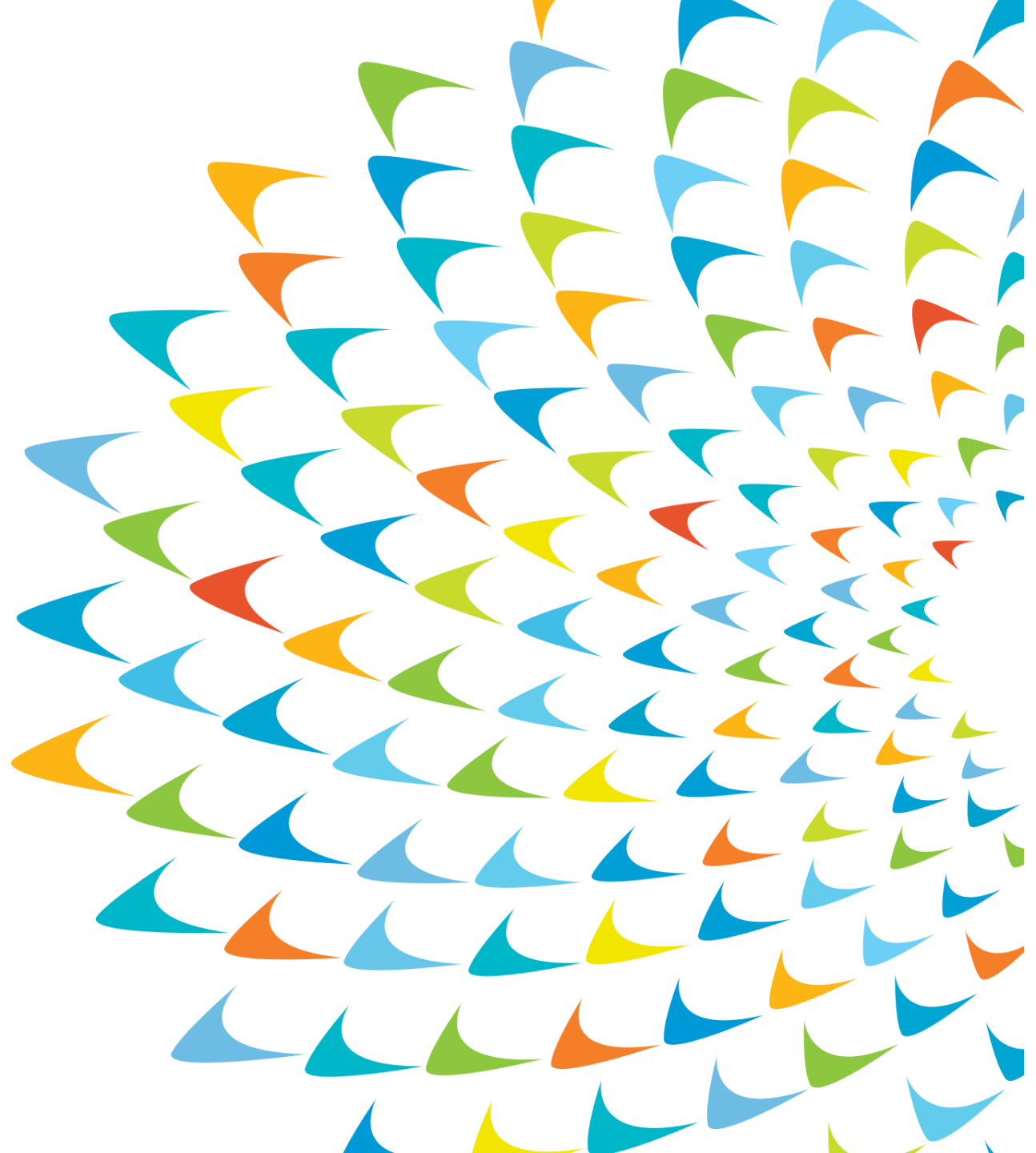


Delivering Hospital PPPs for Sustainable Health

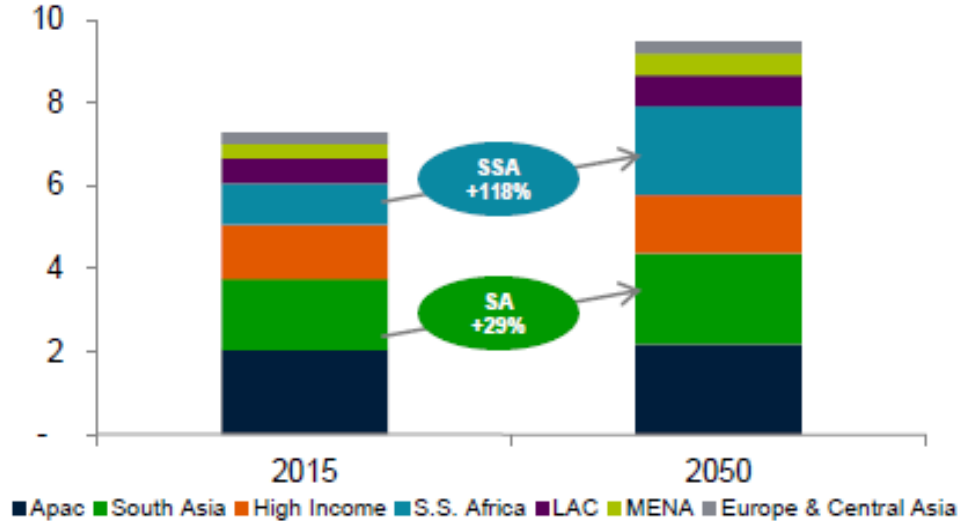
Advancing Health Partnerships in the GMS
Bangkok, Dec 2019

Sanjay Grover
Office of Public Private Partnerships

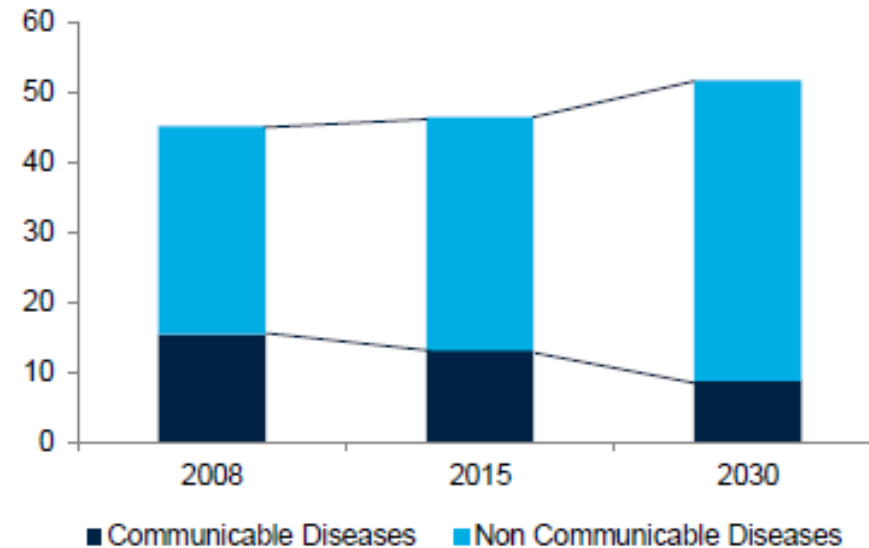


Population Growth and The Rise Of Non Communicable Diseases Will Increase Pressure On Health Care Systems in South Asia

World Population¹
2015 to 2050 (billions)

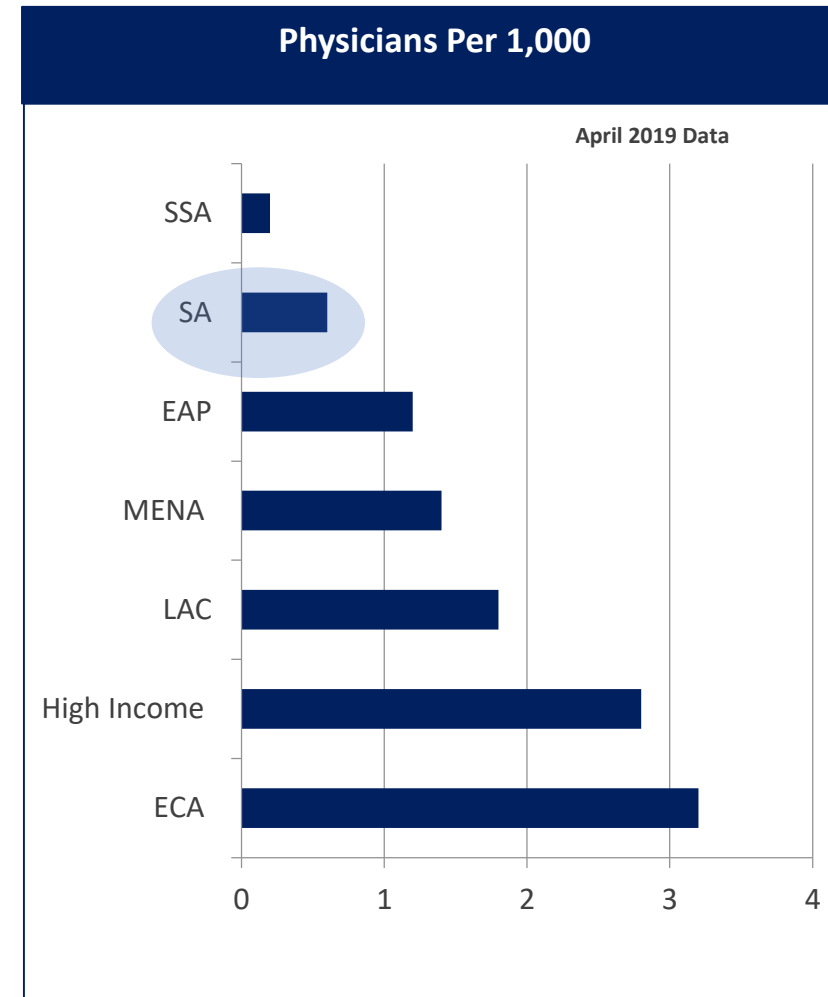
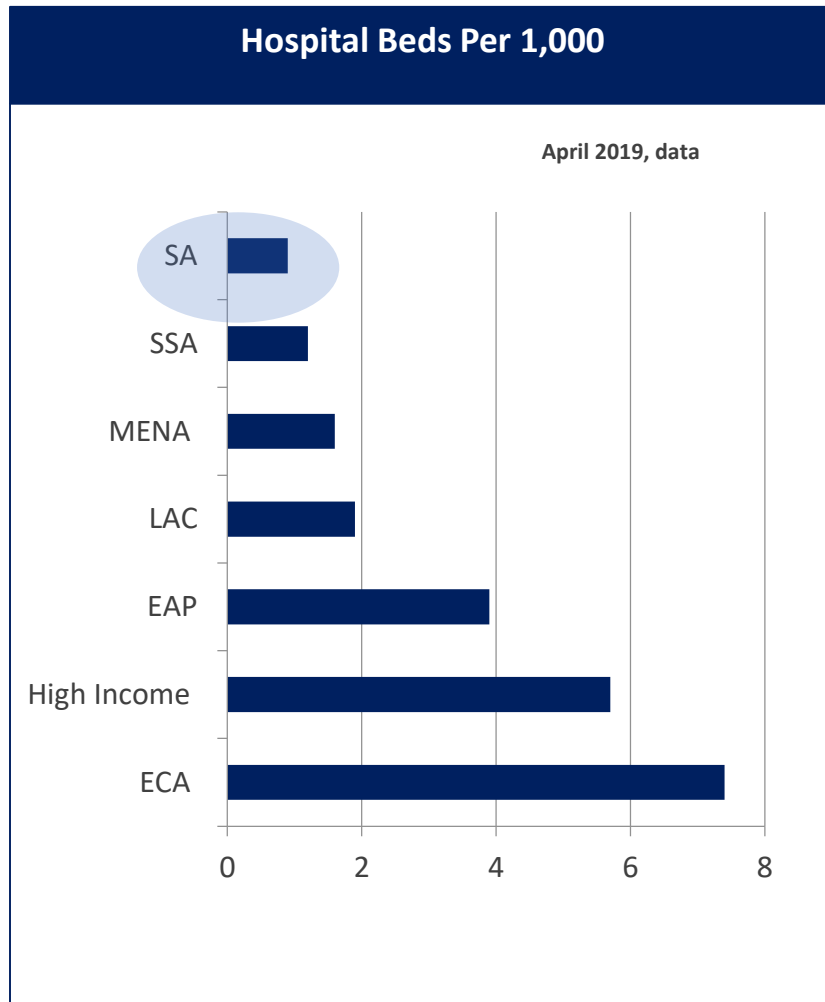


Deaths by Diseases in Emerging Markets²
2008 to 2050 (millions)



Source: World Bank and WHO

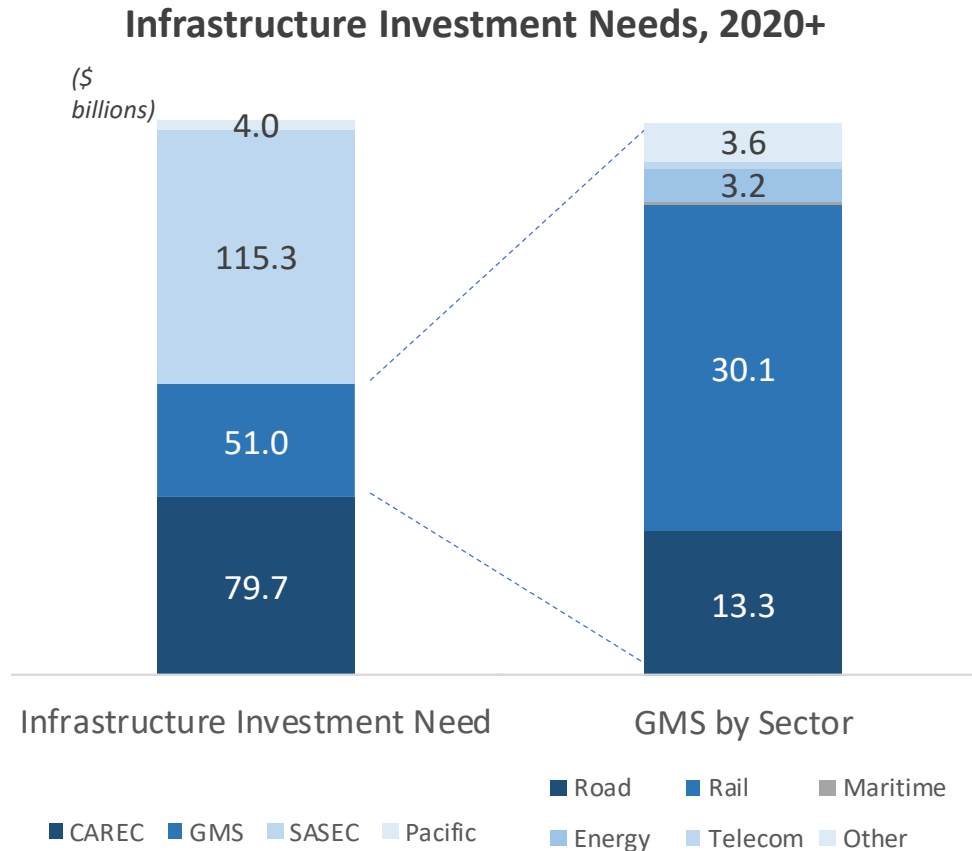
Lack of Infrastructure and trained staff in South Asia



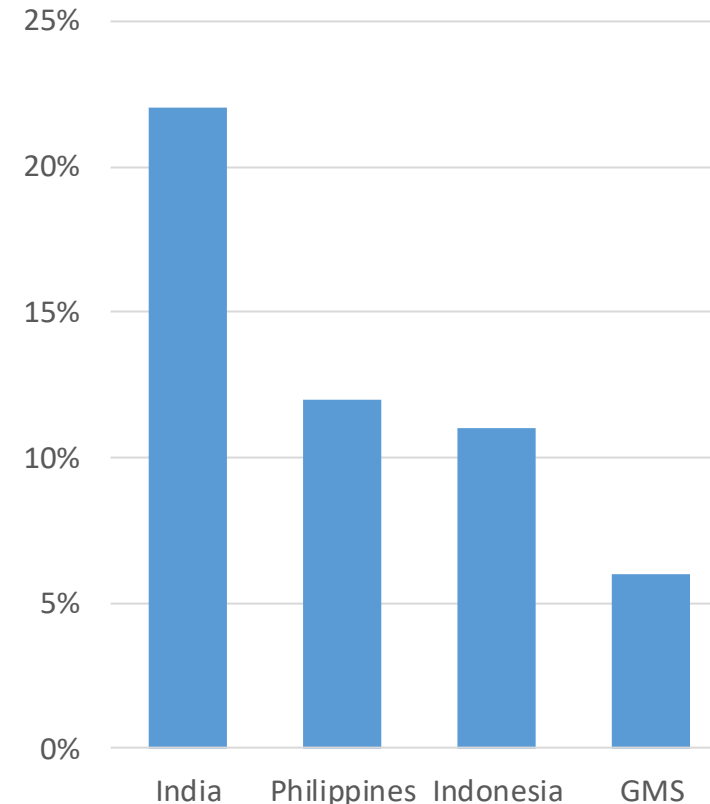
Source: World Bank Health Indicators

Constrained budgets increase need for private sector participation

Infrastructure needs for GMS are significant and ODA headroom is increasingly constrained, but private sector participation compared to public funding still lags neighboring countries.



% of Infrastructure Funded by Private Sources



Source: ADB analysis, Philippines National Economic Development Agency, India 12th Five Year Plan

CAREC = Central Asia Regional Economic Corridor; GMS = Greater Mekong Subregion; SASEC = South Asia Subregional Economic Cooperation
 Source: Meeting Asia's Infrastructure Needs, Asian Development Bank

Public Private Partnerships are being used widely the world over

Private sector participation can bring operational efficiency to healthcare infrastructure projects while reducing government financial obligations

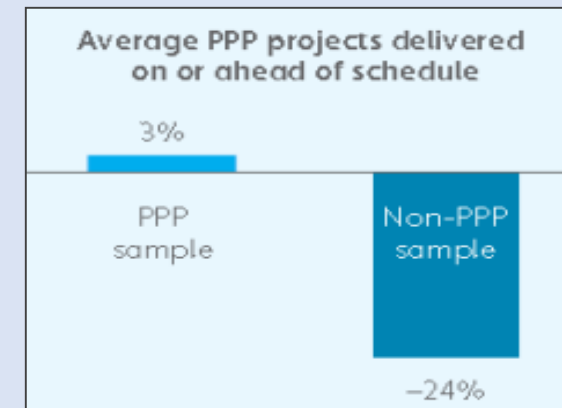
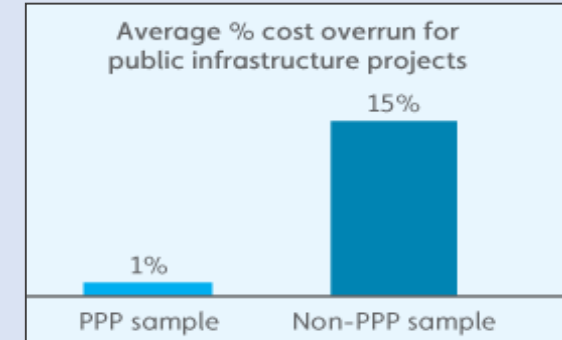
Attract investment

- Government budgets can only meet a fraction of infrastructure needs
- PPPs can be used to deliver additional infrastructure without calling on government budgets

Operational efficiency

- PPP offer opportunities to bring private sector innovation and efficiency, driving greater value for money than traditional procurement

On time, on budget delivery



Source: Infrastructure Partnerships Australia

Private sector capital and know-how can support the successful **delivery of healthcare infrastructure projects**

But to make healthcare PPPs work, some basic principles apply...

Public and Private's Partner Commitment

- Honoring of long-term contracts (15-20yr+).
- Importance of consistent stakeholder support.

Allocation of Risk, Resources and Responsibility

- Identify risk, resources, responsibility and allocate to party that can best manage it.

Government Guarantees/ Insurance/ User Payment

- Long-term fixed availability payment by Government is the most common form of funding;
- Some countries have user or insurance company payments with Government guarantee

Transparency and Accountability

- Transparency throughout the process is critical to competition and pricing.

Key Performance Indicators and Penalties

- Define your needs clearly before finding partners.
- Performance measured and guided by clear and comprehensive KPIs.
- In case of performance failure, corresponding financial penalties are stipulated.

PPPs in healthcare have been slow to take off, especially, in Asia...

Between 2007-2017, PPPs have been used extensively in infrastructure.

- ✓ over 5,019 infrastructure PPP projects across 120 countries;
- ✓ total investment of US\$1.16 trillion
- ✓ most PPPs in energy and transport

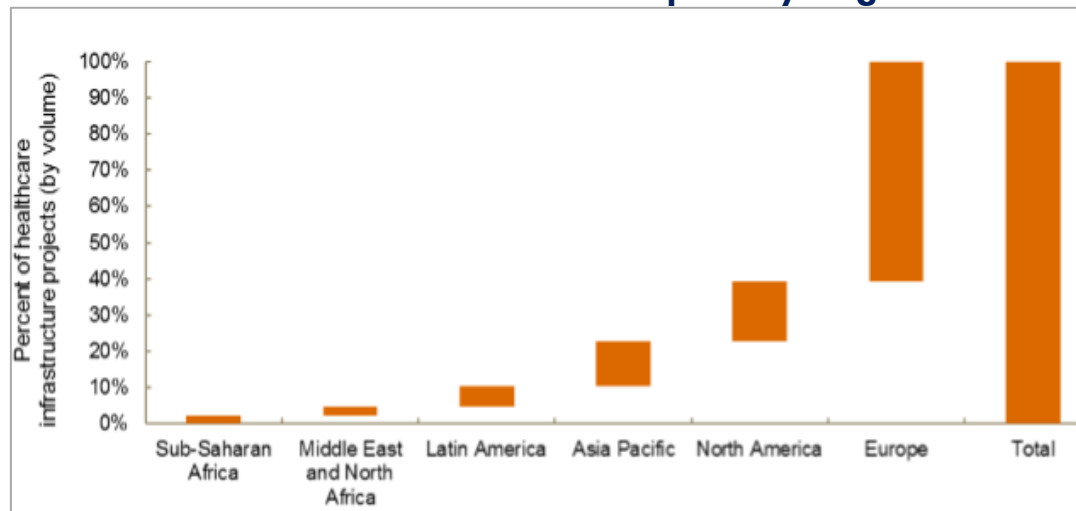
During that period, only 600 healthcare infrastructure projects globally.

- ✓ 75% of those in developed countries, mainly Europe and North America.

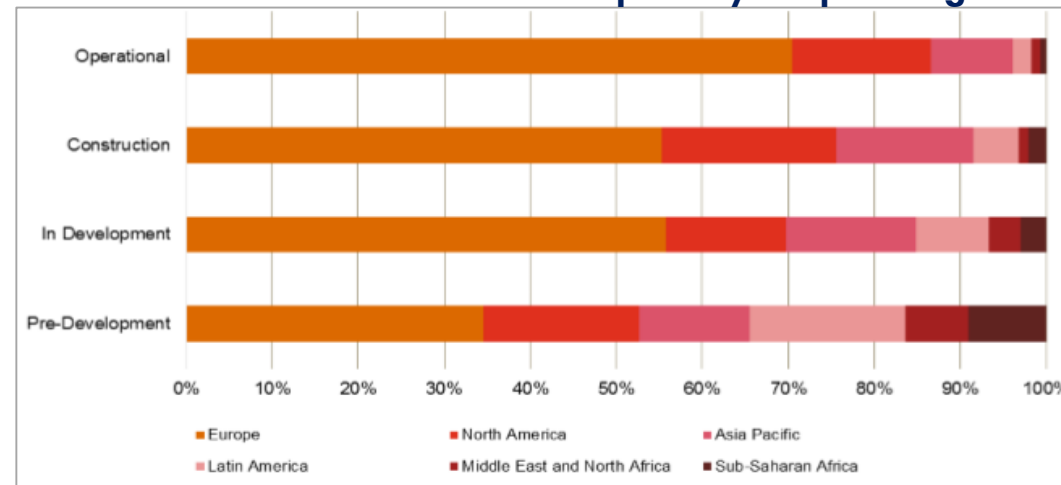
But the adoption of PPPs in healthcare is spreading....

PPPs in predevelopment are more equally divided across all geographic regions.

Healthcare Infrastructure Projects by Region

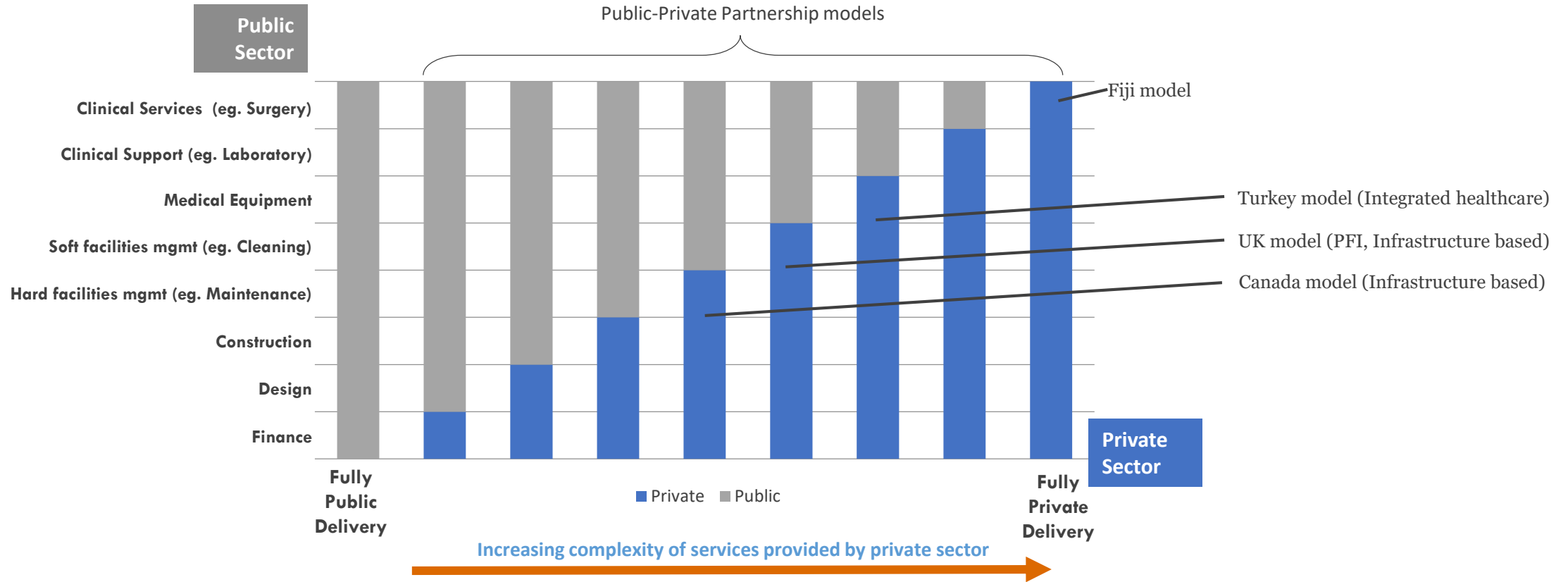


Healthcare Infrastructure Projects by Project Stage



Source: IJGlobal Project Finance and Infrastructure Journal Project Database, accessed May 9, 2017.

PPPs in healthcare have relatively complex models



Infrastructure Model (PFI)– UK Example -- 100 NHS Hospitals built within 12 year period.

UK Government's Core Objective in the 1990s:

- ✓ Scaling up capacity quickly by constructing additional facilities that public sector was not otherwise able to afford.
- ✓ Utilize private sector expertise to complete hospital projects on time and within budget (and allow public sector to focus on service delivery)

Scope: The private sector takes responsibility for the design, construction, finance and part operation of the hospital/facility. The operation element can be limited to maintenance or also include non- clinical support services such as cleaning, catering, laundry etc.

Pros

- ▶ Incentivizes whole life cost and design by including the long term maintenance
- ▶ Transfers the risk of construction time and cost overruns to the private sector
- ▶ Certainty over cost and quality over the life of the contract
- ▶ Gains access to international best-practice design and workflows in designing complex health infrastructure
- ▶ Aligns interests of funders and government – focus on completion of the construction

Cons

- ▶ Long term nature of contract can reduce flexibility, particularly if asset is not needed in long term
- ▶ Requires detailed output specifications prior to procurement
- ▶ Complex contracts needed
- ▶ Ability to maximize efficiency of clinical service delivery is limited
- ▶ In local market, funders will require protection in the event of termination
- ▶ Requires investment in monitoring capability

Payment Structure: These projects tend to be usually based on the concept of an [Availability Fee](#), payed monthly with deductions for poor service performance. These payments are typically made by govt..

Infrastructure Model (PFI)– UK Example - Univ. College London Hospital (UCLH)

- **Background:** The **UCLH NHS Trust** is one of the biggest in the UK and provides patient treatment to more than 200 Primary Care Trusts.
- **Project Description:** Construct a centralized **669-bed hospital building** to replace 8 existing old and scattered hospital buildings
- **PPP Structure: design, build, operate and finance (DBOF)**
- **Contract Terms: 40-year agreement**
- **Total Investment: GBP 422 M**
- **UCLH:** clinical and non-clinical service provision
- **Results/Impact:**
 - improved access for patient;
 - increase **number of treated patients** by **10%**;
 - Cost savings of over **GBP 30M** (PPP vs traditional procurement)



Infrastructure Model (PFI)– Canada Example- Over 50 hospital PPPs carried out (since 2000)

- **Background:** Canada Government aimed at to improve their outdated healthcare infrastructure. Utilize private sector expertise to complete hospital projects on time and within budget. **Drive innovation within facility design via output-based specifications** (Focus on Facility's Functionality).
- **Projects:** Since early 2000s, over **50 hospital PPPs** valued at approximately **18 billion CAD (USD 13.7 billion)** were carried out.
- **Results:** The infrastructure PPP scheme has seen substantial success within the healthcare sector in Canada due to the ability to create **value-for-money** and **develop more efficient design solutions**.
- PPP Program initially started with allocation of facility **financing risk** to contractor and gradually **extend to design and maintenance**.

Variation: Managed Equipment Service

Scope of model: The private sector takes responsibility for the purchase, installation, maintenance and replacement of defined medical equipment usually for a term of 15+ years.

Pros

- ▶ Transfers the risk associated with **procuring and installing the equipment**
- ▶ Degree of **operating risk** also **transferred** - Equipment life-cycle approach (payment is tied to performance, Key Performance Indicator),
- ▶ Cost certainty is largely secured with predictable budget commitments
- ▶ **Maintenance and failure risk** is the responsibility of the private sector. If equipment fails before it's due to be replaced, this is at the cost of the private provider.
- ▶ When done as part of a wider construction project, the interface between the **construction and the equipment installation** is dealt with by the private sector

Cons

- ▶ Specifying future equipment needs can be difficult
- ▶ The cost certainty leads to some **loss of flexibility** - Completely new technology may come along to make some equipment obsolete – ie, something very different replaces the need for MRI scanners
- ▶ **Replacement cycles** managed by private sector – most efficient solution though some contracts have **hard replacement dates**
- ▶ Any **efficiencies are limited by the scope**, particularly where the public sector continues to operate the equipment

Payment Structure: This model tends to be based also on the **Availability Fee concept** with financial deductions for unexpected downtime of equipment or poor related service.

Variation: Specialised/Clinical Support Services PPP

Scope of model: The private sector takes responsibility for the provision of a specific clinical or clinical support service.

The most common types of services delivered are diagnostic imaging, radiotherapy services, dialysis. These contracts can vary in length and can also include related infrastructure.

Pros

- ▶ Private sector expertise can be **utilized to address very specific** needs of the government
- ▶ As these PPPs tend to be for a single service, they can be **easier to define and monitor**
- ▶ **Access to specific shortage** of qualified staff or expertise
- ▶ Can **deliver efficiency** and **quality improvements**
- ▶ Can easily be **replicated**
- ▶ Allows **purchase of needed services** at predictable price, performance-based
- ▶ **Can be integrated** into wider health system with relative ease

Cons

- ▶ **Need to be sizeable** (i.e a network of imaging services or large radiotherapy center): costly to structure and procure if scope of service is very limited, particularly if new buildings are not required
- ▶ Long term contracts for single service **can reduce flexibility** as service needs may change
- ▶ Ability to **monitor and measure** service quality is required – but ability to compare quality and cost may be difficult if like for like services not available across the health system

Payment Structure: These projects tend to be structured on a **fee for service basis, with pre-agreed prices for a defined list of services**. Lump sum payments for pre-agreed volume of services also possible, though much less common.

Service/Diagnostic PPPs

INDIA: Diagnostic Imaging in Andhra Pradesh

- **Scope:** Upgraded diagnostic imaging and radiology facilities.
- **Total investment:** US\$ 6 million
- **PPP Structure:** 7-year concession to provide advanced imaging and radiology services across 4 government hospitals/medical colleges.
- **Concessionaire:** Wipro GE Healthcare Ltd. and Medall Healthcare Private Ltd.

ROMANIA: Dialysis PPPs

- **Background:** Private sector provision of dialysis services in a number of centers across Romania.
- **PPP Structure:** Private Partners renovate dialysis center facilities, provide and maintain equipment, procure necessary supplies and manage service delivery
- **Government** pay private partners a flat fee per hemodialysis treatment, and an annual fee per peritoneal dialysis patient;
- **Results:** The government saved close to three million euros between 2005 and 2008 through these PPP arrangements.

Integrated PPP – Turkey Example - 29 new hospital facilities with 42,000 high-quality hospital beds

Turkey Government's Core Objectives:

- ✓ Improve outdated healthcare infrastructure;
- ✓ Increase bed capacity to OECD norms.
- ✓ Support WB, EBRD and MIGA in setting up the required frameworks and launch the program

Scope of model: The private sector takes responsibility for the design, construction, finance and full operation of the hospital/facility. The operation element includes all clinical and non-clinical services. The government's role in this role is to set standards and regulate.

Pros

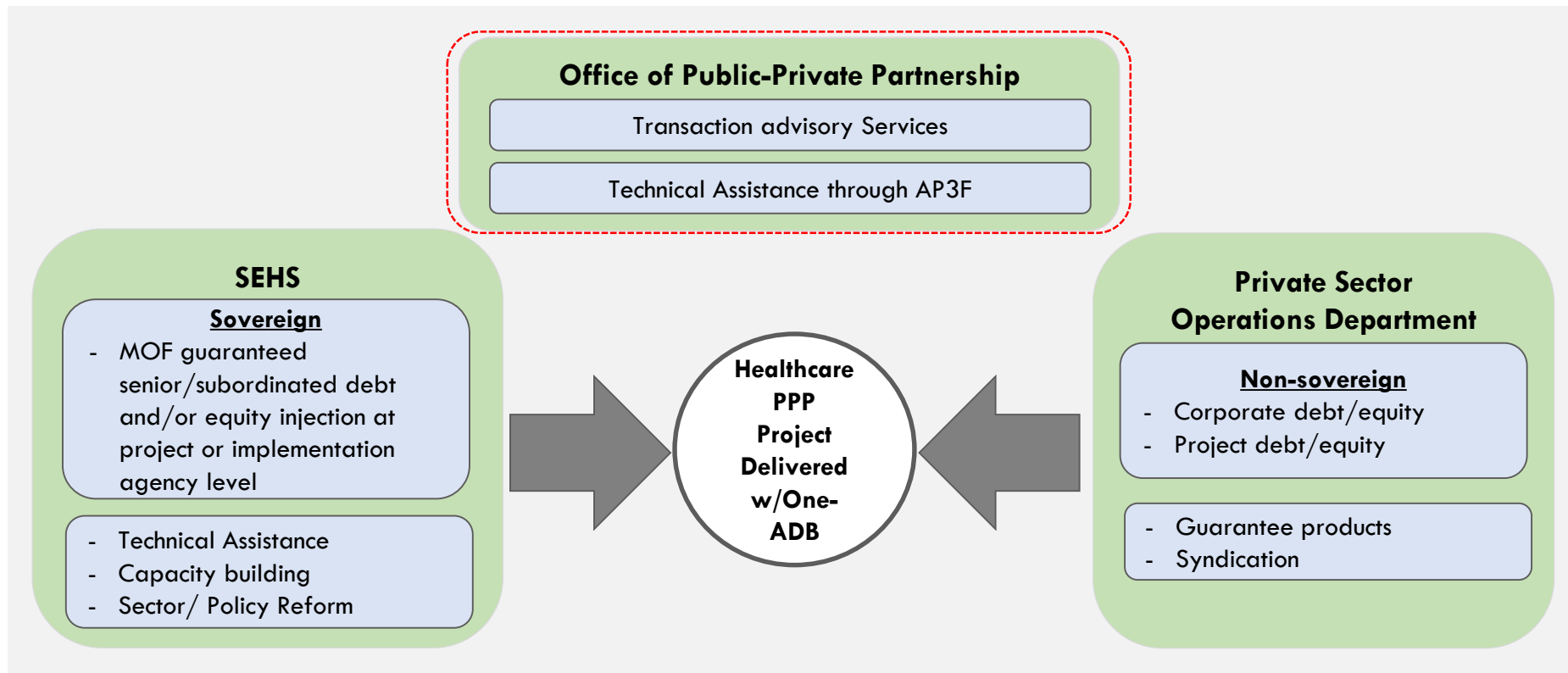
- ▶ Maximizes the **potential for efficiencies**
- ▶ **Access to private sector skills** and **innovation** across the widest possible areas
- ▶ Allows **government to focus on policy setting**, commissioning of services and regulation rather than provision
- ▶ **Learnings** can be applied to the **wider public sector**
- ▶ Can bring a **degree of competitiveness** to the health system

Cons

- ▶ Are **complex to define and structure**
- ▶ Need **well developed output specifications** that provide clarity to the private sector and can be easily monitored
- ▶ Requires **strong private sector presence**, either in country or regionally
- ▶ **Financing can be challenging** as banks typically will be concerned about clinical risk
- ▶ Still relatively **few examples of Integrated PPPs** around the world

Payment Structure: These projects can be structured in a number of different ways depending on hospital financing mechanism. Examples include capitation-based payments, a mix of capitation and Availability Fee, a mix of Availability Fee and Fee for Service.

How can ADB help deliver a Healthcare PPP project



One ADB approach

Regional Department: Provides government and government-owned entities technical assistance for capacity building, sector and policy reforms. Based on counter-indemnity of sovereign, lends to a project or implementation agency. Debt may be subordinated to attract commercial lenders.

Office of PPP: For development of PPP projects, OP3P funds project selection activity, feasibility study, drafting of concession agreement, etc. For select projects and upon request of government and private sector, OP3P advises the client on bankability issues, tender and financial closing.

PSOD: As a non-sovereign lending arm of ADB, PSOD finances PPP project through project and/or corporate loan and invests in equity for qualified projects. PSOD also provides political risk and credit enhancement guarantees and offer syndication services.

Finally, Defining and Achieving Success has to be about more than “no budget”

Defining “success” varies by country

- Increase infrastructure and capacity
- Replace/ modernize infrastructure and equipment
- Increase know-how/clinical expertise/ new modalities
- Efficiency gain (micro/macro)/ overall cost reduction
- Effective and efficient use of resources.



Achieving Success does NOT vary by country

- Strong government support for PPPs
- Comprehensive PPP policy and legal frameworks
 - Binding contractual agreements
 - Defined payment mechanism
 - Acceptable risk allocation
 - Good Governance
- Dedicated PPP unit with clear developed PPP strategy
 - Clear objectives
 - Robust feasibility study
 - Value for money assessment
 - Risk identification and mitigation
- Competitive/transparent procurement
- Informed and engaged stakeholders

Lessons Learnt

Be realistic about affordability

- Requirements for KPIs and construction standards must be aligned with government budgets;
- Higher standards entails higher costs;
- PPP may bring cost efficiencies but may cost more if the required standards are higher.

Start with less complex/
simple PPP structure

- Simply structured PPPs have more chance of successful procurement and implementation;
- Greenfield PPPs are less complex than Brownfield PPPs;
- PPPs involving only facility management are less complex than those with clinical services.

Check international best practice and seek professional advice

- Successful cases of hospital PPPs are available as reference;
- Project failure may be caused by unattractive terms to private sector;
- Manage stakeholder engagement and communication;
- Experienced PPP transaction advisors can increase competition, pricing and chance of success.

Invest in Project Preparation and Feasibility Projects

- Proper project planning and preparation is significant in any successful project;
- Invest in preparing standardized bid documents and technical specifications;
- ADB can support Governments for planning, preparation and implementation.

Case studies

Case study (PFIs)

Egypt – Alexandria Hospitals

- ▶ Two new hospitals (maternity and neurology services) and blood bank facility with a combined 424-bed capacity.
- ▶ 20-year concession to finance, design, construct, furnish, equip, maintain, and provide non-clinical services.
- ▶ Awarded to an international consortium: Egypt's Bareeq Capital, G4S, Siemens & Detac.

South Africa – Albert Luthuli Hospital

- ▶ New hospital had been built by govt but required equipping and IT.
- ▶ 25-year concession to provide IT, medical equipment and manage Facilities Management services
- ▶ Was the first health PPP to successfully reach financial close in South Africa
- ▶ Includes ongoing responsibility to maintain and replace medical equipment

Mexico - Toluca & Tlanepantla Hospitals

- ▶ Two new 120-bed hospitals.
- ▶ 25-year PPP to design, finance, construct, equip, maintain, and provide dialysis, imaging, and lab services.
- ▶ Awarded to Prodemex (Toluca) and Marhnos (Tlanepantla).
- ▶ \$120m USD investment
- ▶ Over 200,000 people with improved access to services

Sweden – New Karolinska Hospital

- ▶ New 600 bed hospital to replace Sweden's most important teaching and research hospital
- ▶ 25-year PPP to design, finance, construct, maintain and provide Facilities Management services
- ▶ Awarded to a Skanska/Innisfree consortium
- ▶ Over \$2 billion of investment
- ▶ Provided an integrated facility with over 300,000 square meters

Case study (Services/Diagnostic PPPs)

India - Andra Pradesh Diagnostic Imaging

- ▶ Upgraded diagnostic imaging and radiology facilities.
- ▶ 7-year concession to provide advanced imaging and radiology services across 4 government hospitals/medical colleges.
- ▶ \$6m USD investment
- ▶ Awarded to Wipro GE Healthcare Ltd. and Medall Healthcare Private Ltd.

Romania Dialysis PPP

- ▶ Private sector provision of Dialysis services in a number of centres across Romania.
- ▶ Contracts let to 4 providers so as not to create a monopoly
- ▶ Payments by NHIF based on fee per hemodialysis session and a annual fee for each patient undergoing peritoneal dialysis
- ▶ 4 international bidders were awarded the contracts
- ▶ Private sector responsible for providing all services including building facilities where required.

Brazil – Bahia Diagnostic Imaging PPP

- ▶ Diagnostic imaging services across 12 public hospital across the State of Bahia (pop 15m).
- ▶ Based on hub and spoke model with central reporting using PACS system
- ▶ Scope of service included:
 - CT
 - MRI
 - Mammography
 - All patient related services
 - Construction of facilities as needed
 - All support services such as cleaning and maintenance
- ▶ Benefits included new services not previously available to the population, better access and higher quality service across the State
- ▶ Costs borne by the State government, not patients – part of SNS (national health service)

Case study (Integrated PPPs)

Brazil – Hospital do Suburbio

- ▶ New 298-bed emergency hospital in Salvador, Bahia.
- ▶ 10-year PPP contract to equip, maintain, and operate both clinical and non-clinical services.
- ▶ Awarded to Promedica and Dalkia.
- ▶ \$50m USD investment
- ▶ 400,000 people with improved access to services

Lesotho – Health Network PPP

- ▶ New 425-bed hospital and network of public filter clinics forming a regional health network and national referral hospital.
- ▶ 18-year PPP contract to design, build, finance and operate facilities, including clinical services.
- ▶ Awarded to Tsepong Consortium, headed by NetCare including local doctors and investors.
- ▶ \$100m+ USD investment and over 330,000 people with better access to services

Spain – Alzira Hospital PPP

- ▶ New Integrated Health service in region of Valencia.
- ▶ 15-year PPP contract to equip, maintain, and operate both clinical and non-clinical services at primary, secondary and tertiary care level
- ▶ Awarded to Ribera Salud
- ▶ Public sector pays a single capitation based, annual fee to the private sector
- ▶ Costs are said to be 25% lower than comparable public hospitals in same region

Turks and Caicos – Hospital PPP

- ▶ Two new small hospitals providing comprehensive secondary care this small island population
- ▶ 25 year PPP contract to design, build, finance and operate facilities, including clinical services.
- ▶ Awarded to Interhealth Canada.
- ▶ \$100m+ USD investment and over 33,000 people with better access to services
- ▶ Development of National Health Insurance system to fund clinical services on a capitation basis.