

CONTINENT	Africa
OCOUNTRY	South Africa
Q HEALTH FOCUS	HIV
AREAS OF INTEREST	Public-private partnerships, Private providers
→ HEALTH SYSTEM FOCUS	Service delivery, Health care financing

## THE GP DOWN-REFERRAL MODEL

### BROADREACH GENERAL PRACTITIONER DOWN-REFERRAL PUBLIC-PRIVATE PARTNERSHIP, SOUTH AFRICA

A public-private partnership model referring public sector HIV positive patients to private general practitioners. In so doing it enhances routine HIV care for patients and reduces the pressure on an overburdened public primary health system.

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# **CONTENTS**

ABE	REV	TATIONS	4
CAS	E IN	TRODUCTION	5
1.	INNOVATION PROFILE AT A GLANCE		6
2.	CHALLENGE		
3.	INNOVATION IN INTERVENTION		8
3.	l.	Down-referral of public patients to private general practitioners	8
3.:	2.	Case management and treatment support programmes	8
4.	IM	PLEMENTATION	9
4.	1.	Innovation in implementation	9
4.	2.	Organization and people	9
4.	3.	Cost considerations	10
5.	Οl	JTPUTS AND OUTCOMES	10
5.1. Impact on health ca		Impact on health care delivery	10
5	2.	Project milestones	11
5.	3.	Community and beneficiaries	11
6.	SC	ALABILITY	12
7.	SU	STAINABILITY	13
8.	KE	Y LESSONS	13
8.	l.	Implementation lessons	13
8	2.	Personal lessons	15
CAS	E IN	SIGHTS	16
REF	EREI	NCE LIST	17















## **ABBREVIATIONS**

ACHAP African Comprehensive HIV/AIDS Partnerships

AfA Aid for AIDS

ART Antiretroviral therapy

ARV Antiretroviral

BR BroadReach

**CCMDD** Central Chronic Medicine Dispensing and Distributing

CD4 Cluster of Differentiation 4

**DMS** Disease Management System

**DOH** Department of Health

**GP** General practitioner

HIV Human Immunodeficiency Virus

**HMIS** Health Management Information System

KOSHMED Independent Practitioners Association of Klerksdorp, Orkney, Stilfontein and

Hartebeesfontein; North West Province, South Africa

MAIPA Mafikeng Independent Practitioners Association; North West Province, South Africa

MOU Memorandum of understanding

NHI National Health Insurance

PEPFAR U.S. President's Emergency Plan for AIDS Relief

PHC Primary health care clinics

**PLHIV** People living with HIV

PMTCT Prevention of mother-to-child transmission

PPP Public-private partnership

TB Tuberculosis

USAID United States Agency for International Development

**US\$** United States dollar

WHO World Health Organization















## **CASE INTRODUCTION**

The GP Model utilizes the additional capacity of the private sector to meet gaps in the provision of health care services for HIV patients in the public sector. It enables medically stable HIV patients to be down-referred from public sector hospitals to local private general practitioners (GPs). It has been specifically constructed to provide support for the overburdened public health care system, which was struggling to cope with the large number of HIV patients needing antiretroviral therapy in South Africa. The GP Model is a publicprivate partnership (PPP) between BroadReach Healthcare, the North West Province Department of Health (DOH), and KOSHMED and MAIPA (two independent private general practitioner associations in the North West Province). Since it began in 2005, 4158 patients have been transferred to private GPs for routine HIV care.

The GP Model illustrates that down-referring by out-contracting selected health care services to private providers with additional, under-utilized capacity is a feasible mechanism to provide and increase access to quality services for public sector patients in resource-constrained environments. Although this has been applied primarily to HIV services and related comorbidities in the GP Model, it would be interesting to examine the transferability of the model to other disease services. The GP Model

also provides an example of how planning for sustainability can impact the future success of such models. Donor funding was provided for 10years to cover the consultation fees of the GPs participating in the Model. These fees were fixed at a negotiated rate, which was determined with input from all partners and structured so that it would be feasible for the North West Province DOH to absorb this cost if donor funding did not continue. Ten years into the GP Model, donor funding has indeed ended and discussions are at an advanced stage for the DOH to absorb these costs as initially planned. As demonstrated by the GP Model, appropriate costing increases the likelihood that effective models can successfully integrated into the public health system.

It would be valuable to explore further the potential for scaling this model to other provinces in South Africa or to other countries with a similar combination of overburdened public sector and underutilized private sector.

"I think we are achieving excellent results for a very difficult disease [HIV]." (Private GP involved in the GP Down-Referral Model)

















## 1. INNOVATION PROFILE AT A GLANCE

## **Project Details**

- Toject Betails				
Project name	General Practitioner Down-referral Public-Private Partnership (GP Model)			
Founding year of project	2005			
Founders' names	Dr Ernest Darkoh (Ghanaian) and Dr John Sargent (American)			
Organizations involved	BroadReach Healthcare (private company) North West Province Department of Health (DOH)			
Team size	BR has 214 employees in South Africa, five are involved in the GP Model.			
Innovation Value				
Main value proposition	A public-private partnership (PPP) model that links public HIV positive patients with private general practitioners, thus enhancing routine HIV care for the patient and reducing the pressure on an overburdened public primary health care system.			
Beneficiaries	HIV positive patients on antiretroviral therapy attending public primary health care facilities. Since 2005, 4158 patients have been transferred to private general practitioners for routine HIV care.			
Key components	<ul> <li>A referral system that leverages use of primary private health care providers for public sector patients at a negotiated, fixed consultation fee.</li> <li>A patient case management and treatment support programme (facilitated through an electronic data management system and an appointed Regional Coordinator) to improve information flow and patient follow-up, increasing treatment adherence and retention rates.</li> </ul>			
<b>Operational Details</b>				
Main income streams	Grants (PEPFAR) and subsidies in kind from the provincial government			
Project cost considerations	<ul> <li>This is a co-funded care model.</li> <li>BR covers the model set-up and staffing costs as well as costs for managing patient data. It provides adherence support and pays the negotiated consultation fees for the private GPs contracted into the model.</li> <li>The North West Province DOH provides antiretrovirals and laboratory services.</li> </ul>			
Scale and Transferability				
Scope of operations	Operational in the North West Province, South Africa. Specific districts include: Klerksdorp (398 807 catchment population), Mafikeng (281 400 catchment population) and Potchefstroom (176 677 catchment population).			
Local engagement	A partnership between BroadReach and the North West Province DOH.			
Scalability	<ul> <li>This model, which utilizes private providers to support public sector patients, is feasible in any setting that has:</li> <li>an abundance of willing and able private primary care providers;</li> <li>political support from the provincial DOH or national Ministry of Health;</li> <li>a centralised health fund, either established as part of a PPP with co-funding and donor support or as a national health insurance scheme.</li> </ul>			
Sustainability	<ul> <li>To ensure the sustainability of this model, three approaches are considered.</li> <li>BroadReach Health care is to transition from being the implementing lead to becoming a technical advisor to the North West Province DOH.</li> <li>The programme is to be fully transitioned and integrated within the North West Province DOH.</li> <li>The programme will eventually become integrated within the National Health Insurance fund of South Africa.</li> </ul>			















### 2. CHALLENGES

HIV prevalence in South Africa rose from 0.8% in 1990 to 4.3% in 1994 (Simelela & Venter, 2014) and was at 12.2% in 2012 (Shishana et al., 2012). The initial response from the government to the epidemic was one of denial, and the rejection of antiretroviral therapy (ART). As a result, between 2000 and 2005, an estimated 330 000 lives or approximately 2.2 million person-years were lost (Chigwedere et al., 2008). In April 2004, a comprehensive ART roll-out plan began, and by 2005, all provinces were providing ART. However, the number of people receiving treatment remained low. By September 2005, 85 000 people were enrolled on ART in the public sector and after a relaxation of eligibility requirements, by December 2008, the number of patients on ART in South Africa grew to 678 550 (Simelela & Venter, 2014). Receiving adequate adherence support and counselling services are crucial for patients with HIV, a life-long chronic disease. The stigma surrounding HIV in South Africa is severe. Public sector clinics do little to protect the privacy of patients, which increases the social challenges surrounding the accessing of care.

In addition to its heavy HIV burden, South Africa is faced with a critical shortage of doctors. In 2013, South Africa had 60 doctors per 100 000 citizens, compared to a world average of 152 doctors per 100 000 (Econex, 2015). Strain on the country's health care system is exacerbated by large disparities in per capita health care expenditure between the private and public sectors. Annual per capita expenditure is approximately US\$ 140 in the public sector, serving 84% of the population, and US\$ 1400 in the private sector serving only 16% of the population (Benatar, 2013; Mayosi & Benatar, 2014). The distribution of medical specialists in the private sector is 86.5 per 100 000 compared to 11.4 per 100 000 in the public sector, and is strongly skewed toward affluent provinces, including Gauteng and the Western Cape (Stuckler, Basu & McKee, 2011; Econex, 2015).

There is growing recognition that complex health challenges cannot be tackled by a single sector of the economy: public, private, or non-profit. Since the mid-1990s, governments around the world have increasingly used private sector involvement in developing, financing and providing public health care infrastructure and service delivery through public-private partnerships (PPPs). Over the past decade, the use of PPPs has grown almost five-fold, with nearly US\$ 4 billion of health PPP contracts signed worldwide in 2010 alone George, 2014). (Roehrich. Lewis & attractiveness of PPPs lies in their promise to leverage the advantages of each sector in order to a better end result. Combined achieve competencies distribute capacity from the private sector to overcome shortfalls in the public sector. While challenges exist in the implementation of PPPs (Buse & Harmer, 2007; IOB, 2013; Roehrich, Lewis & George, 2014), they show an impressive record of mobilising significant amounts of financial resources and expertise (Buse & Harmer, 2007; Martin & Halachmi, 2012; IOB, 2013; Nakimuli-Mpungu et al., 2013; Vian et al., 2015).

Since the early 2000s PPPs have been successfully implemented to scale up national programmes (World Health Organization, 2005). Botswana was the first African country to respond to the HIV crisis by launching a national, public sector ART programme, the Masa programme, in 2002 (Bene and Darkoh, 2014). Masa was based on the model and infrastructure developed by the African Comprehensive HIV/AIDS Partnerships (ACHAP), a PPP initiated in 2000 by the national government, the Merck Company Foundation/ Merck & Co., Inc., and the Bill and Melinda Gates Foundation (Druce et al., 2004; Ramiah & Reich, 2005).

In South Africa, an estimated 2.5 million people were receiving antiretrovirals (ARVs) in 2016, making it the largest programme of its kind in the world. Of these, 2.3 million are on treatment in the public sector (SANAC, 2014). In September 2016, all HIV positive individuals will become eligible for ART regardless of their CD4 count, an estimated 6.19 million (Stats SA, 2015). In addition to this, the growing number of patients previously initiated into ART programmes will need to be retained in care.















### 3. INNOVATION IN INTERVENTION

The GP Down-Referral Programme (referred to as the GP Model) is a PPP initiated and coordinated by BroadReach Healthcare (BR), a private health care consultancy operating in South Africa. The GP Model was developed at the request of the North West Province Department of Health (DOH) to support the delivery of ART to patients being treated in the public sector. Launched in 2005, the Model utilizes the extra capacity sitting within the private sector to meet the needs of the resource-constrained public sector.

# 3.1. DOWN-REFERRAL OF PUBLIC PATIENTS TO PRIVATE GENERAL PRACTITIONERS

The GP Model shifts the delivery of ART in stable patients (those on ART with a suppressed viral load who only need to be seen for routine follow-up appointments and medication collection) from public sector hospitals to lower-level health facilities ("down-referral"). This allows hospital staff to focus on initiating new ART-eligible patients and managing complicated cases. Typically, down-referral happens across different tiers of public sector health facilities. However, to address the challenge of overcrowding of public health facilities, the GP Model down-refers public patients to private independent general practitioners (GPs).

HIV-positive patients on ART attending a public-sector primary health care clinic (PHC) are eligible for enrolment in the GP Model if they had been stable on ART with suppressed viral load for 3-6 months without concurrent illnesses (with the exception of tuberculosis (TB)) and do not have private medical insurance. Participation in the programme is voluntary. Although patients are seen by private GPs, they officially remain patients of the public sector and receive blood tests and medication through the state-run services, but delivered by the GP practices.

Patients were initially referred back to the public hospital for management of any other concurrent diseases, but this changed in 2012 to allow GPs to manage all patient conditions and only refer back to public facilities for complicated cases or those requiring hospital admission.

## 3.2. CASE MANAGEMENT AND TREATMENT SUPPORT PROGRAMMES

For HIV, as a chronic disease, case management and treatment adherence is vital for positive outcomes. The GP Model has designed mechanisms to provide these services for patients, primarily through appointed Regional Coordinators. Regional Coordinator activities include: 1) patient education sessions and adherence/wellness training, which patients attend upon their enrolment into the programme and then annually; 2) support from clinic-based adherence supporters; 3) home visits from adherence supporters and telephonic follow up throughout the course of treatment. The BR team's Regional Coordinators identify nonadherence immediately and implement follow-up procedures. This differs from the support provided from public primary health care clinics where there is no standard protocol or follow-up mechanism across clinics for patients who miss drug pick-ups. In addition to the practical training, the BR Regional Coordinators also provide support and encouragement to patients.

What's important to them it's feeling safe I guess, it's feeling that they are understood, it's feeling that someone is there for them, you know it's feeling like they are not on their own; that if they have a problem there is someone to approach...so I think it's just about giving someone to listen, someone to guide them. (BR GP Model Regional Coordinator)















## 4. IMPLEMENTATION

#### 4.1. INNOVATION IN IMPLEMENTATION

Unlocking capacity through public-private partnerships

The GP Model is structured as a PPP that unlocks existing available resources - a large, unburdened, well-resourced private sector - to shift patients away from the overburdened public sector. This frees up resources in the public sector, improves the care offered to stable patients, and saves them time and the direct and indirect costs of using traditional public sector channels. An MOU for the PPP was established between the North West Province DOH and BR with financial and technical support from the US President's Emergency Plan for AIDS Relief (PEPFAR) and Aid for AIDS (AfA), a private data company. BR assumes primary responsibility for coordinating the partnership, the financial management of consultant fees for the contracted GPs, running patient training sessions, coordinating patient monitoring, follow-up and programme evaluation and reporting. The GPs who are part of the Model are predominantly from two private GP networks in the province (MAIPA, Mafikeng Independent Practitioners Association, and KOSHMED, the Independent Practitioners Association of Klerksdorp, Orkney, Stilfontein and Hartebeesfontein).

#### Electronic Disease Management System

One of the key components of the GP Model is its patient information management system (known as the Disease Management System (DMS). The DMS is donor-funded and managed by AfA. It goes beyond what is available in the public sector and is designed to promote the efficient management of complex patient information and treatment activities. It is available online and offline and provides real-time patient information such as treatment regimen and pick-up history, laboratory information, doctors' consultation notes and adherence support data (Igumbor et al., 2014). It flags if a patient misses a scheduled visit, if lab test results are out of normal/desired ranges, or if medication is uncollected, and notifies Regional Coordinators when a follow-up is required. This facilitates an effective and timely patient support process to increase adherence rates and improve patient outcomes.

#### 4.2. ORGANIZATION AND PEOPLE

BR was founded by Dr John Sargent and Dr Ernest Darkoh in 2003 with the mission to improve health care access, patient outcomes and continuous wellbeing for underserved populations. It is a private consulting company that undertakes a wide range of health-related projects, of which the GP Model is one. Although their headquarters are in South Africa, they have worked in 23 other countries. They partner with governments, multinational health organizations, donors and life science companies.

One of the successes of BR as a convenor for the PPP is its corporate culture and the perspective with which it approaches its work.

The work culture at BroadReach is very simple, we focus on making the difference...the culture just motivates us to do better. You cannot be comfortable and say, "No I have done my part, this is it." You have to go out there and really push hard to make a difference. There is always that room for improvement, so that's the culture. (BR GP Model Regional Coordinator)

Teamwork, relationship-building and helping others are foundational elements and function as motivators. Even though the GP Model team are based in different locations, they speak daily, have regular meetings and share ideas about how to make the processes better for everyone.

Our [viral load] suppression rate has never been less than 90% because I think it's mainly because we work as a team. If I feel like I am not coping or something is just too much, I can ask one of the guys in Northern Cape to assist me...so even though they are in their own towns, we are really united and you can register a problem and we try to push it together... The most important thing I think is building relationships, whether with my colleagues or with my clients. (BR GP Model Regional Coordinator)















#### 4.3. COST CONSIDERATIONS

The GP Model is co-funded. BR covered the costs for the establishment of staffed offices within the selected public sector wellness clinics. It is also responsible for the costs of managing patient data, providing adherence support and paying the negotiated consultation fees to the private GPs contracted into the Model (through PEPFAR funding). The North West Province DOH provides ART medication from their district pharmacies, and laboratory services are provided by National Health Laboratory Services (a parastatal).

All GPs are paid on the basis of individual patient visits, based on a rate negotiated by the Provincial DOH, BR and KOSHMED. Because GPs are responsible only for ART management, the negotiated fee is below the standard private sector GP fee. At the time of this research, GPs received R 110 (US\$ 8) per patient consultation, with the average consultation lasting 8 - 10 minutes. The fees were negotiated at the inception of the programme (and have since been adjusted upward to match inflation) with the North West

DOH to ensure that they would be sustainable should the Ministry of Health need to assume responsibility for financing the model in the future.

A cost effectiveness study was conducted by Navario (2009) comparing down-referral to private GPs (BR's GP Model) with down-referral to public sector primary health care clinics (PHC). The study found that the total cost for the 2007/2008 fiscal year was higher in the GP Model (R 2 153 233) compared to the PHC down-referral option (R 1 556 591). However, due to the increased effectiveness of the Model, the average cost per patient with a suppressed viral load in down-referral care was R 646.41 per month in the GP Model and R 724.00 per month in the PHC option, and the cost per patient retained was R 570.85 in the GP Model and R 516.45 in the PHC option (Navario, 2009). Total and average cost calculations included drug costs (ART and tuberculosis regimens), routine laboratory examinations, outpatient care costs, inpatient care costs, and down-referral care costs (GP fees and coordination).

## 5. OUTPUTS AND OUTCOMES

#### **5.1. IMPACT ON HEALTH CARE DELIVERY**

Increasing access to ART

When ART became adopted nationally throughout South Africa in 2005, only doctors could initiate and follow up treatment and only within a tertiary care setting. However, there was limited additional capacity created to manage the large number of ART-eligible patients and to initiate more patients into treatment once capacity had been reached. The regulations changed to allow nurses to initiate ART in 2012 but patients were still deteriorating and some dying before being initiated onto ART. Over the 10 years the GP Model has operated, 4158 stable patients have been down-referred to the private sector, allowing doctors in the public sector to focus on initiating new patients and handling complex cases.

If you need one clinic for 10 000 people; if we were conservative and we said we had 45 000 people... then we need 45 clinics. We have got 17

clinics. It is way too few. If we take in the GPs and utilize them as part of our system, yes we are going to need the clinics but it gives us a bridge to actually deal with the patient care whilst we expand clinics. (Professor Variava, Clinical Head of Internal Medicine, Tshepong Hospital)

## Improved adherence rates and patient outcomes

At the time of study there was an internally reported adherence rate of 90% of patients on ART, and over the 10 years the programme has been in operation, 92% of the patients down-referred have been retained in care. In the study conducted by Navario (2009) comparing the GP and PHC down-referral models, the following results were obtained: 1) the proportion of patients who remained in care at the down-referral site with suppressed viral loads was 83% and 55% in the GP Model and PHC cohorts respectively; 2) eighty-eight percent of GP model patients had suppressed viral loads compared to 67% of PHC















patients; and 3) retention on treatment was 94% among GP Model patients and 75 percent among PHC patients.

In a study by Igumbor et al (2014:1), the following results were found, based on all patients down-referred in the GP Model:

Median number of patients per GP	143 (IQR: 66- 246)
CD4 count < 200 cell/mm3 at time of down-referral	13.8%
CD4 count < 200 cell/mm3 at 12 months after down- referral	6.6%
CD4 count < 200 cell/mm3 at 48 months after down- referral	4.1%
Suppressed viral load (HIV-1 RNA 400 copies/ml) at 48 months after down-referral	88.4%
Probability of survival at 12 months after down-referral	99.0% (95% CI: 98.4%-99.3%)
Probability of survival at 48 months after down-referral	89.0% (95% CI: 87.1%-90.0%)
Retention rate at 48 months after down-referral	94.3% (95% CI: 93.0%-95.7%)

These improved outcomes were not only noted in studies but also by GPs and staff involved in the Model. "I think we are achieving excellent results for a very difficult disease that needs to be treated." (Private GP involved in the Model)

#### Continuity of care

One of the benefits of the GP Model is the continuity of care it provides when patients are treated consistently by the same doctor.

Having one person dealing with the patient is important because you immediately pick up problems sometimes before they arise. You tend to get to know your patients -- patients you can trust, patients you can't trust, who's taking the medication, who's not taking the medication you will immediately pick up if the patient is sick, when the patient walks in basically. So you develop a very good understanding of your patient as opposed to seeing a patient just randomly. (Private GP involved in the Model)

#### **5.2. PROJECT MILESTONES**

- 28 November 2005 first patient downreferred within the Model
- Celebration of the 5-year anniversary on 04 November 2010
- Model expanded to Potchefstroom in 2009 and Mafikeng in 2010
- Built an expanded pharmacy at Tshepong Hospital on 23 March 2011
- First Runner Up for Centre for Public Service Innovation (CPSI) Awards in 2012
- Model expanded to include other comorbidities in 2012
- Model included two PHCs in the downreferral process in November 2012
- First Runner Up for Centre for Public Service Innovation (CPSI) Awards in 2015
- Full integration into the North West Department of Health (as of 1 June 2016)

#### **5.3. COMMUNITY AND BENEFICIARIES**

In a qualitative study, patients were asked why they chose to be down-referred in the GP Model rather than remaining at their local PHC. The most common reasons included: 1) proximity to home (63%); 2) to save money (51%); 3) quick visit/no queue (49%); 4) friendly staff (37%); and 5) good care (29%) (Navario, 2009: 176). Some of those treated within the Model became unofficial patient supporters.

So now they become kind of champions in their own way to go and tell others what they need to be doing. So it's had a very good effect not only in decongesting our wellness clinic but also actually making sure that the patients are alive and well and you know, taking their treatment. So we're quite happy with what we've done so far. (North West Province DOH Official)

The opportunity to build trust between patients and their GPs was also expressed as a key advantage of the Model in the face of dealing with a chronic illness. "I think trust is a major factor that really motivates because any lifelong illness requires motivation otherwise it's very difficult to manage and we see that with all chronic illnesses." (Private GP involved in the Model)

On a hospital level, there was clear appreciation for the extra capacity that was created through the GP model. "That was also part of the















BroadReach benefits for our institution because it assisted us to help a lot more individuals on multiple levels by building and extending our structure and by us utilizing the general practitioners who could free up space." (Professor Variava, Clinical Head of Internal Medicine, Tshepong Hospital) "It has impacted well on not only just the community, it's also on the hospital. So the entire system benefited from it." (North West Province DOH Official)

The former North West Province DOH District Chief Director, who was instrumental in setting up the GP Model with BR, identified a range of positive outcomes. Although there is a feeling that the Model needs to evolve continually, its multiple benefits for patients, the community and hospitals were clearly recognized.

And what came out of it [the brainstorming session] was actually so good, so good that we feel that it [the GP Model] has really done a lot for the patients. In fact, just last year we had a celebration of the patients that have survived more than seven years under the programme and believe me the results were so good, the survival rate improved, the viral loads decreased, the CD4 remained higher so the patients were actually well and we had beautiful green - we call it green because it's developing, flourishing, alive, so everybody wore green that day and we had a beautiful function to celebrate life. Patients that survived were really highlights of the day and it was so nice to see them well and happy and celebrating. (North West Province DOH National Health Insurance Director)

### 6. SCALABILITY

Two of the scaling considerations for the GP Model are: 1) expanding the scope of the Model to include other clinical services; and 2) widening the reach of the Model by implementing it in all four districts of the North West province (and possibly beyond). In 2012 the Model was expanded to include diabetes and hypertension. The BR team and GPs have expressed a desire to expand it further. Within the provincial DOH, there has also been recognition of the benefit of this. "It would be futile referring patients with comorbidities to a doctor for ART only, they would have to treat both, both or three, whatever comorbidities are there. So that would be necessary for us to give cognizance to that as well." (North West Province DOH official)

Since its establishment 10 years ago, the GP Model has spread widely in the densely populated areas of the North West Province. This was influenced by the acceleration of the national ART roll-out, which led to a willingness by the DOH and the management team from Tshepong Hospital to support innovative models which would assist with this roll-out. The existence of strong private GP networks also facilitated expansion. However, even without the contextual factors that helped shape the success of the Model, with commitment from partners and good leadership from the PPP coordinator, the Model has strong potential to

scale (either directly by BR or through replication by another agent).

The National Health Insurance (NHI) scheme being piloted in South Africa is one way for this scaling to occur. The Model is at present being run in one of the NHI pilot districts (Dr Kenneth Kaunda District) and could be part of the district's NHI strategy. However, redesign of some aspects of the Model may be required to fit in with the changing policy framework. For example, there is currently an emphasis on the contracting-in rather than the contracting-out of private services. At optimum scale, the Model would need to find a balance between customising to fit the context of the specific district and the standardising of best practice. Active participation from new and future partners in this process will be crucial to the uptake of the Model beyond the current districts. These stakeholders need to assess the availability of public and private sector capacity, political support and financial sustainability, as costs and resource allocation vary by district. Maintaining rigorous follow-up systems and the use of tailored electronic DMS throughout the scaling process are important in order to maintain the current impact of high patient retention levels and low loss to follow-up.















### 7. SUSTAINABILITY

A key consideration for sustainability is the eventual hand-over of responsibility to the North West Province DOH, which must be able to absorb the costs associated with the Model. These discussions were held between BR, the North West Province DOH. Tshepong Hospital staff and other key partners at the beginning of the programme, which laid a strong foundation for the Model's sustainability. Consultation fees for the contracted GPs, eventual absorption of those costs by the DOH, roles and financial responsibilities within the partnership, and DOH commodity provision (i.e., ARVs, laboratory and imaging diagnostics) were all issues negotiated before the programme was rolled out. At the time of research, PEPFAR funding through BR covered the cost of GP clinical consultation, AfA data management, the training of contracted GPs and Wellness Clinic staff, patient adherence support, programme management support, and BR programme management (including patient monitoring and follow-up).

As BR and PEPFAR continue to move towards a technical assistance version of support, with a decrease in direct funding for GP consultation fees and other programme administrative costs, the planned absorption of costs and responsibilities by the DOH becomes more critical (White et al., 2014: 19). The North West Head of Department (Health) agreed to take over the programme from 01 June 2016 when it is due to be integrated with the Central Chronic Medicine Dispensing and Distribution Programme. The GP consultation fees will remain at R 110 with consultations reduced from 12 to 6 per annum. The programme is set to be expanded across the North West Province. If the donor funding is completely removed and the DOH is no longer willing or able to absorb the Model, it will need to draw to a close. However, even if this occurs, there will be no interruption of care for the patients enrolled in the Model: they would be absorbed into the PHC down-referral programme. All patient information will remain within the public sector throughout the programme, enabling continuity should such a handover occur. One of the elements being considered is a greater use of the DOH databases and information management systems, to increase compatibility and lower costs if the DOH absorbs financial responsibility. These absolute costs will however need to be weighed up against cost efficiency in terms of patient outcomes within the private GP Model.

## 8. KEY LESSONS

#### **8.1. IMPLEMENTATION LESSONS**

Getting started

Some lessons learnt from BR in the early stages of design and implementation are:

- focus on the root cause of the problem, not just the symptoms, when designing a solution;
- proceed slowly and focus on refining the basics of the model before implementation;
- identify champions within each partner organization who can drive and advocate the model within their environments of influence;
- include all partners from the beginning.

#### Maintaining efforts

#### Iterative improvements

It is important to work continually to improve the Model and make modifications to fit the changing needs, constraints and dynamics of the environment. In the GP Model, two examples of improvements over time were: 1) expanding the Model to incorporate the treatment of other comorbidities; and 2) having patients collect their medication directly from the GP rather than having to go separately to a public sector pharmacy. This was done by including the contracted GP providers into the public health system's pharmacy distribution network. One DOH















champion of the Model also emphasized the importance of building in mechanisms for evolving the design to address the changing situation, even beyond the changes already adopted.

This model was very relevant at the time we started it but at the moment, a lot of changes have happened in South Africa. One of them is the decentralized initiation of HIV patients on ART at the clinic level...So I think that the Model needs a little bit of modification in the new context. (North West Province DOH Official)

#### Communication and feedback mechanisms

One way in which adaption happens in the GP Model is through regular feedback and communication. Various mechanisms have been set up to ensure effective communication between the different stakeholders.

- The on-site presence of BR Regional Coordinators facilitates timely communication and regular interactions between hospital and BR staff.
- Quarterly site meetings between all partners are held to identify challenges and develop strategies to address them.
- These meetings are attended by BR staff,
   GPs and North West Province DOH
   personnel at district and sub-district levels.
- BR convenes, facilitates and distributes minutes of the meetings to all stakeholders.

#### Create a transition plan

Before the inception of the programme, BR established a transition plan to ensure the responsible and prompt transfer of patients back into public sector facilities should funding end. These plans were shared with and agreed to by the North West Province DOH. All patient records are held by the public sector, making a potential transfer easier. At the time of research, talks were at an advanced stage with the North West Province DOH regarding cost absorption and expansion. BR has already completed the collection of data and an implementation plan essential for the expansion. The integration of the Model with the DOH's Central Chronic Medicine Dispensing and Distributing programme is anticipated to increase access to ART.

#### Prioritize teamwork

BR emphasizes solid teamwork. It is one of the foundations of its culture as well as its focus on maintaining effort and delivering good work.

To me everything BroadReach is its people but nothing else. It is its people and you are going to accomplish a lot of accomplishments of what you set out to do based on how well or badly that group of people functions. For me it's not about what I can do individually or what job I can do individually but is about what can we accomplish together as a team. For me a lot of my efforts are going to [be] how as a team are we growing, how can we be the very best team that can be. (Dr Ernest Darkoh, Co-founder BroadReach Healthcare)

#### Overcoming challenges

#### **Building trust**

A significant challenge that had to be addressed, especially in the initial phases of the programme, was building trust and overcoming misperceptions. This is one of the successes of the Model. The lack of trust between the two health service providers was based on the lack of understanding of how each sector could work with and complement each other as opposed to viewing each other as a competitor. The GP Model provided an opportunity for public and private health service providers to work together. Through working together and through regular meetings, differences between the two health providers were identified and resolved.

When discussing the partnership, a North West Province DOH official involved in championing the Model said: "It's been really nice because normally you will find that private and public in the routine way don't look up to each other... So it [the Model] created a relationship which I think has grown."

One of the senior doctors working in Tshepong Hospital who helped set up the GP Model spoke about the change in perception towards private GPs during its implementation.

It is really interesting, we realized that we don't think of them [private GPs] as part of the community but they are. They are the part of the















community, they work within the community, living within the community. Taking all that and showing them respect really made the difference. (Professor Variava, Clinical Head of Internal Medicine, Tshepong Hospital)

This stronger relationship had other benefits beyond the scope of the Model.

So for example the private sector was not sharing data with us because nobody talked to each other. But after this it became very easy to contact them... So we are able to share knowledge and invite each other... So all this doesn't happen overnight and it doesn't happen as a result of one project, it has happened as a ripple effect of the relationship cemented by BroadReach in the beginning. (North West Province DOH Official)

#### Political resistance

When National Health Insurance (NHI) was introduced in the Dr Kenneth Kaunda district (a district in the North West Province), the GP Model was seen as a competitor due to differences in strategy. The GP Model contracts GPs into the programme: the NHI model contracts GP out. Most GPs preferred the GP Model because they do not have to go to public facilities to see patients. They are allowed to see patients at their own surgeries, which the patients also prefer. Some government officials wanted the GP Model to be phased out so that GPs will register with the NHI scheme.

District and sub-district officials did not want to be seen to be going against the mandate of the national Ministry of Health to contract out to GPs. The GP Model initially operated with a low profile to avoid censure from the national Ministry of Health. Meetings were held with district and sub-district officials where the benefits of the two programmes were outlined. It was agreed that the two can co-exist and complete each other.

#### **8.2. PERSONAL LESSONS**

It is fruitful to examine the personal journeys of participants during the innovation stage, as there is much personal sacrifice and determination needed to initiate and drive the work forward. The work requires a mixed set of skills and a willingness to undertake the wide range of tasks.

You have to be willing to do what it takes for that innovation to see daylight...It means having quite a diverse skill set, so you can't be a one-dimensional person and only think of one aspect. I always say a well-executed B-rated idea would be more successful than a poorly executed A-innovative idea. ...Hang in there, be willing to do what it takes, in terms of relationships skills, politics, fundraising and all those things. (Dr Ernest Darkoh, co-founder BroadReach Healthcare)

The road to implementing a new idea can be long and difficult and Dr Darkoh notes the importance of appreciating the moments of success along the way.

When I say success it's a programme that actually gets out there and works and actually affects the lives of people ... When we have those breakthroughs, those moments when the stars aligned and programme actually goes forward and is implemented on the ground as intended. Those are the moments that really give me the most joy because often it's been very, very hard for us to get to that point. (Dr Ernest Darkoh, Cofounder BroadReach Healthcare)

When things get tough, Dr Darkoh has seen how participants' belief in their own work and vision keeps them going. "Don't give up, stay true to what you are trying to do ... it is often a difficult journey, and it can be a lonely journey and you have got to believe in what you are doing." (Dr Ernest Darkoh, Co-founder BroadReach Healthcare)















# **CASE INSIGHTS**

- Out-contracting selected health care services to private providers with additional, underutilized capacity, is a feasible mechanism for providing and increasing access to quality services for public sector patients in resource-constrained environments.
- 2. A case management system with dedicated personnel plays an important role in ensuring continuity of care, reducing the loss to follow up, and achieving better outcomes for patients with chronic conditions. Such personnel also act as support staff for the Model, increasing its effectiveness and enabling the smooth functioning of the new intervention.
- 3. Sustainability is a key consideration for all innovative models, even if there is an initial abundance of donor capital. Appropriate costing increases the likelihood that an effective model could be successfully integrated into the public health system.

















### REFERENCE LIST

- Bene M & Darkoh MBK (2014). The constraints of antiretroviral uptake in rural areas: the case of Thamaga and surrounding villages, Botswana. *Journal of Social Aspects of HIV/AIDS Research Alliance / SAHARA, Human Sciences Research Council, 11*(1):167-177.
- Benatar SR (2013). The challenges of health disparities in South Africa. South African Medical Journal, 103(3):154-155.
- Buse K & Harmer AM (2007). Seven habits of highly effective global public-private health partnerships: practice and potential. *Social Science & Medicine*, *64*(2):259–271.
- Chigwedere P et al. (2008). Estimating the lost benefits of antiretroviral drug use in South Africa. *Journal of Acquired Immune Deficiency Syndromes*, 49(4):410–415.
- Druce N et al. (2004). Impact of Public-Private Partnerships Addressing Access to Pharmaceuticals in Selected Low and Middle Income Countries: Botswana. The Initiative on Public-Private Partnerships for Health (IPPPH). (http://announcementsfiles.cohred.org/gfhr\_pub/assoc/s14816e/s14816e.pdf, accessed 12 April 2016).
- Econex (2015). Identifying the determinants of and solutions to the shortage of doctors in South Africa: Is there a role for the private sector in medical education? (http://econex.co.za/wp-content/uploads/2015/08/ECONEX\_Doctor-shortages-and-training\_FINAL1.pdf, accessed 20 April 2016).
- Igumbor J et al. (2014). A South African public-private partnership HIV treatment model: viability and success factors. *PLoS ONE*, 9(10):e110635. doi:10.1371/journal.pone.0110635.
- Policy and Operations Evaluation Department (IOB) (2013). Public-Private Partnerships in developing countries: a systematic literature review. IOB Study, 378. (https://www.oecd.org/dac/evaluation/IOBstudy378publicprivatepartnershipsindevelopingcountrie s.pdf, accessed 21 April 2016).
- Martin MH & Halachmi A (2012). Public-Private Partnerships in Global Health: Addressing Issues of Public Accountability, Risk Management and Governance. *Public Administration Quarterly*. (http://www.readperiodicals.com/201207/2724082561.html#ixzz2FxfbLJSW, accessed 12 May 2016).
- Mayosi BM & Benatar SR (2014). Health and health care in South Africa 20 years after Mandela. *The New England Journal of Medicine*, 371(14):1344-1353.
- Nakimuli-Mpungu E et al. (2013). Implementation and scale-up of psycho-trauma centers in a post-conflict area: a case study of a private-public partnership in Northern Uganda. *PLoS Medicine*, *10*(4):e1001427
- Navario P (2009). Implementation of a Novel Model to Enhance Routine HIV Care and Treatment Capacity in South Africa: Outcomes, Costs, and Cost-effectiveness (unpublished PhD thesis). Cape Town, University of Cape Town.
- Ramiah I & Reich MR (2005). Public-private partnerships and antiretroviral drugs for HIV/AIDS: lessons from Botswana. *Health Affairs (Project Hope)*, *24*(2):545-551.
- Roehrich JK, Lewis MA & George G (2014). Are public-private partnerships a healthy option? A systematic literature review. *Social Science & Medicine*, *113*:110–119.
- South African National AIDS Council (SANAC) (2014). *Progress Report on the National Strategic Plan for HIV, TB AND STIs (2012 2016)*. Pretoria. (http://sanac.org.za//wp-content/uploads/2015/12/SANAC-NSP-Progress-Report\_6Nov2014\_hires.pdf, accessed 27 April 2016).















- Shisana O et al. (2012). South African National HIV Prevalence, Incidence and Behaviour Survey, 2012. (http://www.hsrc.ac.za/en/research-data/view/6871, accessed 31 March 2016).
- Simelela NP & Venter WDF (2014). A brief history of South Africa's response to AIDS. South African Medical Journal, 104(3):249–251.
- Stats SA (2015). *Mid-Year Population Estimates 2015.* (https://www.statssa.gov.za/publications/P0302/P03022015.pdf, accessed 12 April 2016).
- Stuckler D, Basu S & McKee, M (2011). Health care capacity and allocations among South Africa's provinces: infrastructure-inequality traps after the end of apartheid. *American Journal of Public Health*, 101(1):165-172.
- Vian T et al. (2015). Hospital public-private partnerships in low resource settings: perceptions of how the lesotho PPP transformed management systems and performance. *Health Systems & Reform*, 1(2):155-166.
- White J et al. (2014). Engaging Private Providers in HIV Care and Treatment: Lessons from the BroadReach Down Referral Model in North West Province, South Africa. Bethesda, MD: Strengthening Health Outcomes through the Private Sector Project, Abt Associates Inc.
- World Health Organization (2005). The 3 by 5 Initiative. *Country success stories*. (http://www.who.int/3by5/3by5countryfacts.pdf, accessed 25 March 2016).













