
The Application of Public-Private Partnership for the Purpose of Implementing State Policy in the Sphere of Health Care

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Abstract:

Purpose: The problematic of functions and responsibilities' distribution of the public and private sectors is a debatable issue in the study of the most effective PPP models. The objective of this academic paper is to study the features of the application of public-private partnership for the purpose of implementing state policy in the sphere of health care.

Design/Methodology/Approach: Based on the in-depth case study for data collection and semi-structured in-depth interview, detailed data on the experience of PPP projects in Ukraine have been collected and analysed with statistical methods.

Findings: As a result, the problem of implementing the PPP model has been revealed being the impossibility of municipal authorities to provide guarantees of funds' return to a private partner. This problem is common in the countries with transition economies, where the concept of new public governance has not been implemented yet. The experience of Italy and China as an example of effective implementation of hybrid PPP models in the health care sphere has been studied.

Originality/Value: Research proves the importance of compliance with the obligations of the municipality and its active participation in the implementation of the PPP project. The basic limitation is the inability to scale the results, the experience of the PPP project to other regions within countries due to the lack of practice of implementing the PPP mechanism.

Keywords: Public-Private Partnership, sphere of health care, hybrid PPP models, integrated PPP projects, democratic responsibility, hybrid insourcing.

JEL Codes: R13, I11, I15, I18.

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1. Introduction

The state crisis in the sphere of social services has led to the development of public-private partnership (PPP) models since the 1980s (Yang *et al.*, 2020). Systematic integration of private health care providers into the public health care sector took place (Gupta *et al.*, 2020). Market-type reforms of health care in advanced countries show their effectiveness, reduced prices for services, costs of medical care, time and search for medical services by patients, the level of confidence in the sector is increasing (Fang and Cao, 2019). Since 2015, state policy in the sphere of health care has been based on the concept of New public governance. This concept is the basis of a new form of PPP based on contracts and principles of trust, cooperation, democratic government responsibility, network management forms instead of the principles of developing a competitive medical market of 1980-2010 (Dickinson, 2016). Developing countries as well as advanced countries have been more and more implementing public-private partnership (PPP) projects to increase the capacity of the health care system. The time of service provision is reduced by 19%, the number of patients who can be admitted by 51% for the same period of time increases, the population's access to medical services expands (Sakowska *et al.*, 2019).

Integrated PPP projects are an effective funding model for an integrated health care substructure (Top and Sungur, 2019). The ability of the population to pay for private medical services within the conditions of the development of private medicine, increasing the cost of services through technological solutions based on PPP remain the issues of concern. The level of PPP perception by the population determines the level of use of private medical services and depends on the population group, level of education, income per family member, health status (Wang and Zhang, 2019).

The second important problem that exists in the context of reforming the medical sector is the level of satisfaction of the population's needs with medical services due to the difficulty of ensuring the efficient allocation of resources in health care sector by the state (Ampong-Ansah *et al.*, 2020). This academic paper is intended to study the advantages and disadvantages, possible negative consequences of PPP implementation in countries with economies in transition. The main purpose of the scientific research is to study the features of the application of public-private partnership for the purpose of implementing state policy in the sphere of health care. The following tasks are outlined within the defined objective; to identify the most effective forms and types of PPP in the sphere of health care and to reveal positive and negative effects of partnerships in the sphere of health care.

2. Literature Review

Public-private partnership (PPP) can be considered as a long-term contractual relationship based on agreements between the state and private sectors on the development of public infrastructure and social services (Iossa and Saussier, 2018). PPP is considered as an important form of hybrid organization, which with proper

design and management can ensure the implementation of innovative solutions to complex problems through a combination of different institutional mechanisms (Villani *et al.*, 2017). “*Public-private partnerships (PPPs) is a preferred approach to deliver large-scale public infrastructure*” (Siemiatycki, 2015). Under the conditions of formation of a new type of relations, state - private sector - society (Holovaty, 2015), new forms of PPP and new elements are emerging that transform the mechanisms of PPP. The basic characteristics of PPP are participants from public, private and civil society sectors in donor and recipient countries, sharing of resources, risks and responsibilities among partners, degree of partnership based on commitment and type of relation (such as contractual), organization of the partnership based on form and decision-making, alignment with and consideration of local context and regulation, common objective oriented towards promoting development in third-world countries, specific partnership function such as rule-setting or project-oriented, sustainable effects in the form of a lasting impact beyond the partnership (Brogaard and Petersen, 2018).

The implementation of PPP in the 1980s led to the emergence of the concept of New Public Management (NPM) in the 1990s in advanced countries (Young *et al.*, 2020). And only from the beginning of 2000s this concept began to be used in developing countries. However, this concept failed, which led to the emergence of new PPP models (backourcing, hybrid insourcing as a combination of insourcing and private outsourcing) and a new paradigm of project implementation on a partnership basis. Funding for partnership at the national level through the legal regulatory mechanism is not effective as soon as state funding for the partnership ceases, and efficiency decreases (Wutzke *et al.*, 2018). This means that the private sector should be interested in PPPs, pursue its own goals in project implementation, and financial incentives for PPPs at the national level do not play a motivating role to invest in the health care sector in long-term perspective. The potential role of PPPs will increase for two reasons, tight budget constraints (Buryk *et al.*, 2019), private sector’s participation interest in the health care sector and providing medical services (Iossa and Saussier, 2018).

3. Methodology

The present investigation is based on a new concept of public health policy - new public governance or service (Dickinson, 2016; Yang *et al.*, 2020), which provides the implementation of hybrid models of PPP in the sphere of health care. The explanatory methods of analysis have been used in the investigation, study and generalization of the research results of new PPP models in the sphere of health care in different countries (Italy, China) has been carried out.

At the first stage of the investigation, the experience of Italy and China for the period 2017-2020 has been examined concerning the issue of new hybrid PPP models’ construction in the health care sector, and key elements of the effectiveness of such models have been formed.

At the second stage of the investigation, the in-depth case study method has been used to collect data on the results of the PPP project on the basis of the City Clinical Hospital No. 3, the city of Zaporizhia, Ukraine. The in-depth case study method for collecting data on the project has been applied due to the possibility to collect detailed data on the experience of PPP projects, which cannot be done with other data collection methods (questionnaire). The in-depth case study was based on the method proposed by Villani *et al.* (2017). The authors have introduced elements of new hybrid PPP models based on the concept of new public governance, complementary core skills, long-term technology commitment, effective project financing, networking. These elements became the basis for the analysis of the data collected during the interview. A semi-structured in-depth interview has been used to conduct the in-depth case study. All involved parties to the project participated in the interview, both from the side of local governments and from the private investor, namely, Program Manager for the USAID Public-Private Partnership Development Program, Executive Committee of Zaporizhia City Council as an authorized body for the exercise of powers on behalf of Zaporizhia City Council in the course of implementation of public-private partnership, employees of the City Clinical Hospital No. 3, the city of Zaporizhia, Ukraine.

4. Results and Discussion

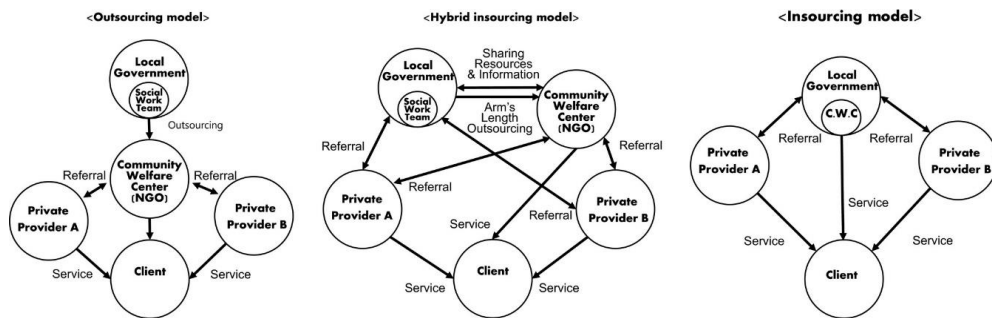
4.1 Hybrid PPP Models in the Health Care Sector of Advanced Countries

Scientific publications for the period of 2015-2020 examine the various effects of PPPs in the sphere of health care. Scientists propose new PPP models, including a hybrid healthcare credit model (Yang *et al.*, 2020) and hybrid healthcare models (Villani *et al.*, 2017). The model was highly praised for its innovation and became widespread among local authorities. The hybrid model is based on the principles of equality and active cooperation, the formation of clear goals of PPP and the perception of employees in the field of medicine (Yang *et al.*, 2020). The hybrid insourcing model is a new PPP model (Yang *et al.*, 2020). This model solves the problems of previous types of PPPs within the framework of new public management's concept, based on market competition and social services monitoring system. State policy ensures the strengthening of the regulatory environment, in particular by investing in public human resources (skills, knowledge), and regulates the legal environment in order to create a standard (regulatory) PPP model (Engel *et al.*, 2014).

Compared to traditional models of health care service delivery, the hybrid insourcing model provides a combination of insourcing and private outsourcing. The effectiveness of such model depends on the role of local government body, either a general manager (head) or an institutional entrepreneur. Local government authorities can plan health care services and take measures to improve the quality of health care services. This determines the basic difference between the hybrid model and traditional model, in the classic version, local government authorities only assess

and monitor the conclusion of contracts, reorganization of medical services; in the hybrid model, local government authorities are responsible for health care services, reporting and service delivery. The basic elements and features of such hybrid model of PPP in the sphere of health care are reflected in Figure 1 (model of hybrid insourcing).

Figure 1. Comparison of the models of outsourcing, insourcing and hybrid insourcing



Source: Yang et al. (2020).

Recent research results confirms the critical role of leaders of local government authorities. This confirms the significant role of the public sector in the implementation of PPP, which is responsible for social services and controls the private sector. Leadership in the public sector, interest in the outcome and goals of PPP implementation of officials strengthens the role of the public sector as a regulator of PPP.

The considered hybrid models of PPP in the sphere of health care (Table 1) prove greater efficiency of PPP1 than PPP2. Complementarity and integration of resources, which is characteristic for PPP1, are crucial for the effectiveness of PPP. Whereas the “substitution effect” in outsourcing resources, as in the case of PPP2, leads to less effectiveness of PPPs at all stages of partnership.

Table 1. Hybrid PPP models: a comparative analysis

Element (model characteristics)	PPP1 integrated insourcing hybrid model	PPP2 outsourcing hybrid model
Complementary core skills	Government applied a series of critically important skills including legal and financial competences, technical skills, project management competences, and cost mapping know-how.	Outsourcing to the private partners and the government essentially relied on private parties' competences.
	The government used all the competences outlined above for monitoring activities, assessing	The private partners used technical skills and implemented managerial competences.

	quality, and supporting project management.	
Long-term technology commitment	The design and implementation of integrated technological solutions, taking into account the lifecycle of the entire project. The problems were clearly discussed and considered, and the interaction of technological change with other asset, process and governance dimensions of the business model were also taken into account.	Technology design did not properly take into account the impact of the new hospital size and location, outside the urban centre, on the public transportation system as well as on citizens' behaviours. The focus on architectural innovation in the design and building phases had a negative impact on operation costs.
Effective project financing	A comprehensive financial and insurance package involving all partners. The insurance package was framed to allow for financial renegotiation and in particular for the solution of possible financial problems.	Major financial troubles were addressed by-passing the original project financing framework. Either additional financial resources were disbursed by the government to solve problems experienced by construction companies in the building phase, or litigation arose between the regional government health agency and private partners over the excessive return on provided services.
Networking	A system of pre-existing personal and institutional relations constituted an essential asset in the design phase. A network provided useful, specific competences and advice to support the internal skills of the partners. Networking compensated for the lack of specific expertise in different fields on the side of the government.	The system of relations – mainly political ones – was exploited by the private partners to increase the probability of a successful proposal in the design phase, or to extract additional funds to cover cost overruns in the building phases.

Source: Yang et al. (2020).

In other terms, while in PPP1 networking contributed to the effective establishment of the PPP and, thus, to the long-term creation of value, in PPP2 it was basically employed by single partners to capture short-term value. New studies in the sphere of public administration prove the importance of experience in the formation of public-private relations, independence of the private sector and officials in the implementation of PPP projects (Yang *et al.*, 2020). The development of entrepreneurial skills of local governments is an important objective in the implementation of PPP projects (Akimov *et al.*, 2020).

4.2 Review of the Current Practice of PPP Projects in the Sphere of Health Care in Ukraine

The legislation of Ukraine on PPP does not contain a clear list of PPP models in accordance with the practice of advanced countries. According to Ministry of Economic Development, Trade and Agriculture in Ukraine, at the beginning of 2020, 187 agreements have been in effect on the basis of PPPs, of which 52 contracts and PPP projects are under the implementation stage (34 - public-private partnership agreements, 16 - joint venture agreements, 2 - others), 135 agreements and PPP projects are not implemented due to various reasons (4 agreements - expired, 18 agreements - terminated, 113 agreements are not fulfilled). Of these, only 2 agreements are connected with the sphere of health care (Ministry of Economic Development, Trade and Agriculture, 2020).

The review of the practice of the state and business testifies to the existing forms of cooperation in the sphere of medicine on the basis of PPP mechanisms with an equal level of participation of the private sector. Here are brief characteristics of examples of the most common practices implemented on the basis of PPP. Public procurement is the easiest and most common way of interaction between the state and the private sector. This type of relationship is of short-term nature and does not provide an active level of private sector's participation in decision-making. There are restrictions concerning the annual financing of such projects, which determines the attractiveness of this type of PPP in the health care sector. Such agreements do not take into account the investment obligations of the private partner, they are aimed at acquiring ownership of goods or services.

Lease of state / communal property: The Law of Ukraine "On Lease of State and Communal Property" defines the procedure for paid and term use of property necessary for the lessee in order to carry out entrepreneurial activity. The traditional lease model does not involve investment obligations. At the same time, the lessee has the right, at his own expense, to carry out modernization, technical re-equipment, reconstruction, improvement of the leased property, subject to agreement with the lessor, unless otherwise provided by the lease agreement. The complexity of the agreement approval procedure and the lack of prevalence of this type of relationship led to a low level of use of this PPP type in the health care sector.

Provision of energy services: The legislation of Ukraine provides the possibility of approval of energy service agreements, that is, agreements, the subject of which is the implementation of energy service by the contractor. Payment of the transaction is carried out as a result of energy services' implementation subject to a reduction in the level of consumption and / or expenses for the payment of fuel energy resources compared to consumption (costs). The specified type of agreement is characterized by certain features that make this type related with PPP agreements, the duration of the relationship (the duration of the agreement can reach 15 years), payment for services is carried out, taking into account the results of actual activities, subject to

the achievement of savings in heating costs. This PPP mechanism is in fact a public procurement of health care services by the private sector. The limited type of PPP exclusively by energy services does not make it possible to consider this model in detail as a standard for future practices' implementation in Ukraine (Onyshchuk *et al.*, 2019).

4.3 The Case of the PPP Project Implementation in the Sphere of Health Care in Ukraine

The United States Agency for International Development (USAID) P3DP program, which operates in Ukraine and together with the municipal authorities of the city of Zaporizhia creates the first PPP in the sphere of health care in Ukraine on the basis of the City Clinical Hospital No. 3 in the city of Zaporizhia. The project was launched in 2015. This project provides the joint use of hospital premises with a private partner who will modernize the premises, provide modern equipment and introduce new surgical techniques. The project is expected to attract 2 million USD over 25 years of existence.

Table 2. Information on the PPP project in the sphere of health care of Ukraine (the city of Zaporizhia)

Element (model characteristics)	Characteristics of the PPP project
Complementary core skills	<p>PPP project outsourcing is generally based on the skills and competencies of individuals. The private partner provides the project with technical skills, management skills in modernization of premises and supply of equipment.</p> <p>Local government authorities are responsible for monitoring and controlling the project implementation. Planning functions were not distributed between the private partner and the municipal authorities of the city. The management function has been delegated to a private partner. The head of the hospital is de jure responsible for the processes of planning and monitoring the project, while the private partner is responsible for the processes of modernization of premises, supply of equipment. The private partner is responsible for the competent staff in the process of equipment supply. Local government authorities are responsible for the skills of hospital staff in the process of using the equipment.</p>
Long-term technology commitment	<p>The government outsources material and technical resources.</p> <p>Local governments participated in the development of technological solutions. The issues of the project implementation have been clearly discussed with the private partner. Technological changes have been taken into account due to changes in management processes, other assets and human resources.</p>
Effective project financing	<p>In the event of financial difficulties, local governments did not fund the project. The municipal government was unable to provide guarantees to the private partner for a refund.</p>
Networking	<p>The existing system of institutional relations (including regional</p>

	participation) has been an important asset in establishing cooperation between the public and private sectors. The Executive Committee of the Zaporizhia City Council as an authorized body for the exercise of powers on behalf of the Zaporizhia City Council during the implementation of public-private partnerships provided consultation on the implementation of the project in the context of the development of documentation, reporting in order to ensure compliance with the legislation of Ukraine.
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Source: Own.

The project of reconstruction and management of the municipal institution of the city clinical hospital faced the problem of ineffective cooperation on the part of the local government authority. The barrier could not be overcome, despite the interest of a private partner. The basis of the project centered around the investment obligations of a private partner for the reconstruction, overhaul and modernization of the institution. Local government authorities had to provide guarantees of return on investment during the term of the agreement. As of present day, the project has been suspended due to the lack of refund guarantee.

As the construction manager has noted, “return on investment to a private partner is one of the main problems in implementing a public-private partnership. In Ukrainian realities, the budget may not be the source of such compensation, however, such compensation should be in the form of the commissioning of new capacities that would become private”.

The PPP model in the sphere of health care in Ukraine proves the importance of applying new principles of state administration (cooperation, democratic responsibility) and the concept of new public governance or service (Onyshchuk *et al.*, 2019). The high level of interest of the private partner does not provide an opportunity to implement the PPP project without state participation, providing skills and competent staff, project monitoring, active cooperation, compliance with commitments.

5. Conclusion

The conducted theoretical and empirical investigation gives grounds to form methodological bases for the implementation of PPP projects in the sphere of health care. The considered modern hybrid models of PPP are a new form of the concept of new public governance. According to the ideas of the new hybrid PPP models, public and private partners must clearly separate functions at the project planning stage and ensure compliance with the commitments made in accordance with the principles of democratic accountability. Municipal authorities must adhere to the principles of active participation (guaranteeing the return on investment to a private partner through the mechanism of state compensation, the mechanism of access to the market of public medical services), the principle of legality (the mechanism of legal regulation of the PPP standard model has been developed), the principle of

institutional transparency, which ensures the establishment of relations between the interested parties from the beginning of project planning to the completion and commissioning. Government authorities should also provide project managers with competent skills, including leaders who are able to work actively with a private partner. The private partner, on the other hand, should ensure the implementation of modern technological solutions in accordance with the demand of the medical market, discussion and solution of possible technological problems.

References:

- Akimov, O., Karpa, M., Parkhomenko-Kutsevil, O., Kupriichuk, V., Omarov, A. 2020. Entrepreneurship education of the formation of the e-commerce managers professional qualities. *Journal of Entrepreneurship Education*, 23(S1).
- Ampong-Ansah, F.B., Maloreh-Nyamekye, T., Otchere, L.N., Boateng, A.K., Antwi-Boasiako, J. 2020. Partnership and collaboration in healthcare delivery in Ghana. *Journal of Public Affairs*. <https://doi.org/10.1002/pa.2175>.
- Brogaard, L., Petersen, O.H. 2018. Public-private partnerships (PPPs) in development policy: Exploring the concept and practice. *Development Policy Review*, 36(S2), O729-O747. <https://doi.org/10.1111/dpr.12277>.
- Buryk, Z., Bashtannyk, V., Ragimov, F. 2019. Economic growth: macroeconomic effects of Public Borrowings at the global level. *Problems and Perspectives in Management*, 17(3), 169-183.
- Dickinson, H. 2016. From new public management to new public governance: The implications for a 'new public service. In Butcher, J., Gilchrist, D. (Eds.), *The three sector solution: Delivering public policy in collaboration with no-for-profits and business*. ANU Press, Canberra, 41-60.
- Engel, E., Fischer, R.D., Galetovic, A. 2014. *The economics of public-private partnerships. A basic guide*. Cambridge University Press, Cambridge.
- Fang, G., Cao, H. 2019. State versus private provision: How does China's market-oriented reform affect healthcare delivery? *Economics of Transition and Institutional Change*, 28(3), 381-411. <https://doi.org/10.1111/ecot.12239>.
- Gupta, S.K., Karpa, M.I., Derhaliuk, M.O., Tymkova, V.A., Kumar, R. 2020. Effectiveness vs. efficiency for organizational development: A study. *Journal of Talent Development and Excellence*, 12(3s), 2478-2486.
- Holovaty, M. 2015. The state and society: The conceptual foundations and social interaction in the context of formation and functioning of states. *Economic Annals-XXI*, 9-10, 4-8.
- Iossa, E., Saussier, S. 2018. Public private partnership in Europe for building and managing public infrastructure: an economic perspective. *Annals of Public and Cooperative Economics*, 89(1), 25-48. <https://doi.org/10.1111/apce.12192>.
- Ministry of Economic Development, Trade and Agriculture. 2020. The state of PPP implementation in Ukraine. Available at: <https://www.me.gov.ua/Documents/Detail?lang=uk-UA&id=9fc90c5e-2f7b-44b2-8bf1-1ffb7ee1be26&title=StanZdiisnenniaDppVUkraini>.
- Onyshchuk, S.V., Buryk, Z.M., Knysh, P.V. 2019. Management of the economic potential of territories in the context of sustainable development: Case of Ukraine. *Problems and perspectives in management*, 17(4), 13-25.

- Sakowska, M.M., Cole, J.A.M., Watters, D.A., Guest, G.D. 2019. Impact of public-private partnership on a regional colonoscopy service. *ANZ Journal of Surgery*, 89(5), 552-556. <https://doi.org/10.1111/ans.15066>.
- Siemiatycki, M. 2015. Public-private partnerships in Canada: Reflections on twenty years of practice. *Canadian Public Administration*, 58(3), 343-362. <https://doi.org/10.1111/capa.12119>.
- Top, M., Sungur, C. 2019. Opinions and evaluations of stakeholders in the implementation of the public-private partnership (PPP) model in integrated health campuses (city hospitals) in Turkey. *The International Journal of Health Planning and Management*, 34(1), e241-e263. <https://doi.org/10.1002/hpm.2644>.
- Villani, E., Greco, L., Phillips, N. 2017. Understanding value creation in public-private partnerships: A comparative case study. *Journal of Management Studies*, 54(6), 876-905. <https://doi.org/10.1111/joms.12270>.
- Wang, Y., Zhang, L. 2019. Status of public-private partnership recognition and willingness to pay for private health care in China. *The International Journal of Health Planning and Management*, 34(2), e1188-e1199. <https://doi.org/10.1002/hpm.2757>.
- Wutzke, S., Morrice, E., Benton, M., Milat, A., Russell, L., Wilson, A. 2018. Australia's National Partnership Agreement on preventive health: Critical reflections from States and Territories. *Health Promotion Journal of Australia*, 29(3), 228-235. <https://doi.org/10.1002/hpja.9>.
- Yang, J.J., Kim, H.S., Choi, S.E., Ryu, L., Choi, Y.J. 2020. What makes hybrid insourcing successful: A new public-private partnership model for social welfare services. *Asian Social Work and Policy Review*, 14(1), 11-21. <https://doi.org/10.1111/aswp.12188>.
- Young, S., Nguyen, P., Macinati, M.S. 2020. Dynamic interplay between contractual and relational governance: An empirical study in Australian healthcare outsourcing. *Australian Journal of Public Administration*. <https://doi.org/10.1111/1467-8500.12427>.