



Enhancing Public Service Efficiency Through Public-Private Partnerships: A Focus on Healthcare in Canada

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Abstract. This paper explores the role of Public-Private Partnerships (PPPs) in enhancing the efficiency of public service delivery, with a specific focus on healthcare services in Canada. Rooted in neoliberal economic principles and evolving in response to government deficits and aging populations, PPPs have become a viable approach for governments worldwide. In the context of Canadian healthcare, PPPs aim to address resource shortages, healthcare distribution disparities, and budget constraints by leveraging the strengths of both the public and private sectors. The paper analyzes the application of PPPs in Canadian healthcare, emphasizing their potential to integrate resources, foster knowledge exchange, mitigate project risks, and optimize resource allocation for improved efficiency. However, it also acknowledges instances where PPPs may lead to higher costs, increased risks, and operational delays, potentially reducing their efficiency. Drawing on diverse definitions of PPPs, the study outlines their operational modes in Canadian healthcare and compares their efficiency with the Traditional Public Sector model (TIP). While highlighting the advantages of PPPs, it critically recognizes situations where they may fall short. Canada's prominent position in PPP development, particularly in healthcare, offers valuable insights into the global advancement of PPPs in various sectors.

Keywords: Public-Private Partnerships (PPPs), efficiency, healthcare services, Canada, resource allocation, knowledge exchange, project risks, Traditional Public Sector model (TIP).

1 Introduction

Public-Private Partnerships (PPPs) represent a novel approach to delivering public services, rooted in Hayek's neoliberal economic thinking and the post-World War II international order. As government deficits grew in high-welfare societies, coupled with an aging population, PPPs became a viable option for governments worldwide. This paper focuses on PPPs in healthcare services in Canada, a country grappling with resource shortages, unequal healthcare distribution, and budget constraints. PPPs in healthcare aim to enhance service supply and quality by leveraging the strengths of the public and private sectors. Canada introduced PPPs in healthcare during the 1990s as part of healthcare reform, where the private sector designed, built, operated, and maintained

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non-core healthcare facilities, shifting the government's role to that of a purchaser and supervisor [1]. This paper analyzes the application of PPPs in Canadian healthcare, highlighting their potential to integrate resources, facilitate knowledge exchange, mitigate project risks, and optimize investment allocation for enhanced efficiency. However, it acknowledges that differing stakeholder interests may sometimes make PPPs costlier, riskier, and less efficient than the traditional public sector model (TIP), leading to operational delays. This study outlines various PPP definitions, outlines their operation in Canadian healthcare, and contrasts PPPs and TIP in Canada, ultimately suggesting that PPPs are generally more efficient [2], albeit with a critical acknowledgment of cases where they may not be.

2 Definition of PPPs: An Overview

Public-Private Partnerships (PPPs) have gained prominence across 135 countries as a means to develop infrastructure and deliver essential public services. The diverse application of PPPs is influenced by each country's institutional framework, economic development, and their unique interpretation of PPP concepts. Varied definitions of PPPs by key sectoral institutions are outlined below:

World Bank: PPPs signify a collaboration wherein the public sector, driven by the ultimate goal of providing public goods, forges agreements with the private sector. The private sector assumes a substantial portion of project risks and responsibilities, while benefits are distributed based on project performance [3].

European Commission: In the context of PPPs, the government represents the public sector, and it teams up with the private sector to establish partnerships via project contracts. The private sector assumes a pivotal role in coordinating project financing.

HM Treasury: PPPs manifest as a partnership uniting the public and private sectors, characterized by a multiparty approach. This encompasses the construction of specific facilities and services integral to project implementation [4].

Canadian Council for Public-Private Partnerships (CCPPP): The collaboration between the government and the private sector aims to address public needs. It necessitates specialized knowledge, expertise from various stakeholders [5], and a steadfast commitment to their respective project responsibilities.

3 Operation of PPPs in Canadian Healthcare Services

PPPs are applied in Canadian healthcare services through various operational approaches. Selecting the appropriate mode for a project involves considering factors like national laws, regulations, policies, the allocation of rights and responsibilities among project stakeholders, and the project's unique context. Xing (2020) provides a summary of different operational methods for PPPs in Canadian healthcare services, as shown below in Figure 1 [11]:

Method	Operation
<p>DBFMO (Design-Build-Finance-Maintain-Operate)</p>	<p>The public and private sectors collaborate through a PPPs contract in which the private sector is responsible for the hospital's design, construction, financing, maintenance, and operation for the duration of the project, maximizing risk transfer from the public to the private sector. The public sector owner takes over the hospital at the conclusion of the contract time and is responsible for its upkeep and operation.</p>
<p>DBFO(Design-Build-Finance-Operate)</p>	<p>The DBFO model is still a relatively small part of Canada's health care sector, as the private sector is responsible for the post-operational aspects of the program, while most of the public sector wants to ensure the quality and efficiency of care by running it themselves.</p>
<p>DBFM(Design-Build-Finance-Maintain)</p>	<p>This is the most popular type of PPP in the Canadian health-care industry. The private sector is in charge of the hospital's design, building, funding, and upkeep. The private sector is responsible for the hospital's design, construction, financing, and maintenance, while the owner is responsible for its operation, with ownership reverting to the public sector at the end of the project contract and the public sector responsible for its maintenance.</p>
<p>DBF(Design-Build-Finance)</p>	<p>The private sector is responsible for the hospital's design, building, and funding, while the public sector is responsible for its upkeep and management, with the public sector ultimately owning the hospital.</p>
<p>BF(Build-Finance) and BFM(Build-Finance-Maintain)</p>	<p>Neither of these models includes a hospital design component. They are suitable for hospitals that have been designed but not yet built, and the public and private sectors can work together using the BF or BFM models to facilitate the project process.</p>

Fig. 1. Different ways of operating PPPs in healthcare in Canada

According to Xing (2020), the prevailing model for Canadian PPPs in healthcare services is the DBFM approach. However, this model encountered challenges, as seen in the New Ottawa Hospital redevelopment project, where certain project aspects remained incomplete. To expedite the project's completion, the Canadian government began contemplating a shift toward a more efficient approach, actively involving the private sector. For instance, in Ontario, Canada, the operational choice hinges on project progress. If the project is already designed before PPP implementation, there's considerable flexibility to opt for either the BF or BFM modes of operation [11].

4 Comparison of the efficiency of PPPs with TIP.

To assess the relative efficiency of PPPs, we will compare them with Traditional Procurement (TIP). Traditional Procurement (TIP) is a conventional method for public infrastructure projects [6]. In TIP, the government handles project planning and design, and it issues separate tenders for the construction and operation phases. After project completion, the government assumes responsibility for ongoing operation and maintenance, or it may reproduce services from a qualified operator. To illustrate the key distinctions between PPPs and TIP models, refer to the diagram below in Figure 2.

Difference	PPPs	TIP
Project phase	Full lifecycle integration of infrastructure projects	Separation of tasks in each phase of an infrastructure project
Contracts	Output performance-based contracts	Contracts based on cost inputs
Payments and incentives	Payments based on project delivery performance	Regular payments throughout the project
Financing	Private sector responsible for some or all of the financing	Government sector responsible for financing
Project Management	Private sector project management	Government sector management or management contract

Fig. 2. Comparison of the efficiency of PPPs with TIP

5 Enhancing Efficiency: PPPs vs. Traditional Public Sector Service in Canada

PPPs offer an efficient framework for integrating resources and promoting knowledge exchange. Traditional Infrastructure Procurement (TIP) often grapples with resource underutilization, subpar service quality, and inefficiencies stemming from the mismatch between project inputs and outputs. Davoodi and Tanzi (2004) attribute these

issues to poor planning within TIP, often due to a lack of public sector expertise, resulting in suboptimal value for money. Political interests and corruption can further hinder project selection, introducing biases that inflate costs or divert funds to less profitable projects, especially in capital-intensive ventures.

In contrast, Public-Private Partnerships (PPPs), effectively address these TIP shortcomings by fostering collaborations between the public and private sectors. This collaborative approach leverages the public sector's healthcare resources and the private sector's expertise to maximize their respective interests, providing high-quality services efficiently [7].

The Abbotsford Regional Hospital & Cancer Centre in Canada, a prime example, illustrates how PPPs optimize resource utilization. Its transition from a resource-strained facility to a resource-integrated medical center through PPPs. The public sector handles clinical services and medical resources, while private partners manage daily hospital maintenance, equipment upgrades, and premises [8]. This partnership facilitates knowledge exchange between both sectors. According to CCPPP data, PPPs significantly boosted the hospital's capacity, accommodating around 60,000 patients annually. Moreover, the project created approximately 600 construction jobs, stimulating local employment.

PPPs also excel in minimizing project risks and optimizing investment resource allocation. Almalki and Al-Hanafi (2018) note that healthcare PPPs involve sharing responsibilities and risks under specific contractual arrangements, enhancing service efficiency and quality [1]. In healthcare PPPs, risks are allocated strategically: the public sector manages national-level risks, policies, and regulations, while the private sector assumes most financing, construction, and operational risks. PPPs mitigate budget overruns and delays, as the private sector bears the brunt of project issues, promoting investment efficiency.

In Canadian healthcare services, PPPs allocate risks reasonably through contracts. This clear division of labor assigns full project responsibility to the private sector, reducing disagreements and risk misallocation, particularly crucial in projects with multiple social capitalists involved [9]. Canada employs Value for Money (VFM) assessments to select the best procurement model for projects, ensuring efficiency [10]. VFM assessments analyze project risks, costs, and market conditions, ultimately comparing PPP project costs with traditional models. If PPPs yield lower costs, they are deemed value for money, effectively avoiding risks and enhancing efficiency.

6 Challenges in PPPs' Efficiency

PPPs projects may not consistently deliver efficiency due to higher costs, increased risks, and operational delays. Firstly, healthcare PPPs are inherently complex, leading to information asymmetry between the public and private sectors, which can raise costs. Private sectors often possess more information and technical advantages, allowing them to employ pricing strategies that favor their interests. Additionally, regulatory and auditing mechanisms in PPPs may prove insufficient, enabling the private sector to inflate

costs unjustifiably for higher profits. Public sectors lacking expertise may require independent specialized organizations, like legal advisors and risk assessments, further increasing transaction costs, some surpassing those of the traditional public sector model (TIP). For instance, in the Benton Civic Hospital project in Canada, \$33.9 million was spent on consultancy fees to select the winning bidder, significantly inflating transaction costs without ensuring value for money[5].

Secondly, in PPPs, private sectors often bear more investment and operating costs, leading to higher healthcare service prices. Moreover, public sectors may need to assume certain risks or costs for the private sector, placing an additional financial burden on the government. Complex investment structures and multi-party cooperation in healthcare PPPs can disrupt construction schedules, with private sectors facing funding and manpower constraints, causing project delays. For example, the Benton Civic Hospital in Canada, initially scheduled for construction in 2002[6], didn't commence until 2005, ultimately costing \$550 million, significantly exceeding the initial estimate. These delays result in imprecisely quantifiable social benefits, such as delayed healthcare service delivery to citizens. Additionally, the Abbotsford Regional Hospital & Cancer Centre project in British Columbia experienced a 40.5 percent cost increase due to project design changes and delivery delays, leading to higher government expenditures and a loss of anticipated social benefits.

7 Conclusion

In conclusion, Public-Private Partnerships (PPPs) represent significant initiatives for enhancing the efficiency of public service delivery through collaboration with the private sector. In the context of Canadian healthcare PPPs, the joint efforts of the public and private sectors have yielded considerable improvements in service efficiency, characterized by the judicious allocation of resources and risks. This paper employs the case of PPPs in Canadian healthcare services to demonstrate that, in most instances, PPPs in service provision promote knowledge exchange, mitigate project risks, and achieve a more rational allocation of resources, thus enhancing overall efficiency. However, it is crucial to acknowledge that PPPs may not consistently deliver optimal efficiency due to potential higher costs, increased risks, and operational delays in specific scenarios.

Canada stands out as a pioneer in PPP development, with healthcare PPPs accounting for over 35% of all projects. By examining healthcare PPPs in Canada, this study contributes valuable insights into the efficiency of service provision through PPPs. These findings can inform the further development of PPPs in infrastructure sectors in other nations, bearing significant practical relevance. Future research endeavors should delve deeper into addressing cost and risk-related challenges associated with PPPs to maximize their benefits.

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