ENGAGING THE PRIVATE SECTOR IN PUBLIC HEALTH CHALLENGES IN NAMIBIA

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PREFACE

PHARMACCESS HEALTHCARE APPROACH: ‘GOING PRIVATE TO GROW PUBLIC’

In the autumn of 2003 PharmAccess was well underway rolling out its workplace programs for HIV treatment in Africa, as started by late Professor Joep Lange. The Heineken operations in Rwanda, Burundi, DRC, Congo-Brazza and Nigeria had been fully initiated in the program. The first results were achieved, showing the impressive ‘Lazarus-effect’: HIV+ workers and family members getting better while using their antiretroviral drugs and starting to work again and become fully productive.

Namibia was the next country on the list, because of Heineken’s affiliations with Namibian Breweries. At the time the HIV prevalence rate in the country was over 20% (amongst pregnant women) and in the absence of accessible and affordable treatment, the effect of HIV was being felt nation-wide by companies and communities.

I was the lucky one to embark on an assessment visit to this beautiful country. I remember flying with the small plane of Ohlthaver and List (O&L) Group of Companies (of which Namibian Breweries is a subsidiary) over the Namibian deserts. The thermal of the air provided impressive turbulence. This did not stop me from lecturing the passengers on the dynamics of HIV infection: on my wildly moving writing pad I was drawing creepy graphs of increasing viral loads, decreasing CD4 cells, antibody reactions and so forth. The bewildered passengers (Ingrid de Beer, then O&L, later our Namibian Country Manager, and Professor Rich Feeley of Boston University) still remind me of that particular trip and biology lesson.

We were assessing the possibilities for a comprehensive workplace HIV treatment program with thousands of workers in the O&L locations country-wide. The challenge we had was that the country is larger than Spain and Portugal together, but hosts only 2 million inhabitants. Reaching out to these people would become an enormous challenge, we soon realized.

During the last weeks of 2003 PharmAccess participated in the ‘extra round’ of the Netherlands Postcode-lottery. We wrote a proposal on Namibia and to our extreme delight our consortium

(Stop AIDS Now! – SAN!) was rewarded with more than 3 million euro! See photograph (fltr): Peter van Rooijen of SAN!, Boudewijn Poelman, Executive Director Postcode-lottery and undersigned.

It is with this lottery grant that the PharmAccess adventure in Namibia actually started. We soon realized that the best way to address a widely dispersed HIV epidemic in a vast country would be through health insurance, featuring HIV in its package. This led to the famous Namibian HIV Risk Equalisation Fund. Evaluation of this intervention lead to additional research funds from the Netherlands Ministry of Foreign Affairs. During this, international public funds started to flow into the country providing a perfect example of 'crowding out'. The current thesis by Ingrid de Beer reflects the journey PharmAccess made in Namibia over the last more than 10 years. In 2016 the PharmAccess operations were successfully transferred to the Namibian HealthWorks Business Coalition.

On behalf of PharmAccess I herewith would like to congratulate Ingrid de Beer with conferring the Namibian PharmAccess interventions into a PhD, of which this booklet provides a concise summary.

Prof. Dr. Tobias F. Rinke de Wit
Director Research PharmAccess Group

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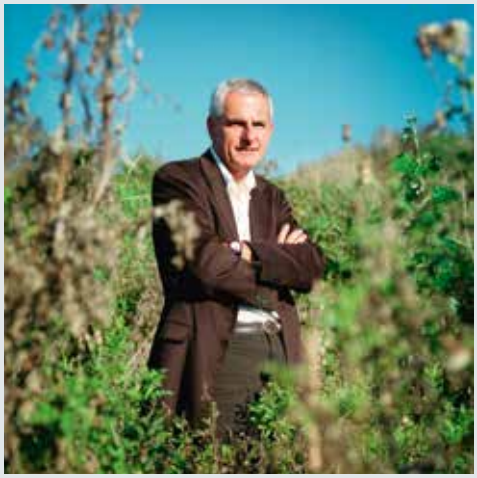

Tribute to Joep Lange

On 17 July 2014, Prof. Dr. Joep Lange passed away, together with his partner Jacqueline van Tongeren, on board of Malaysian Airlines flight MH17, en route to the International AIDS conference in Melbourne. Joep Lange was the founder of PharmAccess and an architect of many of the organizations interventions. He was a respected activist for anti-retroviral therapy globally and especially in Africa. He emphasized the need for rigorous scientific evaluations of health programs in Africa and initiated operational research within PharmAccess. It is impossible to overestimate the contribution Joep Lange has made to the legacy of PharmAccess in Namibia both in terms of health care program interventions and the related scientific articles, which are dedicated to his memory.

KEY MESSAGES

Trust in the healthcare system from all stakeholders creates efficiencies required for a virtuous cycle of healthcare to exist.

The high diagnostic accuracy of OraSure and OraQuick rapid HIV tests on oral fluid as demonstrated in high prevalence Namibian population supports utilization for surveillance purposes in resource restricted settings.

Temporary subsidization of private health insurance for lower-middle income groups through a risk equalization mechanism, such as that demonstrated in Namibia, can leverage additional domestic resources, which are several times higher than the total subsidy provided.

The quality of HIV services in Namibia significantly improved with the implementation of the Risk Equalization Fund.

Anonymous HIV workplace surveillance can serve as a tool to motivate companies to invest in health insurance for their employees.

University students and commercial farm workers are underserved target groups for health insurance in Namibia.

Well managed mobile services can operate effectively and provide basic healthcare to hard-to-reach populations at a price comparative to fixed site settings.

The provision of well-managed mobile primary health services improves health outcomes for vulnerable children in rural and remote settings.

Public private partnerships such as those demonstrated in Namibia can greatly contribute towards a better healthcare system in dealing with public health challenges.

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INTRODUCTION

Strengthening health systems requires a holistic approach. PharmAccess has developed a model to change the healthcare environment from the vicious circle of mediocre quality and poorly accessible healthcare into a virtuous cycle of good quality healthcare.

The model recognizes the key stakeholders of healthcare systems as: the patient, the provider and the payer, all three of them functioning in a policy environment that sets the rules of interaction and exchange. This will stimulate both demand and supply (Schellekens, et al., 2007).

The vicious circle of poor demand and supply of healthcare is caused by a combination of:

- Underutilizing the private healthcare sector in national programs to complement public healthcare;
- Low quality of care due to lack of standards, stock-outs, staff shortages, etc.;
- Insufficient investments especially in providers at the base of the pyramid;
- High out of pocket costs for patients due to low levels of pre-payment and risk pooling.

This reflects on a healthcare system where trust between stakeholders is essentially lacking and therefore transactions costs are unnecessarily high.

Reverse the vicious circle

To balance healthcare supply and demand, and establish trust in the healthcare system the vicious circle would need to be transformed into a virtuous cycle. Healthcare markets in sub-Saharan Africa can then attract the resources they need to function well and deliver more inclusive quality healthcare.

To create a virtuous cycle of healthcare PharmAccess engages a strategy which aims to promote inclusive health markets by stimulating and aligning demand and supply to reduce

out of pocket payments, through pre-payments, risk sharing and risk reduction models (Preker, et al., 2103). This will strengthen primarily, but not exclusively, the private sector and allows for building more sustainable models through the public sector: 'going private to grow public'.

The ultimate goal is to make health markets work more efficiently for low and middle-income groups in Africa by raising more money within the healthcare system. The preferred mode of operation is through the establishment of strategic partnerships (Lange, et al., 2008) to build capacity of local stakeholders who provide health and health financing services to low and middle income groups.

Health challenges in Namibia

This publication describes the results of studies evaluating the PharmAccess strategies and activities of engaging the private sector in the public healthcare challenges in Namibia over a period of 12 years. These strategies involved interventions geared towards all key stakeholders of the healthcare system:

- To stimulate demand by improving health awareness of the patient/client;
- To stimulate supply by developing innovative new healthcare service provision;
- To innovate new payer mechanisms using (temporary) subsidization;
- To collect and present evidence to support policy-making.

The above strategies were supported by the PharmAccess paradigm that healthcare provision is an economic exchange with demand and supply components. Complexity is generated by the fact that in a more mature healthcare system the consumer (patient), provider (clinic) and payer (insurance) are separate entities, creating market distortions.

HEALTHCARE LANDSCAPE NAMIBIA 2004

- *Namibia, situated in south western Africa gained Independence from South Africa in 1990. The country is one of the least populated countries in the world with a population of less than two million on a surface area of over 825,000 square kilometers.*
- *Was a lower middle income country with a GDP per capita of just over US$3,000 and has one of the highest income equalities in the world with approximately 20% of the population earning 80% of the income.*
- *The healthcare landscape also reflects this inequality with the majority of the population making use of under-resourced public health services while only around 16% (the more affluent) have access to private health insurance or medical aid funding serviced by good quality private health providers.*
- *By 2004, the HIV prevalence had peaked with 22% of pregnant women testing HIV positive. In 2004 only a few pilot HIV treatment sites – funded by international partners - were available in the public sector and although treatment was readily available in the private sector, this was a benefit excluded by medical insurance and medical aid funds.*
- *Dialogue or cooperation between the public and private healthcare sector was limited to address the HIV epidemic.*

The policy maker provides the context within which the healthcare exchange between the patient, the provider and the payer can take place. Therefore, the PharmAccess paradigm recommends coordinated interventions at all levels of the healthcare system, as indicated above.

All in all the goal is to provide the right diagnosis, at the right time, for the right patient at the right cost within the right legal and regulatory framework, with both public and private sector contributing a complementary role. No one can function in isolation, as interventions aimed at stimulating one stakeholder have an effect either directly or indirectly on the others.

PHARMACCESS FOUNDATION

When Professor Dr. Joep Lange founded PharmAccess in 2001, he was determined to turn his groundbreaking 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. Currently, the PharmAccess Group has developed into a dynamic international organization with a digital agenda dedicated to connecting more people to better healthcare in sub-Saharan Africa. The PharmAccess Group believes that digitalization and digital healthcare exchange platforms have the potential to revolutionize healthcare in Africa. Our integrated approach mobilizes public and private resources for the benefit of doctors and patients through a combination of loans for healthcare providers (through the Medical Credit Fund), clinical standards for quality improvement (using the SafeCare methodology), (mobile) health insurance and impact research. More and more, we are using digital technology to accelerate this approach through innovative healthcare exchange platforms.

We work closely with leading local and international partners to leverage donor contributions to increase trust throughout the health system, reduce risks, and pave the way for investments. Our specific approach to development has won prestigious international recognitions, including a G20 prize for innovative financing presented by U.S. President Obama and two Financial Times/IFC awards.

More information:
www.pharmaccess.org | www.medicalcreditfund.org | www.safe-care.org


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PharmAccess
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IMPROVING HEALTH AWARENESS

Everything that is done in healthcare should begin and end with the patient in mind. In order to do so it is important to understand the needs of the patient, encourage the patient to understand their own needs and in so doing stimulate development of healthcare services that are relevant to the demand, so there is a basis for (pre-) payment. Various interventions were performed in Namibia that were geared towards increasing demand for healthcare.

One postulation was that performing surveys for pertinent health problems would have multiple stimulatory effects:

- Making people more aware of their health status (and hidden health problems) and thus more willing to prepay for healthcare;
- Making employers more aware of their healthcare responsibilities towards employees and at the same time get more information on the extent of various health problems (in particular HIV), thus creating data to help health policy makers to make better-informed decisions.

Orasure/Oraquick validation study

One approach was to assess whether an understanding of the HIV prevalence, collected through bio-medical and behavioral surveys, support organizations to enroll their internal stakeholders in pre-paid low-income health insurance for HIV in Namibia. In order to reach out to as many people as possible, it was considered beneficial to use a non-invasive HIV test that would be acceptable, as an alternative for those who generally avoid blood-based tests.

Anonymous HIV screening

With the availability of a validated non-invasive rapid HIV screening device, PharmAccess Foundation proceeded under project Okambilimbili, in collaboration with the Namibian Business Coalition on AIDS (NABCOA) and the Namibian Institute of Pathology (NIP), to market

FACT BOX

VALIDATION STUDY

- *Validation study conducted in 2006 in collaboration with the Namibia Institute of Pathology (NIP).*
- *The diagnostic accuracy of the OraQuick HIV-1/2 Rapid Antibody test and the Oral Fluid Vironostika HIV Uniform II microELISA were compared with the Namibian National Algorithm for HIV Testing.*
- *273 OraQuick specimens and 267 OraSure specimens were collected from ante-natal clinics in Windhoek.*
- *This study was the first formal field evaluation of the OraQuick and OraSure devices, in a resource limited setting in Southern Africa.*
- *Finding 1: OraQuick test is 100% accurate (100% sensitivity and specificity).*
- *Finding 2: OraSure has a high specificity (99.5%) and slightly lower sensitivity (97.1%).*
- *Based on this validation the Namibian MoHSS approved the OraQuick and OraSure devices for surveillance purposes in Namibia.*

Hamers RL, de Beer IH, Kaura H, van Vugt M, Caparos L, Rinke de Wit TF: Diagnostic accuracy of 2 oral fluid-based tests for HIV surveillance in Namibia. J Acquir Immune Defic Syndr 2008,48:116-118.

FACT BOX

ANONYMOUS HIV SURVEILLANCE IN COMPANIES

- *Anonymous HIV prevalence surveillances were conducted in 24 Namibian private companies, from 11 different industries, between November 2006 and December 2007.*
- *Participation rates amongst the 8,500 employees ranged from 61.3-97.3% with a mean participation rate of 78.6%.*
- *The prevalence rate of 15.0% revealed that the overall HIV prevalence rate in these companies was in line with the national prevalence estimates in Namibia at the time.*
- *HIV prevalence varied widely between industries, ranging from 4% in the information technology sector to 21% in the mining sector.*
- *Following the HIV prevalence surveillance, 61% of the previously uninsured employees had been enrolled in health insurance, the majority of these insurances (78%) covering HIV only.*

De Beer I, Coutinho H, van Vugt M, Rinke de Wit TF. Anonymous HIV workplace surveys as an advocacy tool for affordable private health insurance in Namibia Journal of the International AIDS Society. 2009, 2:7.

anonymous HIV prevalence surveillance services (using the OraQuick® testing devices) to private sector companies.

It was assumed that providing the management of companies with anonymous HIV prevalence estimates of their workforce would create awareness amongst management and motivate these decision makers to enroll their employees on health insurance.

Student HIV prevalence survey

As the evidence around the prevalence of HIV became more prominent through these surveys, PharmAccess' operational research, during the same period, aimed at exploring different market segments for the health insurance products, which were being developed through the Okambilimbili program to leverage more private sectors funding for the HIV response.

A key question was raised by NABCOA regarding the prevalence of HIV infection in the future workforce, namely tertiary education students in Namibia and the potential need for a student HIV insurance linked to the risk equalization fund. PharmAccess assessed HIV prevalence as well as HIV/AIDS knowledge and attitudes and general access to healthcare among students at the Polytechnic of Namibia and the University of Namibia.

Agricultural employers as a target group for health insurance

PharmAccess was approached in 2007 by the Agricultural Employers Association to assist in the development of an HIV policy. Since access to care and treatment is a key component of comprehensive workplace HIV policy options of providing access to HIV testing and access to treatment services needed to be investigated.

One of the key challenges was the vast geographical spread of the target population. In order to find a solution, PharmAccess investigated healthcare options for rural employers and employees, whilst assessing this sector as a potential market for health insurance.

Private interventions to create demand in the context of a public healthcare system remain a serious challenge. All target populations addressed in the above studies could potentially pre-pay for healthcare. However, they also have access, accepting the long distances that would need to be travelled, to free services. Most formal sector workers consider such services 'good enough'.

Namibia's opportunity for national health insurance would require the reformulation of the policy of free public healthcare for all, mandating all those who can pay to pay. Employer groups should be mandated to provide health insurance for their employees; this should not be a voluntary benefit.

FACT BOX

HIV SURVEILLANCE AMONGST UNIVERSITY STUDENTS

- *HIV prevalence surveillance at University of Namibia (UNAM) and Polytechnic conducted in 2007 amongst 5,568 and 6,302 students respectively.*
- *HIV prevalence rate was relatively low (1.8% at UNAM and 2.8% at Polytechnic) compared to the estimated national adult average of 15.3%.*
- *HIV/AIDS knowledge amongst students was reasonable, except for some misperceptions about transmission.*
- *Awareness of own HIV status was low, motivating a need for HIV counseling and testing services.*
- *Namibian campus health facilities were underused, mostly due to privacy reasons.*
- *The findings motivated an intensification of prevention and education initiatives through the institutional HIV awareness programs and better marketing the use of the existing campus health facilities.*
- *It was concluded that this group would not be the most viable target group for insurances covering HIV without significant and long-term subsidy.*

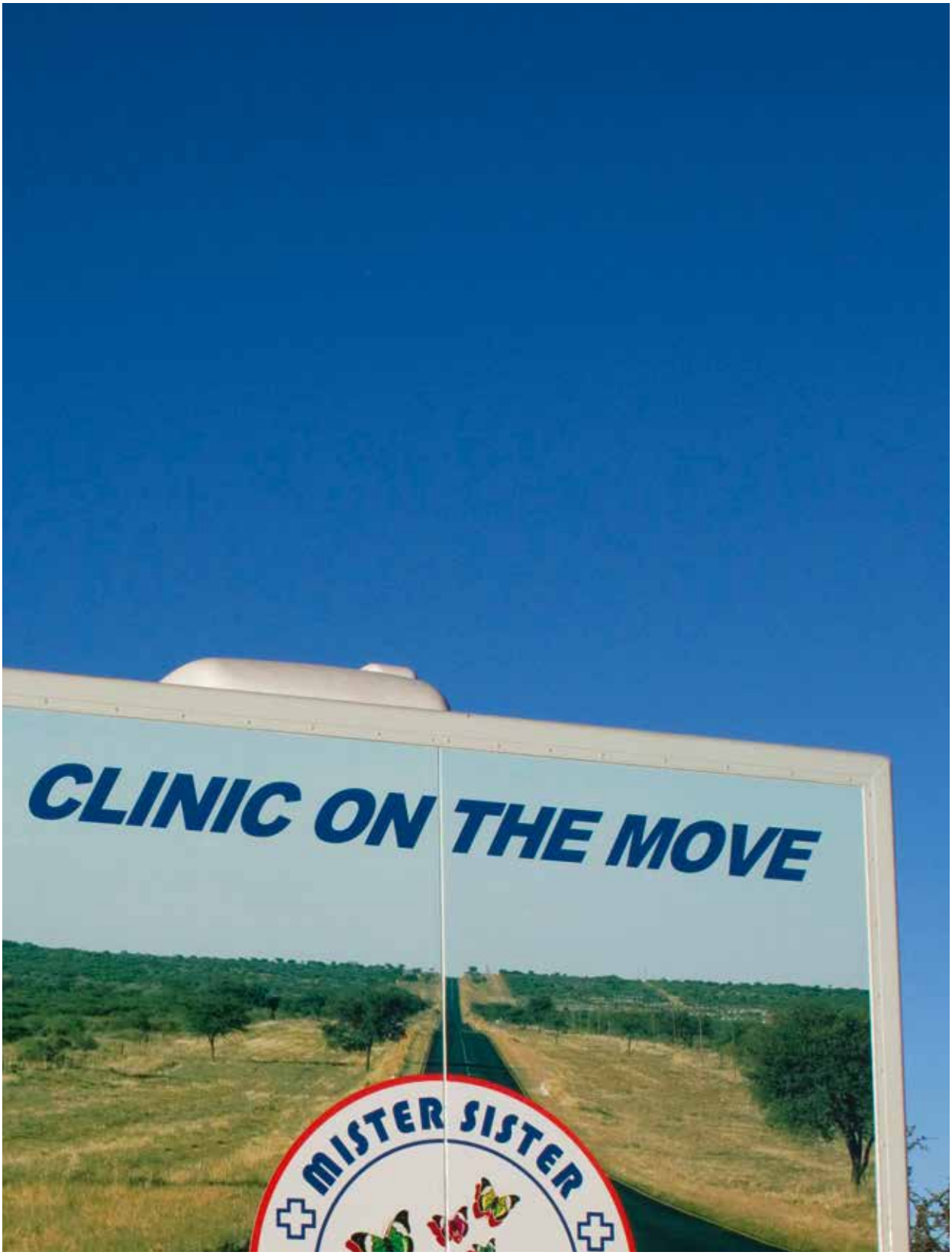
De Beer I, Gelderblom H, McNally A, Van Rooy G, Schellekens O, Rinke de Wit T. HIV matters for University Students. Journal of the International AIDS Society 2012, 15:9.

FACT BOX

COMMERCIAL FARM WORKERS SURVEY

- *In 2007 a cross-sectional study was conducted amongst 1414 commercial farmers nationwide in Namibia to assess the feasibility of introducing health insurance, including HIV treatment benefits.*
- *The findings were as follows:*
  - *1404 farm owners participated in the survey each having an average of 10.2 employees;*
  - *95% had access to at least one health facility;*
  - *Employers were more likely to use private health facilities and had health insurance while employees did not have health insurance and used public health facilities;*
  - *Average one way distance to the nearest health facility was 68km and transport costs to healthcare facilities were largely borne by the employer;*
  - *78% of employers were willing to contribute towards the costs of health insurance for their employees.*
- *It was concluded that commercial farm workers have inadequate access to healthcare facilities and particularly HIV treatment. Access could be improved by providing on-site services and leveraging the willingness of the employer to contribute to health insurance to deliver prepaid services to farms.*
- *This resulted in the Mister Sister clinics program.*

De Beer I, Coutinho HM, Guariguata L, Fortsch HHT, Hough R, Rinke de Wit TF. Health care options for commercial farm workers in Namibia. Rural and Remote Health 11 (online), 2011: 1384. www.rrh.org.au.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MISTER SISTER

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CAPACITY BUILDING

As indicated by the demand studies in chapter 2, there was a need for better access to healthcare in remote areas in Namibia. However, given the vastness of the country, the small population size, the establishment of healthcare facilities in every remote location was not considered cost-effective. PharmAccess responded to the gaps in the supply side of the healthcare system by developing two innovative mobile service provision systems: the Bophelo! and Mister Sister mobile clinics.

Bophelo! Mobile services

The public-private partnership (PPP) model 'Bophelo!' provided mobile wellness screening at workplaces in Namibia.

The effectiveness of mobile services was evaluated compared to fixed site voluntary counseling and testing for HIV (VCT) services both in terms of accessing high risk populations and cost effectiveness. This data provided a primary source of evidence in Namibia of health conditions within the general workforce across different industries to create greater awareness amongst management and policy makers of healthcare conditions in the working population and encourage enrolment in health insurance. All in all, the mobile testing services appeared to be able to access geographically hard-to-reach populations with high numbers of participants testing for HIV for the first time.

Mister Sister mobile clinics

In response to the needs of the rural employers and their workforce and the gap in referral services identified in the Bophelo! Program, PharmAccess in 2010 commenced with piloting of the Mister Sister mobile clinics. Through this initiative, primary health care services were offered to rural and remote populations in Namibia in partnership with the MoHSS, who provided

BOPHELO! MOBILE WELLNESS

- *Started in 2008 as a direct spin-off of Okambilimbili.*
- *A unique public-private partnership between PharmAccess, the Ministry of Health and Social Services (MoHSS), NABCOA and the Namibia Institute of Pathology (NIP).*
- *Offers a wellness-screening package, which included screening of blood pressure, calculation of BMI, rapid blood testing for glucose, cholesterol, Hepatitis B, and HIV.*
- *The cost per patient tested for HIV was significantly lower than in comparative stand-alone HIV testing sites.*
- *First clinic purchased by Okambilimbili program.*
- *Successfully conducted screenings from 2008-2011 by PharmAccess and transitioned to NABCOA in 2011.*
- *Bophelo! was still operating under NABCOA with GFATM subsidy in 2016 (end of the study).*

MISTER SISTER CLINICS

- *Launched in 2010 in Otjozondjupa region.*
- *Provides mobile primary healthcare services.*
- *Services were expanded to 4 regions within 2 years.*
- *Two mobile clinics were purchased for the program with funding from Heineken supported by Namibia Breweries.*
- *In 2012, Namibia Medical Care (NMC) donates 2 mobile clinics and commits to a 3-year funding agreement.*
- *In 2015, the good performance of the NMC sponsorship was extended with a further 3 years.*
- *The mobile primary care service improved the health outcomes of children in rural areas especially orphans and vulnerable children.*
- *Achieved 100% domestic funding level for sustainability in 2016.*
- *Over 16,000 registered and receiving services from Mister Sister clinics in 2016.*
- *In 2016 transitioned to and included into the portfolio of Healthworks Business Coalition.*

licensing, medication, consumables at no cost. In return PharmAccess provided the services to rural and remote populations, charging employers a prepaid subscription fee per employee per month.

To sustain this program, PharmAccess leveraged additional private sector resources through corporate social investment funding and international donor funding to provide primary health-care services to vulnerable groups en route to the rural workplaces for which services were contracted.

FACT BOX

HEALTH OUTCOMES OF CHILDREN

- *A longitudinal study was conducted in 2011 to evaluate the effect of the Mister Sister mobile clinics services on health outcomes of children.*
- *853 children were evaluated at baseline and 635 followed up 5-6 months later, in the Otjozondjupa region. 218 children were lost to follow up.*
- *The study found that the health outcomes of the Orphan and Vulnerable Children (OVC) was worse than those of non-OVC. For example: at baseline only 81.3% of OVC had up to date immunizations compared to 93.8% among non-OVC. The following improvements were noted over the six-month evaluation period:*
  1. *Up-date immunization in orphans increased by about 21%, from 75.0% to 95.5%;*
  2. *The corresponding increase in this same indicator was modest among all other children, from 94.2% to 96.2%;*
  3. *Improvements in nutritional status;*
  4. *Near eradication of parasitic worms;*
  5. *A decline in children with anaemia.*
- *The improvements suggest that the intervention contributed to safeguarding the health of these children from infectious disease.*

Aneni, EC, De Beer IH, Hanson L, Brennan A, Rijnen B, Feeley FG Mobile Primary Health Care Services and Health Outcomes of Children in Rural Namibia. Accepted for publication in the Rural and Remote Health Journal.

TIMELINE INTERVENTIONS PHARMACCESS IN NAMIBIA 2004-2016

2004

PharmAccess startup in Namibia commenced. Diamond Health Services (DHS) product developed

2005

- Okambilimbili launched
- DHS product marketed

2006

- HIV Risk Equalization Fund (HIVREF) developed
- Launch of Vitality and Vitality Day Care
- DHS incorporated into Namibia Health Plans (NHP) Blue Diamond
- Oral fluid tests validated
- 1st Windhoek household survey conducted
- First HIV prevalence surveillance pilot conducted

2007

- Commence prevalence and on-site screening program
- Marketing of HIVREF & products through workplace programs

2008

2nd Windhoek household survey

2009

- Okambilimbili project ended
- 3rd Windhoek household survey
- HIVREF benefits incorporated into individual medical aid fund schemes
- Launch of Bophelo! mobile wellness screening clinics

2010

Pilot of Mister Sister mobile primary health care clinics in Otjozondjupa region (rural areas only)

2011

- Signing of 1st mobile primary health care provision public private partnership (PPP) agreement in Namibia between
- MoHSS and PharmAccess for the Mister Sister clinics in the Otjozondjupa and Omaheke regions
- Transition Bopehlo! Mobile wellness screening program from PharmAccess to NABCOA

2012

- Mister Sister PPP agreement signed for Khomas region and all regional PPP agreements expanded to include service provision in semi urban area
- Corporate Social Responsibility agreement concluded with Namibia Medical Care (NMC) for 3 years funding for Mister Sister and the donation of two mobile clinics

2013

PPP agreements expanded to include urban areas

2014

PPP agreement expanded to Erongo region

2015

- Funding agreement for Mister Sister with NMC extended to 2018
- Funding agreement with B2Gold concluded for Mister Sister

2016

- Mister Sister program domestically financially sustainable
- Transition Mister Sister to the Namibian Healthworks Business Coalition

4

INNOVATIVE PAYER MECHANISMS

While developing insights on how to reach out to lower middle-income people to stimulate prepayment of healthcare – especially for HIV, at a time when the HIV epidemic was at its worst at the turn of the century, it transpired to PharmAccess that Namibian medical aids were not willing to develop pertinent insurance products including HIV coverage. This was mostly related to the perception of unknown and potentially unbearable costs that would result from such packages.

Moreover, medical aids were hesitant because such products, for lower income groups, could potentially cannibalize their existing medical aid schemes. Therefore, PharmAccess stimulated the idea of a separate risk equalization fund for HIV, removing the unknown HIV risk from the medical aid packages and allowing them to compete on a level playing field for lower-income health insurances. This HIVREF was accompanied by an independent quality control mechanism: a HIV patient case management system.

Debate and challenges

The role of the private sector, especially in the achievement of universal health coverage remains a subject of debate, although most broadly suggested is that public sector, private sector and funding agencies work together to mobilize domestic resources to both fund and deliver health services sustainably and especially fill gaps left by the public sector and international funders (Stallworthy et al, 2014) and avoid further crowding out of the private sector.

Challenges such as the poor implementation of public private partnership agreements in the provision of universal health coverage services have hampered progress in countries thus suggesting that well-functioning public private partnerships that support access to community health insurance and health services should fully integrate both public and private sector.

FACT BOX

HIVREF

- *Launched in 2006.*
- *Established by Prosperity Health and Methealth.*
- *Part of Okambilimbili project.*
- *Enabled individual health insurance providers to share the risks for this disease.*
- *Provides cross industry subsidy of N$30 (€0.30) per (insured life) contribution to the participating medical aid funds.*
- *Enrolled over 40,000 people between 2005-2009.*
- *Led to medical aid funds retaining the new products that included HIV.*
- *Up to 13,000 of the 200,000 HIV patients on treatment are treated by the private sector because of medical aid funds accepting the risk of HIV coverage.*
- *First blueprint for PharmAccess of how to structure health insurance funds in Nigeria, Tanzania and Kenya.*

OP Schellekens, I de Beer, ME Lindner, M van Vugt, P Schellekens, TF Rinke de Wit. Innovation in Namibia: Preserving Private Health Insurance and HIV/AIDS treatment. Health Affairs. Volume 28, Number 6. November/December 2009.

5

EVIDENCE TO SUPPORT POLICY-MAKING

To transform any healthcare system evidence needs to be collected to motivate policy changes that affect healthcare exchanges. This was particularly true for the work conducted in Namibia around mobilizing resources in the response to HIV/AIDS. Policy makers are not only defined as politicians, academics or groups of people who make laws and regulations to govern the healthcare system, but also management and decision makers of entities like business coalitions, universities, professional associations and private sector companies, who make decisions about whether or not to provide and pay for health care for their employees and dependents.

Household surveys

Household surveys were conducted to evaluate the impact of affordable healthcare insurances in the City of Windhoek. These surveys generated the first general population HIV prevalence data in Namibia. Information was shared with policy makers, which proved valuable with respect to resource allocation of antiretroviral treatment programs.

Improve health awareness

It was learned over the years that addressing HIV in a 'vertical' manner was not the optimal approach. Including other diseases, and in particular chronic non-communicable diseases appeared a way to de-stigmatize HIV and simultaneously address very important health problems in a more efficient manner. It is illustrated how the Bophelo! mobile screening services were utilized to improve health awareness of HIV and non-communicable diseases (NCD), like diabetes and hypertension in the private sector amongst both employers and employees.

FACT BOX

WINDHOEK HOUSEHOLD SURVEYS

- *Panel household surveys amongst almost 2000 households were conducted in 2006/7 and repeated in 2008 and 2009 to estimate the HIV incidence and prevalence rates in the capital city of Namibia, Windhoek and to analyze related socio-economic factors.*
- *HIV prevalence in the population (>12 years of age) was 11.8% in 2006/7 and 14.6% in 2009.*
- *HIV incidence (i.e. the number of new infections) between 2007 and 2009 was 2.4 per 100 person year.*
- *HIV incidence and prevalence was higher amongst females.*
- *HIV incidence appeared non-associated with any socio-economic factors, indicating a universal risk for the population.*
- *For women a correlation was found between low per-capita consumption and HIV acquisition, while a HIV knowledge score was strongly associated with HIV incidence in both men and women. Thus a higher vulnerability in women was recorded.*
- *High HIV prevalence and incidence was concentrated in the north western part of the city, an area with a lower HIV knowledge, higher HIV risk perception and lower per capita consumption.*
- *The HIV prevalence and incidence rates found in these surveys did not support a declining HIV epidemic in Windhoek.*
- *The surveys identified geographical areas to prioritize HIV campaigning and interventions.*

Aulagnier M, Janssens W, de Beer I, van Rooy G, Gaeb E et al (2011) Incidence of HIV in Windhoek, Namibia. Demographic and Socio-Economic Associations. PLoS ONE 6(10): e25860. Doi: 10.1371/journal.pone.0025860.

Absenteeism

From continuous dialogue with the private sector through the Bophelo! program, it was evident that a key motivation for employers to provide wellness programs and health insurance for their employees was to have a healthier workforce with less absenteeism. PharmAccess wished to further substantiate this by specifically addressing work absenteeism as a consequence of diabetes, hypertension, HIV and other health determinants.

FACT BOX

PUBLICATIONS

The household surveys resulted in a number of other publications:

1. *Janssens W, Gustafsson-Wright E, de Beer I, van der Gaag J: A Unique Low-cost Private Health Insurance Program in Namibia: Protection from Health Shocks Including HIV/AIDS. Development Issues. Vol. 10/ Number 2/ November 2008.*
2. *OP Schellekens, I de Beer, ME Lindner, M van Vugt, P Schellekens, TF Rinke de Wit. Innovation in Namibia: Preserving Private Health Insurance and HIV/AIDS treatment. Health Affairs. Volume 28, Number 6. November/December 2009.*
3. *Janssens W, de Beer I, Coutinho HM, van Rooy G, van der Gaag J, Rinke de Wit TF. A cautious note on household survey HIV prevalence estimates in resource-poor settings. BMJ 2010. 341: c6323. www.bmj.com/content/341/bmj.*
4. *Marleen E. Hendriks, Ferdinand W. N. M. Wit, Marijke T. L. Roos, Lizzy M. Brewster, Tanimola M. Akande, Ingrid H. de Beer, Sayoki G. Mfinanga, Amos M. Kahwa, Peter Gatongi, Gert Van Rooy, Wendy Janssens, Judith Lammers, Berber Kramer, Igna Bonfrer, Esegiel Gaeb, Jacques van der Gaag, Tobias F. Rinke de Wit, Joep M. A. Lange, Constance Schultsz. Hypertension in Sub-Saharan Africa: Cross-Sectional Surveys in Four Rural and Urban Communities; PlosOne. March 2012, Volume 7, Issue 3, e3263f.*
5. *Aulagnier M, Janssens W, de Beer IH, van Rooy G, Gaeb E, Hesp C, van der Gaag J and Rinke de Wit, T.F. Incidence of HIV in Windhoek, Namibia: demographic and socio-economic associations. PLOS One 6, e25860, 2011.*
6. *Asfaw, A., Gustafsson-Wright, E. and van der Gaag. J. (2009). Willingness to pay for health insurance: An analysis of the potential market for new low cost health insurance products in Namibia. Research Study 08-01/2. Amsterdam: AIID.*
7. *E Gustaffson Wright; I de Beer, E Gaeb, G van Rooy, J van der Gaag, T Rinke de Wit; The Okambilimbili Health Insurance Project in Namibia: Lessons Learnt. PharmAccess International, Amsterdam Institute of Global Health and Development, The Netherlands, October 2011.*

FACT BOX

BOPHELO! WELLNESS SCREENING RESULTS

- *Bophelo! wellness screening at workplaces conducted during January 2009 and October 2010 resulted in over 11,000 employees being screened with the objective to improve health awareness not only of HIV but also of non-communicable diseases.*
- *This study combined a medical screening of blood pressure, blood glucose and HIV infection with an employee completed survey on knowledge and relevant risk behaviors for these conditions.*
- *The study estimated the prevalence of the three conditions and compared to self reported knowledge and risk behaviors and possible determinants.*
- *The study found that:*
  - *25.8% of participants had elevated blood pressure;*
  - *8.3% had an elevated random glucose measurement and*
  - *8.9% tested positive for HIV.*
  - *Over 80% of participants reported not to smoke nor use alcohol regularly.*
  - *Over 60% reported to use condoms.*
  - *Over half could not correctly identify risk factors for hypertension, diabetes or high risk behaviors for HIV infection.*
- *It was concluded that the prevalence of elevated blood pressure, elevated blood glucose and HIV amongst Namibian formal sector works is high while risk awareness is low.*
- *Wellness screening at the workplace improved individual knowledge of health and provided anonymous group based information to employers to improve workplace programs and employer based investments into health.*

FACT BOX

ABSENTEEISM

- *Secondary analysis of Bophelo! workplace screening data from the period March 2009-June 2010 conducted to evaluate multiple health factors associated with absenteeism in large worker populations in Namibia;*
- *7,666 employees in 7 industries in Namibia provided self-reported health questionnaires and were medically screened.*
- *The study found that high blood glucose and diabetes had the highest effect on absenteeism, this was followed by anemia and being HIV positive.*
- *Workers in the fishing and service sectors had the highest incidence of sick days.*
- *The highest prevalence of diabetes was found in the service sector.*
- *The highest prevalence of HIV was found in the fishing sector.*
- *It was found that both non-communicable diseases (high blood pressure, anemia and diabetes) and infectious diseases are associated in increased short terms absenteeism at the workplace.*
- *Workplace programs to manage these conditions could reduce absenteeism and reduce absenteeism related costs.*
- *The study advised that to minimize absenteeism related costs, employers could, in addition to education and preventions programs, provide basic health insurance to employees, including regular wellness screening.*


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RECOMMENDATIONS

Besides the learning for PharmAccess the programs and interventions have brought significant changes in the healthcare system of Namibia and increased trust between the public and private sector to jointly provide health services using a mixed funding model.

Recommendations were made for the Namibian healthcare system in light of the declining donor funding and the country's striving to achieve universal health coverage. The recommendations are to:

- Continue stimulating and understanding the demand of the patient/client through increased efforts to provide awareness of wellness and individual healthcare needs both in formal sector and in communities;
- Stimulate supply by expanding innovative quality healthcare service provision through the PPP on service delivery mechanism;
- Innovate payer structures to channel health risks into prepayment and risk equalization mechanisms;
- Develop specific private health insurances for formally employed, including low income, groups;
- Expand the role of MoHSS to facilitate policy making and regulation for public private partnerships;
- Establish an independent national health information hub to support evidence for policy making;
- Establish national standards for quality of healthcare services and health information.

The studies presented motivate further engagement of the private sector towards addressing public health challenges in Namibia not only for HIV, but also for other chronic and non-communicable diseases. This can be done by stimulating demand through the patient/client, directing demand to quality providers through the establishment of innovative public-private partnerships, innovating payer mechanisms for healthcare and providing evidence for policy making.

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CITATIONS OF SCIENTIFIC ARTICLES PRESENTED IN THIS REPORT

The research presented in this booklet has been published in the following peer-reviewed scientific journals

Diagnostic accuracy of 2 oral fluid-based tests for HIV surveillance in Nambia. Letter to the editor. Hamers RL, De Beer I, Kaura H, Van Vugt M, Caparos L, Rinke de Wit TF. *J Acquir Immune Defic Syndr 2008; 48:116-8.*

Anonymous HIV workplace surveys as an advocacy tool for affordable private health insurance in Namibia. De Beer I, Coutinho HM, Van Wyk PJ, Gaeb E, Rinke de Wit T, Van Vugt M. *Journal of the International AIDS society 2009; 12:32.*

University students and HIV in Namibia: an HIV prevalence survey and a knowlegde and attitude survey. De Beer I, Gelderblom HC, Schellekens O, Gaeb E, Van Rooy G, McNally A, Wit FW, Rinke de Wit TF. *Journal of the International AIDS society 2012; 15: 9.*

Health care options for commercial farm workers in Namibia. De Beer I, Coutinho HM, Guariguata L, FOrtsch HT, Hough R, RInke de Wit TF. *Rural and Remote Health 2011; 11: 1384.*

Assessing the costs of mobile voluntary counseling and testing at the work place versus facility based voluntary counseling and testing in Namibia. De Beer I, Chani K, Feeley FG, Rink de Wit TF, Sweeney-Bindels E, Mulongeni P. *Rural and Remote Health 2015: 15: 3357.*

Mobile primary healthcare services and health outcomes of children in rural Namibia. Aneni E, De Beer I, Hanson L, Rijnen B, Brenan AT, Feeley FG. *Rural and Remote Health 2013; 13: 2380.*

Innovation in Namibia: Preserving private health insurance and HIV/AIDS treatment. Schellekens OP, De Beer I, Lindner ME, Van Vugt M, Schellekens P, RInke de Wit TF. *Health Affairs 2009; 28: 1799-806.*

Incidence of HIV in Windhoek, Namibia: demographic and socio-economic associations. Aulagnier M, Janssens W, De Beer I, Van Rooy G, Gaeb E, Hesp C, Van der Gaag J, Rinke de Wit TF. *Plos One 2011; 6 (10): e25860.*

A cautious note on household surveys in poor settings. Letter. Janssens W, De Beer I, Coutinho HM, Van Rooy G, Van der Gaag J, Rinke de Wit TF. *BMJ 2010; 341: c6323.*

Prevalence and knowledge assessment of HIV and non-communicable disease risk factors among formal sector employees in Namibia. Guarigata L, De Beer I, Hough R,Mulongeni P, Feeley FG, Rinke de Wit TF. *Plos One 2015; 10(7): e0131737.*

Diabetes, HIV and other health determinants associated with absenteeism among formal sector workers in Namibia. Guariguata L, De Beer I, Hough R, Bindels E, Weimers-Maasdorp D, Feeley FG, RInke de Wit TF. *BMC Public Health 2012:12:44.*

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REFERENCES

Schellekens, O., Lindner, M., Lange, J., & van der Gaag, J. (2007, October 17). A new paradigm for increased access to healthcare in Africa. *Annual IFC / Financial Times Essay Competition.*

Preker, A., Lindner, M., Chernichovsky, D., & Schellekens, O. (2103). *Scaling Up Affordable Health Insurance : Staying the Course.*

Lange, J., Schellekens, O., Lindner, M., & van der Gaag, J. (2008). Public–private partnerships and new models of healthcare access. *Current Opinion in HIV and AIDS. 3(4), pp.509-513.*

Stallworthy, G., Boahene, K., Ohiri, K., Pamba, A., & Knezovich, J. (2014, June). Roundtable discussion: what is the future role of the private sector in health? Globalization and Health, 10:55.

Abiiro, G., Mbera, G., & De Allegri, M. (2014, May). Gaps in universal health coverage in Malawi: a qualitative study in rural communities. *BMC Health Servcies Research.*

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ABBREVIATIONS

NIP	Namibia Institute of Pathology
HIV	Human Immunodeficiency Virus
HIVREF	HIV Risk Equalization Fund
MoHSS	Ministry of Health and Social Services
NCD	Non-Communicable Diseases
PPP	Public Private Partnership
NABCOA	Namibia Business Coalition on AIDS
NMC	Namibia Medical Care
UNAM	University of Namibia
BMI	Body Mass Index
GFATM	Global Fund for HIV/AIDS, TB and Malaria
VCT	Voluntary Counseling and Testing
OVC	Orphan and Vulnerable Children
AIDS	Acquired Immuno-Deficiency Syndrome
GPD	Gross Domestic Product
DHS	Diamond Health Services
NHP	Namibia Health Plans

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Dr. Ingrid de Beer

Ingrid de Beer was born Weissnar on 16.12.1970 in Bruck an der Mur, Austria. Her parents immigrated to South Africa in 1977, where she spent her childhood. After completing her studies in Political Science and Development Studies at the University of Johannesburg she moved to Namibia.

Ingrid worked in the private sector in Namibia for 12 years, in the field of human resource management, organizational development, corporate governance, internal audit and industrial relations. In 2003, whilst serving as the Director of Human Capital for the Ohlthaver & List Group of Companies in Namibia, Ingrid met Dr. Tobias Rinke de Wit of PharmAccess. At that time Namibia was experiencing the brunt of the HIV epidemic, and the effect was being felt in the group of companies Ingrid was working for. Trying to find a solution to the barriers of accessing HIV treatment motivated Ingrid to leave the corporate world and join PharmAccess in the fight against HIV/AIDS.

Over the 12 years working as Managing Director of PharmAccess Foundation Namibia, Ingrid developed an extreme passion for improving access to quality healthcare for Namibian, recognizing the important role the private sector has to play to compliment public sector initiatives.

In late 2016, the Namibian operations of PharmAccess were successfully merged with the Namibian Healthworks Business Coalition and PharmAccess ceased operations in Namibia. In early 2017, Ingrid took up the position of Technical Director at PharmAccess in Dar es Salaam, Tanzania.

Colophon

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