

A zebra or a painted horse? Are hospital PPPs infrastructure partnerships with stripes or a separate species?



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ABSTRACT: Public Private Partnerships (PPP) have been common in infrastructure for many years and are increasingly being considered as a means to finance, build, and manage hospitals. However, the growth of hospital PPPs in the past two decades has led to confusion about what sorts of contractual arrangements between public and private partners constitute a PPP, and what key differences distinguish public private partnership for hospitals from PPPs for infrastructure.

Based on experiences from around the world we identify six key areas where hospital PPPs differ from infrastructure partnerships. We draw upon the hospital partnerships that have been documented in OECD countries and a growing number of middle-income countries to identify four distinct types of hospital PPPs: service focused partnerships in which private partners manage operations within publicly constructed facilities; facilities and finance PPPs, focused on mobilizing capital and creating new hospitals; combined PPPs, involving both facility and clinical operations; and co-located PPPs where privately operated services are developed within the grounds of a public hospital.

These four types of hospital PPPs have differing goals, and therefore different contractual and functional aspects, as well as differing risks to both public and private partners. By clarifying these, we provide a base upon which hospital PPPs can be assessed against appropriate goals and benchmarks.

Public Private Partnerships (PPP) are used for differing reasons across a range of industries. PPPs in the water sector have successfully mobilized private operators to turn around failing public companies and expand access to water services. In the building sector, PPPs have transferred responsibility of construction and estates management to private companies, leaving government departments to focus on their core activities (Grimsey and Lewis 2004). Increasingly policymakers are exploring PPPs as a means to improve their public hospitals. However, the performance goals and policy context for hospitals differ considerably from those in which PPP models evolved (Grimsey and Lewis 2005; Brinkerhoff and Brinkerhoff 2011). Discussions about PPPs in the health care sector are often hampered by confusion about what the term means, with multiple models grouped without distinction on the umbrella PPP term (Field and Peck 2003). Lacking a clear vocabulary, health policymakers find it difficult to sort out what these “imported” models offer and it is difficult to understand which models are likely to address the performance problems for which a specific PPP is contemplated (Ng and Loosemore 2007).

We review the PPP models most frequently applied in other sectors, and increasingly in hospitals, and use configuration analysis¹ to group them into categories with analytically important

BOX 1. DEFINITION OF PPP

“A more or less permanent cooperation between public and private actors, through which the joint products or services are developed and in which the risks, costs and profits are shared.”

KLIJN ET AL. (KLIJN ET AL. 2007), CITED IN TYNKKYNEN AND LEHTO (2009).

distinctions among them. We propose a typology of hospital PPPs to permit clearer communication and more sound analysis. Clearer specification of their characteristic mechanisms also illuminates the problems that each PPP type has been “built” to address. Establishing analytically meaningful categories allows researchers to compare “like with like”. We hope that this typology will support much needed evaluative research in this field.

Defining PPPs

PPP are a form of contract between a government and a private entity in which the private partner undertakes the long-term provision of publicly beneficial services. Initial injection of capital by the private partners is a key component of many, though not all PPPs. What critically distinguishes a PPP from a service contract is the duration and intended distributed benefit.

TABLE 1: A TYPOLOGY OF HOSPITAL PPPs

PPP Category	Common term	Definition/ Explanation
Services	Operating contract	A private organization is brought in to operate and deliver publicly-funded health services within a public facility.
Facility/finance	PFI	A public agency contracts a private entity to finance, design, build and operate a hospital facility. Health services within the facility are provided by government.
Combined	BOT PPIP	A private organization establishes capacity (through new construction or expansion of existing facility) to provide health services under sustained public or social insurance reimbursement.
Co-location	Co-location	A public agency allocates a portion of a public hospital's land and/or premises for sustained use by a private organization in exchange for payment and specified benefits to the public agency.

Source: Authors' analysis

An important source of confusion about what a PPP is and what it is intended to deliver to the health system derives from the different perspectives of two groups of professionals. One group has a background in infrastructure PPPs – and they seek to bring the benefits of this model to the hospital sector. In infrastructure sectors, PPPs are implemented mainly as a means to mobilize private capital, transfer investment risk, and consolidate the finance, construction, and maintenance activities into a single contract for easy of management by government, with ensuing gains in efficiency by the private operators. Often the advantage of an infrastructure PPP is that financing can be recouped by direct billing of service users, bypassing government budgets entirely. The infrastructure model proponents view the mobilization of private finance as the critical component of a PPP, central to the benefits of the model, and the focal point for contractual attention and negotiation (Brown 2007).

The second group comes to PPPs from health services and is engaged with PPPs as a means to bring private management expertise, flexibility, and care delivery models to hospital operations. This group focuses on service contracting, responsiveness, and efficiency in both the conceptualization and assessment of PPPs. Hospital operation and management experts view the incorporation of better management systems from the private sector as central to improving health services, and as the core benefit, and focus, of a hospital PPP (Dorgan et al. 2010). Because of the differing perspectives, the collection of hospital PPPs implemented around the world include examples that each group view as having been undertaken for the wrong reasons, and often as being inappropriately designated a PPP. As we will explain below, we believe that the commonalities of partnership arrangements and duration of engagement justify the inclusion of partnerships as defined by both groups in the same,

shared, PPP designation. That said, we believe it is critical for policy-maker, analysts, and economists to distinguish the structural features and objectives that drive each transaction.

Hospital PPPs vs Infrastructure PPPs?

The documentation on infrastructure PPPs is growing, and the models, risks, benefits, contract structures, and financing issues are understood (Brown 2007). Since at least the 1800s, governments have sought to encourage private investment in areas of public benefit through mixtures of land grants or long-term leases (railways, toll highways), monopoly grants (canals), and enduring purchase commitments (water and electricity). The pricing of assets, loans, and share of income or fee waivers have all grown more sophisticated, but an infrastructure PPP today is very similar to those from a century ago. As in the days of railway PPPs, profits are gained largely through better management, use of zero-cost land leases, and monopoly or quasi-monopoly control of a resource used by many purchasers. For the government, these PPPs are

attractive because the risk and effort of investment is taken on by a private entity. Society as a whole benefits from having the new infrastructure or utility services that otherwise would not exist.

The mechanics and sources of gains in infrastructure PPPs translate imperfectly to hospitals and healthcare. Acknowledging minor variation between hospital PPP models, there are six key issues that are common to hospital PPPs and make them different from their infrastructure homonyms:

+ Government, not individual, is primary purchaser of

outputs: Infrastructure PPPs commonly collect fees from multiple consumers – drivers on a highway, passengers on a railway, factories and homes receiving water or electricity. By contrast, hospital PPPs typically receive nearly all of their income from government in the form of scheduled lease payments or unit service payments. This simplifies, constrains, and adds risk to the income stream of private operators in hospitals.

+ **Partnership risks are political rather than marketplace:** As a result of the government primacy in purchasing noted above, the risks of hospital partnership success are often more due to uncertainty about long term compliance with payment obligations, than market demand projections. For this reason the borrowing costs for hospital PPPs are usually higher than the cost of infrastructure financing.

+ **Measurability of output:** Infrastructure PPPs deliver highly measurable outputs, whether power, water, road access, or otherwise. Inpatient services are immensely varied based on the condition, co-morbidities, and patient characteristics and largely unobservable (Preker et al. 2000).

+ **Variability of outputs over time:** During the 20 to 30 year life of a typical hospital PPP the population served by the facility can be expected to change in composition, wealth, age, and illness. This is particularly true in low- and middle-income countries (LMICs) where both demographic and epidemiologic transitions may be occurring simultaneously, contemporaneous

¹ Configuration analysis involves comparing instances of similar institutional arrangements (or systemic reforms) to identify recurring functional patterns to enable them to be distinguished into analytically meaningful categories (see, for example Rothgang 2010).

TABLE 2: MAJOR DIFFERENCES BETWEEN HOSPITAL PPPs AND INFRASTRUCTURE PPPs

	Infrastructure PPPs	Hospital PPPs	Implications
Government vs Private purchaser of output	<ul style="list-style-type: none"> Private buyers/payers Government does not enter into long-term service purchasing relationship as part of transaction 	<ul style="list-style-type: none"> Government (or social health insurers) buy all or most services Government enters into long-term service purchasing relationship as part of transaction 	<ul style="list-style-type: none"> Substantial risks to government payer as a result of long-term funding “lock in” obligation Substantial political risks to private partners in hospital PPP
Business risk vs Political risk	<ul style="list-style-type: none"> Borrowing costs reflect estimated risk of demand for infrastructure services by total market of potential payers 	<ul style="list-style-type: none"> Borrowing costs reflect risks associated with single (or multiple) government payer agencies 	<ul style="list-style-type: none"> Cost of finance (and therefore capital) higher for hospital facility investment
Measurability	<ul style="list-style-type: none"> Comparators for benchmarking cost of facility availability services are somewhat limited 	<ul style="list-style-type: none"> Comparators for benchmarking cost of services often extremely limited 	<ul style="list-style-type: none"> Probability of that payment contract will set excessive rates is higher for hospitals
Variability of outputs over time	<ul style="list-style-type: none"> Products stable over time 	<ul style="list-style-type: none"> Products highly variable due to volatility in demographics and disease 	<ul style="list-style-type: none"> Risk to private partners necessitating either higher return contingencies, or flexibility in contract modification Risk to government due to “locked in” commitment to hospitals/ configuration that may not be needed in the future
Variability of technology over time	<ul style="list-style-type: none"> Service delivery technology and organizational models change slowly 	<ul style="list-style-type: none"> Service delivery technology and organizational models change rapidly 	<ul style="list-style-type: none"> Risks to government and private partners as a result of lost flexibility to adapt service organization; or cost of unpredictable adjustments to technology, systems and staffing
Ratio of investment to operating capital	<ul style="list-style-type: none"> High ratio of capital to operating costs 	<ul style="list-style-type: none"> Low ratio of capital to operating costs 	<ul style="list-style-type: none"> Efficiency gains from private finance/ design/ construction and operation of hospital PPPs lower than for infrastructure PPPs

Source: Authors' analysis

with rapid economic development. All of these will affect the medical service mix, or outputs, of the hospital. By contrast, in infrastructure PPPs variation in output volume is normal, but output mix is constant.

+ Variability of technology and organizational configuration over time: The pace of change of medical service delivery is increased every year due to changing regulation, reimbursement systems, technology, and better information. Across the OECD there are large changes each year in the inpatient-outpatient mix, the duration of stay for each service, with new technology leading to changes in diagnostic and treatment protocols, and care shifting from doctors to nurses to physician assistants, and sometimes back in the other direction. The unpredictability of these shifts, together with the high proportion of overall project cost that is due to operations, is unique to hospitals PPPs.

+ Ratio of investment capital to operating capital: Over the

life of a hospital clinical, laboratory, pharmacy and medical services represent 65 per cent of annual operating costs and ancillary services (food, support, IT) another 17 per cent. Facility maintenance and amortized construction costs are less than one fifth of total budget (EBRD2007). For infrastructure operations, the cost of design, construction, finance and maintenance are the large majority of total costs. This means private involvement in design, construction, and maintenance of hospital entities has a lower potential for efficiency gains than in infrastructure projects. In hospitals, the majority of the potential efficiency gains come from service provision.

The implications for governmental obligations and transaction gains or costs are summarized in Table 1.

The defining aspect of hospital PPPs is the relationship between public and private partners which cannot be fully planned out in advance, and which therefore necessitates on-going active discussion and renegotiation during the lifetime of the partnership. For this reason, the challenges of contract management are much greater, and the benefits to government accrue from the private participation in finance and facility provision are often less

[†] The US Centers for Medicare and Medicaid Services list 998 different diagnostic codes in their most recent guide

predictable in hospital PPPs than in infrastructure PPPs.

Typology

Hospital PPPs range from the health service focused to the infrastructure focused. In many instances PPPs incorporate aspects of both. From our review of documented hospital PPP initiatives, four distinct structures, or types, emerged, distinguished by what the public partner is “buying or selling” from/to the private partner, and the primary objectives of the partnership.

In the first model, “services” are the core of the partnership. In order to improve the quality and/or efficiency of hospital services provision, a private organization is brought in to operate and deliver publicly-funded hospital services, usually within the existing infrastructure of the government (La Forgia and Harding 2009). The facility may be built by government explicitly in preparation for this model of service PPP.

The second model involves a public agency contracting a private entity to finance, design, build and operate a hospital facility within which a public service is run. We refer to this as the “facilities and finance” model. It is popularly referred to as the PFI model, coming from the name of the “Private Finance Initiative” program which first applied the model in the UK (McKee et al. 2006, Edwards 2005).

Under the third model, a private organization establishes capacity to provide hospital services under sustained public or social insurance reimbursement. We refer to this as the “combined” model, since the public sector “buys” hospital services combined with the underlying facilities and related finance. There are two variants under this model, which merit distinction. In one variant, a public agency tenders to have a private organization build a new facility and provide services; in the second, the private organization takes over an existing facility and services. The former has been applied to add capacity and assure operator “ownership” in the facility construction (Global Health Group 2010, Sekhri et al. 2011). The latter is often more politically controversial, but has the potential to harness the private sector to take over existing failing facilities and turn them around, as has been the case in Germany (Roeder 2012, Coelho and O’Farrell 2009).

Under the fourth model, public agencies do not buy services but rather allocate public hospital real estate for a private service provider to develop services “co-located” within the public facility. The private organization makes payments to the public agency, as well as providing in-kind services. Most often the objective of this kind of partnership is to capture the value of the real assets, and to tap the private operator’s services and expertise for the benefit of public patients. Facilitating dual practice as an incentive to public practitioners is sometimes a secondary goal. (Nikolic and Maikisch 2006, Project Equity 1999).

Conclusion

The lack of a structured vocabulary to distinguish among differing models of PPPs has led to misguided analysis, misdirected criticism between the “service” and “infrastructure” proponents, and inhibited needed attention to the different goals of each PPP type, and the financial, regulatory, and contractual mechanisms applied to advance those goals.

Building upon the typology presented here, we expect that differing models of PPP will be suited to application in a variety of situations depending upon the specific facility and system need; the public and private capacity to fund the PPP; the governmental capacity to contract and oversee; private capacity to implement, and the legal and healthcare system infrastructure in which the PPP is applied. To fully understand the tradeoffs between differing models, and the context appropriate to each, a more complete analysis of experiences within each model is needed. Only at this point will it be possible to define success for each PPP type, and to both build and test a model of the criteria that will make a PPP likely to succeed or fail. The typology presented here is an advance towards this goal. □

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