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OVERVIEW

Public-Private Investment Partnerships (PPIPs) are an innovative approach for improving healthcare services and infrastructure. PPIPs are a special form of public-private partnership (PPP) that comprise long-term, highly structured relationships between the public and private sectors designed to achieve significant and sustainable improvements to healthcare systems at national or sub-national levels. While the term “PPP” has become somewhat ubiquitous, representing a wide variety of arrangements ranging from impromptu donations to elaborate contractual relationships, the term “PPIP” seeks to set apart a category of health-related PPPs that is potentially transformational for poorly performing government-run health systems.

PPIPs position a private entity, or consortium of private partners, in a long-term relationship with a government to co-finance, design, build and operate public healthcare facilities, and to deliver both clinical and non-clinical services at those facilities over a decade or more. PPIPs enable governments to prudently leverage private sector expertise and investment to serve public policy goals—specifically the provision of high-quality and affordable preventive and curative care to all citizens. PPIPs guarantee government ownership of assets throughout the life of the partnership and aim to be “cost neutral” to patients, who incur the same out-of-pocket payments, usually zero or minimal, as they did in the previous dilapidated and poorly run public facilities.

This Atlas provides an overview of the most innovative PPIPs worldwide, all of which were established to systematically address healthcare challenges in a particular setting. It includes the key characteristics and goals that define a PPIP and features detailed overviews of 12 PPIPs that epitomize this definition. The Atlas also contains seven PPIPs that meet some but not all of the definitional criteria, dubbed the “non-core” list. This Atlas is a working document that serves as a snapshot of the PPIP landscape at one point in time. The information included was collected in late 2009 and early 2010. The information will therefore require routine amendments as governments continue to establish pioneering public-private initiatives and as more information becomes available about existing public-private projects.
INTRODUCTION

Background

Government-run health systems across the developing world are in disrepair, with poor quality services provided in dilapidated facilities. For example, a typical district hospital is rundown, lacking reliable water, sanitation or electricity, with absent or broken equipment, inadequate supply chains for essential commodities, chronic staff shortages, low service quality, overcrowding and poor clinical outcomes. Such secondary hospitals, and the rest of the health system of which they form a part, suffer from poor management and a lack of sustainable and sufficient financing.

Similarly, but less starkly, government-owned and -run healthcare systems in rich countries frequently face challenges of insufficient capital investment, low efficiency, poor patient satisfaction and disappointing clinical outcomes. In both wealthy and poor countries, the skills required to deliver high quality health services efficiently do exist, but are often concentrated in the private sector and underutilized by governments. Historically, some governments have been wary of working with the private sector in healthcare, partly because of general distrust between the private and public sectors, and partly because of an inherited aspiration to create a public monopoly healthcare system, resembling the United Kingdom’s National Health Service as originally conceived and established.

Through time, a recognition of the challenges faced by public health services and the positive experience of PPPs in other sectors, have caused an increasing number of governments to look to the private sector for long-term partnerships to improve healthcare infrastructure and the delivery of healthcare services. In so doing, governments are recognizing the financial, managerial and technical competencies that the private sector can bring and are seeking to harness the strengths of the private sector in the achievement of long-term public policy goals. Many varieties of PPPs in the health sector have arisen as a result of this trend. This document deals with one particular model: PPIPs.

PPIPs are a novel way for resource-constrained governments in both rich and poor countries to use the strengths of the private sector to simultaneously improve health infrastructure and healthcare service provision, while creating a platform for addressing other systemwide inefficiencies. The PPIP model transfers substantial financial and operational risk to a private entity which is contractually obliged to deliver a “complete bundle” of services, spanning construction, maintenance, clinical care, prevention and supplementary services such as pathology, procurement and even training.

The first-ever conference on PPIPs was organized at Wilton Park in April 2008 by the Global Health Group (GHG) at the University of California, San Francisco and The Healthcare Redesign Group. The report of this conference can be found at http://www.wiltonpark.org.uk/resources/en/pdf/22290903/22291315/wp909-report. At this conference, participants requested the GHG to provide a comprehensive compendium or atlas of existing PPIPs and PPIPs under development. This first-ever PPIP Atlas is the result. In the main section of the report, we describe 12 PPIPs in seven countries, using a standardized format to document these programs. In the “Non-Core Public-Private Investment Partnerships” section, we document a further seven programs in seven countries which are PPIP-like, as they do not meet all of the criteria for the most ambitious and fully-bundled PPIPs. We hope and intend that this comprehensive documentation will be a resource and stimulus to leaders in both the public and private sectors working to improve the quality, efficiency and availability of healthcare services.

The GHG is an “action tank” dedicated to identifying, elaborating and translating innovative solutions to major global health challenges into large-scale action to advance health and save lives in low- and middle-income countries. As part of its work on engaging the private sector to strengthen health systems, the GHG serves as a clearinghouse for information on PPIPs worldwide. The GHG studies PPIPs to identify promising practices that might inform governments embarking on PPIPs, and shares lessons learned through print and web-based publications and structured South-South learning exchanges. For more information on the GHG and its PPIP activities, please visit: http://global-healthsciences.ucsf.edu/GHG.
Defining PPIPs—What PPIPs Are

PPIPs possess the following four key attributes:

A Design, Build, Operate and Deliver (DBOD) Model
The private partner or consortium designs, co-finance, builds, operates and delivers clinical care in one or more health facilities, often including a tertiary hospital and surrounding primary and secondary facilities. This model is commonly called a “DBOD.” Unlike other PPPs, PPIPs go beyond private investment in buildings and maintenance; the private partners are also responsible for delivering all clinical services at the facilities, from surgery to immunization to ambulances.

Government Ownership of Assets
The healthcare facilities are owned by the government during all phases of the contract. Because PPIPs are carefully designed vehicles for achieving public healthcare policy goals, they do not relinquish control or ownership of assets to the private sector.

Long-Term, Shared Investment
A PPIP comprises a long-term commitment by both the government and the private partners to provide health services for a defined population. Both partners invest significant resources into the project, ensuring long-term dedication and a common interest in successful outcomes. A successful PPIP must exist for a decade or more to give both partners sufficient time to develop sustainable systemwide processes and infrastructure, and allow for more informed strategic planning and improved feedback loops.

Risk Transfer
Under the DBOD model, the private partners, not the government, are responsible for meeting stringent service quality benchmarks. In addition, the private partners assume risk for delays and cost overruns in the construction phase, and for human resource issues and failure to achieve efficiency in service delivery.

What PPIPs Are Not
It is important to differentiate PPIPs from other models of PPPs that do not attempt to be as comprehensive or as well integrated into the wider health system. Following are examples of models that fall short of the PPIP definition:

Private Finance Initiatives (PFIs)
PFIs are limited to construction and/or non-clinical maintenance of facilities. In PPIPs, however, the private sector’s responsibility goes beyond the delivery of a fixed asset to include clinical service provision that must achieve acceptable quality levels over long periods.

Privatization
Unlike the private ownership in the privatization model, ownership of all the facilities within a PPIP remains with the government.

Contracting Out
As co-investors with an equity stake in the success of the PPIP, the private partners are not merely contractors providing outsourced services.

Co-location
This model exists when public and private enterprises share a physical space, but maintain separate management. For example, a private clinic may have a wing within or adjacent to a public hospital. Several critical components of PPIPs are left out of this model, including shared investment and risk transfer.

Concession
In a concession arrangement a private company manages the operations of a public facility, but with curtailed powers. A concession contract is generally limited such that the private manager inherits significant responsibility but possesses little authority. For example, the private enterprise may manage the workforce, but may not possess hiring and firing privileges. PPIPs necessitate that the private partner have significant authority to ensure accountability.

The Goals of PPIPs
Beyond the overall structure of PPIPs, what sets them apart from other PPPs is the core set of goals they aim to achieve. PPIPs necessitate that both the public and private partners carefully agree on desired outcomes and construct metrics systems for independent authorities to routinely monitor using the following goals.

Quality of Care
The primary purpose of PPIPs is to serve the government’s public policy goals, both for better access and for improved quality of care for all, including the poorest and the most marginalized.

Cost Neutrality
By design, patients utilizing a new PPIP healthcare facility experience no change in out-of-pocket payments at the point of care. In some cases, the PPIP may also be cost neutral to the government, ensuring its annual expenditure for the new PPIP facilities and services is equal to historical expenditures. These instances can be referred to as “cost neutrality squared,” or “(cost neutrality).”
**Equity of Access**
New PPIP facilities are open to all, regardless of a patient’s income level or social status. Equity of access is especially critical for poor or disenfranchised populations which may not have had access to quality healthcare services prior to the PPIP.

**Predictable Government Health Expenditures**
Fixed payments and capped overall project costs add predictability that may otherwise be absent from government healthcare budgeting. Inclusion of facilities maintenance, equipment replacement, staffing and technology forecasting in program contracts promotes stability in national health expenditures.

**Systemwide Efficiency Gains**
New PPIP facilities are designed to operate within, and improve, existing systems. Due to the use of stringent performance indicators and performance monitoring schemes, PPIPs strive to set high and transparent standards for service delivery and outcomes, thus raising the bar for the entire national healthcare system.

**Critical Success Factors**
Research indicates that the four following characteristics should be present to ensure the success of a PPIP.

**Political Will and Capacity**
In all PPIPs, the government takes on the role of business partner, contract manager and informed purchaser, while remaining responsible for leadership, regulation and monitoring. Governments must have or commit to acquiring these skills and must also ensure the support of the community. PPIPs necessitate a level of involvement by the public sector that is well beyond that of PFIs or contracting out.

**Commitment from the Private Sector**
Though a profit incentive exists for the private sector, commitment to serving its clients, both government and patients, must be of foremost importance, and PPIPs take measures—including elaborate performance-based contracts—to ensure that this remains the case.

**Ensuring Trust Between Sectors**
Long-standing ideologies that reinforce distrust often hinder collaborations between the public and private sectors. PPIPs can draw on mechanisms to overcome challenges to effective collaboration including: an open tender process, third-party facilitators, continuous open dialogue and increased transparency by all parties.

**Independent Monitoring and Evaluation**
An independent private or public agency, responsible to the government but commanding the respect and trust of both public and private partners, must be established to collect and validate performance data, ensure all contractual obligations are met and administer or arbitrate financial rewards and penalties. This agency can also play an important role in maintaining public confidence in the new PPIP arrangements and in ensuring appropriate learning and course corrections as the partnership evolves.
The PPIP Atlas

Structure
This Atlas provides a high-level overview of the most innovative PPIPs worldwide, using the aforementioned definition and goals as a template for each entry. Given the rapidly growing and changing nature of PPPs, and PPIPs in particular, both the details of the PPIPs listed, and the number and categorization of them will likely change.

Each PPIP model included in the body of the Atlas has been analyzed based on the political landscape enabling the PPIP, contract specifics related to the partnership, important features and modalities of the PPIP, key outcomes to date and critical factors contributing to the success or failure of the PPIP. To be included in this Atlas, PPIPs must follow the definition of a PPIP on page 10 and must be designed to achieve the goals on page 10. Some examples, however, follow the definition more stringently and place the goals at the forefront of the model.

In addition to the core PPIP examples, there are numerous pioneering PPIP-type arrangements in low-, middle- and high-income countries that do not fit the definition provided, but are often referred to during discussions on PPIPs. Though they might not exemplify the most comprehensive PPIP structure, these PPIPs leverage the private sector to fulfill a government’s public health and public policy objectives in bold and novel ways. The “Non-Core Public-Private Investment Partnerships” section lists seven such partnerships and contracts awarded to private actors by public entities. In some cases the PPIPs include a specific clinical support service and no infrastructure component; in other cases, the private partners provide the capital investment for a project and manage the government health facilities in unique ways, but do not assume responsibility for all clinical service provision.

The PPIP models included in the Atlas have been taken from low-, middle- and high-income countries. Low-income countries expressed significant interest in learning from the successes and failures of other countries. The reasons to implement PPIPs, the key themes in their design and their major challenges are largely shared between rich and poor countries.

Methodology
The GHG conducted grey and peer-reviewed literature reviews and performed qualitative interviews to inform the development of this Atlas. The research process sought to uncover the details of both successful and unsuccessful examples of PPIPs. Data collection around PPIPs is, however, challenging. In general, the available academic literature is lacking analyses of—and even summary information on—PPIPs. Additionally, there are commercial sensitivities and legalities that inhibit both public and private actors from revealing financial, health outcome and other project details. In high-income countries, political and regulatory factors can ensure that upon completion, cost-efficiency and other data from the project are made available to the public. In developing countries, however, this is less likely to occur. PPIPs are increasingly being structured to guarantee accountability and transparency which may over time help to shift trends around data availability and publication.

Audience
The primary audience for this Atlas is the governments of low- and middle-income countries, including policymakers in ministries of health and ministries of finance. In some PPIPs, namely the Lesotho model, the ministry of finance is a key champion of the PPIP. This Atlas may also be helpful to others studying how best to leverage the private sector to strengthen health systems, including donor agencies, non-governmental organizations, academic institutions and private health entities.
CORE PUBLIC-PRIVATE INVESTMENT PARTNERSHIPS

This section includes summary details for the 12 PPIPs that most closely fit the PPIP definition and goals. Entries focus on the high-level details of the project and address the most widely transferable lessons learned as recounted by the stakeholders responsible for instigating, designing and/or implementing these PPIPs.
AUSTRALIA—Joondalup Hospital

Summary
In April 1996, the Western Australian government awarded Mayne Health, a leading Australian for-profit healthcare group, a PPIP contract to design, build, operate and deliver clinical services and non-clinical services at the Joondalup Health Campus just north of Perth. This PPIP encompasses infrastructure upgrades and clinical services for 20 years, and was one in a series of PPIP-like arrangements established in Australia in the 1990s that followed a build, operate, own and transfer (BOOT) model for hospitals. The Joondalup PPIP has been particularly successful given a new influx of government stakeholders who continue to champion the model and have agreed to expand the hospital further by 2013. The PPIP model was not considered a radical approach to healthcare within the Australian context, as investor-owned hospitals are prominent providers of hospital care throughout Australia, and co-location of private and public hospitals has been common since the early 1990s (Brown and Barnett 2004).

Political Overview
In the 1990s, Joondalup was experiencing rapid growth and the government was struggling to meet the increasing healthcare needs of its residents. Based on a review conducted in 1993, the existing Wanneroo Hospital met less than a quarter of residents’ healthcare needs. The existing government was also looking to encourage greater involvement of the private sector to expand healthcare services, despite opposition by the Labor Party and some community groups. In 1996, the government awarded the contract to Mayne Health (now Ramsay Health Care) to take over the operation of the existing 84-bed Wanneroo Hospital and replace it using a PPIP model (Auditor General 1997).

Contract Specifics
The hospital opened in 1998 with 365 beds, and it currently has 379 beds, of which approximately 60% are public, reimbursable by the government. The government pays the private partner an “availability charge” over a period of 20 years to cover capital costs and the ultimate purchase of the hospital. Throughout the concession period the hospital is technically owned by the private operator, but the land where the hospital is situated is owned by the government. At the end of the 20-year contract, however, the public components of the asset will revert back to full government ownership. The private components (the medical center and wards for private patients) will revert back to the government after 40 years. The government also pays an annual amount for the units of service consumed, with a base caseload specified for 135 beds (and a maximum of 220 public beds). Given government estimates at the time the contract was signed, services made up roughly 90% of the contract’s total cost. The government negotiates the price of additional units consumed as needed. The hospital will undergo significant expansion by 2013 and will include more beds and upgraded facilities.

Private Partners
In 1996, the government awarded Mayne Health the PPIP contract. In 2006, the operations for Joondalup Hospital were integrated into Ramsay Health Care, a leading healthcare provider in Australia (Ramsay Health Care 2006). When Ramsay took over for Mayne, it also announced that the company would build a second, all private hospital in Joondalup.

PPIP At a Glance
- Number of Bed: 379
- Number of Public Beds: 280
- Number of Private Beds: 99
- Medical Center
- Upgraded ER Department
- Operating rooms: 6
- Intensive Care Unit: 10 beds
- Nurse Specialist Unit: 4 beds
- Pediatric Ward
- Mental Health Unit
- Day Surgery & Endoscopy Units
- Renal Dialysis Services
- Radiology Services
- Pharmacy Services
- Shared Facilities
- Contract Period: 20 years
- Project Cost: $39 million* (at the time the contract was signed)

* Note: All dollar amounts in this atlas are represented in U.S. dollars.
Covered Population
Currently, the Joondalup hospital’s catchment area is the population of Joondalup, or just over 160,000 people. The Joondalup Health Campus is the largest healthcare facility in Perth’s northern suburbs and provides 24-hour acute care.

PPIP Characteristics
Using a PPIP model different from traditional Australian PPPs that cover no clinical services, the Western Australian government aims to achieve the following:

The Public Policy Objective
The PPIP has allowed the government to deliver more needed healthcare services via upgraded facilities to its residents.

Design Build Operate
The private partner is responsible for designing, building and operating the hospital, overseeing the medical staff and managing the hospital. For these services, the government pays an availability charge to cover the capital costs for the public component, over a period of 20 years.

At the time the contract was signed, the capital costs were approximately 40% of the public sector benchmark used by the government. These costs were estimated at $39 million when the contract was signed in April 1996, but increased later as the system requirements changed.

Deliver Clinical and Non-Clinical Services
The private partner is responsible for providing clinical services such as inpatient services, emergency care and mental healthcare, as well as non-clinical services.

Under the contract, each year the government can decide the quantity of services it needs to purchase, with a base caseload service unit price specified for 135 beds (with a total of 220 public beds available). Any additional units purchased have a lower average unit cost. This amount reflects the case mix, the quantity of services and the prices set for services by all parties for that year (Auditor General 1997).

Government Ownership of Assets
After 20 years, the control of the public components (most of the facilities) will revert to the government. The private components (the medical center and wards for private patients) will revert to the government after 40 years. However, the government retains ownership of all land and buildings during the contract period (Auditor General 1997).

Government Review and Independent Monitoring
The contract requires the private partner to meet certain quality standards. These requirements are based on the Hospitals and Health Services Act of 1927 and National and State Goals and Targets such as the Clinical Health Goals and Targets for Western Australia 1994. In addition, the Australian Council of Healthcare Standards, an independent non-profit accreditation organization, must accredit the hospital to ensure adherence to quality-oriented processes.

Should the private partner fail to meet the quality standards specified, the government can reduce the prices paid for services. The contract will default when and if the private partner loses accreditation (Auditor General 1997).

Long-Term Investment
The contract for the public component has been specified for a period of 20 years (while the private component comprises 40 years).

Risk Transfer and Predictable Government Health Expenditures
The private partner oversees the medical staff and assumes the risk transfer associated with clinical services.

Availability payments are fixed and the payment for services varies each year. The government guarantees the purchase of a minimum number of units of service, but an insufficient number of residents utilizing services could reduce benefits for both the private partner and the government. Thus far this has not been an issue.

Cost Neutrality to Patients
Patients continue utilizing services as they did when the Wanneroo Hospital was functioning.

Equity of Access for All
The private partner must provide services to all residents in Joondalup.

Systemwide Efficiency Gains
The PPIP has allowed the government to provide a “complete bundle” of clinical and non-clinical services for its residents.
Key Outcomes
Potential for Reduced Costs
It is estimated that the government will pay a lower average availability charge per unit as the number of units purchased increases. The base service charge per caseload is agreed upon by all parties, and additional units purchased can have a lower than average cost. Savings for these additional units can arise only if the government is able to negotiate a lower than average cost with Ramsay compared to other alternative partners.

Need for Better Quality Control on Public Side
Based on multiple audit reports published on the Joondalup Health Campus by the Auditor General, Western Australia, it is recommended that the Government Health Department better ensure quality standards are being met, clarify organizational responsibility, publicly declare key performance indicators and develop, document and implement a risk-based contract management strategy (Auditor General 1997). Though Australia has made strides in measuring quality standards, the Auditor General holds that PPPs of all kinds have highlighted the need for even better quality control (Auditor General 2000).

Future Expansion
In 2009, the government decided to expand the Joondalup Health Campus to accommodate the increasing health needs of the growing population. The government approved a $230 million expansion, which includes 451 public beds, 165 private beds, a 20-bed dialysis unit, five new operating rooms, and a new emergency department. Phase I of the expansion is expected to be completed by 2013 (Ramsay Health Care 2010). This success and expansion is unique among the BOOT arrangements established in Australia in the 1990s; others have ceased to include a clinical component due to the intense management they require.

Critical Success Factors
Significant Partnership with Private Sector
Unlike other partnerships in Australia, the Joondalup Hospital PPIP model introduces the private sector as a significant provider of clinical healthcare services. The private sector has upheld the terms of the contract for over a decade, and the government has decided to invest in the expansion of the Joondalup Health Campus, denoting that the PPIP has been a success thus far.
In 2006, Mayne Health integrated its operations with Ramsay Health Care, which now operates the Joondalup Hospital and provides all clinical and non-clinical services.
LESOTHO—National Referral Hospital

Summary
In 2007, the Government of Lesotho (GOL) engaged a regional private consortium, Tšepong (Pty) Limited—40% of which comprises Netcare Limited—to design, partially finance, build and operate a new 425-bed national referral hospital in the capital city of Maseru. The hospital will replace the existing Queen Elizabeth II Hospital (QEII). Tšepong will provide clinical and non-clinical services at the hospital for a period of 18 years, including two and a half years of construction. Additionally, Tšepong will construct a gateway clinic on the same site as the hospital, and will refurbish and upgrade three semi-urban filter clinics which will provide primary healthcare services to the public. The new facilities will include specialized medical equipment and highly trained staff employed by the private consortium. Together with the hospital, these clinics will operate as a district health network. Construction began in 2009; the clinics were complete and commenced operations in May 2010 and the new hospital will open in 2011. The hospital will be located in Bots’abelo, the government’s medical campus in Maseru. Systemwide efficiency gains were a primary focus of this PPIP; the private consortium includes local stakeholders and business, and the PPIP structure necessitates that Tšepong revamp Lesotho’s existing drug-supply system.

Political Overview
The Kingdom of Lesotho is a small landlocked country which shares all of its borders with South Africa. Lesotho has a population of 1.9 million people, with nearly 400,000 people living in Maseru. Lesotho has 10 district hospitals, three referral hospitals and a military hospital (Lithakanye 2009). The QEII hospital in Maseru is nearly 100 years old, and has been unable to meet the healthcare demands of residents because of dilapidated infrastructure, high staff turnover rates and perpetual funding shortages. The new hospital will replace the QEII hospital and will deliver the GOL’s promise to provide quality healthcare for its residents.

Contract Specifics
In December 2007, the GOL awarded Tšepong the contract to upgrade the country’s national referral hospital, build a gateway clinic and refurbish three filter clinics in Mabote, Qoaling and Likotsi. The project cost is estimated at $120 million and will be funded by the GOL, the private sector and the Development Bank of Southern Africa (DBSA). DBSA has loaned Tšepong about R700 million (approximately $90 million) and Tšepong will receive an annual unitary payment from the GOL in return for treating 310,000 outpatients and 20,000 inpatients per annum. The amount will be adjusted for inflation annually, ensuring budget certainty for the GOL.

Thirty-five private beds will be co-located with the 390 public beds, and private specialists from South Africa will visit and consult for both sections of the new hospital. The revenue from the private ward will be shared by Tšepong and the GOL at a pre-determined rate. The GOL and Tšepong will co-manage any specialized referrals to South Africa as required.
The current funding structure for the project is as follows:

- The GOL will provide 34% of capital costs, saving large debt service costs and significantly improving the project’s risk profile. The private partners will fund 66% of the capital costs.

- The World Bank-housed Global Partnership for Output-Based Aid (GPOBA) has provided a grant for $6.25 million, payable over the first five years of the project, to augment the unitary payment that will be made by the GOL for the clinical services. The GOL has requested a Partial Risk Guarantee from the World Bank so that Tšepong can continue to operate with partial coverage at its own expense, should the GOL fail to make the unitary payment.

- The International Finance Corporation (IFC), a member of the World Bank Group, served as the primary transaction advisor for the GOL via an in-kind contribution. The IFC provided significant assistance to both the Ministry of Finance and Development Planning and the Ministry of Health and Social Welfare around the tendering, design and implementation of the project.

**Private Partners**

Unlike other PPIPs, the private consortium responsible for the Lesotho PPIP has been designed with a unique structure to ensure buy-in from the community, and to support Lesotho’s economic development progression. Tšepong is comprised of Netcare (40%); Excel Health (20%), an investment company for Lesotho-based specialists and general practitioners; Afri’nnai (20%), an investment company for Bloemfontein-based specialists and general practitioners; D10 Investments (10%), the investment arm of the Lesotho Chamber of Commerce; and the Women’s Investment Company (WIC) (10%), an investment company comprised entirely of Basotho women. Netcare is Africa’s largest private hospital and healthcare group (Netcare 2008).

**Covered Population**

The hospital is open to all residents of Lesotho via referral. The PPIP contract guarantees the treatment of 310,000 outpatients and 20,000 inpatients per annum.
PPIP Characteristics
Using a pioneering model never before implemented in an African country, this PPIP seeks to achieve the following:

The Public Policy Objective
The PPIP will allow the GOL to deliver its promise to provide residents upgraded healthcare facilities and better quality diagnostics and treatment for the same minimal cost they previously incurred. The GOL has also structured the PPIP to bolster Lesotho’s economic development.

Design Build Operate
Tšepong is responsible for designing, building and operating the national referral hospital, the gateway and the filter clinics. Tšepong employs the medical staff and is responsible for the management of the hospital. The contract also includes provisions to strengthen the existing national drug supply system to better support all facilities and outlets nationwide.

34% of the capital costs will be provided by the GOL and the remaining 66% by the private sector.

Deliver Clinical & Non-Clinical Services
Tšepong is responsible for providing clinical services, including primary and specialized services, and non-clinical services including medical transport, staff training, medical equipment and drugs at the hospital (Litlhakanyane and Friedland 2009).

The GOL will pay Tšepong an annual unitary payment for clinical services, which guarantees treatment for 310,000 outpatients and 20,000 inpatients. GPOBA has provided a grant for $6.25 million for clinical services at filter clinics as a provision until the hospital is built.

Government Ownership of Assets
The GOL owns the hospital as well as the gateway and filter clinics. At no point under the contract will Tšepong own the facilities.

Government Review & Monitoring
The hospital is subject to comprehensive accreditation reviews by the Council for Health Service Accreditation of Southern Africa (COHSASA). PD Naidoo and Associates will conduct reviews and provide final certification for all construction and equipment during the two-and-a-half-year construction period. Turner and Townsend, an independent monitor based in South Africa, will monitor the operation of the PPIP throughout the life of the contract, and apply penalty deductions as needed based on a strict, pre-determined evaluation system.

The hospital is also subject to penalty deductions through evaluations by the performance monitoring system, government monitoring and a Joint Services Committee (Litlhakanyane and Friedland 2009).

Long-Term Investment
The concession contract comprises 18 years, including two and a half years for construction.

Risk Transfer & Predictable Government Health Expenditures
Tšepong employs the medical staff and assumes the risk associated with clinical service provision.

Healthcare provision costs will become fixed for the GOL. Annual unitary payments made to Tšepong will be budgeted as operating expenses, allowing the GOL to continue other critical programs (Principal Secretary Lesotho 2009).

Cost Neutrality to Patients
Patients will continue paying the same out-of-pocket expenditures they would pay at any other public hospital in Lesotho. The co-pay at the QEII was about $1.25 per visit; this will remain the same at the new hospital.

Equity of Access for All
Tšepong is contractually obligated to treat a minimum number of public patients, the number has been carefully devised by hospital operations experts and agreed upon by all parties.

Systemwide Efficiency Gains
The PPIP will allow the GOL to provide “bundled” clinical and non-clinical services. The contract also includes stipulations to ensure Tšepong improves Lesotho’s existing drug-supply system and, through an arrangement with the National Health Training College of Lesotho, utilizes the new facility to train all of the health workers in the country, public and private.
**Key Expected Outcomes**

**Greater Accessibility**

Prior to the PPIP, perpetual funding shortages made it difficult for the GOL to meet local healthcare needs in the dilapidated QEII hospital. The new district network consists of three strategically selected filter clinics, enabling patients to access improved primary healthcare services and obtain referrals as needed. The gateway clinic will serve as the primary care facility for local area patients and manage referrals to the new national hospital.

**Better Quality**

Services provided at the new, well equipped facilities will be cost neutral for patients, who will now receive better quality treatment and experience no change in their out-of-pocket expenditures. It is estimated that the average length of stay at the national referral hospital will be reduced by five to 10 days as a result of better referral protocols, better outpatient care and an improved transportation system (Litlhakanyane and Friedland 2009).

**Better Compensation and Training**

Current QEII and other staff will resign from the GOL and accept an appointment with Tšepong. The staff will be offered equal or better pay and their continued employment will be conditional on performance. Tšepong will also facilitate continuing medical education for its staff, and other health professionals throughout Lesotho. Tšepong will collaborate with Boston University and the University of the Free State to develop a new medical curriculum at the new referral hospital.

**Critical Success Factors**

**Government Leadership:** The Ministry of Finance and Development Planning and the Ministry of Health and Social Welfare have actively led the contracting process and worked more closely together on this project than ever before. The GOL continues to transition into its new role as long-term business partner, contract manager and regulator with technical assistance from the IFC.

**Diversified Funding Sources**

The GOL has been able to secure reliable funding from various sources including loans from DBSA (that go directly to Tšepong) and the private sector, and grants from GPOBA. These funding sources have shielded the GOL from large initial capital outlays and have given predictability to the ongoing unitary payments which the GOL will pay from the health budget.

**Intensive and Sustained Project Management**

The health and finance ministries, the IFC and the private partners have actively managed the project from contract negotiations to construction. The GOL, with assistance from Boston University, has also performed rigorous baseline studies to help determine key performance indicators. These indicators will help the GOL assess the success of the project as it relates to the nation’s goals and others, such as the Millennium Development Goals.

**Expert Transaction Advisors**

The GOL received expert transaction and implementation support from the IFC. The IFC has helped both ministries to build their technical capacity around contract management; this will help the GOL conduct its relationship with Tšepong in the future, once the IFC completes its work on the project.

**Local Economic Empowerment (LEE)**

The GOL is committed to LEE and has ensured the PPIP reflects this commitment. The PPIP will not only provide clinical training for its own staff and the rest of Lesotho’s health professionals, but will integrate local entrepreneurs and women’s groups as well. The contract requires Tšepong to participate in LEE through a multi-faceted approach:

- **Local Equity**—Tšepong is 40% owned by Lesotho-owned businesses, and will increase to 60% ownership by year 13 of the project.
- **Local Management and Staff**—80% of all staff employed will be local, and 1% of payroll will be spent annually to develop and train all employees.
- **Local Subcontracting**—Tšepong has contracted the construction of facilities to RPP Lesotho, a local contractor. Additionally, nearly 35% of the capital equipment will be procured locally. Once the facilities are in operation, Tšepong will contract the majority of the operating tasks to local subcontractors.
- **Local Development and Additional Community Services**—Tšepong has committed to providing medical training for students, providing free cleft lip and palate treatment, providing ophthalmology services under the “Sight for You” program and treating patients for congenital heart conditions, at an agreed value. Tšepong will also fund and operate a Women and Rape Crisis Management Center. As mentioned, Tšepong will also utilize the new hospital as a training resource for all health sector employees nationwide.
LESOTHO—National Referral Hospital PPIP Configuration

Government of Lesotho

Tšepong (Pty), Ltd.
Investor/Holding Company

Netcare—40%
Excel Health—20%
Afri’nnai—20%
D10 Investments—10%
Women Investment Company—10%

Public Partner

Private Partner

Patients

Footnotes
Netcare: South Africa’s largest private hospital and healthcare group
Excel Health: investment company for Lesotho-based specialists and general practitioners
Afri’nnai: investment company for Bloemfontein-based specialists and general practitioners
D10: investment arm of the Lesotho Chamber of Commerce
Women Investment Company: investment company for Basotho women
PORTUGAL—Centro Hospitalar de Cascais

Summary
In 2008, the Government of Portugal awarded a PPIP contract to Hospitais Privados de Portugal (the HPP Consortium) to design, build, operate and maintain the Centro Hospitalar de Cascais for 30 years and to provide both clinical and non-clinical support services for 10 years, which can be expanded to 30 years. This partnership is the first of four PPIPs in Portugal to reach financial close, and the facilities began operating in 2010. This PPIP ensures higher quality services at the same cost to patients, and at a cost to the government that is approximately 9% lower than a purely public option.

Political Overview
The national healthcare system in Portugal is based on universal coverage and free access, and is financed by taxpayers. Most hospitals and primary care centers are owned by the public sector, and the system is complemented by an extensive ambulatory medical system (Carola 2005).

In November 2001, a PPP agency, Parcerias Saúde, was formally established under the auspices of the Minister of Health to promote innovation and expertise through partnerships with the private health sector (Caixa —Banco de Investimento 2008). In April 2002, it received a legal mandate to launch 10 new hospitals via PPPs. The first wave consisted of five hospitals, two of which were new (Loures and Sintra) and three of which were replacement hospitals (Cascais, Vila Franca Xira and Braga). Four of the five were to be structured as PPIPs; of these four, Cascais was the first to be completed and fully functional. The second wave of hospitals consisted of five replacement hospitals (Evora, Gaia, V. Conde, Faro and Guarda) (Simões 2005). The PPIP comprising Centro Hospitalar de Cascais is expected to be completed by 2010 (HPP Saúde 2008) and will be located 30 kilometers from the Portuguese capital of Lisbon.

Contract Specifics
Two special purpose vehicles (SPVs) were created to execute the series of new hospital construction—the SPV responsible for building, operating and maintaining the hospital infrastructure is called Infraco, and the SPV responsible for providing all clinical services is called Clinco. The Infraco concession has been awarded 30 years and includes construction, operation and maintenance of the hospital. The Clinco concession has been awarded 10 years and maintains that the private partner will provide clinical services and non-clinical support services including cleaning, security, laundry, catering and waste disposal (Simões 2005). The government remunerates Infraco through availability payments, and Clinco through annual contracts. The Centro Hospitalar de Cascais PPIP also integrates the Condes de Castro Guimaraes hospital and the Dr. Antonio José de Almeida orthopedic hospital. The project cost is €99.2 million, with the hospital infrastructure valued at €67 million and the clinical services at €32.2 million.

Private Partners
Within the HPP Consortium, Gestao de Edificio Hospitalar (TDHOSP) operates as Infraco, and is sponsored by a Portuguese infrastructure firm, Teixeira Ouarte. Parcerias Cascais (HPP Saúde) operates as Clinco and is sponsored by a Portuguese insurance group—Fidelidade Mundial (Lovell 2008).

PPIP At a Glance
• Number of Beds: 250
• Network Integration: Integrated with regional specialist hospitals
• Clinco Contract Period: 10 years
• Infraco Contract Period: 30 years
• Project Cost: €99.2 million
• Government Cost Savings: Up to 9%
**Covered Population**
When functional, the hospital will serve a population of 170,000 people in the Cascais region.

**PPIP Characteristics**
This PPIP seeks to achieve the following:

**The Public Policy Objective**
The PPIP will allow the government to deliver high quality service more efficiently within the framework of the Portuguese national health system.

**Design Build Operate**
Infraco, operated by TDHOSP, will provide the construction and maintenance for the infrastructure components of the project. The government will make availability payments to Infraco to cover debt and shareholder remuneration (not indexed to inflation), and operation and maintenance costs (indexed to inflation) (Caixa-Banco de Investimento 2008).

**Deliver Clinical & Non-Clinical Services**
Clinco, operated by HPP Saúde, will provide clinical and support services. The government will make annual payments based on services provided, indexed to inflation, and targeted to optimize case-based ratios and shareholder remuneration (Caixa-Banco de Investimento 2008).

**Government Ownership of Assets**
This PPIP comprises a management contract between the private partners and the government. The ownership of assets remains with the government throughout the life of the contract.

**Government Review & Monitoring**
Both availability payments for Infraco and contract payments for Clinco are subject to performance service evaluation and can be withheld if failures result (Caixa-Banco de Investimento 2008).

**Long-Term Investment**
The contract duration for Infraco is 30 years with 24 months of construction. The duration for Clinco is 10 years, though this is extendable to a maximum of 30 years (Lovell 2008).

**Risk Transfer & Predictable Government Health Expenditures**
The private partners employ the medical staff and assume the risk associated with clinical service provision. Healthcare provision costs will become fixed for the government.

**Cost Neutrality to Patients**
The PPIP is cost neutral for patients who will continue utilizing free healthcare services under the national system.

In addition, it is expected that the government will be able to provide healthcare services for up to 9% lower than the cost estimated through traditional mechanisms. As a result, the PPIP is expected to achieve the ideal principle of (cost neutrality)^2.

**Equity of Access for All**
The PPIP is a part of the national health system and will continue providing residents with universal access to all services.

**Systemwide Efficiency Gains**
The 9% of cost savings resulting from this PPIP can be re-invested into other health areas.
Key Expected Outcomes
 Better Quality for Less
 Based on Ministry of Health estimates, this PPIP will result in costs 9% lower than a traditional public sector model. In addition, the residents will have access to higher quality services, and the services will continue to be free under the national system.

Implications for Future Projects
 Similar to the Centro Hospitalar de Cascais PPIP model, the government launched three other PPIPs in the early 2000s: the Braga Hospital (replacement), the Vila Franca Hospital (replacement) and the Loures Hospital (new). These four PPIPs have similar structures, with Infraco providing the infrastructure for 30 years, and Clinco providing the clinical and non-clinical support services for 10 years. They are all a part of the first wave of activity under the government’s PPP mandate. One of these projects is still in procurement, and the tender for the Loures Hospital was officially cancelled in 2005. This termination resulted because bidders presented proposals with vastly different risk-bearing assumptions, such that the tender committee deemed the tenders non-comparable.

The government re-issued the tender in 2008, with significantly different terms to reduce bidding costs, simplify the bidding process, reduce paperwork and focus more on better-defined output specifications. Upon conducting an evaluation of the first-wave hospitals, the government determined that including the clinical component implied too long of a negotiation process before closing, leading to project delays. Therefore, the second wave of Portugal’s PPVs will only include the infrastructure component and a simpler qualification process for bidders. The national health system will provide the clinical services for the second wave of replacement and new hospitals (Euromoney 2009).

Critical Success Factors
 Simplified Tender Process
 While the Cascais PPIP has not been underway long enough to determine the factors critical for its success, the process around this and several other PPIPs enabled the government to adapt its tendering process to be much simpler and clearer going forward, to ensure project timelines are met.
PORTUGAL—Centro Hospitalar de Cascais PPIP Configuration

Government of Portugal

Annual Contract Payment

Public Partner

Parcerias Cascais (Clinco)
Service Provider

Clinical Services & Non-clinical Support Services

Private Partner

Gestao de Edificio Hospitalar (Infraco)
Construction Contractor, Facilities Management

Availability Payment

Construction & Facilities Mgmt

1 Main Hospital

Clinical Services

Patients

Footnotes

Gestao de Edificio Hospitalar (TDHOSP): operates as Infraco and is sponsored by Teixeira Quarte

Parcerias Cascais (HPP Saude): operates as Clinco and is sponsored by a Portuguese insurance group
PORTUGAL—Braga Hospital

Summary
As part of a broader PPP mandate, in 2008 the government of Portugal awarded a PPIP contract to a consortium called Escala Braga, or Braga Scale Group (BSG), to design, build, operate and maintain Braga Hospital for 30 years and to provide clinical and non-clinical support services for 10 years. Braga Hospital will replace an existing hospital and serve as a new teaching hospital linked to the medical university—the University of Minho (José de Mello 2010). The government expects this PPIP to enable it to provide higher quality services at the same cost to patients, and at a cost to government that is approximately 14% lower than it would spend on a purely public option.

Political Overview
As a part of the first wave of hospitals required by the federal PPP mandate of 2002, the Braga Hospital will replace the existing São Marcos Hospital (Saravia 2009). The hospital is scheduled to open in 2011 (José de Mello 2009). This PPIP is one of four PPIPs started as a result of the 2002 mandate, one of which remains in the procurement phase; one of which was transformed into a PPP that excludes clinical service provision; and one of which is the Centro Hospitalar de Cascais outlined above.

Contract Specifics
Similar to the PPIP model for Centro Hospitalar de Cascais, two established SPVs will execute this PPIP: Infraco is responsible for building, operating and maintaining the hospital’s infrastructure for 30 years, and Clinco is responsible for providing all clinical and non-clinical support services for 10 years. The government remunerates Infraco through availability payments, and Clinco through annual contracts. The project will cost approximately €1.18 billion (Lovell 2008).

Private Partners
The private partner in this PPIP is BSG. BSG is composed of 1) José de Mello Saúde, a leading for-profit healthcare provider in Portugal, 2) Somague, a Portuguese engineering company and 3) Edifer, a Portuguese construction group.

Covered Population
When functional, the hospital will serve a population of 2,74,000 people (Lovell 2008) in the Braga and Viana do Castelo areas of north Portugal (Saravia 2009).

PPIP At a Glance

- Clinical Area: 99,000 meters²
- Built Area: 140,000 meters²
- Number of Beds: 706
- Employees: 1,800
- Operating Rooms: 12
- Delivery Rooms: 15
- Consultation Rooms: 60
- Clinco Contract Period: 10 years
- Infraco Contract Period: 30 years
- Project Cost: €1.18 billion
- Government Cost Savings: 14%
**PPIP Characteristics**
This PPIP seeks to achieve the following:

**The Public Policy Objective**
The PPIP will allow the government to deliver more efficient and higher quality service than the pre-existing teaching hospital while remaining within the framework of the existing national health system.

**Design Build Operate**
Infraco will provide for the construction and maintenance of the infrastructure component of the PPIP. The government will make availability payments to Infraco to cover debt and shareholder remuneration (not indexed to inflation), and operation and maintenance costs (indexed to inflation) (Caixa-Banco de Investimento 2008).

**Deliver Clinical & Non-Clinical Services**
Clinco will provide the clinical services and non-clinical support services. The government will make annual payments based on services provided, indexed to inflation (Caixa-Banco de Investimento 2008).

**Government Ownership of Assets**
This PPIP comprises a management contract between the private partners and the government. The ownership of assets remains with the government throughout the life of the contract.

**Government Review & Monitoring**
Both availability payments for Infraco and contract payments for Clinco are subject to performance service evaluation and can be withheld if failures result (Caixa-Banco de Investimento 2008).

**Long-term investment**
The contract duration for Infraco is 30 years with 27 months of construction, and the duration for Clinco is 10 years (Grupo Edifer 2008).

**Risk Transfer & Predictable Government Health Expenditures**
The private partners employ the medical staff and assume the risk associated with clinical services.

Healthcare provision costs will become fixed for the government. Infraco is remunerated by availability payments, and Clinco is remunerated by annual contracts for particular services (Carola 2005).

**Cost Neutrality to Patients**
The PPIP is cost neutral for patients who will continue utilizing free healthcare services under the national system.

In addition, it is expected that the government will be able to provide healthcare services for up to 14% lower than the cost estimated through traditional mechanisms. As a result, the PPIP is expected to achieve the ideal principle of (cost neutrality)^2.

**Equity of Access for All**
The PPIP is a part of the national health system and will continue providing residents with universal access to all services.

**Systemwide Efficiency Gains**
Based on the estimates provided by the private partner, the consortium’s proposal is nearly 14% lower than comparable public sector costs. It is expected that the partnership will result in increased efficiency compared to a public option (José de Mello 2010).

**Key Expected Outcomes**
**Better Quality for Less**
Based on BSG’s estimates, this PPIP will result in costs that are 14% lower than a traditional public sector model. In addition, residents will have access to higher quality service, which will continue to be free.

**Critical Success Factors**
Not enough information available yet.
PORTUGAL—Braga Hospital PPIP Configuration

Government of Portugal

Annual Contract Payment

José de Mello Saúde (Clinco)
Service Provider

Clinical Services & Non-clinical Support Services

1 Main Hospital

Construction & Facilities Mgmt

Somague & Edifer (Infraco)
Construction Contractor, Facilities Management

Availability Payment

Clinical Services

Patients

Public Partner

Private Partner

Patients

Footnotes
José de Mello Saúde: operates as Infraco
Somague, Edifer: operates as Clinco
ROMANIA—Outpatient Dialysis Centers

Summary
In 2004, Romania’s National Health Insurance Fund (NHIF) contracted with four private dialysis operators to take over the renovation and management of renal services at eight different public hospitals across Romania. This novel partnership has enabled Romania to attain new standards for facility and equipment specifications, and for dialysis treatment, in an effort to make the facilities comparable to European Union (EU) standards. The contract requires the private partner to provide services to hemodialysis and peritoneal patients. The government pays the private partner a flat fee per hemodialysis treatment and an annual fee per peritoneal patient. The contract covers an initial four years and is extendable up to seven years, but only if the private partner relocates to a new facility within two years of the tender award (Nixon 2004).

Political Overview
In Romania, inpatient and outpatient dialysis services are provided at nearly 40 public hospitals. Dialysis equipment is purchased by the Ministry of Health (MOH) and dialysis supplies are purchased by the NHIF; all are distributed to hospitals as needed. In 2003, Romania had 36 hemodialysis machines per million persons, compared to 93 in Hungary and 102 in the Czech Republic. The government chose to consider the PPIP model as a way to address the following three healthcare problems suffered by dialysis patients (International Finance Corporation 2008):

- Patients in Romania were receiving dialysis treatment at a rate 70% below the average treatment rate in Western Europe;
- Patients were receiving poor quality treatment because of antiquated dialysis equipment, poor patient follow-up and lack of specialized staff training;
- There was a lack of transparency and accountability in managing operating budgets for dialysis services.

As a part of a pilot program, the government simultaneously tendered private partners to renovate; equip and procure medical supplies; operate the facilities; train and employ staff; and deliver services at eight public hospitals across Romania.

Contract Specifics
Stringent prequalification criteria were established to ensure winning bidders were experienced in dialysis service provision. Each bidder was restricted to two centers to increase competition and limit concentration. The agreed payment per dialysis treatment was set at €100 (Loening 2008); the annual fee per peritoneal patient was set at €11,000 (Nikolic and Maikisch 2006). In addition, the private partners have invested over €28.6 million to renovate and equip the facilities (International Finance Corporation 2008).

Private Partners
Four international bidders and their local partners won contracts: B. Braun (Germany), Baxter (United States), Fresenius (Germany) and Gambro (Sweden) (International Finance Corporation 2008).

PPIP At a Glance
- Number of Dialysis Centers: 8
- Services for hemodialysis and peritoneal patients
- Payment per dialysis: €100
- Annual fee per peritoneal patient: €11,000
- Contract Period: 4 years (extendable to 11)
- Investment by Private Partners: €28.6 million
- Government Cost Savings: Over 2.9 million

Source: www.ifc.org
PPIP Characteristics
This PPIP seeks to achieve the following:

The Public Policy Objective
The government has been able to provide higher quality treatment for more dialysis patients.

Design Build Operate
The private partners are responsible for the complete renovation, equipping and management of all centers.

Deliver Clinical and Non-Clinical Services
The private partners are responsible for recruiting and training all staff, and for delivering all services.

Government Ownership of Assets
At the start of the contract, all centers were located at the public hospitals and the facilities were leased to the private partners (Nikolic and Maikisch 2006). However, private partners are now given the option to build and re-locate to new centers, in order to further help the government to increase capacity.

Government Review and Monitoring
The MOH was supposed to ensure quality via monthly reports from the private partners, through regular inspection of the facilities, and through inspection by the nephrology commission (Nikolic and Maikisch 2006). However, based on study done by the IFC in 2008, currently no mechanism exists to ensure compliance, and to assure key financial and health indicators are being met.

Key Outcomes

Better Quality for Less
Based on IFC estimates, the government has saved €2.9 million between 2005 and 2008, directly as a result of this partnership. For the first time in Romania’s history, this partnership has enabled the government to provide high-quality dialysis care and treatment on par with EU standards (International Finance Corporation 2008).

New Equipment
The private partners have replaced the country’s existing dilapidated publicly owned equipment with state-of-the-art equipment in all of the locations covered by the PPIP (International Finance Corporation 2008).

Long-term investment
The contract was initially in place for four years and extendable up to seven years. Unlike the other core PPIP examples, this PPIP comprises a shorter contract.

Risk Transfer and Predictable Government Health Expenditures
The private partners are responsible for financing the project and therefore bear all of the financial risk. The government pays the private partner a flat fee per hemodialysis treatment and an annual fee per peritoneal patient, making dialysis costs predictable for the government.

Cost Neutrality to Patients
Patients access the dialysis services for free, with the NIHF paying directly for the dialysis services.

In addition, between 2005 and 2008, the new dialysis centers have enabled the government to save on expenses for dialysis services. Thus in Romania, the ideal principle of (cost neutrality)² has been exceeded.

Equity of Access for All
Through this PPIP, the government aimed at improving and increasing access to dialysis services across the country.

System wide Efficiency Gains
The PPIP will allow the government to provide dialysis services at updated centers using state-of-the-art equipment, and by staff members that are specially trained by the private provider. It is estimated that the government has already saved €2.9 million as a result of this partnership (International Finance Corporation 2008).

Higher Quality Standards
The government has introduced a fixed fee treatment for publicly managed clinics resulting in a more transparent pricing scheme for dialysis services. Since the close of the tender, the government has adopted strict national quality standards applicable to both public and private clinics. Unfortunately, these standards have yet to be rigorously followed by non-PPIP public clinics. For example, only 50–63% of public clinics complied with national standards for running blood diagnostic tests compared to 100% of the private clinics. The operators of the eight pilot clinics, however, did adhere to these standards, because of MOH’s ability to threaten non-compliance with punitive actions (International Finance Corporation 2008).
**Expansion in Future**
The government plans to put to tender the remaining outpatient dialysis centers around the country. Two new public clinics have opened as of 2008, and 17 more are being constructed (International Finance Corporation 2008). However, based on a study conducted by the IFC in 2008, the government has not used the same stringent tender, bidding and screening system for further expansion (International Finance Corporation 2008).

**Critical Success Factors**

**Stringent Selection Criteria**
With technical assistance provided by the IFC, the government established strict pre-qualification criteria for potential private partners. The private partners were not only required to have experience in dialysis treatment and management services, but also were required to meet technical and financial requirements. In addition, the contracts were awarded to private partners that had adequately scaled operations and were committed to expanding services and improving care. However, because these standards have not been adhered to for new contracts, it is unclear how well future contracts will fare.

**Committed Public Sector**
The government has been closely engaged throughout the PPIP process, including the tender process, ongoing management activities and the service evaluations. The government has also adopted strict national standards to improve both publicly and privately managed clinics in order to better serve residents. The government has introduced a more transparent fee structure for dialysis treatments, which did not previously exist. As a result of these committed actions, the private partners have not only invested €28.6 million to upgrade existing clinics, but two new facilities have also opened, with 17 more clinics to be constructed in the future.
B. Braun (Germany)

Construction, Facilities Mgmt, & Clinical Services

2 Outpatient Dialysis Centers

Footnotes
B. Braun is a leading healthcare supplier based in Germany
Baxter is a global medical products and services company based in the United States
Fresenius is a global healthcare group supplying medical products and is based in Germany
Gambro is a global medical technology company based in Sweden
SOUTH AFRICA—Polokwane/Mankweng Hospital Complex’s Renal Dialysis Unit

Summary
In 2006, the Limpopo Provincial Government awarded a PPIP contract to private partners to design, build, operate and provide clinical services at the dialysis unit at the Polokwane/Mankweng Hospital Complex in Polokwane. The construction was completed in October 2007, and it will provide services for the entire province of Limpopo for a period of 10 years.

Political Overview
South Africa became a constitutional democracy in 1994 and undertook regulatory measures to facilitate an environment for PPPs. In 2000, the National Treasury established a PPP Unit. Based on the legal definition framed by the South African government, a PPP is a commercial transaction between the government and a private party, where the private party: 1) performs an institutional function in terms of output specifications and/or uses state property for its own commercial purposes; 2) assumes substantial project risk (financial, technical, operational); and 3) receives benefits through unitary payments from government budget and/or user fees. A typical project cycle includes inception, feasibility study, procurement and agreement management (Gqoli 2005). In keeping with the principles and policy objectives of the Broad-Based Black Economic Empowerment (BEE) Strategy, the PPP BEE policy is devised to achieve a broad-based and sustainable BEE outcome in every PPP project undertaken.

Contract Specifics
In December 2006, the government awarded its first PPIP contract to design, construct, upgrade, operate and manage a dialysis unit at Polokwane/Mankweng Hospital Complex for a period of 10 years (National Treasury-PPP Unit 2007). The total project cost is R88 million (approximately $12 million), of which the government pays R17 (approximately $2.2 million) annually for all service provision. This partnership is cited as pro-poor by the government and will serve as an example for future PPIP contracts (Dorcus 2008). The private partner was responsible for providing 100% of the equity, which was raised through shareholder loans (Pautz 2008).

Private Partners
The Limpopo Provincial Government in South Africa awarded the contract to Clinix Renal Care (Pty), Ltd. (CRC), a subsidiary of Fresenius Medical Care South Africa (Pty), Ltd. Fresenius Medical Care is a German company specializing in the production of medical supplies, specifically for renal dialysis. Fresenius is also a partner in Romania’s renal dialysis PPIP. (See page 33.)

Covered Population
This hospital provides renal dialysis services for the entire population of Limpopo (5.4 million people, representing 11.3% of South Africa’s total population). The dialysis unit treats nearly 80 patients each month, totaling approximately 360 monthly treatments.
PPIP Characteristics
This is the first PPIP in South Africa, and it seeks to achieve the following:

The Public Policy Objective
The PPIP will allow the government to deliver a full range of renal services. Residents will have access to better quality treatment at a minimal cost.

Design Build Operate
CRC was awarded the contract to upgrade the existing renal unit, and to design and construct a new dialysis unit at the Polokwane/Mankweng Hospital Complex. CRC also provides limited hard and soft facilities management, and is responsible for maintaining and upgrading all equipment.

CRC took over operation of the unit in December 2006. The construction of the new unit began in March 2007. Phase I was completed in August 2007, and Phase II, including peritoneal dialysis services, was completed in October 2007 (NephroCare 2007).

Deliver Clinical & Non-Clinical Services
CRC is responsible for chronic and acute hemodialysis, and for staffing at the dialysis unit. The unit also provides peritoneal dialysis services for approximately 50 peritoneal patients (NephroCare 2007).

Government Ownership of Assets
The government owns the Polokwane/Mankweng Hospital Complex, including the renal dialysis unit.

Government Review & Monitoring
It is unclear how the government plans to review and monitor the performance of the private partner.

Long-Term Investment
The concession contract is for 10 years.

Risk Transfer & Predictable Government Health Expenditures
CRC is responsible for designing, building, constructing and maintaining the dialysis unit, and for providing and maintaining all equipment. CRC also provides clinical services and staffing and faces the risks associated with these activities. In return, the government pays CRC a unitary payment of R17 million (approximately $2.2 million) for all services. The private partner was responsible for providing 100% of the equity, which was raised through shareholder loans (Pautz 2008).

Cost Neutrality to Patients
Patients will continue to pay minimal out-of-pocket expenditures, and will experience no differential costs after the implementation of the PPIP.

Equity of Access for All
Prior to this PPIP, the patients had to travel to Ga-Rankuwa in Gauteng for renal dialysis. Now patients from all over Limpopo have access to local state-of-the-art services.

Systemwide Efficiency Gains
The PPIP has allowed the government to provide renal dialysis services and care comparable to the private sector at the Polokwane/Mankweng Hospital Complex.
Key Expected Outcomes

Greater Accessibility
Instead of traveling approximately 250km to the nearest dialysis unit at Ga-Rankuwa in the neighboring province of Gauteng, patients now have a renal dialysis unit in their own province of Limpopo. This has had significant positive health and economic effects on the patients in the region (Pautz 2008).

High-Quality Service
The population of Limpopo now has access to state-of-the-art renal dialysis services through this PPIP.

Local Empowerment
The contract has a special provision for BEE to redress the economic effects of apartheid, by providing previously marginalized people with an opportunity for increased employment, management, enterprise development and subcontracting promoting local Limpopo community involvement.

Critical Success Factors

Timing
The expeditious delivery of the facilities and services comprised in this PPIP, from inception to implementation, avoided the pitfalls of momentum drag and fatigue.

Political Champion
Without the support and enthusiasm of senior political stakeholders, the project would not have achieved the necessary direction and support it warranted. A common vision among the senior government leaders with a dedicated project champion promoted the successful delivery of the project.

Project Management
Clear and concise assigned tasks and activities, with well understood objectives advocating a shared goal, ensured a PPIP that could achieve its desired output.
SOUTH AFRICA—Polokwane/Mankweng Hospital Configuration

Provincial Government of Limpopo

Clinix Renal Care (Pty), Ltd.
Facilities Manager Service Provider

Clinix Renal Care (Pty), Ltd.
Construction Contractor

Renal Dialysis Unit

Patients

Footnotes
Clinix Renal Care (Pty), Ltd. is a subsidiary of Fresenius Medical Care South Africa (Pty.), Ltd.
SPAIN—Hospital de La Ribera

Summary
In 1997, the Regional Government of Valencia selected the Alzira Health District for the first PPIP in Spain. The PPIP model, also called the “Alzira model,” is based on a strategic partnership between the Government of Valencia and Ribera Salud Temporary Union of Businesses (UTE-Ribera). UTE-Ribera is a private consortium comprising Adeslas (one of the largest health insurance companies in Spain), Ribera Health (a conglomeration of Bancaja and CAM banks) and Dragados and Lubasa (construction companies). The Government of Valencia granted UTE-Ribera a 15-year (extendable to 20 years) “management concession” to provide a health system for Alzira integrated with the existing National Health System (NHS).

The PPIP model features a unique incentive to ensure quality and patient satisfaction: a “Money Follows the Patient” clause which states that UTE-Ribera must pay for patients’ healthcare costs if they choose to go elsewhere, and that the private partner will receive additional funds for patients from other catchment areas that visit Hospital de La Ribera. This form of PPIP, also known as a “management concession” in the Spanish context, focuses on a four-pronged approach—Public Control, Public Property, Public Funding and Private Management. Based on the successful Alzira experience, the Government of Valencia has already contracted for four more PPIPs in Torrevieja, Dénia, Manises and Elche-Crevillente.

Political Overview
The Spanish health system guarantees free treatment for 44 million residents living in 17 autonomous regions or districts. Each district is responsible for the management of its own facilities, benefits and health service programs. Districts are divided into health departments known as health districts. Healthcare is financed by the government through taxes and provided by the NHS. In 2005, Spain spent nearly €71,530 million (approximately $92 billion), 8.3% of GDP, on healthcare (OECD 2008; Pardo 2008).

During the 1980s and 1990s, Spain’s health system underwent major changes. In 1991 a report produced by the Abril Commission, created by Parliament to evaluate the NHS, criticized the system for its lack of efficiency, flexibility and inclusion of medical staff in hospital management. A new legislative basis for private sector involvement in healthcare delivery was enacted in 1994 and 1997.

Valencia, one of the most progressive regions, is located on Spain’s eastern coast, with a population of over five million. The Valencia Health Ministry’s budget for 2009 was €5,589 million for its 23 health departments, with nearly €1,044 spent per capita in 2008 on healthcare (Generalitat Valenciana 2009). In the 1990s, the lack of a hospital in Alzira, combined with increasing budget constraints and the Abril Commission’s report, encouraged the Government of Valencia to consider innovative ways to provide healthcare for its residents. Through a public bid in 1997, the first concession was awarded for the construction and provision of clinical services at Hospital de La Ribera. The hospital has been in operation since 1999 (Pardo 2008). The PPIP includes a cap on the profit the private consortium can
Private Partners
The concession resulted in the formation of UTE-Ribera, which represents the following structure: Adeslas owns the majority stake at 51%; Ribera Salud owns a 45% stake, and the Dragados and Lubasa construction companies each own a 2% stake (A. de Rosa, M. Marín et al. 2006). UTE-Ribera was responsible for all of the construction costs, which were included in the capitated rate.

Covered Population
The Valencia Health Ministry currently pays a capitated rate for 250,000 residents in Alzira. All eligible residents must carry an electronic healthcare card.

PPIP Characteristics
Using the Alzira model, the Valencia Health Ministry has been able to leverage the private sector’s investment capacity and management expertise to improve access to quality healthcare for its residents. In operation since 1999, Hospital de La Ribera has efficiently provided health services as a complement to the public health system. The PPIP seeks to achieve the following:

The Public Policy Objective
The Government of Valencia strives for the highest degree of health possible for its residents (Article 6 of Health System Law). The government also prioritizes conserving economic resources by seeking alternatives to ensure residents receive quality healthcare at a lower cost. The Alzira model has enabled the government to promote health by improving healthcare quality, accessibility and efficiency (Generalitat Valenciana 2009).

Design Build Operate
UTE-Ribera is responsible for designing, building and operating Hospital de La Ribera.

In addition to investing the initial €61 million for construction, UTE-Ribera has committed to spending a minimum of €68 million in primary and specialized care during the concession period.

Deliver Clinical & Non-Clinical Services
UTE-Ribera is responsible for providing clinical and non-clinical services at the hospital. Clinical services include primary and specialized healthcare services, including inpatient, surgery, outpatient and intensive care, radiology and laboratory services. UTE-Ribera provides 110 types of services. Outpatient pharmacy prescription, prostheses, oxygenotherapy and medical transport are not included in the contract (Trescoli 2008). UTE-Ribera employs the medical staff and is responsible for the management of the hospital.

Government Ownership of Assets
The government owns the healthcare facilities and Hospital de La Ribera is well integrated within the NHS (Pardo 2008).

Government Review & Monitoring
The hospital is monitored by various control bodies such as the Mixed Follow-up Committee and the Regional Ministry Committee. The Government Commissioner is also stationed at the hospital, and manages patient claims, administers patient transfers to and from other areas, obtains hospital activity statistics and oversees service provision at the hospital. The hospital is also subject to local government audits, as well as external audits.

Long-Term Investment
The concession contract is for 15 years and is renewable for up to five years up to its expiration in 2018.
**Risk Transfer & Predictable Government Health Expenditures**

UTE-Ribera employs the medical staff and assumes the risk associated with clinical service provision. The hospital serves a catchment area of 250,000 residents, which is nearly 6% of the total community population. The hospital’s profitability is limited by law to 7.5% each year.

The Valencia Health Ministry pays a capitated rate per resident, which is updated with the Valencia Health Ministry’s budgetary increases and adjusted according to the Consumer Price Index. A pharmacy savings incentive also allows the Valencia Health Ministry and UTE-Ribera to share savings. If UTE-Ribera spends less in outpatient pharmacy than the overall average per resident in Valencia, the Valencia Health Ministry retains 70% and UTE-Ribera retains 30%.

The hospital pays the government 100% of healthcare costs for area patients who seek healthcare elsewhere. The government must pay 85% of the healthcare costs for patients who are not residents of the area but seek services at the hospital. The hospital faces an incentive to provide quality healthcare to reduce patient transfers to other areas. The healthcare expenditure for the government is fixed and includes a capitated rate for each resident, less 85% of costs for out-of-area patients treated at the hospital (Trescoli 2008).

**Cost Neutrality to Patients**

The PPIP is cost neutral for patients who continue utilizing free healthcare services under the NHS.

In addition, the average per capita healthcare cost incurred by the Valencia Health Ministry for the Hospital de La Ribera is nearly 25% lower compared to those in other Valencian autonomous communities. In other words, the PPIP is cost neutral to patients and highly cost-efficient to the government, surpassing the ideal PPIP principle of (cost neutrality).

**Equity of Access for All**

Hospital de La Ribera has greatly improved access for Alzira residents who previously had to travel more than 40 kilometers to Valencia to seek hospital treatment (Trescoli 2006). To ensure access for all, UTE-Ribera is bound by the contract to provide equal access and healthcare services to all residents in the catchment area, regardless of income level.

**Systemwide Efficiency Gains**

The PPIP has allowed the government to provide a “complete bundle” of services for its residents. Hospital de La Ribera provides sophisticated primary and specialized healthcare services, using modern and high-tech facilities, without compromising efficiency or competence. The hospital was named the “Best Spanish Large General Hospital” each year from 2000–2004, and again in 2006.
**Key Outcomes**

**Greater Accessibility**
Alzira residents now have access to personalized, high quality healthcare services in their own health district. Patients report significantly shorter wait times for outpatient care and surgery. They have access to a 24-hour call center and may occupy single rooms during their inpatient stays, including a free bed for companions.

**Better Quality for Less**
Hospital de La Ribera conducts 6.6 surgeries per operating theater per day compared to 5.4 surgeries in a comparable government hospital; the average length of stay is 4.76 days at Hospital de La Ribera compared to 5.22 in a comparable government hospital (Generalitat Valenciana 2009). The hospital has obtained ISO 9000 certification for multiple clinical systems. With nearly an 85% satisfaction rate, the government is able to provide improved health services for nearly a 25% lower cost than in other health areas. In addition, the private partners profit is capped, albeit limited for the course of the concession.

**Employee Empowerment**
Starting in 2003, the hospital adopted a new system to develop a “flatter” management structure, and set higher goals around employee performance. Under the plan, doctors can manage their own time within the needs and objectives of the hospital. Since these changes, employees reportedly have a clear vision of the hospital’s goals, and participate with a greater degree of motivation (Trescoli 2006).

**Increased Competition**
Based on the successful Alzira experience, the Government of Valencia has already contracted for four more PPIPs in Torrevieja, Dénia, Manises and Elche-Crevillente. All of these hospitals transfer the clinical risk, management and construction to the private sector (Eder, Swindell et al. 2007). It is also anticipated that new competing hospitals in the Valencia region will promote higher quality of service in future.

**Critical Success Factors**
Money Follows the Patient—The Valencia Health Ministry has been able to successfully implement cross billing with UTE-Ribera. The financial incentives linked to this system helps to ensure quality service.

**Effective Control and Monitoring Mechanisms**
UTE-Ribera’s operations are monitored by Mixed Follow-up Regional Committee, Regional Ministry Committee on the Concession, and the Government Commissioner who works at the hospital. UTE-Ribera is also routinely audited by external and local government auditors to ensure it is fulfilling its obligations.

**Incentive System**
Staff is offered compensation incentives based on performance and productivity levels. Quality assurance mechanisms have been introduced and health professionals are expected to participate in Continuous Professional Development. Clinicians are expected to set performance targets that correspond with incentives beyond their salaries. Doctors working at Hospital de La Ribera earn 25% more than the average NHS doctor (Trescoli 2006; Trescoli 2008).

**Job Security**
85% of the human resources have a fixed contract, ensuring employment for the majority of the staff. The staff also has flexible work hours, and individualized work contracts, increasing their loyalty towards the hospital.

**Incorporating Customer Opinions**
The Government Commissioner conducts periodic surveys to determine patient satisfaction levels. In the most recent survey conducted, 87% of patients were satisfied with hospital services, and 95% of patients were loyal to the hospital.

**Political Feasibility**
The hospital’s profitability is limited by law to 7.5% each year; this fact was publicized and helped to gain support for the project among Alzira residents.

**Effective Information Technology System**
Hospital de La Ribera is the first hospital in Spain with a fully integrated computerized medical history system. The medical and nursing staff directly record patients’ information electronically, which can be accessed on any computer in the hospital or any integrated primary care center. The system has the ability to generate personalized medical and financial reports for patients, and activity reports for departments. Robust state-of-the-art technology has been essential for the effective management and strategic growth of this PPIP.
SPAIN—Hospital de La Ribera PPIP Configuration

Government of Valencia

Capitated Payment

PPIP Agreement

UTE-Ribera
Investor/Holding Company

Adeslas—51%
Ribera Health (Bancaja, CAM)—45%
Dragados—2%
Lubasa—2%

Govt Commissioner
Monitor and Auditor

Oversight

Reporting

Payment

UTE-Ribera
Facilities Manager, Service Provider

Facilities Mgmt & Clinical Services

1 University Hospital

4 Integrated Health Centers

46 Primary Health Centers

Dragados, Lubasa
Construction Contractor

Construction

Clinical Services

Patients

Footnotes
Adeslas: Spanish Insurance company (Group Agbar)
Ribera Health: Bancaja and CAM banks
Dragados: construction company
Lubasa: construction company
**SPAIN—Hospital de Torrevieja**

**Summary**
Based on the government’s positive experience with Hospital de La Ribera in Alzira, the Government of Valencia awarded the second management concession for designing, building, operating and providing clinical and non-clinical services at Hospital de Torrevieja, and 23 primary health centers. The award was granted to a private consortium, Torrevieja Salud Temporary Union of Businesses (UTE-Torrevieja) for a period of 15 years (extendable for up to 5 years). Hospital de Torrevieja is a €68-million hospital with 250 beds, and will be funded by the government at a set capitation rate. The hospital will provide primary and specialist care, and is integrated with the existing Spanish NHS. This PPIP model is similar to the Alzira model and focuses on four key features—Public Control, Public Property, Public Funding and Private Management. Hospital de Torrevieja is a “paperless” hospital and is even more technologically advanced than Hospital de La Ribera; patients can use mobile phones to SMS the hospital to obtain real-time waiting times at any emergency center. Doctors also have remote electronic access to all records at all times.

**Political Overview**
Hospital de Torrevieja is located in the Alicante Province, the fourth most populous province in Spain, and covers 173,000 resident. Prior to launching the hospital in 2006, the region lacked a state-of-the-art healthcare facility with high-quality service provision commensurate with demand. Many hospitals were closing down due to lack of funding, inefficient technological support and insufficient numbers of trained doctors (Microsoft 2008). Hospital de Torrevieja currently serves a diverse population, 60% of which are foreigners and 27% of which includes people over 65 years of age. These factors make hospital administration duties highly complex (Departamento De Salud Torrevieja 2009).

**Contract Specifics**
In 2006 the Government of Valencia awarded the PPIP contract to UTE-Torrevieja to design, build and operate Hospital de Torrevieja. UTE-Torrevieja invested €68 million for construction, and will spend a minimum of €80 million in primary and specialized care during the concession period.

**Private Partners**
UTE-Torrevieja breaks down as follows: Ribera Health owns 40% (a conglomeration of Bancaja and CAM banks, each with 50% membership); Asisa (one of Spain’s leading for-profit health insurance companies) owns 35%; Acciona (a construction company and leader in infrastructure and energy across Spain) owns 10%; Benidorm Clinics (health clinics owned by Carlos Paz) owns 10%; and Grupo Ortiz (a construction and infrastructure management company) owns 5% (Departmento De Salud Torrevieja 2009).

**Covered Population**
The PPIP covers a population of approximately 173,000 residents. On average the monthly population in Alicante Province totals 331,000 residents, and even exceeds 600,000 in the summer. 55% of the registered population in the health district is foreign, representing 138 nationalities.
PPIP Characteristics
The PPIP seeks to achieve the following:

The Public Policy Objective
The Government of Valencia strives for the highest degree of health possible for its residents (Article 6 of the Health System Law) (Generalitat Valenciana 2009). After the success of the Alzira model, the government built Hospital de Torrevieja using a PPIP to provide state-of-the-art health services for residents of Torrevieja.

Design Build Operate
UTE-Torrevieja is responsible for designing, building and operating Hospital de Torrevieja. UTE-Torrevieja invested €68 million for construction, and committed to spending a minimum of €80 million in primary and specialized care during the concession period.

Deliver Clinical & Non-Clinical Services
UTE-Torrevieja is responsible for providing clinical and non-clinical services at hospital. Clinical and non-clinical support services include inpatient and outpatient services, surgery, radiology, pharmacy, pathology, clinical laboratory analysis, hematology, rehabilitation, nephrology, clinical documentation and research (Torrevieja Salud 2007). Medical transport, prosthetic and ambulatory services are not included in the contract. UTE-Torrevieja employs the medical staff and manages the hospital.

Government Ownership of Assets
The healthcare facilities are owned by the government. Hospital de Torrevieja is integrated within the NHS.

Government Review & Monitoring
The Government Commissioner for the health district works at the hospital and oversees hospital operations. The hospital is also monitored by various control bodies and is subject to local government audits, as well as external audits. The Valencia Health Ministry can impose penalties in the case of poor quality or an insufficient number of patients seen.

Long-term investment
The concession contract is for 15 years and is renewable for up to 5 years.

Risk Transfer & Predictable Government Health Expenditures
UTE-Torrevieja employs the medical staff and assumes the risk for all clinical service provision. The hospital serves a catchment area of 173,000. The hospital's profitability is limited by law at 7.5% each year (Departamento De Salud Torrevieja 2009).

The “money follows the patient” model is followed and the providing partner is appropriately reimbursed. The hospital pays the government 100% of healthcare costs for area patients who seek healthcare elsewhere. The government must pay 85% of the healthcare costs for patients who do not belong to the area and seek services at the hospital. Therefore, health costs for the government are fixed, including a capitated rate for each resident, less 85% of costs for out of area patients treated at the hospital.

Cost Neutrality to Patients
The PPIP is cost neutral for patients who continue utilizing free healthcare services under the NHS system. The average per capita healthcare cost for the Valencia Health Ministry is nearly 30% lower than in other areas. In other words, the PPIP is cost neutral to both patients and the government, achieving the ideal principle of (cost neutrality)\(^2\) (Torrevieja Salud 2007).

Equity of Access for All
Hospital de Torrevieja currently serves 173,000 residents who previously lacked access to a high-quality public hospital. The hospital serves nearly 600,000 during the summer tourist season.

To ensure access to all, UTE-Torrevieja is bound by contract to provide equal access and healthcare services to all in the catchment area.

Systemwide Efficiency Gains
The PPIP has allowed the government to provide a “complete bundle” of services to its residents. The hospital provides sophisticated primary and specialized healthcare services using modern and high-tech facilities, without compromising efficiency. Among other awards, the hospital has been recognized by Consultant Health IASIST Hospitals as one of the “Top 20” major hospitals in Spain in 2008 and 2009, and the “Top 1” under the category of “Nervous System” in its first year of operation (Torrevieja Salud 2007).
**Key Outcomes**

**Greater Accessibility**
Patients report the lack of waiting lines in Hospital de Torrevieja as an important aspect of the care received. Patients can use mobile phones to SMS the hospital to find out about waiting times at Emergency Care Centers to effectively manage their time. Patients also report being more satisfied because they now have access to state-of-the-art technology and competent medical staff.

**Better Quality for Less**
Hospital de Torrevieja has provided quality health services to residents at nearly 70% of the cost for the same service provision in other areas.

**Employee Empowerment**
An effective information technology system has successfully reduced the time employees spend processing patient information; the system allows for electronic storage of all patient information. Medical staff and doctors can telecommute as they have electronic access to patients’ histories on demand.

**Increased Competition**
With new hospitals being built to replicate the Alzira model, the emergence of several competing hospitals in the Valencia region will promote even higher quality service in the future.

**Critical Success Factors**

**Effective Information Technology System**
Hospital de Torrevieja is a “paperless” hospital and has implemented an electronic medical database called Florence (Microsoft partner technology) to integrate medical records and clinical information across all hospital departments. Florence provides a single solution for patient record management, invoicing and billing, human resource applications and management tools for day-to-day operations, and it provides employees an electronic forum for e-learning. Florence has inbuilt metrics and alarms that measure variances in forecasts, and send SMS alerts to supervisors about potential problems. Similarly, patients can be alerted about waiting-time information at each Emergency Care Center via SMS. Florence also helps staff to manage patient flow for all departments.

**Money Follows the Patient**
The Valencia Health Ministry has been able to successfully implement cross billing with the hospital.

**Facilitating Work Flexibility**
Using Florence, medical staff are able to access patient information anywhere at anytime. This has promoted online collaboration among staff, and has allowed doctors to have a better quality of life during on-call duties. Doctors can also virtually attend to their patients via webcam-based consultations. Florence has enabled telecommuting and telemedicine, improving medical staff mobility (Torrevieja Salud 2007).

**Effective Control and Monitoring Mechanisms**
The hospital’s operations are monitored by the Government Commissioner who works at the hospital. The Commissioner conducts periodic surveys to determine patient satisfaction. In the most recent survey conducted, patient satisfaction was recorded at nine points out of ten.
SPAIN—Hospital de Torrevieja PPIP Configuration

Government of Valencia

UTE-Torrevieja
Investor/Holding Company
Ribera Health (Bancaja, CAM)—40%
Asisa—35%
Acciona—10%
Benidorm Clinics—10%
Grupo Ortíz—5%

UTE-Torrevieja
Facilities Manager, Service Provider

Facilities Mgmt & Clinical Services

1 Main Hospital
23 Primary Health Centers

Grupo Ortíz
Construction Contractor

Construction

Clinical Services

Patients

Govt Commissioner
Monitor and Auditor

Payment

Over sight

Payment

Oversight

Footnotes
Ribera Health: Bancaja and CAM banks
Asisa: private insurance company
Acciona: construction company
Benidorm Clinics: health clinics owned by Carlos Paz
Grupo Ortíz: group of construction and infrastructure management companies
SPAIN—Hospital Dénia Marina Salud

Summary
Following the positive experience of the Hospital de La Ribera in Alzira, the Government of Valencia awarded a third management concession for designing, building, operating and providing clinical and non-clinical services at Hospital Dénia Marina Salud and 12 surrounding primary health centers. The award was granted to a private consortium, Marina Salud, for a period of 15 years (extendable for an additional five years). Hospital Dénia Marina Salud is a €96.64 million hospital with 280 beds, and will be funded by the government at a set capitation rate. The hospital will provide primary and specialist care, and is integrated within existing NHS. This PPIP model is similar to the Alzira model except that the anticipated cost savings are even more significant.

Political Overview
Dénia is located on the northern coast of the Alicante Province. It has a population of 183,000. Dénia is a popular tourist destination and serves as a second residence for many Spaniards and Europeans. Studies indicate that the population has increased by 34% in the past five years, with nearly 63,000 non-residents living in Dénia (Domene and Bonjoch 2008).

Contract Specifics
In 2008 the Government of Valencia awarded the concession contract for Hospital Dénia Marina Salud. The construction of the facilities was completed in 2009 and the hospital has been operational since early 2010 (Marina Salud 2009).

Private Partners
The concession resulted in the formation of Marina Salud, a private consortium with the following structure: DKV Seguros (a health insurance company) owns 65%, and Ribera Health (a conglomeration of the Bancaja and CAM Banks) owns 35% (Ribera Salud 2009).

Covered Population
The PPIP includes service for 150,000 residents. Apart from the main concession, the hospital is also expected to serve 63,000 non-residents living in Dénia, and nearly 350,000 tourists visiting Dénia.

PPIP At a Glance

- Built Area: 42,500 meters²
- Number of Rooms: 280
- Outpatient Facilities: 57
- Operating Rooms: 12
- Delivery Rooms: 3
- Main Hospital: 1
- Primary Health Centers: 12
- Residents Served: 150,000
- Capitated Rate: €570 per resident in 2008
- Concession Period: 15 years (extendable to 20)
- Project Cost: €100 million
- Government Cost Savings: Up to 20%
**PPIP Characteristics**
The PPIP seeks to achieve the following:

**Objective**
The Government of Valencia strives for the highest degree of health possible for its residents (Article 6 of the Health System Law) (Generalitat Valenciana 2009). After experiencing the success of the Alzira model, the government has committed to providing state-of-the-art healthcare for residents of Dénia.

**Design Build Operate**
Marina Salud is responsible for designing, building and operating Hospital Dénia Marina Salud and committed an initial investment of €100 million.

**Deliver Clinical & Non-Clinical Services**
Marina Salud will be responsible for providing clinical and non-clinical services at the hospital, similar to the Alzira model. This does not include prostheses, medical transport, home oxygen therapy and ambulatory services.

**Government Ownership of Assets**
The healthcare facilities are owned by the government. Hospital Dénia Marina Salud is integrated within the NHS.

**Government Review & Monitoring**
Following the Alzira model, the Government Commissioner oversees hospital operations and patient claims and transfers from within his post at the facility. The Valencia Health Ministry can impose a penalty if the patient turnover rate exceeds 20%.

**Long-term investment**
The PPIP contract is for 15 years and is renewable for up to 5 years up.

**Key Outcomes**

**Better Quality for Less**
Hospital Dénia Marina Salud has provided quality health services for residents at nearly 75% of the cost for the same service provision in other areas.

**Increased Competition**
With the advent of additional hospitals being built based on the Alzira model, several competing hospitals will emerge in the Valencia region, promoting a higher quality of service in the future.

**Risk Transfer & Predictable Government Health Expenditures**
Marina Salud employs the medical staff and assumes the risk for all clinical service provision. The hospital serves a catchment area of 150,000 residents, and will receive a capitated rate per resident from the government. The hospital’s profitability is limited by law at 7.5% each year.

The PPIP assumes a “money follows the patient” model and the private partner is appropriately reimbursed. The hospital pays the government 100% of healthcare costs for area patients who seek healthcare elsewhere. The government must pay 80–85% of the healthcare costs for patients who do not belong to the area and seek services at the hospital. Therefore, health costs for the government are fixed, which includes capitated rate for each resident, less 80–85% of costs for out-of-area patients treated at the hospital.

**Cost Neutrality to Patients**
The PPIP is cost neutral to patients who will continue utilizing free healthcare services under the NHS system.

The PPIP will result in 20% efficiency gains for the Government of Valencia.

**Equity of Access for All**
To ensure access for all, Marina Salud is bound by contract to provide equal access and healthcare services to all residents in the catchment area.

**Systemwide Efficiency Gains**
The PPIP will allow the government to provide a “complete bundle” of services for its residents over a 15-year period.

**Critical Success Factors**
Not enough information available.
Government of Valencia

Ribera Health (Bancaja, CAM)—35%
DKV Seguros—65%

Marina Salud
Investor/Holding Company

1 Main Hospital
12 Primary Health Centers

Marina Salud
Facilities Manager, Service Provider
Facilities Mgmt & Clinical Services

Marina Salud
Construction Contractor

Construction
Clinical Services

Payment
Oversight

Govt Commissioner
Monitor and Auditor

PPIP Agreement
Capitated Payment

Payment

Patients

Footnotes
Ribera Health: Bancaja and CAM banks
DKV Seguros: Insurance company
SPAING—Hospital de Manises

Summary
Following the positive experience of Hospital de La Ribera in Alzira, the Government of Valencia awarded the fourth management concession for designing, building, operating and providing clinical and non-clinical services at Hospital de Manises, and to update and equip six primary health centers, and to construct new centers in Turis and Alcañiz. The award was granted in 2006 to a private consortium for a period of 15 years (extendable for an additional 5 years). The hospital will provide primary and specialist care, and is integrated within the existing NHS. This PPIP is similar to the “paperless” Hospital de Torrevieja model, but includes new primary care centers as part of the PPIP.

Political Overview
Hospital de Manises is located in the city of Manises. Prior to building the hospital, the region lacked a state-of-the-art healthcare facility that could meet increasing health demands of residents. Besides the hospital in Manises, health centers, local clinics and healthcare centers will be constructed in Alcañiz, Alborache, Buñol, Barrio del Cristo, Calicanto, Cheste, Chiva, Godella, Macastre, Manises, Quart de Poblet, Loriguilla, Ribarroja, Sierra Perenchiza, Turis and Yátova.

Contract Specifics
Hospital de Manises is a €37 million hospital with 220 beds, and is funded by the government at a set capitation rate. Hospital de Manises opened in 2009 and employs approximately 700 professionals.

Private Partners
The private consortium formed for this PPIP is UTE-Hospital de Manises-Sanitas, a leading healthcare and insurance provider, owns 60%, and Ribera Health owns 40% of the stake in the hospital (Ereno 2009).

Covered Population
The PPIP covers a population of approximately 147,000 residents.

PPIP At a Glance
- **Built Area**: 55,000 meters²
- **Number of Rooms**: 221
- **Outpatient Facilities**: 53
- **Surgery Rooms**: 10
- **Post Surgery Recovery Rooms**: 16
- **ICU Beds**: 10
- **Dilation and Delivery Rooms**: 6
- **Delivery Rooms**: 2
- **Dialysis**: 15
- **Day Posts**: 24
- **Main Hospital**: 1
- **Primacy Care Centers**: 8
- **Primary Care Clinics**: 11
- **Specialist Units**: 16
- **Anatomy Lab**: 1
- **Residents Served**: 147,000
- **Concession Period**: 15 years (extendable to 20)
- **Project Cost**: €137 million

Source: Hospital de Manises, A forum for health, Sanitas, Geneva 2009
**PPIP Characteristics**
The PPIP seeks to achieve the following:

**The Public Policy Objective**
The Government of Valencia strives for the highest degree of health possible for its residents (Article 6 of the Health System Law) (Generalitat Valenciana 2009). The private partners are committed to providing quality healthcare with responsibility, efficiency, and commitment for the residents of L’Horta Manises area (Sanitas Group 2008).

**Design Build Operate**
The private partner is responsible for designing, building and operating Hospital de Manises, and building, updating and equipping several primary healthcare centers. The initial investment cost was €137 million (Sanitas Group 2008). Hospital de Manises will be a “paperless” hospital.

**Deliver Clinical and Non-Clinical Services**
Private partners will be responsible for providing clinical and non-clinical services at the hospital similar to the Alzira model.

**Government Ownership of Assets**
The Government of Valencia owns the healthcare facilities. Hospital de Manises is integrated with the NHS.

**Government Review and Monitoring**
Following the Alzira model, the resident Government Commissioner will oversee hospital operations, and patient claims and transfers while being stationed at the hospital.

**Long-Term Investment**
The concession contract is for 15 years and is renewable for up to 5 years.

**Risk Transfer and Predictable Government Health Expenditures**
The private partner employs all medical staff and assumes the risk associated with clinical service provision. The hospital serves a catchment area of 148,000 residents, and receives a capitated rate per resident from the government.

**Cost Neutrality to Patients**
The PPIP will be cost neutral for patients who continue utilizing free healthcare services under the NHS system. Not enough information is available about costs for the government.

**Equity of Access for All**
To ensure access to all, the private partner is bound by contract to provide equal access and healthcare services to all residents in the catchment area.

**Systemwide Efficiency Gains**
The PPIP will allow the government to provide a “complete bundle” of services for its residents over at least 15 years.

**Key Outcomes**

**International Research Collaboration**
Hospital de Manises is participating in an international study to analyze and compare the health systems of five OECD regions and several developing countries.

**Critical Success Factors**
Not enough information available.
Public-Private Investment Partnerships for Health: An Atlas of Innovation

**SPAIN—Hospital de Manises PPIP Configuration**

- **Government of Valencia**
  - Capitated Payment
  - PPIP Agreement
- **Govt Commissioner**
  - Monitor and Auditor
- **UTE-Hospital de Manises**
  - Investor/Holding Company
  - Ribera Health (Bancaja, CAM)—40%
  - Sanitas—60%
- **Government of Valencia**
  - Oversight
  - Reporting
- **Payment**
- **UTE-Hospital de Manises**
  - Facilities Manager, Service Provider
  - 1 Main Hospital
  - 8 Primary Health Centers
  - 11 Primary Health Clinics
  - 16 Specialist Units
- **UTE-Hospital de Manises**
  - Construction Contractor
  - Construction
  - Clinical Services
- **Patients**

**Footnotes**
- Ribera Health: Bancaja and CAM banks
- Sanitas: Leading healthcare insurance company

**Public Partner**
- Public Partner

**Private Partner**
- Private Partner

**Patients**
- Patients
SPAIN—Hospital del Vinalopó

Summary
Following the positive experience of Hospital de La Ribera in Alzira, the Government of Valencia awarded the fifth management concession for designing, building, operating and providing clinical and non-clinical services at Hospital del Vinalopó. The award was granted to a private consortium again comprising banks and an insurance company for a period of 15 years (extendable for an additional 5 years). Hospital del Vinalopó is a €110-million hospital with 196 beds, and will be funded by the government at a set capitation rate. The hospital will provide primary and specialist care, and is integrated within the existing National Health System. This PPIP model is similar to the Alzira model but includes a larger number of staff. Opened in June 2010, Hospital Vinalopó has been labeled one of the most technologically advanced hospitals in Europe.

Political Overview
Hospital del Vinalopó is located in the city of Elche, which is part of the Elx-Crevillent-Aspe health department. The hospital serves nearly 150,000 residents. Elx-Crevillent-Aspe is a fast-growing region, and the Valencia Health Ministry is committed to providing quality healthcare for its residents. The hospital is expected to provide employment for 820 local professionals (Vinalopó Salud 2009).

Contract Specifics
The Hospital del Vinalopó opened in June 2010.

Private Partners
The private consortium UTE-Vinalopó is comprised of Ribera Health (a conglomeration of Bancaja and CAM banks), which owns 60%, and Asisa, which owns 40% (Ribera Salud 2009).

Covered Population
The PPIP covers a population of approximately 140,000 residents (determined by Information of Population, September 2007).

PPIP At a Glance
- Built Area: 45,000 meters²
- Number of Rooms: 196
- Outpatient Facilities: 56
- Surgery Rooms: 12
- Post-Surgery Recovery Units: 14
- Rehabilitation Rooms: 26
- Dilation/Delivery Rooms: 8
- Neonatal Care Posts: 8
- ICU Beds: 16
- Emergency Resolution Boxes: 14 adults, 2 pediatric
- Emergency Observation Posts: 32 adults, 6 pediatric
- Emergency Resuscitation: 2 adults, 1 pediatric
- Endoscopy Rooms: 2 digestive, 1 respiratory
- Day Hospital Posts: 45
- Dialysis Stations: 22
- Residents Served: 150,000
- Concession Period: 15 years (extendable to 20)
- Project Cost: €110 million

Source: Vinalopó Salud
**PPIP Characteristics**
The PPIP seeks to achieve the following:

**The Public Policy Objective**
The Government of Valencia strives for the highest degree of health possible for its residents (Article 6 of the Health System Law) (Generalitat Valenciana 2009). After the success of the Alzira model, the government is committed to building Hospital del Vinalopó to provide state-of-the-art health services for the residents of Elche.

**Design Build Operate**
Private partners are responsible for designing, building and operating Hospital del Vinalopó with an initial investment of €146 million.

**Deliver Clinical & Non-Clinical Services**
Private partners will be responsible for providing clinical and non-clinical services at hospital similar to the Alzira model.

**Government Ownership of Assets**
The healthcare facilities are owned by the government and at the end of the contract will be reverted back to the government. Hospital del Vinalopó is integrated with the NHS.

**Government Review & Monitoring**
Following the Alzira model, the Commissioner from the Government will oversee hospital operations, and patient claims and transfers while being stationed at the hospital.

**Key Outcomes**

**Effective Information Technology System**
Opened in June 2010, Hospital Vinalopó has been labeled one of the most technologically advanced hospitals in Europe. Like Torrevieja and Hospital de Manises, this is a “paperless” hospital.

**Critical Success Factors**
Not enough information available.

**Long-Term Investment**
The concession contract is for 15 years and is renewable for up to 5 years up its expiration.

**Risk Transfer & Predictable Government Health Expenditures**
The private partner employs all medical staff and assumes the risk associated with clinical service provision. The private partners will employ the medical staff, and the hospital will serve a catchment area of 140,000 residents and will receive a capitated rate per resident from the government. The model will be similar to Alzira model.

**Cost Neutrality to Patients**
The patients should experience no difference in healthcare costs before and after the implementation of the PPIP. As before, healthcare will be free for residents and is provided by the NHS through taxes.

Not enough information is available about costs for the government.

**Equity of Access for All**
To ensure access to all, the hospital is bound by the contract to provide equal access and healthcare services to all residents in the catchment area.

**Systemwide Efficiency Gains**
The PPIP will allow the government to provide a “complete bundle” of services for its residents over at least 15 years.
Footnotes
Ribera Health: Bancaja and CAM banks are equal partners in this investment company.
Sanitas: leading healthcare and insurance company.
TURKS AND CAICOS ISLANDS—National Hospitals

Summary
In April 2010, the Turks and Caicos Islands Government (TCIG) completed a full revamp of its health system through a PPIP arrangement with Inter-Health Canada Limited (ICL) by launching a new National Health Insurance Plan (NHIP). ICL has been responsible for designing, building and operating two state-of-the-art integrated health facilities on the Islands that now deliver healthcare services that meet international standards: Cheshire Hall Medical Center on Providenciales and Cockburn Town Medical Centre on Grand Turk (FP Staff 2010). The hospital complexes were completed on schedule and on budget in January 2010, and started providing services in April 2010. TCIG pays ICL a unitary payment for the construction and the core management of facilities, and a capitated rate to provide a full range of clinical services. TCIG began the discussions that led to the PPIP in 2005.

Political Overview
The Turks and Caicos Islands (TCI) is a United Kingdom Overseas Territory located in the British West Indies. TCI comprises a chain of islands to the northeast of Hispaniola and has a current estimated population of 35,000. TCIG offers universal health coverage financed through a national health plan augmented by government revenues to cover the indigent and the unemployed.

Historically, TCIG has devoted significant financial resources to referrals outside of the Islands for specialist medical care, under the treatment abroad program (TAP). According to an evaluation in 2005, TCIG estimates TAP was contributing an additional 40% to the country’s overall health budget. With an annual growth rate of over 20%, TAP could eventually bankrupt TCI’s small but growing economy. A major reform of the entire health system was needed, starting with new infrastructure and quality health service provision that could meet the demands of the growing population. To allow universal access to healthcare, TCIG implemented the NHIP. Coverage and participation in the NHIP is mandatory and universal for all TCI residents and immigrant workers. Individuals covered through the NHIP are able to purchase private health insurance for supplementary care, non-covered services and treatment abroad (Feachem, Betts et al. 2008).

Contract Specifics
In 2008, TCIG entered into a 25-year contract, extendable for five years, with ICL to build two new health facilities in TCI and to deliver healthcare services that would be accredited by the Canadian Council on Health Services Accreditation. The two hospitals have been built with a total capacity of 60 beds—20 beds on the island of Grand Turk, the capital and seat of the government, and 40 beds on Providenciales, the most populated of the islands. To allow for initial requirements and future development, only half of these beds are commissioned during phase I of construction; a further 30 beds will be added as the population grows. The design concept allows for future expansion if necessary. The estimated cost of designing, building and providing basic facilities management is $124 million.

PPIP At a Glance
- Number of Beds: 60 (Grand Turk beds: 20, Providenciales beds: 40)
- Surgery Rooms: 3
- 24/7 Emergency Services
- Diagnostic Imaging
- LDRP Maternity Suites
- Dialysis Center
- Pathology and Blood Bank
- Physiotherapy
- Re-education
- Dentistry
- Residents Served: 35,000
- Integrated Primary, Secondary, Tertiary Hospitals: 2
- Capitated Rate varies with population
- Concession Period: 25 years (extendable to 30)
- Project Cost: $124 million

Source: 3D image of the hospital, PM Group

Multiple PPIP locations
Private Partners
The project creates two subsidiaries of ICL based in TCI: InterHealth Canada Infrastructure, Ltd. and InterHealth Canada Clinical Services, Ltd. The former has designed, built, equipped and managed the two new medical facilities which provide comprehensive primary, secondary, lower tertiary and emergency care. The latter entity is delivering clinical and non-clinical services at these facilities.

Covered Population
The hospital is available to all 35,000 residents of TCI.

PPIP Characteristics
This PPIP seeks to achieve the following:

The Public Policy Objective
TCIG has provided upgraded healthcare facilities for all residents through the PPIP. Residents have access to better quality treatment at the same cost as before.

Design Build Operate
ICL is responsible for designing, building and operating the two new national hospitals. TCIG will pay ICL a set unitary payment for 25 years to cover capital repayment and basic facilities management (not including clinical services).

Deliver Clinical & Non-Clinical Services
ICL is responsible for delivering integrated clinical services—primary, secondary, lower tertiary and emergency care at the two hospitals, and will oversee all non-clinical services. TCIG will pay ICL a per capitated rate which will be adjusted annually.

Government Ownership of Assets
TCIG owns the two national hospitals that comprise this PPIP. At no point under the contract will ICL own the facilities.

Government Review & Monitoring
The clinical services contract specifies a comprehensive list of key performance indicators based on international standards, and payment to ICL is subject to deductions for non-compliance. The PPIP also requires maintaining accreditation by Accreditation Canada as a prerequisite for payment; loss of accreditation is grounds for TCIG to terminate the agreement. TCIG’s Health Regulatory Authority will also conduct quality monitoring.

Long-Term Investment
The contract covers 25 years and is extendable for up to five years.

Risk Transfer & Predictable Government Health Expenditures
ICL has been responsible for financing the complete project costs and has borne the risk for all financial outlays throughout the design and build phases of the PPIP. TCIG payments for the design-build-operate portion of the contract started only when the hospitals were completed in January 2010. For clinical services, the payments started only when the hospitals begin delivering services in April 2010. The initial capitation rate was established based on actuarial calculations and will be adjusted annually. Every three years, a full actuarial review will be undertaken to adjust the rate for medical technology and demographic changes.

Cost Neutrality to Patients
Patients will pay a minimal out-of-pocket co-payment to access the high-quality services provided at the two healthcare facilities. In many cases, the co-payment is less than what was being paid at the old, outdated facilities.

In addition, due to large overseas treatment costs, the new health system will reduce public health expenditures by nearly 30% while providing higher quality services. Thus in TCI, the ideal principle of (cost neutrality)$^2$ is expected to be achieved.

Equity of Access for All
To ensure that healthcare services are not cost-prohibitive for any resident, TCIG has implemented an affordable NHIP at the same time as the PPIP. The NHIP provides mandatory insurance coverage for all residents and migrant workers. Due to government subsidies, employees and employers will obtain a full range of health services for a combined total of 5% of wages. This is split equally between employers and employees so that no employee will pay more than 2.5% of his or her wages.

Systemwide Efficiency Gains
The PPIP will allow the government to provide a “comprehensive package” of clinical and non-clinical services for its residents, while drastically reducing overseas care.
**Key Expected Outcomes**

**Greater Accessibility**
Patients will have access to trained local and international medical professionals in TCI. Unless the medical staff cannot resolve medical cases in the new facilities, patients will not be referred abroad for treatment. Patients will have better access to state-of-the-art treatment on the islands, and in most cases will not need to travel abroad.

**Financial Stability for the Government**
The TCI healthcare system was in need of radical change as it faced the soaring healthcare needs of its growing population combined with the escalating costs of its overseas treatment program. The implementation of the NHIP ensures universal healthcare coverage for all TCI residents. TCIG can now deliver quality healthcare to its citizens, while ensuring healthcare costs remain stable.

**Better Quality for Less**
With the implementation of the NHIP, patients will pay a minimal out-of-pocket co-payment at the point of service, in order to access state-of-the-art facilities. Because of the reduction of TCI’s large overseas treatment costs, the new health system is expected to reduce TCIG’s actual health expenditures. Thus, in TCI, the principle of (cost neutrality)\(^2\) is expected to be achieved.

**National Health Insurance Plan**
As of November 2009, TCIG began accepting contributions to the NHIP, which provides universal health coverage to all TCI residents. The NHIP will provide residents security against sizable out-of-pocket expenses during ill-health. Residents consider a 2.5% deduction from employee paychecks fair and equitable.

**Critical Success Factors**

**Government Leadership**
Beginning in 2005, senior officials from TCIG, including the Ministers of Health and Finance and the Attorney General, attended key meetings and were personally committed to ensuring the program’s success, as well as the PPIP’s alignment and integration with the NHIP.

**Capacity Building**
PPIPs bring with them roles for governments that are unfamiliar, and ways of working that require new skills, new processes and new attitudes. Two of these, ‘the government as a partner’ and the ‘government as an active purchaser and regulator,’ are particularly critical to the success of PPIPs. The structure of the TCI PPIP aimed to ensure TCIG honed this expertise.

**International Standard Component**
The fact that this PPIP requires the private partner to maintain the same accreditation and quality standards as Canadian hospitals added legitimacy to the project. This critical component secured buy-in from multiple stakeholders, including community members, who might otherwise not have been strong advocates of the PPIP.
Footnotes

InterHealth Canada Clinical Services, Ltd.: InterHealth Canada, Ltd. subsidiary responsible for providing clinical services, maintaining equipment, and supplying information technology and management

InterHealth Canada Infrastructure, Ltd.: InterHealth Canada, Ltd. subsidiary responsible for designing and building hospitals, initial equipment purchase, and facilities management
For the sake of clarity and brevity, this Atlas focuses specifically on those PPIPs that closely fit the most ambitious definition of the model. Numerous other examples of promising PPIPs in low-, middle- and high-income countries exist however, which embody a few crucial elements of the PPIP model. A select number of these are repeatedly referenced during discussions of PPIPs. Though they may not exemplify the most comprehensive PPIP structure, these PPIPs leverage the private sector to fulfill a government’s public health and public policy objectives in bold, novel ways. We have dubbed these types of partnerships “non-core PPIPs” and include them on the following pages to stimulate additional thinking on the range of situations in which future PPIPs could be envisioned.

Though also important, we have excluded novel PPIPs which may not prioritize health outcomes, which are limited to a small sub-population, or which do not exemplify government ownership, such as the following. For example, in Georgia 100 new hospitals will be upgraded or built by a private partner over a seven-year contract on land owned by the government, however, these hospitals will revert to private ownership at the end of the project. Also, in Papua New Guinea and Zimbabwe, mining companies are working with ministries of health to provide care for workers and surrounding communities.
Examples from Low- and Middle-Income Countries

Brazil—Hospital Geral de Pedreira
In the late 1990s the State Government of São Paulo financed, built and equipped 16 new hospitals under a traditional public works contract. The State then contracted with several not-for-profit hospital operators, each known as a Social Organization in Health (Organizações Sociais em saúde—OSS), to operate the hospitals, including the provision of both clinical and non-clinical services. The OSSs are obligated to treat all local residents and are not permitted to charge fees or treat private patients. The OSSs receive a global fixed budget from the State upon fulfillment of specified patient volumes and predetermined quality parameters. Each OSS has the autonomy to make decisions involving human resources, purchasing and outsourcing, but cannot make capital investments. Depreciation is not included in the calculation of the global budget, and any capital investments are negotiated annually with the State, and are dependent on the State’s capital budget and political negotiations with State health authorities. In short, capital financing of the OSSs is similar to that for facilities directly administered by the State. The lack of financing for depreciation of the plant and equipment has been cited as a weakness of the model. As the facilities age, the OSSs are subject to fluctuations in state capital financing and may face delays around upgrades. The OSSs have, however, demonstrated significantly better performance on bed turnover rate, bed substitution rates, bed occupancy, and average length of stay than the hospitals exhibited when State-run. The OSSs also utilize about one-third fewer physicians than comparable public facilities. For more information please see the following World Bank publication: Hospital Performance in Brazil: The Search for Excellence by Gerard M. La Forgia and Bernard F. Couttolenc.

Egypt—Alexandria Hospitals
In 2008, the Government of Egypt requested proposals for a PPP to improve the public health infrastructure in Alexandria. Alexandria University, under the Ministry of Higher Education and the Ministry of Finance, is currently inviting private sector bids for the design, construction, financing and provision of non-clinical services and some diagnostic and non-educational services in two university hospitals and a new blood bank in Alexandria. All assets will belong to the government and the private partner will be reimbursed through payments over a 20-year contract period, subject to monitoring and evaluation overseen by the government. Alexandria University will provide the clinical services at these facilities. This PPP model mirrors the PFI examples first seen in the UK and also found in countries such as Canada, Portugal and Spain, but includes some additional components. For more information please visit: http://www.alexunivhospitalsppp.org/.

The Gambia—Riders for Health
In 2004, The Gambia’s Department of State for Health and Social Welfare (DoSHSW) commissioned an NGO, Riders for Health, to maintain and manage its vehicle fleet of two- and four-wheeled vehicles, most of which were not used as they were not “roadworthy”. Under its Transport Resource Management System which focuses on preventative maintenance, Riders trained full-time technicians to work in regional workshops and provide monthly servicing of State health workers’ vehicles, in the communities in which they are based. Riders also trained health workers and government drivers in basic maintenance. The program costs the DoSHSW approximately $0.60/km for off-road vehicles and $0.20/km for motorcycles, and has resulted in zero days lost to breakdowns since its inception. In 2008, the DoSHSW engaged Riders to launch a new, first-ever program to lease vehicles (including ambulances) from the DoSHSW via five-year leases. Unlike the original basic management contract, the leasing contract ensures that Riders a) has a greater management stake in maintaining the vehicles over the life of the contract, and b) that Riders assumes the burden of up-front capital costs, making the project still more cost efficient and sustainable for the State. The cost/km of the lease program is approximately 35% more than the management contract model, and remains under $0.90/km for ambulances. Under the Riders partnership, the number of health workers in The Gambia using motorcycles has increased by 110%, and they now see five times more patients. For more information please visit: http://www.riders.org/map_list.aspx?country=gambia.

India—Rajiv Gandhi Superspecialty Hospital
The Government of Karnataka built a superspecialty hospital in Raichur in 2002 to serve an economically poor region of the state with no modern health facilities. The hospital offers cardiology and cardiothoracic surgery, neurology, plastic surgery (with special treatment for filariasis) and general medicine. Apollo Hospitals, Ltd., a corporate hospital chain and the largest private healthcare group in India, took over the management of the hospital in 2002. Through this partnership, the government is able to provide free services to the poor, and Apollo Hospitals is able to establish its business operations without having to invest in constructing physical infrastructure. The Rajiv Gandhi Hospital gets full reimbursement of all expenses plus a service fee from the government, however, there are no explicit incentives stated or agreed in any of the partnership
agreements. A positive incentive for the private partner is that the experience of working with government may help the Apollo to secure more contracts in the future. For more information please visit: http://www.apollohospitals.com/hospitals-in-india/other-locations/raichur.html.

**Mexico—Mexico State Hospitals**
The Government of Mexico entered in two PFI-like partnerships with private partners to design, build, operate and provide some clinical services. The IFC has dubbed this partnership “PFI plus.” Clinical services included in the contract include laboratory, radiology and dialysis services. The public sector will be responsible for the majority of the clinical services. Tender for the project was expected in late 2009, however this deadline was not met. The IFC has committed to providing technical consultation for this project; however as of summer 2010, the process has yet to start.

**Examples from High-Income Countries**

**Canada—Abbotsford Regional Hospital and Cancer Centre**
Canada has proven to be a large proponent of hospital-focused PPPs (known in-country as P3s) which largely epitomize a design, build, finance and maintain model, but sometimes include a clinical operation component (Silversides 2008). One notable PPP involves Access Health Abbotsford (AHA), a consortium of companies expected to finance, design, build, maintain and provide facilities management services at the new Abbotsford Regional Hospital and Cancer Center in Fraser Valley, British Columbia (BC), based on a PFI model. AHA is partnering with the British Columbia (BC) Ministry of Health Services, the Provincial Health Services Authority/The BC Cancer Agency, the Fraser Health Authority and the Fraser Valley Regional Hospital District. The Fraser Health Authority and The BC Cancer Agency will deliver all healthcare services. The Fraser Valley Regional Hospital District will provide $70 million toward the construction costs of the new complex. The project manager, Partnerships BC, will oversee planning, scheduling, procurement, contract management, project development and financial planning. The public health authorities will own the land and facilities.

**Germany—Berlin-Buch Hospital**
In 2001, Helios-Kliniken (HK), Germany’s second largest private hospital operator, won a tender to operate and replace an aging 1,100-bed hospital in Berlin that had been facing financial losses due to decreasing patient volumes combined with overstaffing. The €215-million build, own and operate hospital model was privately financed in full, without the use of public funds. Under the concession contract, HK assumed the hospital license and the assets and liabilities of the existing facilities (24 clinics and six institutes, with five sites, 167 buildings and 1,100 beds). Staff contracts were transferred to HK, and the government monitors quality through pre-established key performance benchmarks. The hospital remains a teaching and academic institution, and the research and education activities are state-funded and managed by Charité University. The project has resulted in cost-efficiency improvements.
CONCLUSION

The past three decades have witnessed a growing tendency by governments of countries at all income levels to seek out long-term partnerships with the private sector (PPPs) in domains such as transport, infrastructure and energy. While starting considerably later and much more cautiously, a parallel trend can now be seen in the health sector. While simple design, build and maintain models, like the British hospitals built under PFIs, remain the most commonplace, an increasing number of governments are experimenting with more ambitious models, including PPIPs.

Despite the political and financial risks inherent in PPIPs, they hold potential for significant improvement in quality and efficiency in healthcare, at a time when many publicly owned and run facilities are in poor shape. It remains to be seen whether the imperative of reducing public finance deficits further encourages governments to seek PPIP solutions to healthcare challenges.

Clearly, the number and range of PPIPs in the health sector around the world are growing. We have documented 19 of them in this Atlas. We hope that this preliminary body of knowledge will both inform and stimulate those who are expanding their PPIP investments or considering this option for the first time.

Some have argued that PPIP solutions are not scalable or generally applicable, especially in very low-income settings. While low income settings will be more challenging, the examples presented here clearly demonstrate that each PPIP must be tailor-made for its unique purpose and circumstances. There are common lessons and themes, however there are also a myriad of details which are essentially site- and context-specific. These details really matter and getting them right is, and will continue to be, at the heart of success.

We look forward to further information—from existing and new PPIPs—that can add to the collective body of understanding about when a PPIP may be an attractive alternative and about how to optimize a PPIP’s impact. We anticipate that the next few years will witness a further substantial expansion of evidence on the design, operational performance and impact of PPIPs.
REFERENCES


FP Staff (2010). Two new hospitals set to open Saturday. FP Turks and Caicos.


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