A signature program of the PopTech Accelerator, **Project Masiluleke** is a breakthrough cross-sector collaboration that employs mobile technology and introduces an HIV self-test as high-impact, low-cost tools in the fight against HIV/AIDS and TB in South Africa. A facilitator of cross-sector, multi-disciplinary collaboration, the PopTech Accelerator pioneers vanguard solutions to pressing global challenges.

Project Masiluleke exemplifies this approach by bringing together best-in-class organizations and leaders from the fields of public health, mobile technology, design innovation, arts/entertainment and philanthropy. These partners have introduced and are advancing an entirely new approach to the management of HIV/AIDS in South Africa and other regions of the world facing high rates of HIV infection.

**The Challenge**

Project Masiluleke (which means “give wise counsel” and “lend a helping hand” in Zulu) was born out of the desire to address the challenges that result in avoidance of HIV testing, delayed initiation of life-saving treatment and high rates of treatment default, all of which contribute needlessly to high mortality rates from HIV/AIDS. Harnessing the ubiquity of mobile devices in many parts of the developing world, this project has the potential to catalyze transformative social change.

South Africa has more HIV positive citizens than any country in the world. In some provinces more than 40% of the population is infected. Ineffectual public communications campaigns and the social stigma associated with HIV/AIDS keep many from pursuing testing or treatment. Despite widespread availability of HIV testing at all government clinics and free anti-retroviral (ARV) treatment, less than 25% have tested and know their status. Only about 10% of those with AIDS who qualify for ARVs are currently receiving these lifesaving drugs.

The majority of HIV-infected patients in South Africa seek care only after they become symptomatic with end-stage AIDS, at a time when they require the greatest resources and have the least likelihood of survival. Of those who start ARV therapy in Africa, only 60% remain on these lifesaving drugs after two years. Cost-effective interventions that promote adherence are desperately needed.
The Mobile Opportunity

Unlike other mobile health initiatives, which primarily provide tools to healthcare workers, Project Masiluleke proposes solutions that interact directly with the end-users – those impacted by HIV/AIDS. In this context, mobile phones hold tremendous untapped promise as a tool for public engagement around HIV. Because nearly 100% of South Africa’s population (including the young and the poor) has access to these devices, mobile phones can be cost-effectively used to:

- close the healthcare “information gap” by delivering geographically and culturally appropriate messages that encourage people to learn their HIV status earlier;
- connect people to existing “on-the-ground” HIV and TB clinical services for testing and treatment; and
- increase people’s adherence to anti-retroviral regimens once in treatment.

Project Masiluleke capitalizes on these opportunities and represents the largest-ever use of mobile devices for the delivery of public health information. The project is presently reaching upwards of 1 million South Africans every day, helping connect them to care – with a special emphasis on those who have been historically difficult to reach (men, youth, and those living in rural areas with limited access to healthcare information and services).

Taking Action

Project Masiluleke brings together a world-class coalition of organizations and domain experts to test and scale up a powerful and integrated approach to fighting HIV/AIDS and TB. The project initiatives aim to raise widespread public awareness about how to access help; move people to take action resulting in their getting tested for HIV and TB; get those who test positive into treatment; and help them adhere to effective individualized treatment plans that will extend their lives and reduce the human, community, and economic losses associated with what would otherwise be certain and untimely death.

The three main project components that support those outcomes are:

1. “Please Call Me” x 1 Million x 365 days: Public Awareness and the Call to Action

The first stage of the project is built around the use of specialized text messages, delivering approximately 1,000,000 HIV/AIDS messages each day, reaching virtually 100% of the adult and adolescent population of South Africa. These messages are inserted in the unused space of “Please Call Me” (PCM) text messages – a special, free form of SMS text widely used in South Africa and across the continent. They connect mobile phone users to a network of government-funded HIV call centers where they can obtain accurate healthcare information and referral to regional healthcare centers capable of providing voluntary HIV testing and counseling, TB screening, and treatment with antiretroviral therapies and anti-TB medication. Messages are culturally relevant and written in local languages.

Project Masiluleke’s PCM campaign has tripled average daily call volume to the National AIDS Helpline in Johannesburg. Looking forward, assuming only 2% of PCM recipients respond in the coming year – and only half of those initiate an HIV/AIDS test – Project Masiluleke has the potential to mobilize several hundred thousand South Africans to get tested.
2. HIV Self-Testing with Mobile Support: Exponentially Expanding Testing Services

Ultimately, with more HIV+ citizens than any other country in the world, South Africa demands a radical solution to truly reverse its HIV/AIDS and TB crises. The next phase of Project Masiluleke will actively explore a breakthrough distributed diagnostics model: low cost HIV self-testing with mobile counseling support. Analogous to a pregnancy test, these distributed diagnostics would provide a free, private, and reliable way for anyone to take the critical first step of knowing his or her status, with high-quality information provided by knowledgeable counselors via mobile device.

Historically, access to HIV self-testing has raised concern around the lack of support from an in-person counselor and the potential for testing error. However, these concerns must be weighed against the ability to achieve wide-scale testing and earlier entry into care, through an option that empowers patients, alleviates stigma and off-loads clinic-based testing services, where limited staffing and space preclude sensitive and private counseling. Early response from the KwaZulu-Natal Department of Health, the South African HIV Clinicians Society, and other leaders in healthcare has been strongly enthusiastic. Most important, feedback from the community confirms individuals are eager to have access to an HIV self-test, with both patients and healthcare workers preferring counseling via cell phone.
3. TxtAlert: Keeping Patients Connected to Care

Project Masiluleke will implement a mobile technology called TxtAlert to keep patients who are on anti-retrovirals in care by providing automated SMS reminders of their scheduled clinic visits. Regular clinic appointments help to assure that patients adhere to their medication regimens, thus avoiding treatment lapses that contribute to drug-resistance and disease progression. TheTxtAlert system has been successfully piloted at Right to Care’s Themba Lethu Clinic in Johannesburg. As part of Project Masiluleke, TxtAlert is expanding to provide both ARV and TB treatment reminders for patients enrolled at the ARV program of Edendale Hospital, in KwaZulu-Natal, South Africa, where over 11,000 patients have started treatment.

Ultimately, Project Masiluleke is based on a highly integrated, efficient and cost-effective service delivery model. All of the technologies being developed and used in Project Masiluleke, including the Please Call Me systems and TxtAlert, are “open-source,” meaning that they can be used without license anywhere in the world. When gauged on a cost-per-action basis, PCMs represent a low-cost public health awareness tool capable of reaching millions of individuals. This model is scalable and replicable to other regions of the globe and capable of being deployed to address a number of public health concerns.

Early Results

The Please Call Me campaign was initiated on October 1, 2008, and has been sending about 1 million PCM messages per day ever since. The campaign has produced the following outcomes:

- 350 million PCMs have been sent throughout South Africa
- Calls to the AIDS Helpline have increased by 300%
- Over 1.2 million calls to the Helpline have been attributed to the PCM campaign
- Local-language (Zulu) messages outperformed English, guiding future deployment
- For each PCM message, an accompanying script and frequently asked questions (FAQ) have been provided to Helpline operators to ensure consistent answers to caller questions.

What Will It Take?

As a major undertaking with transformative potential, Project Masiluleke requires the efforts and dedication of a wide range of individuals and institutions. Project partners are continuing to apply their expertise and resources to fine-tune implementation plans, gain key endorsements and approvals, and secure donated or at-cost services and supplies. In addition, the project will require philanthropic investments to move beyond a demonstration project to a sustainable collaborative endeavor capable of producing groundbreaking new approaches to major public health challenges. In 2010, we are seeking the support of foundations, corporations and philanthropists to achieve this goal.

To Learn More

For more information, you may visit the Project Masiluleke microsite on the PopTech website at www.poptech.org/project_m.

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World-Class Advisors

Guiding the development of Project Masiluleke are several of the most respected and decorated HIV/AIDS, TB and mobile health experts in the US and South Africa.

- David Bangsberg, MD (Professor of Medicine, Harvard Medical School, US)
- Rochelle Walensky, MD MPH (Asst Professor of Medicine, Harvard Medical School, US)
- Neal Lesh, PhD (Dimagi and D-Tree International, US)
- Patricia Mechael, MD (Earth Institute, Columbia University, US)
- Dr. Francois Venter (President, South African HIV Clinician's Society, SA)
- Dr. Douglas Wilson (Editor, South African HIV/AIDS Handbook, SA)
- Winstone Zulu (TB/HIV Advisor & PLWHA, World Health Organization, Geneva & SA)

An Unparalleled Partner Set

Project Masiluleke is being incubated by the PopTech Accelerator, which brings together international cross-sector teams of companies, foundations, NGOs, funders, artists, and thought leaders to collaborate on outcomes none could achieve independently. The Project Masiluleke team includes South African-based foundations, NGOs, and corporations, corporate partners with tremendous global reach in the mobile technology space, industrial designers, and media and public relations partners. The in-kind value of intellectual property, technology services, and professional time donated by these partners runs well into the millions of dollars. They include:

**PopTech** – PopTech is a renowned ideas summit and social innovation network dedicated to accelerating the positive impact of world-changing people and ideas. The organization is known for its visionary PopTech conferences, engaging media productions, and the innovative social change programs that it fosters worldwide. The PopTech Accelerator facilitates interdisciplinary, world-changing projects – such as Project Masiluleke – that use new tools and embody new approaches to significant global challenges.

**iTEACH** – Directed by Krista Dong, MD and Zinhle Thabethe, iTEACH is a leading HIV/TB service and research organization headquartered in the heart of the co-epidemics in KwaZulu-Natal, South Africa. Working in close partnership with the Department of Health and leaders in the community, iTEACH models interventions to improve HIV and TB care and treatment in the public health sector. iTEACH provides clinical and cultural expertise for Project Masiluleke; it is responsible for content of the SMS messages as well as field testing and piloting of the HIV self-test and counseling service.

**The Praekelt Foundation** – Praekelt is a South African-based non-profit committed to building innovative mobile technology solutions that improve the health and well-being of people living in poverty. The Foundation is an incubator for new mobile-based solutions and developed the technology to insert the healthcare messages into existing PCMs, as well as the TxtAlert concept – two critical components of Project Masiluleke.
frog design – frog design is a leading global innovation firm with extensive experience developing breakthrough mobile applications and services on a global scale. Committed to social development, frog is contributing service design expertise to ensure that all aspects of the user experience – particularly the HIV self-test service – are carefully crafted for maximum usability, value and relevance to the end user.

MTN – One of the largest and fastest-growing telecommunications companies in the developing world, MTN is generously donating up to 1 million “Please Call Me” messages per day for one year, representing 5% of their daily PCM allocation. MTN South Africa is part of the MTN Group, a multinational telecommunications group operating in 21 countries in Africa, Asia and the Middle East. The MTN Group claims more than 74 million subscribers across its operations in Afghanistan, Benin, Botswana, Cameroon, Cote d’Ivoire, Cyprus, Ghana, Guinea Bissau, Guinea Republic, Iran, Liberia, Nigeria, Republic of Congo (Congo Brazzaville), Rwanda, South Africa, Sudan, Swaziland, Syria, Uganda, Yemen and Zambia.

Nokia Siemens Networks – A leading global enabler of communications services, Nokia Siemens Networks provides a complete, well-balanced product portfolio of mobile and fixed network infrastructure solutions. With operations in over 150 countries, the company will play a key role in helping to propagate the Project Masiluleke model and learnings worldwide.

Ghetto Ruff – A leader in the South African music scene and among the most relevant cultural brands in the country, Ghetto Ruff and its artists have a long history of channeling their celebrity and voices to advance social change. Three of the label’s top young acts – Jozi (Bongani Fassie, Leslie, Ishmael), Gumshev (Bruno and Fistos) and solo artist Malik – have committed to help make Project Masiluleke a success.

National Geographic Society – One of the world’s largest non-profit scientific and educational organizations, the National Geographic Society is a generous supporter of the PopTech Accelerator and Project Masiluleke. In addition to providing grant support, the National Geographic Society will be documenting the work of the project.

LifeLine Southern Africa – LifeLine collaborates with the South African National Department of Health to administer the country’s National AIDS Helpline – a critical resource for those seeking more information about HIV/AIDS testing and care. The National AIDS Helpline is the pilot site for Project Masiluleke, receiving inbound calls generated by PCMs.

Children of South African Legacies – Understanding all too well the toll HIV/AIDS is having on South Africa and its prospects for the future, prominent members of the Mandela and Sisulu families have signed on to support Project Masiluleke. Thembinkosi Mandela, grandson of Nelson Mandela, and Mzolisa Sisulu, grandson of renowned African National Congress leader Walter Sisulu, are among those who have endorsed Project Masiluleke and pledged to help drive adoption of the program.