

## PROJECT REPORT

# Public-private partnerships in the response to HIV: experience from the resource industry in Papua New Guinea

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## A B S T R A C T

**Context:** Although Papua New Guinea (PNG) has made some progress in social development over the past 30 years, the country's Human Development Index has slowed in recent years, placing it below the regional average. In 2012, the estimated HIV prevalence for adults aged 15–49 years was 0.5% and an estimated 25 000 people were living with HIV. Although reduced from previous estimates, the country's HIV prevalence remains the highest in the South Pacific region. While the faith-based and non-governmental sectors have engaged in HIV interventions since the epidemic began, until recently the corporate sector has remained on the margins of the national response. In 2008, the country's largest oil and gas producer began partnering with national and provincial health authorities, development partners and global financing institutions to contribute to the national HIV strategy and implementation plan. This article provides an overview of public–private partnerships (PPPs) and their application to public health program management, and then describes the PPP that was developed in PNG.

**Issues:** Innovative national and local PPPs have become a core component of healthcare strategy in many countries. PPPs have many forms and their use in low- and middle-income countries has progressively demonstrated increased service outputs and health outcomes beyond what the public sector alone could achieve. A PPP in PNG has resulted in an oil and gas producer engaging in the response to HIV, including managing the country's US\$46 million HIV grant from the Global Fund to Fight AIDS, Tuberculosis and Malaria.



**Lessons learned:** Given the increasing expectations of the international community in relation to corporate responsibility and sustainability, the role of the corporate sector in countries like PNG is critical. Combining philanthropic investment with business strategy, expertise and organisational resource can contribute to enhancing health system structures and capacity.

**Key words:** developing countries, healthcare financing, HIV, Papua New Guinea, public health administration, public–private sector partnerships.

## Context

Two decades have passed since the World Health Assembly called on WHO to mobilise and encourage the support of all partners in health development, including non-governmental organisations and institutions in the private sector, in the implementation of national strategies for health for all<sup>1</sup>. Subsequent interaction with the commercial sector broadened and deepened, this relationship became a central feature of the global health landscape, and as a result a new direction of policy for WHO emerged<sup>2</sup>. However, until 2000, there was little information in the public domain concerning how individual partnerships should work and very little consideration of the many implications in the development of what have since been characterised as public–private partnerships (PPPs)<sup>3</sup>.

Public–private partnerships were initially discussed in terms of ‘global’ PPPs, collaborative relationships that ‘transcended national boundaries and brought together at least two parties, a corporation (or industry association) and an intergovernmental organisation, in order to achieve a health-creating goal on the basis of a mutually agreed and explicitly defined division of labour’<sup>4</sup>.

Since then, a proliferation of PPPs have reconfigured the international landscape in a range of forms and approaches, the term ‘public–private partnership’ being interpreted and applied in a number of ways. This article describes a multi-faceted PPP between a major oil and gas producer, the National Department of Health and associated development partners in Papua New Guinea (PNG). It begins by discussing

the emergence and range of public-health-related PPPs and then focuses on the PPP experience in PNG.

## Issues

### *Public-private partnerships in the public health domain*

Emerging in varying forms, PPPs have frequently been recognised as partnerships between public and private health sector entities. These partnerships have also been referred to as ‘public–private mixes’, defined as strategies that link healthcare entities within the private and public sectors to national programs<sup>5</sup>.

Although comparisons between health outcomes in private and public sector services in low- and middle-income countries are limited<sup>6</sup>, evidence for the effectiveness of combining the efforts of private- and public-sector programs, particularly in the tuberculosis (TB) and malaria sectors, is increasing.

In India, where more cases of TB occur than in any other country in the world, it has been recognised that collaboration between public TB programs and private healthcare providers is an important strategy to ensure equitable access to quality TB diagnosis, treatment and care<sup>7-10</sup>. Similarly, public–private mix interventions in the areas of TB testing and treatment have been demonstrated in Nepal<sup>11</sup>, Myanmar<sup>12</sup>, Kenya<sup>13</sup>, Nigeria<sup>14</sup> and Pakistan<sup>15</sup>, where the involvement of private providers, under the public program umbrella, has substantially increased TB case notification and treatment success rates.



Other PPPs in the TB field have been described relative to sole public provision: public–private workplace (PWP) and public–private non-government (PNP) partnerships<sup>16</sup>. In South Africa, a PWP was formed between provincial TB programs and mining companies, where the employer’s occupational health services received free TB treatment drugs or were reimbursed per TB patient treated. In India, a PNP between provincial TB programs and non-governmental organisations (NGOs) provided community-based treatment in which NGOs were paid a monthly sum per patient to manage community-based TB programs<sup>17</sup>.

Malaria programs have also seen a rise in the development of PPPs, particularly in relation to subsidised insecticide-treated net (ITN) distribution. As early as 2002, the global Roll Back Malaria program advocated building sustainable systems that guaranteed access to ITNs for the most vulnerable, while ‘exploiting the entrepreneurial spirit and efficiency of the private sector’<sup>18</sup>. Over the ensuing years, this concept continued to be embedded in WHO’s strategic framework for coordinated national scale-up of ITNs<sup>19</sup>.

Determining malaria PPP studies followed, the evidence largely originating through Tanzania’s national ITN scheme. A cost-sharing scheme, which combined largely private sector distribution with limited but targeted public subsidies, achieved sustained coverage of 75% mosquito bednet use across all age groups in a large rural population in southern Tanzania<sup>20</sup>. Through a nationwide discount voucher scheme, pregnant women accessed vouchers at antenatal clinics in public health facilities. These could be redeemed for a mosquito net of choice at a shop in the catchment area of the health facility<sup>21,22</sup>. A further study evaluated the effect of three different ITN distribution processes: free, subsidised and commercially purchased ITNs<sup>23</sup>. All three delivery strategies enabled poor rural communities to achieve net coverage high enough to yield both personal and community protection for the entire population. Each process reached its relevant target group and the free availability of nets only temporarily suppressed the net market, illustrating that in this setting these delivery strategies are complementary rather than mutually exclusive approaches. Despite major

challenges, PPP ITN programs have been seen as a bold step to address the public health needs of vulnerable groups<sup>24</sup>.

In contrast to TB and malaria, for HIV there is a paucity of evidence related to PPPs, specifically for public–private mix approaches. This may be related to concerns over the quality and affordability of HIV treatment and care by private practitioners<sup>25,26</sup> or that the role of the private sector in providing HIV-related services has been largely overlooked<sup>27</sup>.

Although the engagement of private healthcare providers appears nominal in the response to HIV in low- and middle-income countries, there has been a movement in the development of PPPs that focus on health system strengthening. These PPPs have emerged in areas where private partners combine philanthropic investment with business strategy, expertise and resources and where investment guarantees a surplus for the public partner in terms of enhanced health system structures or capacities<sup>28</sup>.

A key example is the experience of Botswana, which responded to its HIV crisis through the development of a PPP between the Government of Botswana, Merck & Co., Inc. (and its company foundation) and the Bill & Melinda Gates Foundation. An analysis of the complex PPP relationship that emerged in response to the country’s 38.5% adult prevalence of HIV infection concluded with five lessons about how partners can build more effective collaborative relationships, including (i) understanding the key values that motivate partners; (ii) making a firm commitment to building relationships at the technical and operational levels relevant to the partnership; (iii) viewing collaboration as a learning process rather than an organisational structure; (iv) building a portfolio of diverse activities; (v) expecting stress in partnerships<sup>29</sup>.

The United States’ President’s Emergency Plan for AIDS Relief (PEPFAR) is another key example in which a private contribution took the form of not only financial outlay, but also of commercial expertise. Established in 2003, PEPFAR is widely recognised as one of the most ambitious and successful bilateral programs ever implemented to address a single



disease<sup>30</sup>. PEPFAR has been recognised for its role in paediatric HIV management<sup>31</sup>. Part of the program's success is attributed to the participation of the commercial sector. PEPFAR has improved country-level supply chain systems by taking advantage of commercial industry's best practices in logistics. PEPFAR also developed a working partnership with a medical technology company to assist with improving laboratory systems.

HIV-related PPPs that involve corporate philanthropy have also been established as short-term operations. In Kenya, a large-scale HIV testing intervention was integrated with a multi-disease prevention package of long-lasting insecticide bed nets, condoms and water purifiers<sup>32</sup>. The PPP consisted of a corporate partner who provided a grant to implement the program in conjunction with the Ministry of Public Health and Sanitation and an international, non-profit humanitarian organisation. In addition, the corporate partner manufactured and donated the long-lasting ITNs and water filters used in the campaign. The intervention lasted 7 days, during which 47 173 individuals received a HIV test.

### *Development of a private–public partnership in Papua New Guinea*

With around 800 indigenous languages, limited infrastructure and access difficulties created by the diverse terrain, PNG is widely regarded as a challenging environment for the delivery of health services. Close to 90% of the country's population lives in rural areas and access to the widely scattered rural communities is often difficult, slow and expensive. Only 3% of the roads are paved and many villages can only be reached on foot<sup>33</sup>. Although PNG has made some progress in social development over the past 30 years, the country's Human Development Index has slowed in recent years, placing it below the regional average and ranking it at 156 out of 187 countries with comparable data. Under-five mortality is 61 per 1000 live births, life expectancy is 63.1 years and the adult literacy rate is 60.6%<sup>34</sup>.

In 2003, the country was declared as having a generalised HIV epidemic. In 2007, the prevalence was reported as

1.5%, sparking an urgent response to action. A revised estimate of 0.9% was reported for 2009 and the 2012 estimate indicated a national prevalence of 0.5% in those aged 15–49 years<sup>35</sup>. A comprehensive National HIV Strategy and Implementation Plan for 2011–2015 clearly defines the national response. Development partners from international, regional and national organisations, particularly those from the faith-based sector, have engaged in the response with gusto. Until recently, the broader private/corporate sector community has operated on the margins of this response.

Oil Search is PNG's largest oil and gas producer and operates all of PNG's producing oil and gas fields. In 2013 it had a net profit after tax of US\$205.7 million, an operating cash flow of US\$366.8 million and a market capitalisation of approximately US\$11 billion<sup>36</sup>. Oil Search has operated in PNG since 1929, so it is very familiar with the development challenges faced by the country.

Twenty years ago, Oil Search invested in the development of its own internally run healthcare service, a unique position in the resource industry, where most companies outsource this operational commitment. In addition to providing occupational health services to the workforce, the company became progressively involved in the delivery of primary health care for the community. This response was prompted by local need in remote areas underserved by poor infrastructure and minimal provision of services. In the mid-2000s, a dedicated Oil Search public health team was established, initially to tackle malaria, then HIV and more recently maternal and child health. In 2007, the company ventured into its first formal PPP. With funding from the Asian Development Bank, matched by the company's own financial contribution, agreements were made with national and provincial health authorities and local services to scale up HIV and sexually transmitted infection (STI) testing, treatment and support.

In 2011, Oil Search created the Oil Search Health Foundation, established as a trust with its own constitution and registration as a company incorporated under the laws of the Independent State of PNG. It was then awarded tax



exemption as a charitable association by the PNG Internal Revenue Commission. By establishing the trust and quarantining finances from the parent company Oil Search, donations to the foundation became exempt from income tax and expenditure zero-rated for goods and services tax. Ongoing functional support from Oil Search is recognised through a services agreement and annual service work orders.

Following the success of the initial PPP previously described, in mid-2011 the Oil Search Health Foundation became the principal recipient for the Global Fund to Fight AIDS, Tuberculosis and Malaria, round 10 HIV grant, worth US\$46 million, making it one of a small group of corporate sector entities involved directly in managing Global Fund grants. The foundation also became a subrecipient of the same grant to support the scale-up of HIV testing, treatment and support activities in two further provinces.

The PPP model used by the Oil Search Health Foundation can best be described as one that draws on flexible partnerships with all levels of government, donor, development and civil society organisations to enable the design, implementation and evaluation of sustainable public health interventions for rural and remote communities in need. The foundation's ability to leverage specific sectors of Oil Search's corporate operations, such as finance, human resource and logistical support, allows for the mobilisation of activities with speed and relative efficiency, while engagement with government ensures the foundation's programs are aligned with PNG national health strategy and implementation plans.

In terms of HIV, at national level the foundation contributes technical support for the improvement of training curricula and treatment guidelines. At community level, the foundation deploys field-based teams, each with a project supervisor and team of healthcare staff, trainers and HIV prevention specialists who deliver targeted training and skill reinforcement through participative education programs and an ongoing program of supportive clinical mentorship. With comprehensive key stakeholder engagement, field teams support local services to improve clinical workflow and outputs, supply chain management, medical record

management and laboratory and pharmacy operations. Where opportunities exist, HIV interventions are meaningfully integrated with activities related to sexual and reproductive health.

To date, the foundation's PPP has reported many successes, both in terms of service outputs and clinical outcomes. Community healthcare workers now receive standardised HIV and STI education, with most courses leading to formal certification by the National Department of Health. This is backed with informal onsite clinical mentorship provided by the foundation's HIV specialists who also provide logistical, supply chain, monitoring and evaluation, and general primary care support. To date, the foundation has supported the launch of 66 new HIV testing sites, which have performed more than 41 000 HIV tests (reported at the end of February 2014). Of these tests, 565 (1.4%) people have been confirmed as HIV positive and subsequently managed in accordance with national HIV treatment and support guidelines.

Public-private partnership funding has also enabled the refurbishment of health facilities in order to improve the conditions of health services. The foundation leverages its relationship with Oil Search supply chain and logistical processes to complete health clinic and staff accommodation refurbishments, including the supply of new water tanks, generators and medical equipment, fitting of insect screens, painting and securing premises. The laboratory at one of Oil Search's operational sites has been accredited as a reference centre for HIV confirmatory and CD4 (a type of white blood cell) testing. This service also offers routine lab monitoring for those taking antiretroviral therapy and adds a back-up to the laboratory in the provincial capital.

To generate demand for services and to mitigate the impact of HIV in local communities, community groups are trained across the project sites to deliver HIV awareness and prevention messages through theatre and peer education. Basic HIV awareness education is also provided to church groups, community groups and local female sex workers. Support to increase condom distribution sites has resulted in



the distribution of nearly 500 000 condoms in 2013, with demand increasing each year.

The Oil Search Health Foundation HIV field team also contributes to improved networking and relationship strengthening between the National and Provincial Departments of Health, National AIDS Council Secretariat and other development partners.

## Lessons learned

Global health financing and the delivery of assistance for health continues to shift. Multi-sector collaborations through PPPs are emerging to address complex health issues requiring multidisciplinary approaches<sup>37</sup>. Public–private partnerships in global health have rapidly proliferated and are now recognised as an integral component for implementing effective interventions<sup>38</sup>. Governments are seeing the potential for engaging the private sector in improving people’s health<sup>39</sup>, and despite some evidence to suggest a ‘crowding out’ effect has taken place whereby global funding mechanisms are replacing more local private investment<sup>40</sup>, in general, greater amounts of development assistance for health are flowing to NGOs, other private channels, and PPPs than to UN agencies<sup>41</sup>. There is a risk that corporations and business associations use such opportunities to pursue their interests and to foster market liberalisation that might undermine social rights, but the development of the new ‘global political space’ allows actors like NGOs, advocacy groups and foundations that strengthen social rights to have a greater influence on politics, including putting pressure on large enterprises to assume corporate responsibility<sup>42</sup>.

The PNG experience outlined here indicates the acceptance of PPPs as a way forward for health and social development. Oil Search has demonstrated how a large private sector company from the resource sector can play a significant role in health development.

The success of the Oil Search PPP model is largely reliant on fostering and sustaining strong, meaningful relationships with

government and development partners, and with the general community. Contributing to the local community maintains and enhances the company’s social licence to operate, but to achieve community and stakeholder acceptance, communities must remain at the centre of the corporate sustainability vision. In the Oil Search model, this has largely been achieved by a genuine commitment by executive leaders to sustainability and provision of a high degree of freedom to public health specialists, rather than corporate, to shape the foundation’s strategy.

In terms of overcoming challenges, the Oil Search model offers a range of lessons that primarily revolve around managing risk and maintaining the balance of power between the state function and the corporate contribution. Stepping outside the company’s core business environment can increase the company’s financial, reputational, safety and security risk, so alternative strategies that uphold the principles of risk management need to be identified. For instance, when foundation teams were established in the community away from Oil Search operational bases, corporate standards of staff accommodation were difficult to meet so alternative strategies that continued to maintain staff safety were developed. There is also the risk of corporate partners overstepping the line, and or being pressured to do so from local stakeholders, and taking on the responsibility of government. To prevent this, the foundation ensured that roles and responsibilities were established in project areas prior to project commencement through the development of memorandums of understanding with provincial health offices. In terms of managing contractual risk, standard operating procedures were drawn up to ensure subrecipients of funds had clear processes of disbursement and acquittal.

While it is clear that governments have a major role in setting policy, strategy and standards, and monitoring the implementation of services, certain companies, by the nature of their operating environment, can be engaged by governments and development partners to leverage their business systems to support healthcare development, either in their own operating areas or the country as a whole. If a united vision is created along with a shared understanding of



expectations, roles, responsibilities and risks, PPPs will generate shared value for all stakeholders involved.

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