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Towards Universal Health Coverage in Namibia: Using PPP Synergies for Equitable Health Outcomes



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Executive Summary

Universal health coverage means that all people have access to the health services that *they* need, *when* and *where* they need it, without financial hardship. With current resources and technology, that level of universality will be difficult to reach. However, by harnessing more resources, using resources more efficiently, and expanding access to technology to the wider public, healthcare delivery can reach more people, where they need to be reached, improving both the equity of healthcare services and the health of the citizenry.

Public-private partnerships (PPPs) have the potential to offer all three: more resources, efficient resource management and better technology. However, a public-private partnership is no panacea, and, certainly, it is not appropriate to adopt a one-size fits all model to develop, design, implement, manage or even budget for private partnerships. For such partnerships to work, it must be possible for government and the legal system to:

- Prepare and enforce contracts with clearly defined outcomes,
- Establish effective processes for monitoring and verifying performance,
- Impose deductions and penalties whenever performance falls short,
- · Manage/promote bid competition,
- Develop or 'buy-in' experience with partnerships, and
- Develop and inculcate public sector, private sector and civil society buy-in.

Even though one size may not fit all, each of the six previously listed requirements are certainly possible in Namibia. In addition to the above, our review of the literature suggests that

- Open communication,
- Clear guidelines, and
- Transparent practices

are salient features of successful PPP environments and agreements.

Currently, there are no formal PPPs in Namibia, although there is experience in both South Africa and Lesotho. The former created a unit and process within its National Treasury to support PPPs. The latter agreed to a health PPP that resulted in long-term budget problems for the country. Both experiences are relevant to Namibia, as is the literature on PPP experiences that is available. To be able to use PPPs to support the government's health policy objectives and local health authorities, we make the following recommendations:

- 1. Government should begin to develop a dialogue with the private sector, one focused on partnership, rather than as a source of financial support.
- 2. Government should learn from those with more experience with PPPs to develop appropriate, yet flexible, policies.
- 3. Government should use the dialogues and other's experiences to understand and, where necessary, promote the business case that lies behind potential private sector involvement.
- 4. Government should stay engaged, so that it maintains a consistently open and transparent approach to PPPs and an enabling PPP environment.
- 5. There are PPP opportunities in health that can be considered:
 - a. Government can engage with its current MoU, SLA and informal partners to formalize, where appropriate, their agreements under a PPP.
 - b. Government can work with private companies and researchers to develop effective, but inexpensive, incentives to encourage treatment and/or engagement with their own health.
 - c. Government can work with private companies to enable technology to improve the equitable access to quality healthcare in the country.

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1 Background

In 2001, to fight the scourge of HIV/AIDS on the African continent, heads of African states agreed to what is now referred to as the Abuja Declaration, which seeks to increase the share of the government budget devoted to health care. The Namibian government takes their commitment seriously, spending nearly 15% of its total expenditure on the health sector, which would meet the Abuja Declaration of 2001. Such a large share might also help the government achieve (or at least make progress on achieving) universal health care (UHC), which is SDG 3.8.

Preceding those efforts, the World Health Organization set health as a fundamental right for every human being, while the Alma-Ata Declaration refocused their attention, agreeing that 'strengthening Primary Health Care (PHC) is the most inclusive, effective and efficient approach to enhance people's physical and mental health, as well as social well-being'. The Astana Declaration on PHC is a cornerstone of the health SDGs. An important feature of both is that it called all stakeholders to work together as partners to 'build stronger and sustainable PHC'. Which partners, and exactly how, remains an important discussion along the path to PHC, as well as UHC; however, it is assumed that patients, health professionals, the private sector, civil society, local and international partners, and others will participate in the process.

Thus, the WHO is strongly in favour of partnerships for health, in which all sectors are involved. In what follows, we look at a particular example of this, Public-Private Partnerships (PPPs), describing how they might be harnessed for the good of healthcare delivery in Namibia. The Ministry of Health and Social Services (MoHSS), as the sole custodian for the provision of public health care and social welfare services, has an obligation to constantly improve efficiency and effectiveness in public health care service delivery. As such, the ministry may find it beneficial to find technical and financial partners within the private sector to help address major issues and challenges to improve health outcomes.

2 Introduction to PPPs

International development partnerships are changing, and Public Private Partnerships (PPPs) are an important component of that change. They are believed capable of reducing inequalities in public service access and provision through improved resource provision, targeting and efficacy. In fact, Sustainable Development Goal (SDG) 17 promotes partnerships between government, the private sector and civil society that should be 'inclusive... built upon principles and values, a shared vision, and shared goals that place people and the planet at the centre...'. Such partnerships predate the establishment of the SDGs. As we can see in Table 1, there were thousands of such partnerships in the developing world in place during the 1990-2011 period. However, Africa is relatively under-represented.

Table 1: Number of Private Partnerships in Developing Countries between 1990-2011. Source: Sanni and Hashim (2014).

Region	Project Count	Percentage
Latin and the Cariibbean	1,586	30
East Asia and Pacific	1,564	30
South Asia	771	15
Europe and Central Asia	742	14
Sub-Saharan Africa	436	8
Middle East and North Africa	139	3

Although PPP ideas have been around for close to 50 years, it is not an entirely obvious descriptor. Loosely, it implies shared financial and governance arrangements between the public sector – in Africa it tends to be financed by revenue or aid, and the private sector, which may include local and/or international capital, as well the incorporation of private sector efficiencies and cost containment skills. As Gideon and Unterhalter (2017) note, such partnerships incorporate a potential trade-off: they offer increased financing options, but such financing may skew

activities towards profit, rather than purely social benefit. Governments may prefer PPPs over public procurement because they provide access to capital, yet free the public budget of many of the expenditures. However, that ignores long-term financial commitments (cost plus interest, service costs and potentially profit expectations). Since the initial PPPs cost does not have to be recorded, governments might view PPP capital as a 'free good', agreeing to more than they should, such that government finds the future operational costs too large, even though the project was initially affordable.

2.1 PPP typology

Thadani (2014) outlines common PPP arrangements focusing on the health sector. These arrangements are: 1

- **Contracting-in:** Contracting-in means the government hires an individual on a temporary basis for services. Doctors, technicians and other staff are recruited on contracts for a certain stipulated period of time. This is one way of filling up the vacant positions in a health unit. However, this model fails to work in some cases, for example, if hospitals are located in remote areas where patients are less in number, the contracted-in specialists are not attracted to move to these places.
- **Contracting-out:** It is a model where the Government pays an outside individual to manage a specific function. There are different levels of contracting-out which depends on the magnitude of autonomy given to the concerned contractor. The various levels are mentioned below:
 - o Level 1: The Government hands over the physical infrastructure, equipment, budget and personnel of a health unit to a private organization.
 - o Level 2: The Government hands over the physical infrastructure, equipment and budget but gives the agency the option of selecting the personnel as per their terms and conditions but subject to Government norms such as one ANM per 5,000/3,000 population.
 - o Level 3: The Government hands over the physical infrastructure, equipment and budget but gives freedom to the agency to adopt their own service delivery models without following fixed prescribed pattern.
 - o Level 4: The Government hands over the physical infrastructure, equipment and budget but gives freedom to the agency to recruit personnel, adopt their own service delivery models, freedom to expand types of services provided and freedom to introduce user fee and recover some proportion of cost.
- Voucher System: A voucher is a document that can be exchanged for defined goods or services as a token of payment (tied-cash"). This consists of designing, developing and valuing health packages for various common ailments / conditions (like ANC package / STI package / Teen pregnancy package which can be bought by the people at specific intervals of time. These vouchers can then be redeemed for receiving a set of services (like 1-2 consultations, lab tests, procedures, counseling and drugs for the condition) from certified / accredited hospitals or clinics and are to be used within 2-3 months of buying the voucher. This means that the package can be bought, used as and when required and ensures privacy for the client. Regular monitoring is required for ensuring quality standards, training of providers and networking with the people to ensure that the proper use of vouchers. The vouchers are redeemed to the clinics for the number utilized depending on the price for each package of service provided. Clinics that fail the quality standards of service and do not do well on patient satisfaction can be removed from the certified services.
- Mobile Health Vans: This facility ensures that in isolated and rough terrain areas where there is meager transportation facilities the private agencies take up the initiative to provide mobile vans. These vans go to select villages and provide health services including Reproductive and Child Health (RCH) on fixed dates. The basic objective underlying this scheme was to prevent the problem of underutilization of services for want of proper modes of transport. While private sector resources were put to use to purchase vans, the government contributed to these services by deputing medical officers and medicines. This approach has significantly helped to improve access to quality services.
- Insurance and Public-Private Partnerships: In one of the recently planned schemes, the government insures and pays health insurance premium for families below poverty line. These families in turn are insured against expenses on health and hospitalization, up to a certain amount. On similar principle, it is possible to develop

¹ These definitions are taken directly from Thadani (2014).

sustainable health insurance schemes that are community based. In such schemes, the community members pay a minimum insurance premium per month and get insured against certain level of health expenditure. This protects them from sudden and unexpected expenditure on health. Such community-based schemes also ensure that the local needs and expectations of the people are met, by preferentially reimbursing local trained healthcare providers.

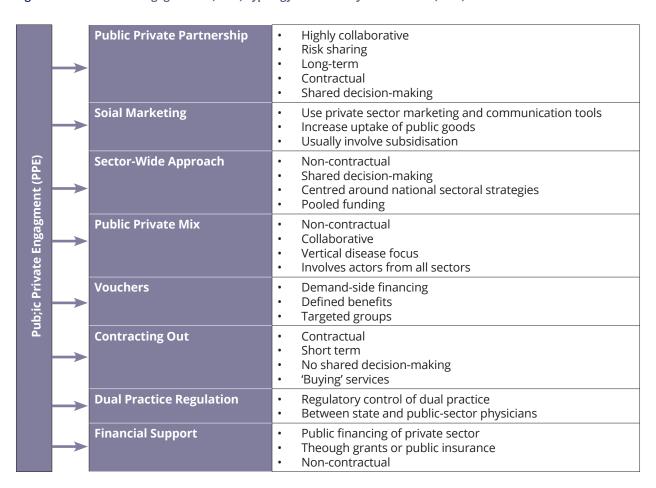
- Subsidies: Government provides funds to some private individuals for providing certain services.
- Leasing or Rentals: Governments offers the use of it services and equipment to the private organization.
- **Privatization:** The Government transfers the ownership of a public health facility to a private organization or groups

A slightly different set of definitions are presented by Marriot (2014):

- Franchising: Public authority contracts a private company to manage an existing hospital
- **DBFO (Design, Build, Finance and Operate):** Private consortium designs facilities based on a public authority's specified requirements, builds the facility, finances the capital cost and operates the facility
- BOO (Build, Own, Operate) or BOOT (Build, Own, Operate, Transfer): Public authority purchases services for a fixed period (say 30 years), after which ownership remains with private provider, or in the case of BOOT, reverts to public authority
- **BOLB (Buy, Own, Lease back):** Private contractor builds the hospital; the facility is leased back and managed by the public authority
- **PPIP** (**Public Private Integrated Partnership**) or **Alzira Model**: Private contractor builds and operates the hospital, with a contract to provide clinical care for a defined population

Finally, Whyle and Olivier (2016) offer a different set of descriptors. These are presented in Figure 1.

Figure 1: Public-Private Engagements (PPEs) Typology. Source: Whyle and Olivier (2016).



To conclude, PPP does not mean the same thing to everyone, and the naming conventions are not consistent, yet, throughout the world. However, the range of definitions supports the idea that there is extensive flexibility that can be honed for purpose.

2.2 PPP costs and benefits

Paraphrasing Hellowell (2019), risk transfer, is the main benefit of many PPPs and occurs for many reasons: public payment is not made until facilities or services are made available, private profits are expected to be driven by cost minimization over the entire project (rather than price management in a captive market), and expectation of competitive bidding over the initial project, keeping the overall costs down. To make such conditions arise, government must be able to:

- write a comprehensive contract with clearly defined outcomes,
- establish effective processes for monitoring and verifying performance,
- impose deductions and penalties whenever performance falls short, and
- manage competition within bidding (even in settings where may be few firms).

As suggested by the preceding requirements and incentive problems, PPPs must be carefully considered. The preceding expectations may not be easily met in Africa, where there are perennial concerns around legal frameworks (including justice), skills, competition, and budget sustainability. The Economist Intelligence Unit (EIU) suggests there are major concerns in each of these areas. The EIU further suggests that only South Africa had adequate access to debt capital.

Importantly, concessional financing in sub-Saharan Africa for most public procurement carries very low interest rates (often 0%–1%), and very long repayments, sometimes 30–38 years, including a grace period of 5–10 years. Private sector investors are likely to expect rates exceeding these, and potentially over shorter periods of time. Thus, not all procurement should go through the private sector.

Much of the focus in the literature remains on the perceived benefits and limitations of public and private agents within PPPs, especially concerns about accountability and contract management. There are further concerns that donors are imposing agendas on countries, which might impact priorities, local community involvement and the overall political process. There are further worries that performance-driven models of health care are focused on narrow outcomes, rather than a broader national agenda of "health for all", which may not be beneficial.

3 Namibia

Around 1.5 million (uninsured) Namibians, which account for 85% of the total population, rely on primary health care of the public sector. It includes cheap and easy medical treatment. The public health services usually charge flat user fees depending on the level of the facility. Due to highly subsidized user fees, medicine is generally affordable, which matches the stance of the Ministry of Health and Social Services. Everybody in the country can have access to public healthcare, even if they are not able to pay, but those who are able to pay should pay for the health services. Public health service delivery is founded upon the fundamental principle of primary health care (PHC). The PHC approach to service delivery entails a health system that is people centred, equitable and socially inclusive. PHC is delivered through community outreach sites, clinics and health centres whilst district hospitals and referral hospitals handle more complex medical procedures. Each service delivery level has its own specific functions; however, complicated cases at one level are referred to the next level. At the community level, health extension workers identify health needs in the community and refer them to clinics. Cases that cannot be handled at the clinic level are referred to the health centres, whilst these facilities refer complex cases to district hospitals. In turn, district hospitals refer complicated procedures to referral hospitals.

Despite a well-organised and structured system, the sparse population does not make it easy to deliver healthcare in the country. Thus, the healthcare system in Namibia does not perform as well as other Upper-Middle Income Countries (UMIC). As seen in Figure 2, the under-5 mortality rate of 45.2 per 1,000 live births is higher than the world target of 25 under-5 deaths by 2030 and is 3.1 times higher than the UMIC average of 14.4. In addition, life expectancy at birth for both males and females is considerably lower in Namibia compared to other UMICs.

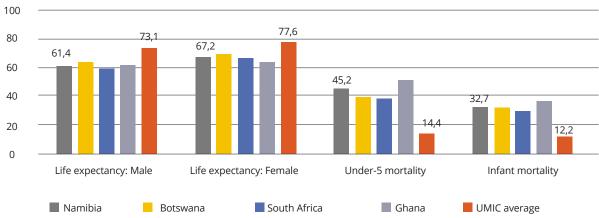


Figure 2: Selected health outcomes in Namibia compared to other middle-income countries.

Source: World Bank (2019)

Moreover, there are equity issues associated with service delivery. Health care services provided to different groups should be of the same quality, regardless of race, gender, ethnicity, age, geographical location, religion, socio-economic background, linguistic or political affiliation. In Namibia, evidence suggests 62.4% and 66% of individuals in the poorest and second poorest wealth quintile access health services, respectively, while 70.6% and 72.5% of individuals in the second richest and richest wealth quintiles use healthcare services. Furthermore, poor women use public health facilities 30% less than their rich counterparts for child delivery services. Women covered by health insurance with secondary and higher education, who are likely to be wealthier, are more likely to be screened for breast cancer than their counterparts, who are not covered by health insurance and are less educated. Figure 3 outlines a slightly different form of inequity in healthcare access. It shows that the poor (at 44%) are far more likely to say that healthcare is too expensive or too difficult to get to, compared to the rich (26%).

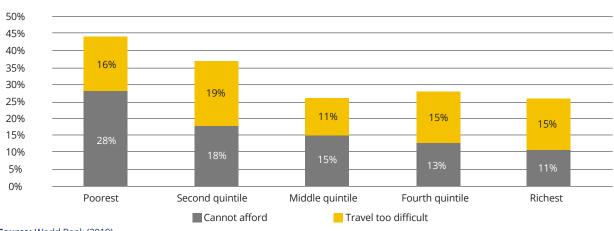


Figure 2: Cannot afford seeking healthcare when needed, by socio-economic group

Source: World Bank (2019)

Despite high levels of expenditure – see Table 2 – and being a signatory to most international healthcare declarations, there is a need to improve performance in the health sector. Such improvements can arise in many dimensions. Firstly, it might be possible to improve the efficiency of healthcare delivery. Previous research suggests that public sector hospitals are not particularly efficient – efficiency averages around 62-74%. Thus, it does appear there is scope for efficiency improvements. Secondly, it might be possible to relieve constraints on resources, especially related to accessing healthcare workers; relatedly, those workers might face constraints in their ability to deliver services that might be alleviated. Thirdly, health care services are not equitably accessed. Thus, we also outline some issues related to equity that can potentially be addressed. Importantly, one underlying guiding principle can offer support in each of these three dimensions: partnerships with the private sector.

Table 2: Trends in total and government health finances, in million N\$, 2015-2018

	2015/16	2016/17	2017/18
Total MoHSS expenditure	6 506,37	7 203,69	7 059,94
Government health expenditure by other Ministries	192,13	190,21	190,21
Government transfer to PSEMAS medical aid	2 273,65	2 212,87	2 537,08
Total Government Health Expenditure, in million N\$	8 972,15	9 606,77	9 787,23
MoHSS expenditure as % total government expenditure	73%	75%	72%
PSEMAS as % of Gov. Health Expenditure	25%	23%	26%
Government Health Expenditure as % of GDP	6%	6%	5%
Gov. Health Expenditure as % of General Gov. Expenditure	13,4%	13,5%	14,5%
GDP, current in million N\$	150 083,00	164 155,57	183 488,25
General Government Expenditure	67 091,54	71 243,98	67 523,02

Source: World Bank (2019)

3.1 Challenges facing the MoHSS

The MoHSS has identified five challenges in ensuring continuous service delivery. Those challenges are as follows:

- Staff establishment: the MohSS had 11270 available posts, of which 9918 (88%) were filled during the 2012/13 FY. By 2016/17 staff establishment is at 13082, of which 11700 (89%) were filled. This serves as a challenge to the Ministry, since posts created were meant to fill a particular purpose in the enhancement of service delivery and support the MoHSS in delivering on its mandate. With an 11% vacancy rate, it is possible that a number of service provisions are not achieved.
- Human Resource Development (HRD): a total of 121 and 93 students were admitted for their studies in Medicine and Pharmacy at People's Friendship University and First Moscow Medical University in Russia, respectively. As part of Project 2013, 633 students are receiving undergraduate training in India, Russia, Zambia and Cuba in various health related fields. With regard to postgraduate studies and specialization, 38 Doctors are training in South Africa, Tanzania and Zimbabwe.

Furthermore, the Ministry introduced the Diploma in Nurse Training Project for a six-year period, with classes has commencing on 1 February 2014. 566 students are receiving training. In its efforts to strengthen pre-service training, various bilateral agreements were signed with the Republic of Cuba, the Federal Democratic Republic of Ethiopia, the Republic of Zambia, and Senegal.

The focus of the Ministry has been to train Doctors, as opposed to look to training in all of the associated disciplines, such as: dentistry, physiotherapy, healthcare management, psychology, and nursing. However, the lack of training, and therefore, human resources in the allied disciplines creates difficulties filling positions. Thus, there is a challenge to ensure that all facets of its human resources are continually developed.

• Policy and Legal Framework:

Policies: The National Policy on Public Health Laboratory and the regulations relating to the Impaired Registered Persons have been approved. However, Social Welfare Policy, National Alcohol Policy, Policy for Older People, Policy for Financial Assistance to Registered Welfare Organizations, Policy on HIV and AIDS, Ministerial Training Policy, Transport Policy and Malaria Policy under review.

Legal framework: The Public Health and National Environmental Health Bills are under consideration by the Cabinet Committee on Legislation (CCL), whilst the Substance Abuse Prevention and Treatment Bill, the Welfare Organization's Bill, Mental Health Bill, Food and Safety Bill, and Amendment to Health Facilities Act were approved.

The policies formulated by the MoHSS take an extended amount of time to be approved, and once approved, complete implementation of policy is subject to individual interpretation and can take time.

• Capital Development: 41 health facilities were newly constructed (clinics, health centers, Regional Management Team offices and Staff accommodation) while 31 health facilities were upgraded (clinics, health centers, hospitals and offices). In terms of health financing, over the reporting period, the budget execution rate averaged 99.75%.

Although the execution rate is exemplary, capital development is a 'drain' on the budget of the MoHSS. Thus, if additional capital support can be located, it will be possible for the MoHSS to focus on other important aspects of service delivery.

• Information Technology: the MoHSS has developed an Internet System and is awaiting its implementation. Functional Video conference facilities were installed at the Head Office, Windhoek Central, Katutura, Oshakati, Rundu and Katima Mulilo hospitals.

However, the ICT framework and network need to be improved to ensure continual service delivery, potentially via internet communication, and the use of technology across and between the different respective clinical departments.

Although the ministry delivers on their objectives, the above places significant strain on their already stretched resources. Thus, they are challenged in their ability to follow through, ensure compliance within respective units of the ministry, and identify areas where the private sector can assist.

Unfortunately, the burden of communicable diseases (CDs), such as: HIV/AIDS, Malaria and Tuberculosis, including multi-drug-resistant and extensively resistant tuberculosis cases, continues to need attention. The morbidity and mortality burden attributable to non-communicable diseases (NCDs), such as: cardiovascular diseases, cancer and diabetes, are on the increase. For NCDs there are numerous risk factors – tobacco use, abuse of alcohol, physical inactivity and unhealthy diets – in need of public health interventions. Thus, innovative interventions for the prevention and control of both CDs and NCDs are central to curbing the plight of these diseases.

Currently, the government receives donations from NGOs to address many of these health issues; ABT associates, DAAP and PEPFAR are working in close cooperation with the MoHSS to fight against these diseases. Although such sources complement health expenditure, they are relatively small when compared to the public and private sectors; see Figure 1. Possibly, public-private partnerships will be able to garner greater cooperation between the public sector, the private sector and civil society. In particular, additional health PPPs could offer further funding for healthcare beyond those presented in Figure 1.

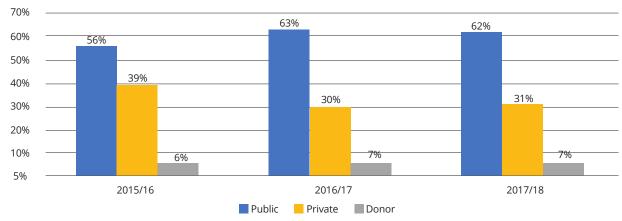


Figure 1: Sources of health financing: 2015/16-2017/18.

Source: Namibia Resource Tracking for Health and HIV: 2017/18

3.2 MoHSS strategic objectives

The MoHSS' strategic objectives are extensive and focus on improving health and social welfare. The following list presents a synopsis of those objectives.

- Improve effective prevention and management of Communicable diseases of which the Key Performance Indicators are the reduction in morbidity and mortality of CDs, such as malaria, TB, and HIV.
- Improved routine immunisation coverage for Measles.
- · Improve effective prevention and management of NCDs, reducing morbidity and mortality
- Improve maternal and newborn health, which includes the reduction in maternal, neonatal and infant mortality rates.
- Improve Emergency Services via a fully functional trauma and emergency centre for the Windhoek Central Hospital with the appropriate number and quality of skilled health professionals, functional equipment and physical infrastructure.
- Strengthen social welfare through quality health services by reducing waiting times and social ills.
- Increase the nurses ratio, the pharmacist ratio, and the doctor ratio in the population.
- Decentralise health services functions.
- Reduce referrals for specialised services from state facilities to private facilities or facilities abroad.
- Ensure integrated and functional ICT infrastructure by implementing an electronic health system and increasing the share of systems that are interoperable and synchronised towards a single health information system.
- Ensure an appropriate regulatory framework for health service delivery by continuously reviewing policies and working towards the enactment of appropriate laws.
- Reducing litigation cases against the ministry, and the costs related those cases.
- Improve compliance to all relevant frameworks and protocols to protect the public against harmful interventions.
- Accelerate health infrastructure development through construction, including via PPP frameworks, ensure
 that facilities are properly equipped and staffed and that the facilities are maintained and, where necessary,
 incorporate accommodation.
- Improve contracting and pharmaceutical supply via the Central Medical Stores.
- Enhance organizational performance, measured by staff satisfaction, health indexes, and health and emotional well-being of staff, as well as citizen satisfaction.
- Ensure budget compliance and execution.
- Develop a competency framework for each of the health professions.
- Enhance human capital development and utilization through improved organization, and the implementation of the national health human resource management plan.

Although the ministry delivers on most of these objectives, its greatest challenge is to follow through on these strategic objectives. The objectives are many, the resources and budgets are limited, and therefore, lesser priority activities (as viewed by those addressing the objectives in any one facility or within the ministry), such as measurement, ensuring compliance within the respective units of the ministry, and identifying areas where the private sector can assist are the types of objectives that might fall through the cracks.

3.3 Overview with respect to PPPs

The MoHSS's mandate arises from the constitution, "to oversee and regulate public, private and non-governmental sectors in the provision of quality health and social services, ensuring equity, accessibility, affordability and sustainability." If interpreted rather narrowly, this mandate does not suggest the development of PPPs; rather, it suggests each sector is separate. However, as the MoHSS suggests in its own SWOT analysis, that is a weakness. It notes that although there is a policy in place, there is no legal framework for implementation; fortunately, that opens the door to opportunity. For example, they can engage with their South African neighbours, who have a clear policy framework and documentation, or they can engage with others with more experience with PPPs; they can develop and promote buy-in through engagement with potential partners. Also, they can take advantage of the fact that there are already a few long-standing examples of resource sharing that can be leveraged and potentially simplified through a PPP.

The government has identified the following infrastructural development areas in the table below, in which they have called for the private sector to assist; however, to date, these objectives have not been met; as we outline below, there are few PPPs in place.

Table 3: Infrastructura	ıl deve	elopment projects	seeking priva	te sector support.
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Target	Year	Construction of Health Facilities	Total
Baseline	2016-17		
5–years targets	2017-18	Renal Dialysis	1
	2018-19	Neo-natal Unit in Swakopmund	1
	2019-20	Okahao Hospital	1
	2020-21	Otjiwarongo Regional Referral Hospital	1
	2021-22	Oshakati Regional Referral Hospital	1

3.3.1 Current PPPs and related agreements

There appears to be only one PPP in Namibia's health sector, at least in the standard sense. However, there are many MoUs and Service Level Agreements (SLAs) that could be reframed as PPPs, including longer-term arrangements related to clinical health services – the provision of pharmaceutical supplies, use of private facilities for MRI, dialysis, eyes, and EEGs, as well as, patients that are sent to South Africa for more specialised treatment. Each of these arrangements might be considered to be low-hanging fruit for formalisation under a PPP, and could be used to develop experience, frameworks and policy related to PPPs.

The arrangement that could be described as a PPP is within the trucking industry and includes sex workers, as well as the vulnerable members of local communities (especially those that serve as waypoints for transport) – the PPP focuses on treatment and testing for HIV/AIDS. The arrangement could be described as 'contracting-in', wherein a private group provides services through facilities that the group makes available and staffs, with appropriately qualified individuals. The group also manages and reports the relevant information to the Ministry of Health. However, the MoHSS does not pay the group. Instead, the MoHSS provides medicines, free of charge as it does for the rest of the public sector, along with relevant training and certification. Funding is supposed to be accessed by the group, and it is expected to come from private industry, primarily the trucking industry; the memorandum of understand-

ing also suggests that additional funding comes from development and/or aid agencies, presumably international (such as PEPFAR), as well as, additional funding from employers through employee wellness programs.

The HIV/AIDS agreement with the trucking industry appears to be similar to South Africa's North Star Alliance – discussed a bit further in the appendix. Our review of the literature has found that PPPs like these in Namibia, South Africa, and other countries around the world, tend to work well. The private sector is more than willing to support these initiatives because they are not terribly expensive – the costs are clearly demarcated and can be controlled. Most importantly, there is an obvious benefit to the private sector. The PPP is designed with their workers in mind, should improve worker health, and therefore, improve profitability. The public sector benefits, as well, because additional resources from the private sector are brought to bear on a public health problem, which helps the MoHSS achieve its objectives.

Another arrangement we were able to uncover might best be described as a capital donation – presumably one with the latest technology, along with installation and shared responsibilities related to training, maintenance, and data collection, amongst others. It is not clear the agreement has led to any cooperation, yet; however, in principle, the thought of access to additional resources, which is a highly desired feature of PPPs, could improve access to high quality care. Having the service available in Namibia can also support broader UHC objectives, which do not discriminate against need, regardless of what that need might be.

3.3.2 Views from the ground

During our investigation, we spoke to one private company operating in the e-medicine environment. For the most part, they work with a range of private sector clients to provide frontline consultations. Some of which can be dealt with at the point of contact, although others need further referrals, including patients requiring pharmaceutical resources. Although one would not view their contribution as a PPP, because they offer medical services for privately employed individuals, many of those patients may not have access to a medical aid or use the private healthcare sector. Thus, this company is already contributing, to some degree, to healthcare access equity in the country.

We also undertook a qualitative survey.² Unfortunately, the response rate was very low, which, on its own, highlights a human resources challenge – too little time for too many activities. Responses were received from two doctors/ surgeons, one each involved in obstetrics-gynecology and pediatric cardiology. There was a clear difference in their experience with private partners, and that background difference impacted on the insight we could garner from them. Each of the respondents believed there was potential for PPPs to help, with one of the respondents specifically noting the possibility of access to resources that are not available in the public sector. Each of them believe that partnerships with the private sector can help alleviate resource limitations. It was also clear that neither of them had enough experience to offer insight related to challenges surrounding the development of a PPP.

Although neither was aware of any PPPs, per se, one had interacted with a hospital in Cape Town as part of an outsourcing agreement; the services/capabilities were not in place in Namibia, but they were available in Cape Town. The outsourcing agreement exceeding NAM\$ 20 million seems high – admittedly, we do not have a reference for comparison and do not know the underlying cost of the service provided – however, it was not a partnership in a way that might be of wider benefit. For instance, there was no local capacity building. Thus, one of the key concerns with respect to PPPs is whether or not they have would be appreciated by those participating. In this case, the potential to contribute to resource 'development' – and not just add resources – might be viewed more favourably. This concern also suggests a different set of limitations around regulation and management of PPPs within the Namibian context than suggested from the African literature.

² The questionnaire is presented in Appendix D.

3.4 The Purpose of PPPs in Namibia's health sector

In healthcare, many governments have gravitated towards PPPs to address a range of health system challenges, which include:

- · Need for new or upgraded infrastructure,
- · Capital budget and/or cash flow constraints,
- · Need for improved management skills to improve quality and costs efficiency of healthcare delivery,
- Need for stronger and more efficient procurement and supply chain,
- Need for additional services/skills (e.g., speciality services) or expanded service capacity

Unfortunately, too many governments lack the capital budgets to finance new construction on a large scale and are constrained by national policies and hiring norms that restrict their ability to implement reform. In Namibia, although there is excellent budget execution, funds spent on buildings and other capital take away from the ability to deliver high quality care for all, i.e., UHC. Thus, the MoHSS has identified a few capital projects that it would like to undertake with private support – see Table 3.

By partnering with the private sector through PPP arrangements, in addition to accessing additional capital, governments gain access to more flexible and innovative practices – such as the introduction of comprehensive IT systems and performance-based human resource management practices – allowing them to expand capacity and provide services more efficiently. The flexible nature of PPPs provides a framework for developing and adapting existing structures to meet the specific needs of each project.

For instance, among the objectives of PPPs could be the establishment of a sustainable financial system; capacity-building reforms and management reforms in the public and private sectors; preventing unintended outcomes in the growth of the private sector in health; cost control and improving the health of the community; facilitating socio-economic development; improving PHC services coverage, quality, and infrastructure; as well as, increasing the uptake of health services.

In terms of the PPPs currently in place in the country (there is but one that could be considered to be a PPP), and the PPPs envisioned (there are five projects where private support has been requested), the Namibian PPP activities are or are meant to:

- Access private funds to improve the health of its citizens, which arises through additional healthcare access points, testing, healthcare professionals and drug distribution points.
- Leverage private funds and expertise to build additional health facility infrastructure.

3.5 Challenges facing PPPs in Namibia's health sector

To date, the government has not managed to attract additional private support for its health facility capital expenditures. Also, the government has not, otherwise, developed PPPs around those expenditures, or, in fact, any new PPPs that might support it in meeting its objectives. Our qualitative interviews and our review of the literature offer insight into why that has not, yet, happened.

3.5.1 Challenges

The following challenges appear to be the most relevant, when it comes to Namibia developing health sector PPPs.

- 1. There is limited experience with PPPs, which makes it difficult to:
 - a. design long-term contracts,
 - b. establish effective and appropriate processes for monitoring, and
 - c. deal with legal challenges that might arise from the imposition of penalties.

- 2. Namibia has a small population, with a relatively small private sector, which means that the bidding process may not be competitive enough to limit the cost of any project.
- 3. The private and public sectors have long operated separately, despite some necessary collaborative projects, which leads to both communication and trust issues, potentially over the entire life of the project.

Our review of the literature, as well as our interaction with various stakeholders has confirmed these challenges. For instance, the literature focuses extensively on the ability of developing country governments and justice systems to:

- prepare and enforce contracts with clearly defined outcomes,
- establish effective processes for monitoring and verifying performance,
- impose deductions and penalties whenever performance falls short, and
- manage/promote bid competition.

Fortunately, Namibia is underpinned by a strong legal tradition. Despite that, the contractual obligations, the monitoring of performance, and its verification are complex, which raises the specter of costly legal challenges associated with deductions/penalties that might arise in contract enforcement. In addition, we have also noted, above, that even the MoHSS admits that it struggles to ensure accountability.

Our stakeholder engagement also points to:

• very limited experience with PPPs (in the country).

The lack of experience does not mitigate against the challenges listed previously. Furthermore, although the respondents we were able to speak to held a relatively favourable view of the potential that PPPs might offer, that view may not be widely held. Thus, a relevant challenge surrounding the implementation of PPPs is:

- public sector, private sector and civil society buy-in, along with
- transparent communication structures.

As our review of the literature has highlighted, see the Appendix, trust between partners and participants is extremely important in meeting the delivery objectives of a PPP; thus, the PPP environment must be supportive at all levels and participant buy-in must receive continuous attention.

3.5.2 Discussion

If we consider the capital donation MoU (noted above) as an example – at first glance, the MoU ought to be attractive to the MoHSS, because the MoHSS will not have to manage purchase or other upfront costs, like installation and training. However, there are likely longer-term costs, including the implication within the MoU, that the MoHSS will eventually take over the equipment and maintenance. Thus, these costs will need to be forecast and incorporated within the budget framework. Our literature review suggests that these types of arrangements – ones with longer-term cost implications – do not always work as well as hoped, because of the above challenges. Thus, the MoHSS will need to be able to manage these longer-term costs. In the case of Lesotho – see the Appendix – the inability to forecast and manage those costs over the longer term has created a Design, Build, Finance and Operate (DBFO) PPP that is problematic for government and its health budget.

Furthermore, in the capital donation MoU, the responsibilities are clear; however, there is no obvious statement in relation to spare parts, if something were to happen to the capital equipment. Thus, there is a need to forecast break-down and spare parts costs and availability; break-down may be more common in Namibia than in other places if the operational skills are not always in place. Relatedly, although maintenance is supposed to be handled locally, that requires appropriate technical skills – it is not clear they are locally available or always available – and those skills may be rather expensive to employ. Thus, the possible cost effects of the MoU, again, are less clear. Lastly, it would be beneficial to know the likely demand for the equipment. Is the equipment needed only rarely

and is it infeasible to work through South Africa or another country, despite the underlying strategic objectives of reducing reliance on foreign governments for healthcare?

If we, instead, consider developing a new partnership with the private sector, by formalizing one of the broader resource-sharing MoUs, the preceding challenges may be mitigated, at least partially. In particular, in the case of formalising long-standing agreements, there is already familiarity with the partner, and presumably, some level of trust. There should also be experience related to the underlying costs and even incentive problems that might arise. Thus, the contracts and related issues should be manageable from both sides. Under that scenario, the primary remaining concern is whether or not the public sector is in a position to manage and ensure accountability, which it has already admitted is a general concern, even when it comes to their own strategic objectives (let alone a PPP).

3.6 Addressing PPP challenges and considering options

As suggested in the literature, private partners or at least non-government partners are rather diverse, including academics, community-based organizations, churches, industry, the garment industry, telecommunication, consultancy companies, private providers, and traditional healers. This range of resources is not insignificant and opens the door for the public sector to do more than it is currently able, if appropriate arrangements can be made with the private sector and other civil society actors. As noted already, being successful with PPPs requires numerous legal and technical skills that can be learned through experience and through discussions with those more experienced.

3.6.1 Capital investment PPPs

When it comes to PPPs, it is to be expected that the private sector will seek returns on their investments, and therefore, any such PPP needs to allow for that possibility. In the case of infrastructure, doing so implies either a design/build/finance/operate (DBFO) PPP, a build/own/operate, build/own/lease-back PPP or something like the Alzira model, unless the government can elicit donor funding. In the case of an Alzira model, as noted above and outlined in the Appendix, there is limited evidence that they have been successful either in supporting the overall objectives of providing high quality (and/or equitable healthcare) or in providing the return expected within the PPP in a way that the governments involved can afford.

Importantly, that does not mean that an Alzira-type partnership cannot be successful; rather, it reminds us that the Namibian government needs experience or needs to seek advice from those with experience, including its South African neighbours, who have their own dedicated PPP unit, and more developed countries. Similarly, the Namibian government should seek advice from other developing countries, such as Lesotho, that have tried to use Alzira-type PPP models for capital investments.

One current feature of the investment climate is relatively high volatility, which is likely to continue for some time. This climate does offer governments, which can guarantee stable cash flows, an opportunity to entice investment away from riskier prospects. Similarly, the economic climate is worsening, and therefore, construction companies may be more inclined to compete for projects, potentially lowering short- and long-term costs.

Thus, in the current economic and investment climate, there is potential to raise private capital and keep overall costs down; however, doing so requires a range of skills that are not widely available in Namibia, due to its limited experience with PPPs. To address that challenge, government may need to 'buy-in' relevant experience or learn through others' experiences.

3.6.2 Healthcare delivery PPPs

If there is an interest in developing new private sector partnerships, such as those in e-medicine or other areas of healthcare delivery, the risk appears smaller, while the potential public health benefits appear larger. Human resources in the public sector are limited, and, as we have seen, there is an 11% vacancy rate. Although the country

is investing in future human resources, using current (and future) resources more efficiently can help immensely in the delivery of healthcare. Furthermore, the development and use of new technology has the potential to change the delivery of health care to be more equitable, as well, although equity in that scenario will depend on access to smart communication devices, i.e., the internet.

In terms of the e-medicine company we spoke to, they work with a range of private sector clients to provide front-line consultations. Some of those consultations can be 'completed' at the point of contact, although others need further referrals, including patients requiring pharmaceutical resources. Thus, there is potential for an e-medicine PPP, in which government operates as it currently does, taking referrals, but also supports the private company in the delivery of healthcare services, through the provision of medicines (similar to its current PPP with the trucking industry).

With respect to efficiency and equity, such a company, and others like it, could be a first line of engagement in many clinics, which would create space (free-up resources) within the clinics to reduce queues and/or increase throughput. For example, an e-consult could make a recommendation to see a nurse or a doctor. Of course, a PPP in that space would need to be developed carefully, so as to manage long-term costs, risks associated with misdiagnosis, buy-in from patients to be initially treated on "TV", and even perceptions of unequal treatment, if certain types of patients appear to be treated differently.

Developing a PPP with an e-medicine company might also require the development of dual practice physician regulations or other arrangements, since physicians might be willing to do e-consults, as well as in-person consults for those referred. For example, in Mozambique, the state contracts with expatriate doctors to supplement human resources for health, especially for underserved areas and, thus, can increase coverage and access. Generally, dual practice physician service contracts are complicated and need to be carefully managed. The broader field of information economics still has not 'solved' the information problems inherent in these contracts, and therefore, it is not realistic to expect them to be solved soon.

Despite those challenges, any PPP effort to increase population access to physician services is worth considering further. As suggested above, e-medicine represents one such possibility. In health care, all but a small share of patients can be treated via standard protocols, which can be 'coded'. In other words, those health problems can be captured via an appropriate question and answer algorithm. Although being treated via machine-learning, or through an app, may not be for everyone, not being treated at all remains a reality for too many, and that reality can be changed via e-medicine, where partnerships are a possibility.

New technology and business skills are becoming available every day. In nearly all industries, these changes are reducing production costs through increased productivity. The government should capitalize on both by encouraging or even supporting their expansion in underserved areas. It might even be able to earn a profit if it is willing to invest in private equity. It might even be able to so indirectly by exchanging medicines (or access to medicines) for that equity.

3.6.3 Healthcare financing PPPs

Finally, there is another source of funding that is often discussed, when speaking about improving healthcare and healthcare equity. Community-level prepayment plans are often recommended to complement (or even replace) government financing in sub-Saharan Africa. There are such programs in Africa; however, there are few community health insurance (CHI) programmes out there.

Although CHI has many health financing benefits, such as increased access without impoverishment arising from health care costs, low enrolment has limited its success. Small contributions can be a financial burden for the very

poor, the same community targeted by CHI schemes; thus, there is a place for government and other civil society actors to support these schemes where possible. Only the Government Employees Medical Scheme (GEMS) in South Africa and PSEMAS in Namibia, which are heavily subsidized voluntary health insurance schemes, represent something that looks like community financing. However, the community is limited to government employees, who are rarely poor or vulnerable. As can be seen in Figure 4; this is a significant stream of revenue.

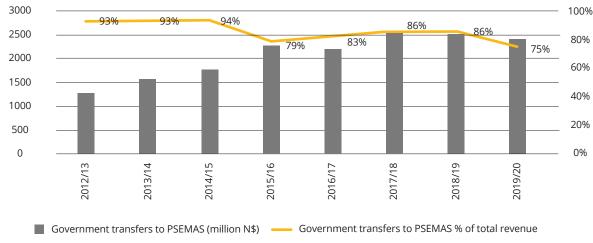


Figure 4. Government funding to PSEMAS.

Source: World Bank (2019)

Thus, government could consider partnering with private medical aid schemes, to develop and implement a more representative community health insurance scheme that improves access to services for all, which should improve health equity.

4 Conclusions and recommendations

A competent and skilled health workforce, adequate health financing, sound policy framework, appropriate and relevant medical products and medicines, including technologies and knowledge management, are pivotal to strengthening the health system in Namibia. In order to ensure consistent service delivery, the government should look to partner with the private sector. Doing so can enhance healthcare delivery and strengthen civil society, because PPPs can provide improved healthcare, improved efficiency and improved equity in health outcomes.

Despite the many challenges to PPPs that the government currently faces, there is a policy in place that allows for PPPs. However the follow through towards implementation is lacking, which may result from PPP inexperience, a lack of understanding, and even a lack of commitment arising from too many goals and objectives.

To this date, only one arrangement we could find in Namibia might be considered a PPP. It is possible that current SLAs and MoUs can be formalized as PPPs, and that doing so, would lead to better health outcomes for all Namibians. It is also possible that new partnerships can be found – they should be. However, to achieve better outcomes for all, both the private sector and the government will have to fully commit to working together to ensure the state of health of Namibia's citizens.

Whyle and Olivier (2016) interpret the expansive literature on PPPs to highlight that the private sector can support the public sectors objectives, although those objectives may not be realized in all cases. One of PPP's benefits is additional resources, allowing the state to focus on the poor and vulnerable. Unfortunately, Private health care

provision is often expensive, which would decrease affordability, equity, population health and social justice objectives. However, the private sector has access to significant resources that, if mobilized more widely, might be more positive than negative. To get there, appropriate public policies are needed.

There is a substantial literature suggesting that the PPPs are not easy, which may lead to poor monitoring and evaluation. It is often the case that private providers are successful at increasing uptake, due to more appropriate geographic access, shorter waiting times, more flexible hours, easier access to staff and medication, and more confidentiality regarding disease-related symptoms. There is evidence that private providers produce more effective interventions, including efficiency and fairness, and effectiveness; such improvements can produce results for the poor. South Africa's North Star Alliance within the transport sector provided healthcare services in 'roadside wellness clinics for truck drivers, sex workers, and their clients, as well as individuals from surrounding communities that did not have access to clinics, otherwise'. A similar plan is operating in Namibia, which also seems to be successful. In such cases, private sector involvement appears to be at least partially commercially viable.

Global PPPs are credited with managing AIDS, as well as diagnostic and treatment services. PPPs successes for TB diagnostics, treatment, and management were also observed in various African locations. Successes appear to arise from the design of referral forms, treatment cards, referral mechanisms, free medication, and encouragement to complete treatment – although not all studies are suggestive of PPP success in all cases, which would be a rather lofty standard to apply. This evidence suggests that clear protocols and treatment encouragement are important for success in healthcare interventions. Thus, government's role as 'protector of the healthcare sector' is of absolute importance, as it is the designer and arbiter of clear protocols (it is also important to engage with new protocols, when found to be effective); however, government can work with private companies and researchers to develop effective, but inexpensive, incentives to encourage treatment and/or engagement with their own health.

Despite the generally positive results uncovered in the broader African literature, there were challenges with respect to strategic vision, partner commitment, role confusion, coordination, and leadership skills. Many human resource challenges were underpinned by trust problems across the partners, as well as ownership and power concerns; often those issues can be attributed to capacity limitations.

There were also financial issues, such as too little funding or insecure funding, trust issues related to reimbursement and the lack of accounting for PPPs in the long-term budget process. Unfortunately, information sharing across technology or lack of technological platforms was also rampant, which affected records, as well as collaboration across the partners. Surprisingly, one of the problems PPP are supposed to address, low efficiency in the public sector, was turned on its head, as challenges arose from inefficiency in the private sector, especially when attempting to deal with the poor and vulnerable. Thus, we recommend that government work with the private sector to develop seamless information sharing arrangements, and, to the extent possible, similar budgeting and reimbursement processes.

There are many potential lessons to learn from the preceding discussion. It is necessary for treatment guidelines to be up-to-date and followed by both the private and public sector, along with clear information sharing and communication strategies. Some of these suggestions clearly fall within the realm of management, which should work harder to streamline and regularize communication and coordination. Similarly, legislation supporting PPPs can clarify management structures, goals, and objectives, which can support collaboration coordination. Such communication matters for all members, which can improve stakeholder relations. Incentives across partners need to be properly understood and managed, as does sustainability of the funds, which includes proper documentation and information management. For all of this to happen, being prescriptive may not be an option; rather, flexibility remains important, as does political and community support.

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Although PPPs have potential, opponents do not believe that PPPs can work, because the technical capacity is not available for monitoring and contract writing, for example. Thus, PPPs require a strong public sector that can engage and monitor, while the public interest goals should be carefully considered, such that public goals are more likely to be defined, measured, and met. Doing so implies proper incentives for participation and might benefit from the ability to persuade, which may require training.

As already stated, openness in communication, as well as clear accountability and roles remain necessary. Accountability is likely improved through proper monitoring, including the human resources in the PPP. Maintaining a PPP also requires effort, including the continuance of executive commitment. The public and private sector must commit, communicate, and cooperate. "Ultimately, it is the government and local health authorities that are responsible for health services provision to the population," (Joudyian et al. 2021).

To be able to use PPPs to support the government's health policy objectives and local health authorities, we make the following recommendations:

- 1. Government should begin to develop a dialogue with the private sector, one focused on creating partnerships, as well as social benefits.
- 2. Government should learn from those with more experience with PPPs to develop appropriate, yet flexible, policies.
- 3. Government should use the dialogues and other's experiences to understand and, where necessary, promote the business case that lies behind the private sector's involvement.
- 4. Government should stay engaged, so that it maintains a consistently open and transparent approach to PPPs and an enabling PPP environment.
- 5. There are PPP opportunities in health that can be considered:
 - a. Government can engage with its current MoU, SLA and informal partners to formalize, where appropriate, their agreements under a PPP.
 - b. Government can work with private companies and researchers to develop effective, but inexpensive, incentives to encourage treatment and/or engagement with their own health.
 - c. Government can work with private companies to enable technology to improve the equitable access to quality healthcare in the country.

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Appendix: A Detailed Review of the Literature

A PPP experiences in Africa

Although Tables 1 and 2 provide some information related to PPPs in Africa, it should be noted that those were not focused on Africa. However, Whyle and Olivier (2016) undertake an extensive literature review, to determine how many health PPPs, what kinds of projects and where those projects operate. See Tables A.1 and A.2.

Table A.1: Prevalence and Location of PPP Types in the Literature.

PPE model	Number identified	Countries		
Social marketing	12	Angola, Malawai, Mozambique, Namibia, South Africa, Zambia, Zimbabwe		
Contracting out	8	Botswana, Lestho, Malawi, Mozambique, South Africa, Zimbabwe		
Globla PPP	7	Bostwana, Lestho, South Africa, Swaziland. Zambia		
PPM approach	5	Angola, Malawi, South Africa, Swaziland, Zambia		
Co-location PPP	4	South Africa		
SWAp	3	Malwai, Mozambique, Zambia		
PFI	3	South Africa		
DP regulation	3	Mozambique, South Africa, Zambia		
Voucherprogramme	2	Zambia, Malawi		
Financing	2	South Africa		
PPIP	1	South Africa		
Azira model PPP	1	Lesotho		
Franchise	1	Zimbabawe		

Source: Whyle and Olivier (2016).

Table A.1 shows us that social marketing campaigns are by far the most common in Africa, while contracting-out and global PPPs are similarly used in Africa. Social marketing campaigns and global PPPs in Africa have mostly been focused on addressing issues related to HIV/AIDS, as have many of the contracting-out programs. Table A.2 shows us that South Africa is home to the most initiatives; however, only a quarter of them include international partners. Only one such partnership is listed for Namibia, which appears to also be related to HIV/AIDS; we discussed in more detail, above, when we discussed Namibia.

Table A.2: International Partners in Africa Identified in a Literature Review.

Country	No. of PPE initiatives identified	No. and % with external partners
South Africa	19	5 (26%)
Malawi	7	7 (100%)
Zambia	7	6 (86%)
Zimbabwe	5	4 (80%)
Mozambique	4	3 (75%)
Botswana	3	3 (100%)
Lesotho	3	2 (66%)
Angola	2	2 (100%)
Nambia	1	1 (100%)
Swaziland	1	1 (100%)

Source: Whyle and Olivier (2016).

The last table presented by Whyle and Olivier (2016), Table A.3 here, describes the international partners working in Africa, at the time they completed their literature review. The results suggest a clear focus, again, on HIV/AIDS and other infectious diseases, with DFID, PEPFAR, the Global Fund to fight AIDS, TB and Malaria being important partners on the continent. According to Population Services International's website, they are more widely active in health, but there is a strong focus on women's reproductive health, as well as HIV/AIDS.

Table A.3: International Organizations in Africa Identified in a Literature Review.

Organization	Occurance of PPE involvement identified
Population Services International	12
Department for international Development	6
United Satets President's Emergency Plan for AIDS Relief	5
The Global Fund to fights AIDS, Tuberculosis and Malaria	4
Bill and Melinda Gates Foundation	3
Roll Back Malaria	2
SFH	2
World Health Organization	2
Geroge W. Bush Foundation	2

Source: Whyle and Olivier (2016).

A.1 South African experiences

PPP infrastructure projects began in the largest African economy, South Africa, in 1999. It has a dedicated PPP unit within National Treasury, and even has a manual. At least some share of the push for infrastructure PPP comes from the need for public infrastructure, like potable water, transportation, sanitation systems and electricity (which is still a problem), and social services. In principle, PPPs could allow South Africa's public agencies to focus on core services, while other funds could be used for investments.

Some concerns related to earlier projects in South Africa relate to constraints in delivery – especially limited competition in PPP markets. There is also concern related to policy direction, such as consistency in that direction among political leaders, which leads to problems with clarity and affects implementation. Importantly, there are public officials available to originate and implement projects, partly due to limited or no technical know-how, poor resourcing and authority. Finally, there appears to be a traditional public procurement system bias, while differing markets and PPP legal environments in the municipalities create further implementation problems.

According to Sanni and Hashim (2014), the following lessons can be derived from the South African infrastructure PPP implementation:

- There is a dedicated PPP Unit that was early and could guide PPP participants. It is argued that this unit was responsible for the recorded successes.
- There is a strong legal environment, which helped in the PPP contracting phase, which places South Africa above most other sub-Saharan African countries.
- There is also strong political will to address Apartheid challenges, many of which are infrastructure-related, and there appears to be political support of the PPP approach.

In health, Whyle and Olivier's (2016) review suggests that private partnerships in Africa can be implemented without external support, although it is not common. Interestingly, South Africa's many different types of private partnerships: contracting-out arrangements for part-time district surgeons and public-private workplace partnerships, co-location PPPs, three PFIs, a PPM for child survival, additional financing arrangements, a PPIP, as well as remunerated work outside the public sector. Co-location arrangements tend to be long-term and allow public hospital resources to be used by the private sector on a fee basis with additional benefits for the public sector. Benefits

include revenue opportunities, infrastructure management for public hospitals and private hospital provision to those who can afford it, which might free-up public sector resources further.

Dual practice (DP), which allows healthcare workers to be employed in the private and public sectors is another component of PPP in South Africa, although it is also in Zambia and Mozambique. It is primarily designed to increase the number of medical professionals in remote areas. Given the limited number of health professionals in Africa, one might expect DP to be allowed in more places. One reason it might not be is that DP includes undesirable incentives that might adversely affect health systems. DP may facilitate government physician retention, but also incentivize absenteeism, potentially reduce public sector job-satisfaction, and exacerbate 'brain drain'. DP may worsen inequalities, because there are incentives to provide better care in their private practices, and therefore, DP requires appropriate and targeted regulation and enforcement.

DP regulations in South Africa are known as the remunerated work outside public services (RWOPS) policy. It requires physicians to apply, limits outside hours and requires the outside work to not interfere public sector hours, although absenteeism may have increased, and privileges appear to have been abused by health practitioners. Similar regulations operate in Zambia, although it is further limited to senior physicians; however, DP is not permitted in Mozambique. Enforcement is a problem in Zambia and Mozambique. Whether or not there is regulation, DP is prevalent in the African region; however, there are clear problems trying to manage it, which suggests the need for increased research on the mechanisms and effectiveness of regulation of DP. Although not necessarily the same as DP, part-time district surgeons are often used to provide care in remote or rural locations.

Sinanovic and Kumaranayake (2006) examine the costs and cost effectiveness of different collaborations with the private sector for TB DOTS provision. Although there are previous South African economic studies related to community-based care, finding a reduction in cost and improvement in cost-effectiveness of DOTS, there is little examining PPP arrangements. They consider three models, including a purely public, a public-private workplace partnership (PWP), and public-non-governmental organization partnership (PNP). They undertook a retrospective costing exercise, based on a 12-month period. Quantities were multiplied by prices, while capital costs were annualized on different schedules, depending on the scale of capital, and the discount rate was 3%. Patient costs included time and travel, and based on a structured interview, although over a small sample. The cost-effectiveness ratio was calculated for each model of provision by dividing cost by the unit of effect and compared with each other.

They found varied results and that the main cost drivers were different by model type. As might be expected, treatment at work or in the community was more affordable to the public sector and to the patient; they were also found to be most effective, although the PNP model in their limited study was consistently the most cost-effective. Despite the apparent success of the PPPs, they argue that success is likely associated with the incentives in the system, while monitoring and evaluation are also important.

One important area for PPP is vaccine procurement. Vaccines are successful and offer value-for-money. South Africa's vaccination program requires around 46 million doses per annum and costs about ZAR 1.5 billion (NDoH, 2010) – in 2015 values. Since 2004, a PPP, the Biovac Institute (BI), manages procurement and distribution. BI is an equity partnership with the Biovac Consortium (Pty) Ltd., a private company with a majority stake. It has many of its own shareholders, including Biovac Holdings (62.5%), Heber Biotec (15%), VaxIntel (15%) and the Disability Employment Concern Trust (7.5%). The Biovac Consortium held a controlling share in BI (52.5%), and the NDoH.

Clearly, balancing the public good with private incentives required a careful structure; otherwise, problems might arise. As noted above, South Africa had established a formal structure within National Treasury, within which to manage such arrangements. However, the PPP benefitted from a reasonably functional setup. There were success-

ful procurement processes for medicines within the NDoH; rather, the PPP was meant to secure supply through local manufacturing concerns. As with procurement, this was not necessarily new. There were such facilities in place producing polio and Bacillus Calmette–Guérin (BCG) vaccines, the latter of which is used against tuberculosis. The PPP was also meant to partially replace both the State Vaccine Institute and the South African Vaccine Producers, which were not believed to be meeting quality or commercial objectives.

Els and Mabane (2001) undertook an analysis of the proposed PPP, suggesting that it represented value-for-money and would transfer significant risk to the private sector, which were just a few of the requirements within the PPP framework. Walwyn and Nkolele (2018) set out to determine if the initial assessment was reasonably accurate, in hindsight. BI is now a significant ongoing concern, and its sales far exceed the initial assessment. They also argue that the initial assessment severely underestimated the complications that would arise in this fast-paced industry. It is difficult to estimate prices or manage quality. BI prices were relatively higher than expected, although that difference can be attributed to two new vaccines, such that the prices are more in line with expectations.

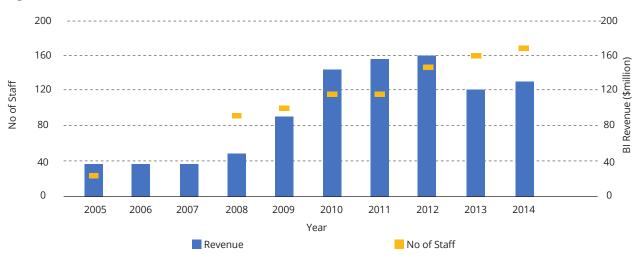


Figure A.1: Growth in BI Revenue and Staff: 2005-2015.

Source: Walwyn and Nkolele (2018).

Thus, it appears that BI has succeeded in managing procurement costs. Its margin on sales is about 13%, which equates to about USD 17 million per year. Walwyn and Nkolele (2018) suggest that this is less than the value it produced, and, therefore, it has benefitted the country from a cost perspective. One of the areas that caused some problems was in terms of capital expenditure. The initial assessment underestimated the need, while NDoH did not contribute any, as it was reluctant to invest or dilute its shareholdings. Despite BI's value-for-money proposition, there was still disappointment in the fact that there is still no local manufacturing. One of the likely reasons for that, is that BI has not earned enough to invest more widely, while NDoH has been reluctant to make any investments.

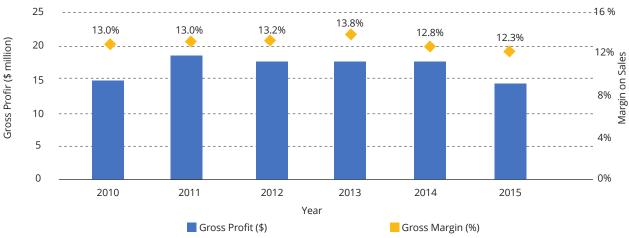


Figure A.2: Gross and Profit Margins for BI 2010-2015.

Source: Walwyn and Nkolele (2018).

BI is a unique animal. It is the only private ownership and private finance initiative in the country. It is also a demand-side project (from national government) that seeks to extend supply. In other words, it is an attempt at localization of supply. However, such instruments are problematic. Even though public sector procurement can stimulate manufacturing, it is not generally in-line with the goals of the procuring public sector department. "Indeed, the NDoH has been openly and frequently critical of the BI-PPP, stating that, if the DTI wants local industry, then it should pay for its incentivization", Walwyn and Nkolele (2018).

A.2 Lesotho experiences

According to Marriott (2014), there are many PPPs that include clinical service delivery. Many of which are based on the Alzira Hospital in Valencia, Spain. The Alzira contract combined facilities construction and the operation of non-clinical and clinical services, including primary care provision for a defined population; the last of these is funded through capitation. However, success in that model appears to have been driven by very low staff levels compared to public hospitals, reduced salaries, longer hours and limited services offerings. Thus, patients in need are likely to use other public hospitals, which leads to the surprising result that the Alzira Hospital generates a small profit of about 1.6 per cent, raising further doubts about it as a truly commercial concern.

Marriott (2014) is rather critical of the first PPP in Lesotho, in which The Queen 'Mamohato Memorial Hospital (opened in October 2011) was built to replace Lesotho's old main public hospital, the Queen Elizabeth II (QE II) Hospital, in the capital, Maseru. All facilities were designed, built, financed, and operated under the PPP (supported by the International Finance Corporation), and the arrangement includes clinical services delivery. As outlined above, with respect to the benefits of PPPs, it was presumed to provide better healthcare for the same costs as before. However, the PPP hospital and its three filter clinics are more expensive than promised at more than \$67m per year (in 2014), which is more than three times the expected cost and is associated with a minimum 64 per cent increase in government health spending.

Marriott further argues that this increased government budget share is hurting other critical needs. For example, (i) there are fewer resources for primary and secondary healthcare in rural areas, where most people live; (ii) the human resources budget is rising below the rate of inflation, despite health worker shortages; and (iii) the government also believes it will be more cost effective to build a new district hospital in the capital, rather than pay the private partner to treat them. Hellowell (2019) places some of these concerns in clearer terms. For example, per capita expenditure on health in 2015 in Maseru was double the amount of the next closest district, while Tšepong employs nearly half of the doctors in the country.

Table A.4: Forecast and Actual Fees under Tšepong PPP in Maloli (M).

Financial year	Unitary fees as forecast: in the contract (net of VAT) (M million)	Invoiced amounts (M million)	Actual expenditures (net of VAT) (M million)	Invoiced amounts minus forecast uni- tary fees (M million)	Actual expenditures minus: forecast: unitary fees (M million)
2012/2013	352.88	435.55	409.88	82.69	57
2013/2014	377.58	575.30	463.58	197.74	88.02
2014/2015	403.99	598.12	482.44	194.13	78.45
2015/2016	432.27	641.99	439.42	209.72	7.15

Source: Hellowell (2019).

Although not highlighted directly by Gideon and Unterhalter (2017), accountability, which is increased with transparency, may have improved the situation over what it has become. For example, it seems that negotiations and relevant information are buried in commercial confidentiality. Thus, objective scrutiny cannot be realized; the information lies within vested interests, which might entail a predisposition to go ahead with the PPP.

According to the Government of Lesotho (2009), initial capital cost was estimated to be M1.165 billion (US\$84 million in 2007 dollars), and the hospital was to be completed in two years. Government contributed M400 million, while Tšepong footed M765 million of those costs, while the private contribution was not reported as part of government expenditure or debt. Tšepong's contribution arose from the Development Bank of Southern Africa (DBSA), through a loan at an annual interest rate of 11.65%. The DBSA and Netcare provided additional loans at a rate of 13.1%. Both rates were well above the South African interest rate at the time. There was a further 16-year operational period, and the operations to maintain the facilities and manage all services (clinical and not) were to be undertaken by the winning bidder, Tšepong. Tšepong was to receive annual payments of M255.6 million (US\$18.4 million in 2007 dollars) for expected costs plus a return on debt and equity; the forecast internal rate of return on shareholder capital exceeded 25%. Government initially was not willing to pay beyond M180.4 million per year. It is important to note that the average interest rate on government debt near that time was only 0.6%; thus, it is difficult to believe they could have agreed to pay many multiples of that. According to the agreement, there would be small co-payments for only a few services, and 90% of those fees were to be transferred back to the Ministry of Health. Equity of M 10.41 million was also included in the deal, via Netcare, the largest shareholder, and local investors. The contract also requires that 500 to 20 000 inpatients and 258 000 to 310 000 outpatients are to be treated every year, as well as fees for exceeding the upper limits: M9491.64 (including VAT) per inpatient and M57 (including VAT) per outpatient (2007 prices).

The underlying process for the PPP alludes to many difficulties that can arise in managing these agreements. The initial request for proposals did not lead to an accepted bid. Rather, a further set of bids were requested. Initially, the expected capital cost was put at M500 million. However, after-the-fact, i.e., after a bid had been approved, the government added-on many improvements/extensions to the hospital. These additions were negotiated over, rather than managed as part of the bid process. The private sector may have been in a better negotiating position and taken advantage of that to win further concessions.

An additional component of the fee is based on inflation, even though 30% of costs are not affected by inflation. The adjustment allows for the recuperation of medical goods inflation, rather than actual inflation, and, therefore, limits private sector risks and lowers incentives to the private sector to attempt to manage costs. Hellowell (2019) suggests that indexation increased the fee by 68% from 2008/09 to 2015/16. Operational fees are higher because (thousands) more patients have been treated than initially envisioned, while government payment delays have left it with automatic penalties. Unfortunately, in cases where the consortium has defaulted in its debts, those

penalties have been passed-on to the government in higher fees; thus, the risk arrangement does not appear to favour government. What this means for the long-term relationship is an interesting question; however, it does suggest that PPPs should be – to the extent possible – properly managed, such that there are decent projections over the life of the contract, while keeping as much of the project as possible within the bidding process. Post-bid negotiations do not seem to have helped, in this case.

Hellowell (2019) further reports that the MoH may monitor, but is not able to, due to capacity constraints: "As of 2015, only two full-time MoH employees managed all outsourced services, collectively accounting for 52% of the total health budget of the country in that year." Thus, the government has not been able to impose any penalties, although one of the main requirements, to obtain and maintain accreditation by COHSASA, the Council for Health Service Accreditation of Southern Africa, appears to have yielded general quality improvements. Tšepong obtained a 94.3% COHSASA accreditation in November 2013. Only South African public hospitals have previously been accredited.

What does one take away from the first such PPP in Africa. Probably, being the first is not a good thing. More generally, new facilities were available on-time and, seemingly, within budget, while quality is both historically and regionally above average, probably because the contract required the hospital to seek accreditation. Thus, governments interested in PPPs can learn that, even when they cannot manage all the details, there might be relatively simple non-government alternatives that support government objectives.

Lesotho's challenges were not unexpected, given what was known about PPPs at the time. However, the fact that those challenges still arose, suggest that state capacity matters, as do contestable markets and access to capital. In Lesotho, there were constraints on all three. It seems reasonable to expect similar issues in other developing countries, such as Namibia. To oversimplify, a PPP is not a panacea to financial constraints! Governments might benefit from a South African style unit in which there are dedicated and specialist human resources to deal with PPPs. More generally, since multilateral banks are currently supporting PPP initiatives, there is a need for them to also support capacity-building around PPP development, finance, and management.

Although private finance offered something for Lesotho, the immediate issues dominated the planning. Thus, longer-term concerns did not receive enough attention. To address this problem and others that have been uncovered, there is a need to create additional avenues of contestability. For example, independent agencies could be brought in for purposes of review, and that process might be strengthened, if an independent private sector actor was included in that review process. Scrutiny is not just with respect to fiscal sustainability – although that is under threat, partly because of the Tšepong PPP – scrutiny related to quality, equitable access and risk sharing are also necessary.

B Private support of health in Africa

Whyle and Olivier (2016) review 52 individual initiatives, representing 8 distinct PPE models, see Figure 1, including: "social marketing, sector-wide approach (SWAp), contracting out, voucher programmes, public-private mix (PPM) approach, DP regulation, financing, and public-private partnership (PPP). In addition, six PPP sub-types were identified, including franchising, global PPP (GPPP), public-private integrated partnership (PPIP), Alzira model PPP, co-location PPP and private finance initiative (PFI)." Many of the initiatives are at least partially funded internationally. For example, the Soul City social market campaign – which is underpinned by the Population Services NGO, and its affiliate, Society for Family Health. It is also supported by the South African National Department of Health (DoH), the Global Fund to Fight AIDS, Malaria and TB (GFATM), the President's Emergency Plan for AIDS Relief (PEPFAR) and the United States Agency for International Development, USAID.

Social marketing, as the name suggests, uses commercial communication and marketing to increase product use or change behaviour. Normally, it has a public health goal in mind. Given the prevalence of HIV/AIDS in Africa, it is not surprising that many such initiatives focused on behaviour change – condom use and safe sexual practices. There were many contracting-out initiatives; these delegate health-related responsibility by the state to a private partner for a fee. The contracts covered medical services in hospitals, clinics, mining companies, NGOs and through private physicians, and the contracts specified the type, quantity, quality, and duration of the services. Global PPPs were also uncovered in Africa; these typically include international donors, as well as local parties. Funds are usually disbursed, while there are agreements in place for decisions and labour. For example, the Apparel Lesotho Alliance to Fight AIDS included the Lesotho Ministry of Health and various international aid agencies, such as USAID and DFID, as well as international clothing companies and the Lesotho garment industry. Their review of the literature highlights that 65% of the private partnership arrangements include international partners. In South Africa, however, only 5 of the 19 initiatives had out-of-country partners, suggesting it is more self-sufficient, which matches with its relative economic might.

Their review uncovered little in the way of formal contracting arrangements, including those supported by international donors. There were thirty-four receiving international support, although only 9 were formalized through a contract or memorandum of understanding. On the other hand, 78% of those not internationally supported had formal arrangements. Possibly, the lack of formal agreements is not indicative of reality, which suggests that "information on the details of the relationship, the degree of accountability between partners, and the mechanisms used to achieve an appropriate level of accountability, is not available for use by future policy-makers and implementers," (Whyle and Olivier 2016). Outside of South Africa and Lesotho, there were no reported private finance initiatives (PFIs), which are long-term term contracts for the design, construction finance and non-clinical operations to be managed privately. PFIs are designed to shift risk from the public to the private sector and redistribute the costs to allow the public sector to manage those costs over a longer period. It is further hoped that the bundling of construction and facility maintenance, creates positive incentives to build "better" and, thus, improve efficiency.

Additional contracting arrangements relate to that of individual physicians, although not in the same way as dual practice, which we discuss further, below. It is done in South Africa and Mozambique. In the case of the latter, the state contracts with expatriate doctors to supplement human resources for health, especially for underserved areas and, thus, can increase coverage and access.

C Broader concerns related to private partnerships in health

Given that PPPs are often supported by the IMF and the World Bank, which are not always viewed as positive influences in either the development or the global dialogue, it should not be surprising that some critiques are leveled against PPP activities. Languille (2017) offers an extensive review of that literature focusing on health and education. For instance, she highlights a subset of positive academic articles funded by the Initiative on Public Private Partnerships for Health, itself funded by the Bill and Melinda Gates Foundation or by aid agencies that have endorsed PPPs. She further breaks the low- and middle-income country health PPP literature into three strands focusing on (i) global health initiatives (such as those developed to fight HIV/AIDS) – at least 80 of these are in existence, (ii) applications of the Alzira Hospital model, as in Lesotho, and (iii) demand side financing, which often incorporates vouchers, such as that for health care or bednets.

The WHO and its newly developed commercial partnerships have received much attention. The literature has worried about a contradiction that might exist between public interest goals, ethics, and the for-profit motive, although

the change at the WHO may have arisen as part of a broader survival strategy during a time when international power was shifting and budgets were getting tighter. Philanthropy, possibly driven, in part, by new paradigms in corporate social responsibility, have also played a role in expanding PPPs. The Rockefeller Foundation has supported global health in various guises for more than a century, but not without critique; the Bill and Melinda Gates Foundation is receiving similar types of criticism, now. Such comparisons may not be appropriate, as philanthropy has changed. Firstly, the Bill and Melinda Gates Foundation is the largest source of support for health but follows 'philantrocapitalism' tenets; in other words, a value-for-money approach underpins most philanthropic activities.

Some critiques of this approach and unprecedented funding power relate to the ability to set policy, which may not necessarily match those supported through democracy. Furthermore, there is concern that funding occurs in combination with business interests, rather than for broader philanthropic reasons. Corporations might be involved in PPPs for similar reasons: (i) the ability to influence through access to policy or regulation, or (ii) more direct financial benefits, such as tax breaks or simply to promote their brand (Buse & Walt, 2000). However, these objectives have rarely been investigated empirically and scant evidence is available on corporations' actual PPP practices. Frost, Reich, and Fujisaki (2012) provide one example, which is Merck's involvement in a global health PPP associated with the distribution of a drug they had developed – Ivermectin. Such activities do raise concerns about the "fox guarding the henhouse."

There is also a concern expressed in the literature that PPP support is driven simply by anti-state postures, possibly arguing that accountability and incentives are lacking in the public sector, and therefore, it is inefficient and might also be captured by vested interests. Thus, it is argued, it is necessary to create customers out of patients and their caregivers, allowing them to exercise their market rights, especially their right to shop and refuse. Furthermore, PPPs create 'space', enabling them to work around rigid public sector regulatory frameworks and powerful unions. The evidence suggests governments playing a smaller role, as would be supported by the preceding anti-state capture worldview.

Regardless of the worldview, governments and donors are the main funders. More worrying is the unequal cost-sharing characterized in many of the global health PPPs. Authors have also stressed the unequal sharing of costs, risks and gains that characterise global health PPP). Given the large funding available via the Bill and Melinda Gates Foundation, it is possible to hide rather small corporate sector contributions, suggesting the private sector is free riding on donor support). Others go farther suggesting that the governments are 'subsidising the philanthrocapitalists'. It is further suggested that businesses are surprisingly risk averse and hesitant to invest; thus, it is the public sector that is driving innovation.

Although it has been suggested that PPPs might allow for governments to focus more specifically on the poor and vulnerable, which implies that equity concerns are relevant, when it comes to the establishment of PPPs, there is little evidence to suggest equity is enhanced through PPPs. Hanefeld's (2008) review of PPPs in education suggests positive equity in access. However, others argue that the effects on health inequalities has been negative. Unfortunately, the public sector does not adequately serve the poor and vulnerable. There is some evidence that vouchers have increased the use of health services, especially in the case or reproductive health. However, the broader effect of voucher schemes on social inequality and the quality of health care provision is limited, at best. Others are also concerned that the ability of these interventions to produce a significant impact on quality and utilisation of care is far from fully demonstrated. One reason for the limited success with vouchers hinges on the creation of parallel structures and the additional administrative burden that is likely to eat away at any funding gains.

Although a consensus has emerged that global health PPPs were important for health, especially for HIV/AIDS services, while PPPs supporters promote the positive effects in related to the mobilization of funds, increased R&D

and the broader standardization of health care. However, the success also preceded a change in the global health agenda geared towards infectious diseases, rather than non-communicable ones. The COVID pandemic certainly furthered that push.

Gideon, Hunter, and Murray (2017) ask whether PPPs have the potential to address gender inequalities, focusing their attention on reproductive health care. It is suggested that it is possible for such programs to address inequality; however, little is known. Their goal is to develop a gendered lens for such analyses. Their wording suggests that they are not fond of the notion that voucher schemes 'discipline women to become rational economic women'. They focus their attention on a project in India, and their review further suggests that PPP projects focused on women are not even likely to improve equity for women. They argue that empowerment and choice was, instead, taken away, because male managers and female community workers were captured by vested interests.

As Languille (2017) concludes, "From a policy perspective, the limits of voucher and cash transfer schemes point to the flaws of an approach exclusively focused on the demand side. Only a system-wide perspective that incorporates supply dimensions would be able to address social services challenges in the South (Jehan et al., 2012)."

D Namibia health professionals questionnaire

This Questionnaire aims to investigate the possibility of using Public Private Partnerships(PPP) arrangements to improve efficiency and quality of health services with the objective of reducing wastage, and providing more equitable health care to a greater section of the Namibian population. Mainly focusing on the most recent developments to synthesise various views and identify any possible information gaps. This will also assist in proposing future paths towards a sustainable and equitable health financing system in Namibia.

- 1) In what department do you work?
- 2) There is significant interest around the world and in Namibia for public private partnerships. In your view, what is the role of a PPP in the provision of equitable and sustainable healthcare service in the public sector?
- 3) We understand there might be many challenges in the department. Thus, we would like to know which three challenges you view as most pressing, at this point in time?
- 4) We understand that there is a partnership with the private sector in your department. How long has this been in place?
- 5) According to your understanding, what is the partnership meant to address?
- 6) Is that in line with current challenges, even if not listed in your previous top three?
- 7) Is the answer to 4) in line with challenges that your department faced previously?
- 8) In your view, has the partnership helped alleviate or mitigate some of the challenges faced either in the past or currently?
 - a. If so, how?
 - b. If not, why not?
- 9) Has the partnership had an impact on your department's ability to deliver healthcare services?
- 10) Has the partnership created new challenges for you? If so, please, provide an example.
- 11) Given your experience with this PPP, would you be willing to enter into another one that might focus on addressing one of your listed challenges?
- 12) Given your experience, which challenge do you believe would be most appropriate for a PPP?

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About the EAN:

The Economic Association of Namibia (EAN) is a Namibian Think Tank conducting research and providing public policy advisory services. The Association also organizes public discussion forums on topical issues in order to inform the broader public and stimulate public debates on current issues. Moreover, the EAN has established an online document repository accessible through its website that provides access to relevant socio-economic research reports and official documents.

About the Hanns Seidel Foundation (HSF):

Present in more than 60 countries world-wide, the Hanns Seidel Foundation Namibia (HSF) is a German non-profit organisation, largely funded by the German Federal Ministry for Economic Cooperation and Development. Together with its Namibian partners, the Foundation promotes democracy and good governance, the rule of law and anticorruption, sustainable economic and social development, environmental sustainability, as well as climate adaptation and mitigation.

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