergo a midterm evaluation (end 2013) and further expansion (2014-2016).

The system will establish linkages with other existing toll free platforms including the NAC (emergency call line 990), the toll free Childline (116) for gender based violence. A toll-free short code for the U-Report initiative will be requested to Zambia Information Technology Authority (ZICTA).

Government through NAC will provide overall leadership and guidance in the U-Report programme design, coordination and monitoring, ensuring that U-Report is compliant with Zambia's ICT and HIV policies and programmatic guidelines. UNICEF will provide technical assistance in the IT system and content design, development of social mobilization and promotional activities. Non-government organizations (NGO) and Civil society organizations (CSO) will play a key role managing incoming and outgoing SMS's (U-Reporter Operator) through outsourcing, and will also participate in social mobilization activities in the programme to enrol U-reporters and support evidence-informed behavioural change campaigns. The network of Climate Change ambassadors (Child ambassadors) will be enrolled as U-Reporters promoters and will support enlisting U-reporters in their communities.

Monitoring and Evaluation framework

During the design workshop of the programme, a result based monitoring and evaluation framework will be developed, supported by a U-Report programme logframe.

Timeline and estimated budget

Timeline:

- October 2012- December 2016

Estimated budget (detailed budget under development)

- Design and launch Phase (Oct 2012-December 2012): 300,000 USD
- Post launch and evaluation of pilot phase (Jan 2013-March 2014): 500,000 USD
- Consolidation and Expansion (April 2014 – December 2016): 2,000,000 USD

Priority actions (October 2012-December 2012)

1. IT platform and agreement with mobile operators for toll free SMS system (Date: Sept 16th – Sept 30th)
2. Hiring consultants (1 for IT platform and 1 for content development and management)
3. Planning and organization of the design workshop (Date: October 15th – 19th 2012)
4. Partnership agreement with local organization for programme implementation and capacity building (Date: October 1st – October 31st)
5. Zambia U-Report Launch (December 1st on World AIDS Day)