



Ethics in Public Health Research

A Research Protocol to Evaluate the Effectiveness of Public–Private Partnerships as a Means to Improve Health and Welfare Systems Worldwide

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Public–private partnerships have become a common approach to health care problems worldwide. Many public–private partnerships were created during the late 1990s, but most were focused on specific diseases such as HIV/AIDS, tuberculosis, and malaria.

Recently there has been enthusiasm for using public–private partnerships to improve the delivery of health and welfare services for a wider range of health problems, especially in developing countries. The success of public–private partnerships in this context appears to be mixed, and few data are available to evaluate their effectiveness.

This analysis provides an overview of the history of health-related public–private partnerships during the past 20 years and describes a research protocol commissioned by the World Health Organization to evaluate the effectiveness of public–private partnerships in a research context. (*Am J Public Health*. 2007; 97:19–25. doi:10.2105/AJPH.2005.075614)

IN NOVEMBER 2002, THE World Health Organization (WHO) Centre for Health Development in Kobe, Japan, convened the Global Symposium on Health and Welfare Systems Development. Participants concurred that strategies to improve the availability of health and welfare services in developing countries should include an increased emphasis on “. . . partnerships among communities, civil societies, the private sector and government.”^{1(p15)} The report from this symposium recommended that WHO member states explore ways of adopting the public–private partnership model for the delivery of health and welfare services. At the same time, though, the conference report acknowledged that there is a lack of scientific evidence regarding the effectiveness of these partnerships.

In 2003, the WHO Centre for Health Development asked researchers at Stanford University to assist in the development of a research protocol to evaluate the effectiveness of the public–private partnership model. From the

development of this protocol it became evident that there is tremendous enthusiasm internationally for use of the public–private partnership model to improve health care, but no common understanding about what precisely constitutes a public–private partnership. In addition, there is a lack of firm evidence of the circumstances under which a public–private partnership approach is preferable to more traditional models. I provide an overview of the history of the public–private partnership worldwide movement and propose criteria by which the effectiveness of public–private partnerships might be assessed.

PUBLIC AND PRIVATE SECTOR INVOLVEMENT IN HEALTH SERVICES

Article 25 of the United Nations' Universal Declaration of Human Rights² affirms that all people have a right to what Amartya Sen referred to as “social opportunities,” which he described as “the arrangements that society makes for education, health care, and so on, which

influence the individual's substantive freedom to live better.”^{3(p39)} On the basis of these principles, established at the time of the founding of the United Nations, responsibility for maintaining systems to promote health and welfare was situated primarily within the public sector. During the 1980s, political and economic disruptions in many areas of the world led to a reassessment of this reliance on the public sector. Both national governments and global economic organizations began to shift to an increasing reliance on the private sector for improvements in health and welfare systems. The restructuring of the British National Health Service under Prime Minister Margaret Thatcher and the restructuring of the Mexican health care system as part of the international response to its economic crises were examples of the movement toward privatization and increased reliance on market forces that became increasingly widespread.

William Hsiao of Harvard University published an analysis of



the effects of these marketization efforts in the health care systems of 4 countries. Calling marketization “the illusory magic pill,” Hsiao concluded that “neither pure centrally planned nor free-market health systems can achieve maximum efficiency. A complex mixed system seems to be the answer.”^{4(p356)} Hsiao called for a collaborative effort by public and private sectors to confront the health care challenges of developing countries. The effort would emphasize an incremental approach, evaluate demonstration sites on an experimental basis, and eventually expand the model based on evidence of its efficacy.

Around the same time Hsiao published his analysis, perceptions

about the role of the private sector in providing health and welfare services were rapidly shifting. Rather than adopting a pure privatization model, increased emphasis was placed on establishing partnerships between the public sector and various organizations in the private sector.⁵ The term “public-private partnership” became common and was typically referred to simply by its acronym “PPP.” Before 1990, the term public-private partnership rarely appeared in articles abstracted in PubMed. Figure 1 shows that between 1990 and 2004 there has been a steady increase in the use of the term.

The enthusiasm for the public-private partnership approach to

global health problems was evident in a series of articles published in 2000 and 2001. One article suggested that, “through the emerging new paradigm of public-private partnerships . . . the challenges of the myriad unmet health needs of developing nations can begin to be fulfilled.”^{6(p65)} Two articles described “the proliferation of public-private partnerships [that] is rapidly reconfiguring the international health landscape.”^{7(p549),8} An editorial in the *British Medical Journal* referred to public-private partnerships as “essential” for getting vaccines and new medicines to the world’s poorest populations.⁹ One author emphasized the

advantages of the public-private partnership model and issued a “global call for action.”^{10(p5)}

Despite increased attention to the public-private partnership model, there has been no consistent definition of what, precisely, constitutes a public-private partnership. WHO has acknowledged the diversity of arrangements subsumed under the public-private partnership moniker: “The term public-private partnerships covers a wide variety of ventures involving a diversity of arrangements, varying with regard to participants, legal status, governance, management, policy-setting prerogatives, contributions and operational roles.”¹¹

The enthusiasm for a public-private partnership approach to global health problems arose in response to the convergence of a number of forces during the mid- and late 1990s. The first was the growing skepticism directed at a private sector approach. A second force was a growing pattern of collaboration in the United States between the federal government, private universities, and private pharmaceutical companies in the development and marketing of new pharmaceutical products; a collaboration initiated by the Bayh–Doyle Act that was passed by Congress in 1980.¹² The third force was the decision by the Rockefeller Foundation, the Bill and Melinda Gates Foundation, and other organizations to rely extensively on the public-private partnership model when funding efforts to address the growing worldwide crises of

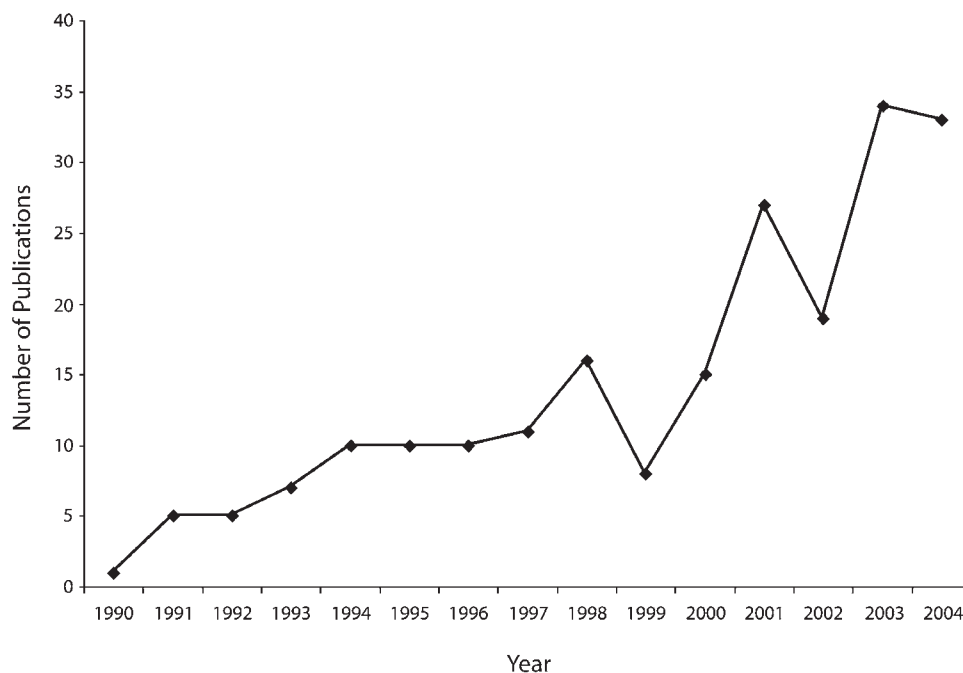


FIGURE 1—Number of publications abstracted in PubMed that contained the words “Public-Private Partnership(s)” in the title or abstract from 1990–2004.



HIV/AIDS, malaria, tuberculosis, and other major diseases.

Not all observers shared the enthusiasm of early public-private partnership proponents. Muraskin described the experience of establishing the global Children's Vaccine Initiative, citing "the political problems caused by organizational and national rivalries that the new [public-private partnership] venture faced from its inception."¹³(p1721) In a similar vein, Birn cited the "political obstacles to decentralizing fiscal power, redistributing resources in an equitable fashion, and eliminating the inefficiencies of separate but unequal health systems,"¹⁴(p81) that plagued Mexico's attempt to improve health and welfare systems through the integration of public and private sectors.

In 2001 the Bill and Melinda Gates Foundation provided a

grant of \$1 million in support of the worldwide Initiative on Public-Private Partnerships for Health (IPPPH).¹⁶ As part of this effort, IPPPH cataloged and categorized new and existing major public-private partnership efforts in health. Figure 2 shows that there was a dramatic increase in the formation of health-related public-private partnerships in the late 1990s. Of the 90 public-private partnerships identified by IPPPH, 72 (80%) were focused on specific diseases such as HIV/AIDS, malaria, and tuberculosis (Table 1). Only 1 was focused on improving health systems beyond specific illnesses or conditions. This pattern of successful public-private partnerships in a disease-specific context is reflected by recent published reports.¹⁷⁻²² However, the public-private partnership model in a

TABLE 1—Number of Public-Private Partnerships Identified by the Initiative on Public-Private Partnerships for Health: 1974–2003

Public-Private Partnership Focus	Number of Partnerships
HIV/AIDS and other sexually transmitted diseases	21
Malaria/dengue	16
Tuberculosis	6
Other specific diseases	29
Vaccines for preventable diseases	5
Reproductive health	4
Syringe distribution	4
Other miscellaneous	2
Drug safety/counterfeit and substandard drugs	2
Health policy/health systems	1

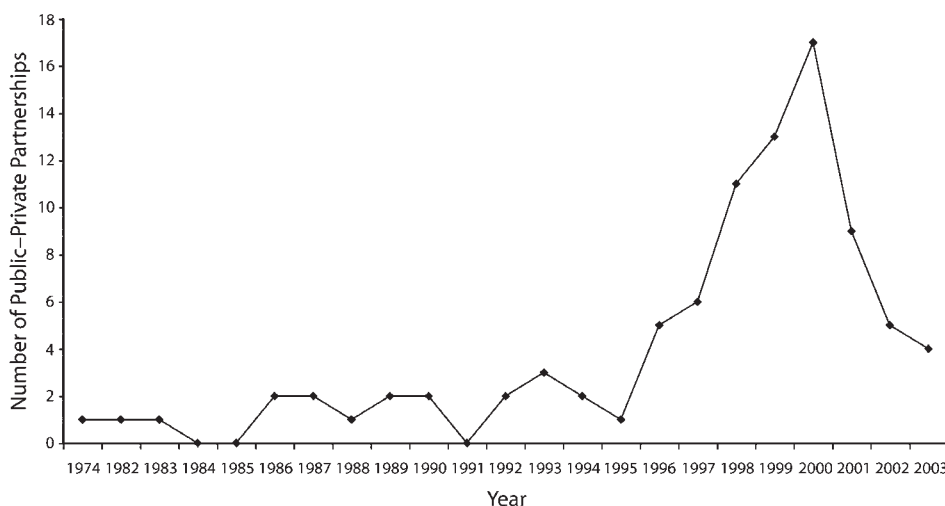
disease-specific context has not been uniformly successful. A review of the experience with public-private partnerships cautioned that,

although such partnerships may be able to produce the desired outcome, they also bring their

own problems. . . . [W]e know little about the conditions when partnerships succeed . . . but considerable skepticism exists about the motives of private firms that engage in partnerships, even when the efforts have substantial public health benefits.²³

Roy Widdus, the project manager for IPPPH, reviewed the record of public-private partnerships for health and concluded, "These partnerships should be regarded as social experiments; they show promise but are not a panacea."²⁴(p713)

Few reports address the use of a public-private partnership approach to improve health delivery systems for a wider range of health problems, but 1 that does described an effort in the city of São Paulo, Brazil, to create a partnership between the city government and private physicians to provide health care for the poor residents of 2 São Paulo neighborhoods.²⁵ The plan ended after 5 years amid controversy and evidence of



Source. Initiative on Public-Private Partnerships for Health.¹⁵

FIGURE 2—Number of new public-private partnerships in health created from 1974–2003.



poor administration and financial irregularities.²⁶

In the absence of research that established the effectiveness of the public–private partnership model, and in the face of expanded efforts to apply the public–private partnership approach beyond a disease-specific context, concerns began to arise about the appropriate role of public–private partnerships. Buse and Waxman suggested that public–private partnerships have potential risks as well as benefits and recommended that before investing more deeply in the public–private partnership model, “WHO should promote and support research aimed at identifying good partnership practice and leveraging private sector contributions to health development.”^{27(p752)} It was in the context of these recommendations that the WHO Centre for Health Development commissioned a research protocol.

A PROTOCOL TO ASSESS PUBLIC–PRIVATE PARTNERSHIPS

In 2004, a panel of 9 scholars from around the United States, each with expertise in a discipline relevant to international health, convened for a 2-day meeting. Each scholar contributed his or her perspective on the optimal methodology to establish a protocol to evaluate the effectiveness of public–private partnerships in improving health and welfare systems worldwide. There are 8 principal aspects of the protocol.

The Relationship Between Public and Private Sectors

When evaluating public–private partnerships, 1 of the first issues to be confronted was the difficulty establishing a clear, consistent, and reasonable division between which organizations should be considered in the “public sector” and which organizations should be considered in the “private sector.” In the research that preceded the development of the protocol, it became apparent that there was no common understanding of what precisely constitutes the public or the private sectors. Some individuals considered only for-profit, market-based organizations to be within the private sector; private, not-for-profit organizations were considered to be in the public sector. Others, including representatives from the WHO Centre for Health Development, believed that only governments and government agencies were in the public sector, and all nongovernmental organizations, whether for profit or not for profit, were in the private sector.

Although it was not necessary for the purposes of the protocol to establish a universally acceptable division between the public and private sectors, it was nonetheless important for methodological consistency to establish such a distinction as it pertains to the research on the effectiveness of public–private partnerships. Accordingly, the consultants who participated in this project concurred on the following distinction between public and private sectors:

For purposes of evaluating public–private partnership efforts, we include government agencies and nongovernmental organizations that have multilateral approval by formal state governments (e.g., treaties, charters) in the public sector, and those organizations, either for-profit or nonprofit, that act independently of formal multilateral state agreements in the private sector.

A key aspect of characterizing the involvement of the public sector was describing the administrative structure of the public sector organization(s) that were involved in the public–private partnership effort. This included indicating whether the public sector agency was part of the central government or organization (e.g., a ministry or principal agency) or part of a local government or organization (e.g., a local health department or branch agency).

It was equally important to accurately characterize the nature of the private sector involvement. Private sector participation can take many forms, ranging from international nongovernmental organizations to local nonprofit organizations to market-based for-profit firms. One or more of these organizational forms may participate in a public–private partnership. It was important to identify the structure of the participating entities to fully appreciate the extent to which market forces affect the outcomes of the public–private partnership. If more than 1 organizational type participated in the public–private partnership, it was

important to identify the hierarchical decisionmaking process among or between the private sector participants (i.e., does 1 organization have more decisionmaking authority than the other[s]). Finally, in those cases in which market-based organizations participated in the public–private partnership, it would be important to characterize the market system in which the public–private partnership operates. The effects of a public–private partnership in a highly regulated market may be quite different than those in a more loosely regulated market.

The Nature of the Partnership Between Public Sector and Private Sector Participants

It will be important for methodological consistency to describe in some detail the partnership relationship between the 2 sectors. In some cases, that relationship may be a loose one, with little in the way of formalized agreements. In other cases, that relationship may be or may approximate a formal partnership. For the purposes of the protocol, the concept of partnership, “. . . implie[d] a commitment to a common goal through the joint provision of complementary resources and expertise, and the joint sharing of the risks involved . . . [that was] directed from the outset.”^{28(p694)}

Although such a formal definition of partnership arrangements may describe many public–private collaborative efforts, there could be other arrangements that are neither as formally structured nor as specifically focused as this



definition implies. Accordingly, research that addresses the effectiveness of public–private partnership efforts need not require that a formal partnership agreement exist between public and private sector participants in order for a case study to be undertaken.

In describing the partnership arrangement between public and private sectors, it will also be important to address the following question: why is each participant there? Partnership arrangements involve shared benefits for both partners. In some cases, the expected benefits for each participant might be spelled out clearly as part of a partnership agreement. Alternatively, the benefits to 1 partner may be more indirect and may accrue in various ways or at various times. Clarifying the expected benefits of the partnership relationship will be an important part of the analysis of the effectiveness of a public–private partnership.

The Financial Arrangements of the Public–Private Partnership Project

There are a number of ways a public–private partnership project can operate in an effort to improve health and welfare services. These include (1) establishing direct service provision by a new public or private entity with joint funding; (2) expanding existing private sector service provision through increased public sector funding, or conversely, expanding existing public sector service provision through increased private sector

funding; and (3) establishing new private sector service provision through new public sector funding, or conversely, establishing new public sector service provision through new private sector funding.

The ability to understand the effectiveness of a public–private partnership project will depend on an accurate description of the form and financing of enhanced service provision. Of particular importance is clarifying whether the project represents a new investment from the private sector in public sector service programs, or, alternatively, a new public sector investment in private sector service programs. Placing this analysis in the context of the

history of financing health and welfare systems in the country or region under study also will be important.

The Structure, Scope, and Functions of Enhanced Health and Welfare Services

Once the administrative structure of a public–private partnership project has been established, the actual manner of the service provision must be carefully detailed. Differing organizational forms can have quite different outcomes within the same market context. Characteristics of the enhanced service programs that should be included in the public–private partnership analysis can be seen in the box on this page.

Characteristics of the Enhanced Service Programs to Be Evaluated in a Public–Private Partnership

- Types of services provided: medical care, social support, public health
- Formalized management system, including processes for decisionmaking, resource allocation, and fiscal oversight
- Administrative linkages between public and private sectors; ongoing management process
- Centralization versus decentralization of services
- Hospital-based versus central facility-based versus community-based
- Emphasizes facilities versus emphasizes labor-intensive services
- Operational linkages between public and private sectors for activities such as training, research, conferences, and collaborative project planning
- Level of professional activities involved: physicians, nurses, other certified providers
- Extent to which pharmaceutical treatments are involved, and the policy for pharmaceutical choice, pricing, distribution
- Mechanism of payment for services: budget, capitation, fee-for-service, user fees
- Types and degrees of risk involved and which partner was most susceptible to risk

Government Policy Enacted to Promote Partnership Efforts

Research on the effectiveness of public–private partnerships needs to clarify the policy process by answering questions such as: were new multilateral treaties or compacts required? Were new national laws required? Were new national regulations (without the enactment of new laws) required? If so, were they national or regional? Were new public sector regulatory or oversight agencies or processes required? Were any legal or regulatory changes made by executive decision or legislative action? Did any international organization impose needed legal or regulatory changes?

Measuring the Effectiveness of the Public–Private Partnership

A crucial aspect of public–private partnership research is the ability to identify and quantify outcomes and to establish that changes in these measures that coincide with public–private partnership efforts were actually the result of public–private partnership activities. Addressing questions such as the following should use both qualitative and quantitative methods of analysis, as appropriate to the situation:

1. What were the intended outcomes of the public–private partnership effort?
2. Did the effort target specific aspects of health and well-being for improvement?



3. Did the effort identify specific, measurable indicators of the intended outcomes?
4. Did the effort identify specific target levels to be attained for these indicators?
5. Are the methods used to measure the outcome indicators reliable and consistent over time?
6. Did the indicators change during the period of the effort under study? If so, in the desired direction? Did they attain the target levels?
7. Are there sufficient longitudinal or comparison data to support the conclusion that identified changes in the indicators were the result of the programs and activities under study?
8. Were there any outcomes from the effort (either beneficial or detrimental) that were not expected to occur?

Assessing Issues of Equity

A crucial aspect of WHO programs is to enhance equity in health and well-being. Accordingly, research on the effectiveness of public-private partnership efforts should include specific data regarding the effect of the public-private partnership efforts on equity for vulnerable groups as an outcome distinct from the assessment of overall effectiveness described above. The examination of equity will include addressing several key questions.

1. Do target outcomes and indicators adequately reflect outcomes specific to vulnerable

groups (e.g., maternal and child health for gender equity) as well as general population outcomes (e.g., mortality rates)?

2. In selecting target levels of outcome indicators, are group-specific levels set so as to reduce previous inequities?
3. How did the public-private partnership effort affect the bottom 20% of the population, based on measures of socioeconomic status or health status, in comparison to the results for the population overall?
4. Was there a reduction in preexisting inequities coincident with the effort under study?

Identifying Potential Weaknesses of the Analysis

As is the case in all carefully done research, if the members of a study team identify weaknesses in their analysis that may limit the ability to generalize from their study to other contexts, it is incumbent on those members to identify and characterize those weaknesses. The weaknesses may be the result of factors beyond their control (e.g., missing data) or may be because of factors specific to the case study (e.g., inconsistencies in the way data were gathered). Identifying potential weaknesses in a study does not detract from the quality of the study. On the contrary, the quality of the study may be enhanced by a frank discussion of potential weaknesses in the study methodology and by including suggestions on how to improve it.

RESPONSE TO THE PROPOSED PROTOCOL

In March 2004, this research protocol was presented to a global consultative meeting convened at the WHO Centre for Health Development. Representatives from several member states as well as representatives from WHO regional offices provided feedback and suggestions for revision. The feedback focused on 2 principal points. First, a number of member states wanted a more loosely structured definition of what constitutes a public-private partnership to include in the analysis existing efforts at privatization that do not involve a true partnership. Second, a number of states emphasized the need to have analyses rapidly available to meet local political objectives, even at the expense of loss of methodological rigor or consistency.

It was clear from the discussions at the consultative meeting that there is continued confusion within the WHO as to the distinction between creating structured public-private partnerships and efforts at local privatization that do not involve partnership efforts. Some participants voiced substantial resistance to excluding from the analysis programs that follow historical market-based privatization models of the type described by Hsiao.⁴ This resistance of certain member states is despite the statement by WHO headquarters that, "Public-private partnerships for health should be distinguished from privatization."¹¹ Nevertheless, it

was the firm recommendation of the consulting scholars who helped develop the protocol that efforts that involve privatization exclusively, without efforts at forming new, cross-sector partnerships, should not be included in the analysis of public-private partnership effectiveness.

Similarly, a core assumption in developing the protocol is the need for methodological rigor and consistency. As such, the analysis of public-private partnership effectiveness must exclude considerations of local political needs or exigencies.

CONCLUSIONS

During the 1990s, public-private partnerships evolved into a very popular means of addressing a number of serious diseases in the developing world. Although there has been substantial success in using the public-private partnership approach, the record of success for public-private partnerships is still mixed. There has been recent enthusiasm within the WHO and elsewhere for extending the public-private partnership model to the delivery of health and welfare services for a wider range of health problems. There are few available data about the success or problems of using a public-private partnership approach to improve the delivery of health and welfare services, because few published case studies of successful public-private partnerships of this type are available. Further research on the effectiveness of public-private partnerships,



using standardized research protocols, is needed before substantial resources are invested in the expansion of public-private partnership efforts. ■

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