Dear friends,

Sometimes, very rarely, you meet people who impact the course of your life. For me, Joep Lange and Grace were such people. Joep, father of five, was a brilliant scientist, pragmatist and activist who founded our organization 15 years ago to bring life-saving AIDS treatment to those who needed it most. About ten years later, I crossed paths with Grace, a 27-year-old widow and mother of five, living with HIV in the slums of Nairobi and struggling to make ends meet. In many ways, Joep and Grace couldn’t be further removed from each other. Yet for me, their destinies have become forever intertwined.

Although there is still a long way to go, the pace of change in sub-Saharan Africa is indeed awe-inspiring. The mobile revolution is changing the social and economic fabric of the continent. And it’s not stopping there – we believe digital technology is on the verge of disrupting healthcare in Africa in a way that nobody can fully imagine yet.

People living in urban slums or remote rural areas may be cut off from public services, but nine times out of ten, you can bet they have a sim card and access to a mobile phone. In 2016, we embarked on the national roll-out of M-Tiba in Kenya. Its mobile health wallet allows people to send, save and receive digital money and entitlements that can only be used for health – directly on their phone. M-Tiba reaches and empowers people who until now have been invisible to the system.

At PharmAccess, we work from the premise that African health markets are in a vicious cycle of low and unpredictable demand, low and unclear quality of supply, and totally inadequate financing. This vicious cycle has huge repercussions for the lives of people like Grace. In cooperation with leading local and international partners, we leverage donor support to reduce and redistribute risks, increase trust throughout the health system and pave the way for investments. The rise of digital technology is set to catalyze this process with unparalleled impact and scope.

As most people know, Joep’s life was tragically cut short in 2014. And although Grace finally gained access to medical care through M-Tiba, she passed away this winter. Change came too late for her. We must accelerate our efforts and turn the vicious cycle into a virtuous one, so that Grace’s children can fulfill their potential as full-fledged members of the next global generation. Everything we need to turn this dream into reality is within reach – it is a matter of putting it into practice and forcing political will. Together, we can make that happen.

Onno Schellekens
CEO PharmAccess Group

‘To those who regularly visit sub-Saharan Africa, the pace of change is indeed astonishing, and there are many reasons to be optimistic about the region. We should, however, also realize that very little has changed for the poor in rural settings, and that the lives of those who left for urban slums are extremely difficult. To include the latter two groups in the ‘great escape’ from poverty is the big challenge ahead.’

Joep Lange (1954 - 2014)
2016 at a glance

**ENABLING HEALTH INVESTMENTS**
Access to capital, combined with our technical assistance, is empowering healthcare providers to grow their business and improve the quality of healthcare services for their patients.

In September 2016, DPC, Calvert Foundation and private investors announced the closing of a USD 17.45 million agreement to expand the Medical Credit Fund.

**DEMAND-SIDE FINANCING**
Increased financial protection for patients is improving access to healthcare through products such as health insurance and mHealth wallets.

Since 2007, 880,520 people have been enrolled in various PharmAccess-supported health insurance schemes.

In Tanzania, more than 170,000 people were covered under ICHIP health insurance.

In Ghana we worked with the GIC / World Bank Group under the AHMME program, using a digital proxy means testing tool to screen 110,000 households to identify poor households eligible for a premium waiver in the NHIS.

In Nigeria, the Kwara State Health Insurance program won the 2016 FT/IFC Transformational Business Award.

**CAPACITY BUILDING**
Human resources are key to building effective health systems.

In 2016, 16,472 staff members were hired in MCF clinics.

By the end of 2016,

- 1044 loans for healthcare providers were distributed through one of our partner banks
- USD 21,485,493 in disburse loan amounts
- 97% historical repayment performance

**DIGITAL TECHNOLOGY AS AN ACCELERATOR**

**m-tiba** is a digital platform for inclusive healthcare that directly connects patients, providers, and payers.

**IMPROVED SERVICES**
Access to life-saving treatments and better care increases clients’ trust in and utilization of healthcare.

**RESEARCH AND IMPACT EVALUATION**
Scientific and operational research by international and local researchers is an integral part of our work. Advocating for policy change starts with proof of principle.

Research output up to 2016 includes:

- 71 peer-reviewed scientific publications*  
- 55 grey literature and reports  
- 11 PhD theses  
- 10 MSc theses  
- 34 case studies, and research and policy briefs  
  * 90% of these have an African outlier

**SETTING AND RAISING STANDARDS**
The SafeCare standards for resource-limited settings enable benchmarking and form the basis for quality improvement plans.

SafeCare was a 2016 finalist in the OECD DAC Prize for Taking Development Innovation to Scale.

In early 2017, the SafeCare standards were re-accredited by ISQua.

2.2 million patient visits every month

Clinics using the SafeCare standards

<table>
<thead>
<tr>
<th>Year</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>305</td>
<td>66,526</td>
<td>124,630</td>
<td>328,975</td>
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</tr>
</tbody>
</table>

**RESULTS AT CLINICAL LEVEL**

- 61% of clinics perform more lab tests
- 50% of clinics perform more HIV tests. Every month, 169,945 people are tested for HIV
- 54% of clinics perform more malaria tests. Every month, 533,174 people are tested for malaria
- 38% of clinics have more family planning sessions. Every month, 86,822 people attend family planning
- 184,710 immunizations per month

**2,203,289 patients have access to improved care**
Digital technology as an accelerator

History has taught us that building trust and a system of solidarity is a long-term endeavor. But what if there’s a way to speed this up and drive exponential change in healthcare?

The world is on the brink of what has been dubbed the fourth industrial revolution. This fusion of technologies is creating new ways of serving existing needs and disrupting virtually every industry. Many of us benefit from perks like ordering food online or hailing a cab with two taps on a mobile. However, we need to ensure that this revolution does more than just make just some peoples’ lives more convenient.

Fortunately, digital technology is actually pre-eminently suited to exposing as well as mitigating social and economic inequities. The mobile phone is one of the biggest social equalizers on the African continent. More than 90% of people use a simple mobile phone. Africa is also home to M-Pesa, the world’s leading mobile money service. This offers huge opportunities to build new healthcare solidarity mechanisms and to tackle Africa’s poor health statistics.

By providing transparency, accountability and direct access to end-users, digital technology opens up avenues to close the gap between the top and bottom rungs of the prosperity ladder. We can bring healthcare within reach of people who, until now, were structurally excluded from the system. And - it can be done more efficiently, with strongly reduced transaction costs, at an unprecedented scale and pace.

Matching demand and supply

When Professor Dr. Joep Lange founded PharmAccess in 2001, he was determined to turn his pioneering scientific research on triple-combination drug therapy into action. His drive brought this life-saving AIDS treatment to those who needed it most. Joep’s vision of increasing access to affordable and better healthcare for people in sub-Saharan Africa is still at the heart of what we do.

Building on this work on the front lines of HIV/AIDS, our focus has broadened to making healthcare finance and delivery more effective and more inclusive. We work towards this goal by stimulating both the demand and the supply side of the healthcare market to reduce risk and attract investments. Our integrated approach mobilizes public and private resources for the benefit of doctors and patients through a combination of loans for healthcare providers, clinical standards for quality improvement, health insurance and impact research. More and more, we are using digital technology to accelerate this approach.

Transitional year

In many ways, 2016 marked a transition for our organization. Although we’ve been developing and testing mobile phone-based health solutions since 2013, the past year is when it all started to come together. Not only did we launch the M-TIBA mobile health wallet in Kenya, but our mHealth labs in Tanzania, Ghana and Nigeria have also started to take shape. It was also the year in which we further developed our digital agenda. From 2017 onwards, this digital agenda will be the cornerstone to our approach.

‘If there’s one object that both the rich and the poor have in equal quantities, it is the cell phone.’

Dr. Khama Roqo, Head of Health in Africa Initiative, World Bank Group
Connecting patients, providers and payers

M-TIBA was developed by PharmAccess, Africa’s top mobile operator Safaricom and health payment platform CarePay.

Kenya has a head start on the rest of Africa in terms of mobile penetration. It also boasts the world’s leading mobile money transfer system, M-Pesa. This fertile ground, combined with the challenge to ‘make M-Pesa work for healthcare too’ made the country a logical place to develop our first mHealth activities. The groundwork we have been doing since 2013 led to the national roll out of M-TIBA last summer. By the end of January 2017, more than 235,000 Kenyans had already signed up, and momentum continues to build with over 2,000 new subscribers every day.

M-TIBA is a digital platform for inclusive healthcare that directly connects patients, providers, and payers such as family members, health insurers or donor agencies. It empowers consumers, improves their financial protection, supports better quality of care and generates local and international financing for health. M-TIBA enables people to save, send, receive and pay money for medical treatment through a mobile health wallet on their phone. It’s a closed loop with conditional funds that can only be spent on healthcare at selected providers.

The transparency M-TIBA provides will help build a new kind of healthcare solidarity, it allows us to take our approach of stimulating demand and supply with the aim of attracting healthcare investments, to a new level:

• Boosting demand. Although M-TIBA is available for every Kenyan with an M-Pesa account, it initially targets people living in urban slums and rural areas. The aim is to connect the poor to savings schemes, benefits and health insurance at very low admin costs. It can help to crowd in funding from solidarity payers like family members, employers, donors or governments, who receive proof that their money is used for healthcare only.

• Stimulating supply. Healthcare providers also benefit from being connected to the M-TIBA platform. For one, they gain access to more people that are able to pay for healthcare. M-TIBA also generates a wealth of data on medical treatments and financial transactions. These insights can help providers to improve on both the clinical and business side of operations. Digital payments minimize leakages and enhance efficiency. In addition, we strengthen cost-effectiveness of service delivery through mechanisms like joint procurement systems, access to finance for quality improvement or capacity building through e-learning.

• Generating more funds for health. M-TIBA is increasing transparency and reducing risk and transaction costs, making it more attractive to invest in health. The real-time transaction information also makes it much easier and less costly to provide loans for clinics that were previously unable to get a regular bank loan.

Over the coming years, we will explore possibilities to expand the M-TIBA platform to other countries. Although we’ve only just begun, we believe M-TIBA will prove a strong enabler for financial solidarity and better quality of care, as well as a crucial accelerator of inclusive healthcare markets.

‘I am not very educated but I can do the entire process by myself. First I start with *253#. It reads the words ‘Welcome to M-TIBA.’’

Emily Anyango, mother of three
Medical Credit Fund raises USD 28.2m in debt funding and grants. Debt providers include OPIC, Bill & Melinda Gates Foundation, Calvert Foundation, Deutsche Bank Americas Foundation and Soros Economic Development Fund. Grant contributions were made by a variety of public and private partners, including the Dutch Ministry of Foreign Affairs/FMO and IFC/G20.

First HIV/AIDS workplace programs with Heineken in six African countries.

Dutch Postcode Lottery awards PharmAccess with an annual donation of 500,000 euros for 5 years.

Launch of the Health Insurance Fund

PharmAccess starts the Pan-African Studies to Evaluate HIV Drug Resistance (PASER), the largest coordinated network monitoring HIV drug resistance in Africa.

Commission from the Clinton Foundation to co-write the guidelines for the national HIV/AIDS treatment program in South Africa.

Launch of SafeCare, the first accredited quality system for healthcare providers in resource-restricted settings.

Start of mHealth Research Labs

Embedding SafeCare methodology at a national level. Contract with Kenya’s National Hospital Insurance Fund (NHIF) and the World Bank Group’s Health in Africa Initiative to introduce the SafeCare standards in the NHIF insurance program.

Medical Credit Fund surpasses the USD 10m mark in disbursed loans.

Dutch Ministry of Foreign Affairs announces continued support for the Health Insurance Fund across the 2016-2022 horizon.

President Bill Clinton endorses Joep Lange Institute in video message.


First Kwara conference on State-Supported Health Insurance: Research & Results Day.

IFHA-2, second closing raises USD 137m for investments in Africa’s private healthcare sector.

Launch of M-TIBA mobile health wallet with Safaricom and CarePay.

Launch of Joep Lange Institute, first lectures by World Bank President Dr. Jim Yong Kim and behavioral economist Prof. Dan Ariely.

Winner, with Amref Flying Doctors, of Dutch Postcode Lottery’s EUR 10m Dream Fund to improve access to quality healthcare in Kenya through the mobile phone.

FT/IFC Transformational Business Award for Kwara Health Insurance Program.

Medical Credit Fund raises additional USD 17m for healthcare impact investment in Africa.

1000th loan disbursed by Medical Credit Fund.

Launch of IFHA-II, second closing raises USD 137m for investments in Africa’s private healthcare sector.

Tanzanian Ministry of Health releases SafeCare guidelines nationwide.

Medical Credit Fund wins the G20 SME Finance Challenge Award

Medical Credit Fund wins the G20 SME Finance Challenge Award

Launch of Medical Credit Fund, the first loans fund for health SMEs

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Launch of SafeCare, the first accredited quality system for healthcare providers in resource-restricted settings.
New paradigm for health in Africa

Setting in motion an upward spiral of trust, capital, quality and availability of health services.

PharmAccess was one of the first non-profit organizations to act on the large untapped potential of the private sector and recognize the need for capital investments in healthcare delivery. We advocated a new paradigm for health in a prizewinning IFC/Financial Times essay in 2007, at a time when this idea was still met with widespread resistance.

Since then, the complementary role of the private sector in delivering an essential social service like healthcare has become increasingly accepted. At the same time, a functioning, inclusive health market requires the state to fulfill an important enabling and equalizing role. Our interventions therefore stimulate and support public sector efforts.

The Dutch Ministry of Foreign Affairs is a committed and long-term funder of our approach through the Health Insurance Fund. This flexible and long-term funding was essential for testing different innovative financing mechanisms (including health insurance and later M-TIBA), building a strong network of partners and contributing to our mission to achieve a paradigm shift in healthcare in Africa. The support of the Dutch government remains crucial to our work.

Vicious cycle

Health markets are in a vicious cycle of low quality supply and demand. As a (semi-) public good, healthcare requires large government intervention. However, many African countries suffer from limited state capabilities and poor institutions. As a result, many people turn to the private sector and, since insurance is virtually non-existent, pay for healthcare out-of-pocket.

Despite its important role, the private sector is often weakly regulated and highly fragmented. Due to the high investment risk it has limited or no access to the capital required for quality improvement and expansion of its services. And low quality in the clinics means low trust among patients.

The high proportion of out-of-pocket spending and the lack of trust in healthcare provision leads to low and unpredictable income for healthcare providers. This limits their options for investing in the quality, scope and scale of their services even further.

Healthcare markets, especially at the base of the pyramid, are stuck in this vicious cycle of low and unpredictable demand, low and uncertain quality of supply and totally inadequate investments, both public and private. The absence of health insurance leads to catastrophic health expenses, sending millions into deeper poverty every year.

Digital disruption

The above analysis remains relevant today. In fact, the free flow of information through the mobile revolution is making healthcare inequities more visible. Such knowledge comes with responsibility. Now that these inequities are in plain sight, we must also capitalize on the full potential of digital technology to address them. By applying it to our integrated approach of demand-side, supply-side and investment-related interventions, digital technology can play a disruptive role in helping to turn the vicious cycle into a virtuous one, accelerating the quest for inclusive healthcare.
Developing organized demand for healthcare

If people don’t trust that there will be a doctor when they need one or that there will be enough drugs on stock at their local clinic, why would they pre-pay for health? It’s like buying a mobile phone subscription in an area with no network.

Health insurance covers only 5.5% of total healthcare expenditure in Africa. This means that the vast majority of people pay out-of-pocket, from unexpected medical bills to long-term costs for chronic diseases. Most governments have yet to work out an inclusive approach to increase access to care for their citizens. In most cases, public health insurance only covers people working in the formal sector even though those in the informal sector, such as farmers or small market traders, are most in need of coverage.

Integrated approach
PharmAccess has been developing pre-payment mechanisms and risk-pooling structures for low-income families in Africa since 2007. Over the years we have learned that developing such organized demand for healthcare requires investments on the supply side as well as the demand side. Predictable income, for example from health insurance, helps healthcare providers to run their business effectively. At the same time, reducing out-of-pocket expenditure through insurance or other forms of pre-payment offers financial protection and peace of mind to people in case they fall ill. The combination of loans, measurable standards (SafeCare) and our quality improvement program aims to set in motion an upward spiral of trust, capital, quality and availability of health services.

Partnerships
We work with African companies and governments to design and implement health insurance schemes for lower income groups. In Nigeria and Tanzania, the original community-based structures have evolved into schemes that are supported by regional or national governments through subsidized premiums and increased investments in healthcare infrastructure.

In Nigeria, the Kwara Community Health Insurance scheme has helped build a stronger, cost-efficient healthcare system. Impact evaluations show significant improvements in healthcare utilization, health outcomes and financial protection in target communities. It is internationally lauded as an example of how the private health sector can complement public health service delivery. In 2014, the Kwara State Health Insurance program won the Saving Lives at Birth Award and was a finalist in the OECD DAC Prize for Taking Development Innovation to Scale. In June 2016, it won the prestigious FT/IFC Transformational Business Award for Achievement in Sustainable Development: Maternal and Infant Health. The Kwara program is now transitioning into a statewide insurance, with the technical support of the World Bank Group/IFC’s Health in Africa Initiative.

Our extensive experience in this area prompted the Lagos State and Ogun State Ministries of Health to ask for technical assistance in the development of a (mandatory) health insurance program for the citizens of their states. In 2016, PharmAccess provided support to Lagos State in the form of an actuarial study and operational guidelines. The actuarial study - especially challenging in such a data-limited setting - focused on determining accurate pricing of premiums and reimbursements in order to ensure financial sustainability of the scheme. We worked with Nigerian-based business and management consulting firm Phillips Consulting to formulate operational guidelines based on the Nigerian Health Bill.

The ‘Improved CHF’ (iCHF), launched in partnership with the NHIF and district councils in Northern Tanzania, is a voluntary, public-private health insurance scheme. The premium is 100% locally funded. iCHF aims to increase access to quality healthcare for people in the informal sector, mostly rural and low-income groups. Both public and private facilities receive support to improve quality through training, equipment provision and infrastructure upgrading. By December 2016, more than 170,000 people had access to care through iCHF. Significantly, the government of Tanzania sees iCHF as a building block for creating a mandatory insurance scheme for the entire country, an important step towards universal health coverage.

‘Sometimes you go to the doctor and you get better. Sometimes you don’t go to the doctor and you get better. With insurance, you know that you’re going to give up money but you’re not sure you’re going to get anything out of it. A sure loss with a potential gain. Ideally what will happen is that if you go to a doctor, you wouldn’t feel any risk.’

Dan Ariely, professor of psychology and behavioral economics at Duke University

‘The health wallet forces you to put money aside for one of your most predictable needs: ill health.’

Dr. Khama Rogo, Head of Health in Africa Initiative, World Bank Group
In Ghana, we worked with the IFC / World Bank Group under the AHME program to identify poor households who are eligible for a premium waiver in the National Health Insurance Scheme (NHIS). Using a digital proxy means testing tool, almost 110,000 households were screened, just over 25,000 of which qualified for the waiver. An online real-time dashboard tracked the enumeration process.

**New solidarity mechanisms**

In Kenya, the emphasis was on preparing and launching the M-TIBA platform for healthcare transactions and data collection. Innovations like M-TIBA can build on existing social solidarity mechanisms to offer new forms of pre-payment and risk pooling. Patients connect to M-TIBA through a mobile health wallet on their phone that increases access to better healthcare and financial protection. For healthcare providers, M-TIBA helps to lower transaction costs, increases transparency, shortens cash cycles, and improves quality of care and business performance by increased access to loans and a quality improvement program.

One of the first mobile health financing products is the M-TIBA Bonus Scheme, a health savings product. We are currently working with world-renowned behavioral economist and first Joep Lange Chair Professor Dan Ariely to analyze decision-making behavior and determine the best incentives to get people to save for health.

**One iCHF enrollee’s story**

Agnes Tito is from a farming family and lives in a neighboring district. When she enrolled in iCHF she chose Charlotte Health Centre, a faith-based facility in Siha district even though she lives about 20 km away. She had heard about the good quality of care here, that the staff was caring and more attentive to patients. She received antenatal care at a public facility closer to home but travelled to Charlotte Health Centre when she went into labor.

iCHF is Agnes’ first experience with insurance. She joined after a community health worker visited her family and explained the concept to them. She already had three children, all born outside of an insurance plan and without complications. This time, her delivery was very different. Due to fetal distress she had to have an emergency caesarian section. While an ordinary delivery costs around Tsh 10,000, this operation and the ensuing 7 days of hospitalization would have cost her family Tsh 250,000. Thankfully, Agnes was insured. She was able to recover in hospital and baby Jessica is doing very well.

‘A Kanga, the colorful printed fabric traditionally worn by women in our region, costs about Tsh 30,000. During sensitization meetings I tell people that this one piece of clothing is just as expensive as the iCHF premium that covers their family’s health expenses for a whole year. It makes them see that they cost the same but that iCHF is worth much more.’

Sister Basilica Panga, Mbulu Catholic Diocese Health Secretary and a key figure in the Mbulu community in Northern Tanzania

**FT/IFC Transformational Business Award 2016**

In the words of the jury, the program is ‘filling a tremendous systemic need for access to quality healthcare for women and children by forging partnerships with government, foundations, the private sector and the healthcare community.’

The program is built on a public-private partnership between the private insurer Hygeia Community Health Care, the Kwara State Government, the Health Insurance Fund and PharmAccess Foundation. It was set up with the support of the Dutch Ministry of Foreign Affairs in 2007.

Over the years, more than 40 healthcare facilities have been upgraded. Among other results, Kwara has shown an impressive rise in women giving birth in hospital, including women who aren’t in the health insurance program: hospital deliveries rose from 50% in 2009 to 70% in 2013, an increase which can be attributed to the program. World Bank data show that, since the start of the program, Kwara has become the second-best performing Nigerian state in maternal and child care.
Strengthening healthcare supply through quality standards

Many healthcare providers in sub-Saharan Africa lack sufficient qualified staff, functioning supply chains or even basic resources like power or water. How can we create actionable data that take these challenges into account, and use it to motivate and support clinics in improving their quality?

The healthcare sector in sub-Saharan Africa has a shortage of institutions and standards to ensure objective measurement of the quality of services. SafeCare fills this need: by measuring organizational management and processes, clinical quality and safety, we can now benchmark and certify performance. The SafeCare standards, launched in collaboration with Joint Commission International (JCI) and COHSASA, are the first and so far only ISQua accredited clinical standards tailor-made for resource-restricted settings. They create a common language and ensure quality is measured against international standards, while leaving room for application of local solutions to specific challenges.

Quality improvement

The SafeCare standards form the foundation upon which we have built our stepwise quality improvement program. After a SafeCare assessment, healthcare providers receive a detailed report that identifies quality gaps as well as a prioritized quality improvement plan. Rather than applying a pass-or-fail system, SafeCare measures and recognizes incremental progress. As providers demonstrate continued improvement, their progress is rewarded with SafeCare Certificates at five levels to recognize improved clinical and business performance. Stimulating quality improvement on the supply side helps to increase demand for health insurance.

In 2016, the standards underwent a revision to incorporate lessons learned and adapt to the current context by making them leaner and more digitally adept. Also, changes were made in the scoring methodology to make the quality improvement journey as smooth as possible for healthcare providers. The revised standards were accredited in February 2017.

In Kenya, we’re taking the first steps to integrate SafeCare and our digital agenda. In order to join the M-TIBA network for example, healthcare providers undergo a SafeCare assessment and receive quality improvement assistance. As quality rating of service in the health sector becomes more transparent, patients can make informed healthcare choices. Providers that are actively improving their services attract more patients and generate more income. Benchmarking enables mechanisms such as pay-for-performance, thereby further stimulating sustainable quality improvement.

To ensure that the methodology fits in the legislative framework of the countries we work in, we have engaged in strategic partnerships with state and national governments.

- In Tanzania, the government has adopted the SafeCare standards and methodology as the national system for stepwise certification towards accreditation.
- In Kenya, the NHIF has adopted SafeCare methodology to be used for quality assurance in contracted facilities.
- In Ghana, we have helped develop the roadmap for the national Healthcare Facilities Regulatory Agency (HFRA) to regulate and incentivize healthcare quality in an institutionalized approach.
- In Nigeria, we are helping Kwara, Ogun and Lagos States develop a framework for transparency of information and benchmarking, SafeCare helps to reduce risks and build trust between all parties in the healthcare sector, as well as to stimulate investment.

Private partnerships

In 2016, we also further expanded our network of private partners. We started operations in Uganda through a partnership with the Uganda Healthcare Federation (UHF) and PACE. The partnership aims to build a sustainable model in which UHF will be the licensed partner for a national roll-out of the SafeCare methodology.

In Nigeria, we teamed up with PurpleSource Healthcare Ltd to provide quality assurance within its network of private providers. PharmAccess will also work with DrugStoc to provide quality assessment services to stand-alone pharmacies and pharmacies in hospitals.

Stimulating investments

To make informed decisions and more accurate long-term projections, investors need relevant, reliable and comparable data. By creating a framework for transparency of information and benchmarking, SafeCare helps to reduce risks and build trust between all parties in the healthcare sector, as well as to stimulate investment.

For further reading, visit our blogs on topics such as benchmarking, advanced quality improvement, Digital Health and Patient Safety.

Value for patients

In 2016, we started working with the International Consortium for Health Outcomes Measurement (ICHOM) to investigate how principles of value-based healthcare can be applied in low and middle-income countries. This year, we will launch a pilot focusing on in pregnancy and childbirth. The idea is to implement a global standard set of outcome indicators and collect administrative and patient reported data from around 200 pregnant women using the M-TIBA platform.
**Business of Quality**

In Tanzania, SafeCare has been granted funds from DFID’s Human Development Innovation Fund (HDIF) for the Business of Quality program. It builds on existing PharmAccess programs, combining use of the SafeCare standards and quality improvement methodology with access to credit and health insurance. Implementing partners in this program are Association of Private Healthcare Facilities in Tanzania (APHFTA) and Christian Social Services Commission (CSSC).

The program is specifically designed to improve both business performance and clinical quality in 400 clinics, benefitting Tanzania’s rural poor. ELMA Foundation supports additional interventions in a selection of 100 facilities, geared towards complementing the efforts of the Tanzanian MoHSW to improve maternal, neonatal and child health.

The aim is to increase scale and accessibility of these services in the private sector. Among the facilities that have had a follow-up SafeCare assessment, full compliance with the MNCH standards in SafeCare has increased from 30% to 70%. The percentage of pregnant women having their blood pressure measured increased from 29% to 48% and the percentage of women given iron/folic acid increased from 50% to 72%. So while there is still a long way to go, the progress made already is very encouraging.

**Milestone for Paelon Memorial Clinic**

In October 2016, we had the honor of awarding the first SafeCare level 5 certificate to Paelon Memorial Clinic in Lagos, Nigeria. After working with the Government of Kenya at the Ministry of Health, I started this facility in 1994 with 23 beds and six staff members. We provided outpatient and in-patient services and we had a laboratory for tests. Over the years, our staff has increased to 120 and we have about 97 beds, a pediatric ward, maternity ward and female and male wards. We treat about 2000 outpatients a month.

In 2011, we received and repaid our first KES 500,000 (USD 5,000) MCF / Sidian Bank loan, which we used for renovations, equipping our laboratory and stocking the pharmacy. The following year we applied for a larger loan and borrowed KES 4.2m (USD 42,000). We used it to among others expand our maternity wing, construct a modern theatre, establish a dental and emergency unit, automate our systems and improve financial management and patient record keeping, train our staff and develop SOPs. Patient visits increased as we offered more services. From this growing cash flow we purchased a CT scan. Later we also applied for an additional loan to acquire an X-ray machine and other medical equipment such as an ultrasound machine.

One of our main challenges has always been the lack of doctors and qualified staff. Kitale is a remote border town. It’s far from Nairobi and most doctors do not want to work in this area. We used to make many referrals to other hospitals as we did not have specialized doctors or the facilities to treat patients. In addition, most staff would leave private hospitals to go work in public hospitals so the staff turnover was really high. Now, we have witnessed many changes. Our improved services have attracted new doctors such as an orthopedic surgeon, meaning there are fewer referrals. The loans allowed us to purchase modern equipment and our laboratory services have become more extensive.

From our first loan onwards, we have been trained on the SafeCare standards and were assessed on a regular basis. On our first assessment in 2011 we scored 44 out of 100 points (SafeCare level 1). On the latest assessment in 2016 we scored 80 points, bringing us to level 3! The financial and technical support has really changed the operations of Cherangany. The patient satisfaction has increased and the staff are happier in performing their duties because of regular training and getting more knowledge. I think we are doing well. Patient visits have increased, from 1,800 per month in 2011 to 2,800 in 2016, and regular assessments ensure that our standards remain high. Cherangany now has a good name in this area and we have set a good standard in the community by providing better services.’

**Closer look at Cherangany Nursing Home**

Jacob Kisang Kilimo describes how two loans through Medical Credit Fund and improving the quality of services using the SafeCare standards has made a difference at his facility.

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Enabling health investments

Without insight into clinical and business performance, how can banks assess the risks involved in lending to private healthcare providers? And without access to capital, how can these providers grow their business and improve the quality of healthcare services for their patients?

In 2009, we set up the first and only dedicated fund providing loans to small and medium-sized health enterprises (SMEs) in Africa: the Medical Credit Fund. Health SMEs often lack a credit history, adequate bookkeeping and accounting systems, financial performance records and sufficient assets to serve as collateral. As a result, they are often unable to secure formal bank loans and struggle to purchase modern equipment or even pay for basic repairs.

Medical Credit Fund mitigates risks for African banks in order to bridge this gap. Our strong partnerships have led to integrated loan products such as Sidian Bank’s Tabibu loan in Kenya, uniBank’s uniHealth loan in Ghana and Diamond Bank’s Mediloon in Nigeria. The strong repayment performance is prompting banks to take an increasingly large share of the funding and repayment risk, a sign that we are helping to build a healthier investment climate for health SMEs.

By combining the loans with our technical assistance program, we help these clinics build a financial track record and become bankable, grow their business acumen and improve the quality of their healthcare services. This quality improvement has become measurable thanks to the SafeCare standards.

Expansion to USD 2.5m loans

Over the years, we observed a growing demand for larger and more flexible loans. In 2015, the Dutch Good Growth Fund and Pfizer Foundation provided support for Medical Credit Fund to prepare an expansion of its mandate. This, in combination with a loan from Calvert Foundation, allowed us to reduce the investment risk for follow-on investors and to further catalyze impact investments.

In 2016, Medical Credit Fund raised an additional USD 17m from OPIC, Calvert Foundation and two private investors. In 2017, a number of development banks will also join, bringing the fund size to USD 45m. This expansion allows for loans of up to USD 2.5m – a significant step up from the previous USD 350,000 ceiling – and for partnerships with non-bank financial institutions. Including new opportunities for our partnership with Philips, as we can now finance a wider range of equipment. It also opens up financing for other players in the healthcare sector like suppliers of medicines and equipment, and enables partnerships in new countries. In November, we did our first deal in Liberia, working with TLG Capital to disburse a loan for the country’s largest private outpatient facility.

Innovative loan products

Following and anticipating opportunities in the market, we continue to develop and test innovative (digital) financing solutions.

More than 4,000 private healthcare providers in Ghana rely on claims payments from the National Health Insurance Scheme (NHIS) for 80% of their revenue, but it can take months for claims to be reimbursed. With uniBank and the National Health Insurance Agency (NHIA), we developed a receivable financing product that allows healthcare providers to address this issue. Healthcare providers receive a self-liquidating loan as an advance on the NHIA claim, automatically paying the interest when the NHIA pays the claim into the uniBank account.

In Tanzania, we relaunched our partnership with NMB Bank and started an innovative financing collaboration with equipment leasing firm Equity for Tanzania (EFTA). The latter opens access to more flexible debt financing by allowing private facilities to use equipment as collateral.

In Kenya, we built a new partnership with the World Bank and Capital Tool Company to implement an invoice-financing scheme for the pharmaceutical supply chain.

The growing role of the mobile phone in day-to-day financial services like sending mobile money or paying electricity bills or school fees also opens up new opportunities for innovative financing products. Mobile payment mechanisms that make risks transparent will allow us to expand and increase loan disbursements parallel to the more traditional banking channel.

In partnership with CarePay, we have developed a mobile cash advance product that uses M-TIBA to lower risks and transaction costs. This short-term loan for healthcare providers uses digital patient revenues as a means of security in that it is automatically repaid based on a fixed percentage of these digital patient revenues. This allows for a very low-cost and low-risk financing solution for facilities, benefiting especially smaller healthcare facilities who typically have the most difficulty accessing capital. The cash advance product was successfully piloted at a small number of healthcare providers in Nairobi and we will be working to make this product more widely available.

‘With our first N 1m (USD 5,000) loan, we purchased an ultrasound and an ECG machine. We used the next N 3.5m (USD 18,000) loan to buy a 45kg generator which now services the whole hospital. Since we have expanded our services, we’re attracting more patients and revenues and patient satisfaction have improved greatly.’

Dr Chidi Akahara, Medical Director of His Glory Hospital, Lagos, Nigeria
‘Banks in Ghana often see that customers lack sufficient collateral to enable banks to provide the right financing,’ says Joseph Hansen-Addy, Head of Loans Processing Centre at UniBank in Ghana. ‘Many banks have little knowledge of the health sector. UniBank was already active in the healthcare sector but with MCF, our efforts have become more targeted.

When it comes to healthcare facilities, we offer credit to customers within the bank’s broad customer segment that provides medical services. This credit facility is a local currency loan with attractive interest rates and upfront fees. It’s targeted not only to clinics but to all businesses within the health sector value chain. The unique selling point is the combination with technical assistance offered through our partnership with MCF.

One of the challenges faced by health SMEs is delayed payment of insurance claims. Through our collaboration with MCF we have been able to develop an innovative credit product to address this gap. By providing invoice discounting services for overdue claims, we are also able to provide an advance on the NHIS claim to the health facility. MCF’s collaboration with uniBank is really helping to bridge the financing gap in Ghana.’

‘Banks in Ghana shy away from the health sector and if they decide to lend to you they do so at cut throat interest rates. With MCF’s assistance I obtained a receivable finance loan from uniBank which went into procuring badly needed supplies.’

Dr. Wisdom Amegbletor, CEO of New Crystal Health Services Limited, Accra, Ghana

Receivable financing in Ghana

This is a unique development as Strathmore usually targets higher-end healthcare managers with academic qualifications for its executive programs. With the support of the Dutch government’s FDOV program, we’ve developed and provided a basic course at a lower cost, designed for managers and owners of healthcare facilities operating in the mid and lower segments of the market.

This is the first activity of the Healthy Business Development partnership: a public-private partnership comprised of the Kenyan Ministry of Health, IFC, AMPC International Health Consultants, Strathmore, and MCF/PharmAccess.

In 2016, we celebrated the graduation of participants from three foundations courses and one executive course. Many participants of the executive course are now sending their staff to the courses to ensure optimal implementation of strategic changes in their organization.

‘Now, in developing my growth strategy I act on the lessons learned from case studies. I have also acquired knowledge on how to raise capital, with equity and funding. It has been very beneficial to listen to the coach’s feedback and tap his experience.’

Dr. Ken Okoth, owner and manager of Ruai Family Healthcare Centre, reflects on the course.
Operational research and impact evaluation

Without in-depth research into our programs, how can we assess what works and what needs adjustment? We use scientific proof of principle to improve approaches, maximize impact and advocate successful programs to scale.

Global health issues require scientific rigor to define the size and scope of challenges and provide robust evidence if and how interventions work. This has been an integral part of our mission from day one. We investigate areas like quality of care, financial healthcare transactions, disease incidence, health outcomes, poverty maps, connected diagnostics and stakeholder experiences in order to test and validate different models of healthcare financing and delivery. Several landmark papers were published in prestigious journals like JAMA, British Medical Journal and The Lancet.

Data-driven
Data are the new currency for healthcare exchanges. Systematic data collection, management and analysis generates a wealth of information on the operations and impact on both the demand and the supply side of the health system. Data collection is moving towards ‘real-time’ and ‘big data.’ New skills and analytical methods are required to process big data and extract meaningful information. Digital technology is opening up new scientific avenues and playing an increasingly prominent role in our research agenda.

We conduct two types of research:

• Operational research that provides more in-depth knowledge about PharmAccess activities with the objective of improving day-to-day operations.
• Impact evaluation that encompasses longer-term research that evaluates the impact of PharmAccess operations on health and economic development.

M-TIBA generates GPS-tagged, near real-time data on financial healthcare exchanges. In the near future, we will build on this opportunity through research endeavors around poverty mapping, monitoring of disease outbreaks, medical decision support systems, clinical path tracking and connecting diagnostics to treatment.

Research partnerships
The Amsterdam Institute for Global Health and Development (AIGHD) remains a preferred partner in assessing biomedical and socio-economic impact of our programs. Another special relationship is with the Joep Lange Institute, which aims to push the envelope in global health, drive policy change and make health markets work for the poor. It provides complementary leveraging funding to deepen and broaden PharmAccess research, especially research that catalyzes the impact of digital technology in healthcare.

Over the years we have also been building relationships with other international research institutes. Some of the more recent collaborations include:

London School of Hygiene and Tropical Medicine
To improve understanding of the business case of quality improvement through SafeCare and the broader impact of this work, the London School of Hygiene and Tropical Medicine is conducting a major study on the work of the HDIF-funded Business of Quality program in Tanzania.

National Health Insurance in Ghana, the University of Ghana and three Dutch universities
To increase understanding of insurance enrollment behavior into the Ghanaian National Health Insurance, a four-year study funded by WOTRO was conducted in Ghana and completed in 2015. The study explored and compared perceptions of clients, healthcare providers and the Ghana National Health Insurance staff. The research was supported by University of Amsterdam, Groningen University and VU University.

Duke University’s Center for Advanced Hindsight
To learn more about behavioral issues that affect sustainable financing of and adherence to quality healthcare, we joined forces with the Joep Lange Institute, the Nairobi-based African Population Health Research Centre (APHRC) and behavioral economist Professor Dan Ariely of the Center for Advanced Hindsight (CAH). Ariely’s team is leading a study in slum areas of Nairobi to learn more about what drives decision-making behavior involved in pre-paying, saving and giving for healthcare. This study explores different ways in which we can motivate the poor to set money aside for healthcare using M-TIBA.

‘The collaboration with PharmAccess and AIGHD has allowed us to train a critical mass of young researchers, who have developed into excellent academic professionals.’

Tanimola M. Akande, Professor of Public Health at the University of Ilorin, Nigeria. Akande has played an instrumental role in the impact evaluations of the Kwara State Health Insurance program.
Our work in Namibia

Our work in Namibia, which started in 2004, was successfully transferred to local partners at the end of December 2016.

One of the main research projects done in Namibia was an impact evaluation of low-cost health insurances for lower-middle income people. Over 8,000 people participated in the survey. Extensive data was collected on demographics, socio-economic status and welfare, health, healthcare spending and health behavior. In addition, several biomedical markers were tested: blood pressure, height, weight, HIV status, cholesterol and blood sugar. Although the introduction of the health insurance eventually was ‘crowded’ out by international donor funding, the unique data allowed for one of the best-documented urban HIV incidence estimations in Africa and important publications in PLoS One, eLife and The Lancet.

‘How do we incorporate our understanding from social science into health so that people will not just know what they’re supposed to do but will actually take action?’ Ariely asks. This research, done in collaboration with the African Population Health Research Centre (previously known as NABCOA, the Namibia Business Coalition on AIDS), an NGO PharmAccess has worked with since the start.

‘With the wallet I don’t get stressed’

Jecinter Anyango Kwanya works as a volunteer in the Kibera Health Center. She joined a chama that is saving for health using M-TIBA.

‘If my baby is sick, or my husband, I can use the M-TIBA health wallet. Without it, I would have to borrow from a friend or a neighbor. That would not always work. If I couldn’t borrow, I would go and talk to the doctor, asking him if he could help me and receive payment later. But now, I can pay.

In the chama savings group, we save KES 1,000 (USD 10) per month. For the health wallet, we contribute 200 shillings and then get a KES 200 bonus.

Early this year, my two kids were very very sick, and I went to the hospital with them. They did laboratory tests, and it came out they had typhoid. They got treatment and I paid 3,000 shillings for all that with the wallet. I am really happy that they are well now.

The wallet is very fine. I cannot spend that money on anything else. So if someone gets sick, I don’t have to get stressed, because I have a little money to pay the bills.’

Over the years, our ‘Mister Sister’ mobile health clinics have proven a (cost) efficient and effective way to provide primary care for difficult to reach groups like farm workers and people in informal settlements. Operations are now fully domestically funded and will continue under the umbrella of the Healthworks Business Coalition (previously known as NABCOA, the Namibia Business Coalition on AIDS), an NGO PharmAccess has worked with since the start.

Behavioral science for healthcare

In 2016, PharmAccess and the Joep Lange Institute solidified their strategic alliance with Duke University’s Center for Advanced Hindsight (CAH), a group of behavioral economists led by Professor Dan Ariely, to start research around M-TIBA in Kenya.

‘How do we incorporate our understanding from social science into health so that people will not just know what they’re supposed to do but will actually take action?’ Ariely asks. This research, done in collaboration with the African Population Health Research Centre (previously known as NABCOA, the Namibia Business Coalition on AIDS), an NGO PharmAccess has worked with since the start.

On the supply side, CAH started studying strategies to motivate healthcare providers to adopt and apply M-TIBA. It will identify the barriers to the adoption of the platform and test interventions designed to overcome these barriers.

On the demand side, CAH is designing and testing interventions aimed at increasing both individual and group endorsement of pre-paying for health expenses through M-TIBA. Research topics include incentives to increase health savings, how to increase remittances for healthcare (through care-givers, family members, rich to poor, etc.), and what is the most effective way to present information in order to empower patients to make better decisions about their health, through the use of mobile technology.

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Improving maternal care in Samburu

Since 2013, we have been working with the M-Pesa Foundation, Amref, Safaricom and the Samburu County to improve maternal and child health outcomes in this rural county in Kenya and develop an innovative approach to ensuring sustainable access to this care.

The Uzazi Salama program addresses some of the main challenges in the area, including distance to the health facility, poor quality of health services, under-trained health workers and limited access to finance. The serious shortage of doctors and qualified nurses means that midwives and other healthcare staff must often do more than they have been trained for.

In 2016, PharmAccess supported 55 health facilities in implementing their quality improvement plans using the SafeCare standards. Nineteen county health management team members were trained as SafeCare champions to support the county’s quality agenda. We also provided a mobile transport voucher to pregnant mothers in selected areas to cover the costs of referral transport to the closest health facilities for deliveries. This intervention was successfully piloted in Barsaloi and Suguta and led to a high conversion of mothers from home to skilled deliveries. In Barsaloi, deliveries with a skilled attendant even rose from 55% to 100%.

M-Pesa Foundation, Amref, Safaricom and the Samburu County to improve maternal and child health outcomes in this rural county in Kenya and develop an innovative approach to ensuring sustainable access to this care.

HIV/AIDS workplace program

PharmAccess has been supporting a PEPFAR/US Department of Defense funded HIV workplace program for the Tanzanian Peoples’s Defense Forces since 2006.

A recent UNAIDS meta-analysis using data from armies around the world showed that with 13.8%, the Tanzania army had the highest HIV prevalence.

PharmAccess supports a comprehensive package of targeted prevention interventions, both at community and facility level. Main activities are sharing of sexual and behavior change communications materials, voluntary male circumcision and HIV testing and counseling. Interventions include renovation and maintenance of clinics, procurement of equipment and test kits, as well as training of healthcare staff.

So far, 74 military health facilities have been scaled up. These clinics are open for the 32,000 army staff and their dependents, about 10,000 young recruits and tens of thousands of people living in the area. In 2016, more than 80,000 people were tested for HIV, including more than 9,000 pregnant women.

Dutch Postcode Lottery supports healthcare innovation in Kenya

In 2016, PharmAccess and Amref Flying Doctors were awarded 9,950,000 euro by the Dutch Postcode Lottery.

With its Droomfonds (Dream Fund), the Dutch Postcode Lottery offers the opportunity to realize trailblazing dream projects. This opportunity enables the development of innovative mobile based tools to increase access to good healthcare for women in Kenya, directly through their mobile phone. Cleverly combining healthcare knowledge, quality, and financing through the M-TIBA mobile health wallet. In 2017, the project will begin in Kenya first targeting 100,000 women and their families.

Woman 360

As the middle class in Ghana grows, so does demand for quality care. With a grant from the Dutch embassy, PharmAccess is working with two private hospitals in Accra to develop and pilot a commercial franchise model for pregnancy and birthing services.

The aim of Woman 360 is to offer efficient healthcare services through a hub and network of cooperating private clinics. Specially trained midwives will work from small, easily accessible clinics under the supervision of a gynecologist at a specialist hospital. The midwives handle basic routine visits and only refer women who require more skilled attention to gynecologists at a centralized, well-equipped hospital.

By standardizing all services in the network and optimizing patient flows, both the quality of care and the business potential become more predictable and transparent and therefore attractive for patients, entrepreneurs and investors. The business structure design allows for replication within Ghana and wider region in a franchise model.

In 2016, we developed clinical guidelines and protocols, and facilitated trainings for midwives at Resolve Medical Services and Airport Women’s Hospital. The next step is further developing the franchise formula. Construction of the first two clinics will start in 2017.

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‘I have had so many rich experiences and opportunities through this project that I personally believe it will forever shape and influence my career path while fostering my personal growth and development’

Anastasia Sedinam Dakatse, enrolled midwife at Airport Women’s Hospital
The road ahead
Over the coming years, PharmAccess will continue to design, implement and test market-based health financing and delivery innovations, with a growing focus on the digital opportunities that can accelerate this process.

To better match demand and supply, we aim to improve efficiency, effectiveness and transparency of healthcare transactions. Starting in Kenya, we focus on working with local partners in developing a more comprehensive digital healthcare marketplace around M-TIBA. In parallel and where possible connected to M-TIBA, we are increasingly digitizing our existing activities:

**Boosting demand and facilitating solidarity**
We will continue to work with partners and local governments to build on the demand-side financing models that show promise and transition them into new public or private structures. Developing, testing and introducing new digital products and services tailored to the specific healthcare financing need of patients, both as individuals and in groups, will be key. Also, new (digital) opportunities are arising in supporting administration and delivery of national health insurance schemes as many African governments are pursuing healthcare reforms towards Universal Health Coverage.

**Stimulating quality supply**
Measuring clinical and business quality using the SafeCare standards will remain a central part of our work. At the same time, we continue to work with our partners on technical assistance to improve performance. As quality improves, demand for healthcare will grow as well. Digital technology will help to increase the scale, effectiveness and efficiency of these activities.

**More money for health**
Mobilizing capital into the private health sector will remain a focus. Through the Medical Credit Fund we continue to lower the investment risks for banks, both through the transparency delivered by the SafeCare standards and by shouldering some of our partner banks’ financial exposure. We will co-develop or perform due diligence on health SME business plans and provide transaction advisory services to larger clients. Finally, we will continue developing (digital) financial innovations that tackle sector-specific obstacles like collateralization requirements and working-capital shortages.

**Research**
We will expand internal learning through fact-based and rapid evaluations to improve operations, and continue to build an evidence base for the effectiveness and impact of our work. We will strengthen partnerships with academic institutions in Africa as well as with the Joep Lange Institute, which can help advocate to scale those innovations and approaches that have proven successful.

Building and implementing our digital agenda will be the main focus moving forward. We cannot wait to see the potential of digital technology leveraged for the benefit of those who are currently left behind and look forward to working with a growing number of partners to make this happen.
The greatest impact of technology in Africa in the next decade will be felt in health. M-TIBA can extend and transform essential services for millions of Kenyans. This is just the start of what we can do together to transform Kenya's healthcare sector.

Bob Collymore, CEO of Safaricom