Project and contract management in hospital Public-Private Partnerships: A strategic analysis of the Portuguese experience

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July 7, 2023

Abstract

Portugal has a vast and intricate public health system that is being impacted by rising costs. The concepts of New Public Management, together with foreign experience, drove the creation of public-private partnership (PPP) models around the turn of the century to enhance the focus on performance and cost-effectiveness in healthcare. The first wave of PPPs, which began in 2001, featured an innovative and integrated concept that linked hospital infrastructure building and administration with clinical service delivery. The growth of PPP projects to avoid financial limitations reveals a lack of strategic thinking and the government's short-term perspective on contracts lasting up to 30 years. Various procedural delays, miscalculated costs, and external advice on contract monitoring have exposed the public sector's incapacity to handle complex projects and contracts properly. Following a widely criticized first wave that resulted in some clinical service delivery going back to the public sector, Portugal is now seeking to establish a second wave of hospital PPPs that do not include this problematic component. In response, this work suggests Portugal's first strategic management method for managing healthcare PPPs. This paper initially examines the Portuguese legal framework before doing an organic SWOT analysis that combines the expertise of national PPP specialists. Filling existing knowledge gaps in public institutions, increasing tight collaboration and accountability with the private sector, and examining methods to contract management, renegotiation, and value-for-money evaluations are all recommended in the strategic formulation.

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Running title: Project and contract management in hospital PPPs

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Abstract

Portugal has a vast and intricate public health system that is being impacted by rising costs. The concepts of New Public Management, together with foreign experience, drove the creation of public-private partnership (PPP) models around the turn of the century to enhance the focus on performance and cost-effectiveness in healthcare. The first wave of PPPs, which began in 2001, featured an innovative and integrated concept that linked hospital infrastructure building and administration with clinical service delivery. The growth of PPP projects to avoid financial limitations reveals a lack of strategic thinking and the government's short-term perspective on contracts lasting up to 30 years. Various procedural delays, miscalculated costs, and external advice on contract monitoring have exposed the public sector's incapacity to handle complex projects and contracts properly. Following a widely criticized first wave that resulted in some clinical service delivery going back to the public sector, Portugal is now seeking to establish a second wave of hospital PPPs that do not include this problematic component. In response, this work suggests Portugal's first strategic management method for managing healthcare PPPs. This paper initially examines the Portuguese legal framework before doing an organic SWOT analysis that combines the expertise of national PPP specialists. Filling existing knowledge gaps in public institutions, increasing tight collaboration and accountability with the private sector, and examining methods to contract management, renegotiation, and value-for-money evaluations are all recommended in the strategic formulation.

Keywords: Public-private partnerships; contract management; project management; Portugal

Highlights:

- Overview of project and contract management in Portuguese hospital PPPs;
- SWOT analysis to the Portuguese hospital PPPs;
- Strategic analysis with expert judgments;
- Strategic planning proposal to raise Portuguese hospital PPPs' performance.

1. Introduction

Current public sector health spending in Portugal has grown since the beginning of the century, rising from nearly 11 billion euros in 2000 to more than 25 billion euros in 2022, as stated by the Statistics Portugal (INE). The likelihood that future expenditure would become unsustainable demands the development of novel and efficient tactics to cut health-care expenses without compromising the delivery of healthcare across the country.[1]

With the advent of new public management thoughts, market incentives for the creation of products and services in the public sector were put forward.[2] Together with the public sector's financial restrictions, this pushed the adoption of public-private partnerships (PPP) models in Portugal,[3] as public administration became increasingly focused on performance and value for money (VfM). A hospital PPP is a collaborative agreement between a public sector institution, such as a government or a public agency, and a private sector entity, usually a corporation or a group of enterprises. PPPs have been used in a variety of industries and nations throughout the world to capitalize on private sector knowledge, investment, and efficiency while meeting public infrastructure and service demands.[4] However, depending on local rules, sector-specific concerns, and the interests of the public and private organizations participating, the specific architecture and execution of PPPs can vary greatly. The sharing of duties, risks, and benefits between the public and private organizations involved is a crucial feature of a PPP.[5]

The first five PPP hospitals, launched in 2001, employed a PPP model that combined infrastructure and clinical services administration. Contracts were signed for four of them: Hospital de Cascais in 2008, Hospital de Braga and Hospital de Loures in 2009, and Hospital de Vila Franca de Xira in 2010.[6] The second wave of five PPP hospitals was announced shortly after the first, in 2002, and used a different model that did not involve clinical service management. So far, no partnership has been established utilizing this model.

Portugal is under severe fiscal restrictions. Economy and efficiency are now more important than ever in ensuring its National Health Service (NHS)'s long-term sustainability.[7] Creating a credible alternative to

traditional procurement that protects the public interest is an appealing prospect. However, present information on hospital performance limits the evaluation of PPP models.[8]

Although some authors have highlighted the merits of this model, it is not out of controversy.[9] PPPs in hospitals have been particularly contentious in Portugal due to many elements unique to the country's healthcare system. Reasons for this include the high costs associated with the model, the financial risks, the limited control and transparency, as well as the impact on healthcare access and quality of care. Critics contend that such partnerships result in much greater government costs than typical public hospitals. Long-term contracts and financial arrangements in PPPs have resulted in significant financial burdens for the Portuguese healthcare system, which have been criticized as inefficient and unsustainable. Besides, hospital PPPs in Portugal have experienced financial difficulties, resulting in significant obligations for the government. In certain circumstances, the public sector has had to offer additional financial support to faltering PPP ventures, straining public budgets even further. These financial risks have generated worries about the efficacy and financial feasibility of public-private partnerships in Portugal. Complex contractual frameworks, as well as a lack of public monitoring, have been considered as impediments to effective decision-making and accountability. Concerns about possible mismanagement, corruption, and conflicts of interest have been fanned by the lack of transparency around PPP contracts and operations. Another sensitive topic is the possible impact of hospital PPPs on access and equity in healthcare. According to critics, the emphasis on profitability may result in a concentration of services in metropolitan areas, potentially leaving rural and underdeveloped communities with limited access to important healthcare services. This disparity in healthcare access has been a major source of worry, particularly in a nation with regional differences like Portugal. Finally, concerns have been expressed concerning the quality of care offered by PPP-operated hospitals. The business-driven character of these collaborations, critics claim, may emphasize cost-cutting tactics and profit maximization over patient care. There have been reports of understaffing, service delivery delays, and compromises in the quality of treatment delivered by PPP-operated hospitals.

The hospital PPP model is not all disadvantages, but also merits.[10] Private sector knowledge and investment may be brought into the healthcare sector through PPPs, allowing for the creation of new and efficient hospital facilities. Private partners may have access to funds and resources that may be used to renovate existing facilities or to construct new ones, resulting in better healthcare infrastructure. Private businesses engaging in PPPs frequently have prior expertise implementing cutting-edge healthcare technologies and processes. This can help hospitals integrate new medical equipment, electronic health records, telemedicine systems, and other technology advances. Such advances can improve the quality of care, diagnosis, and treatment choices accessible to patients. Besides, private partners are supposed to improve operational efficiency in hospital administration. Private companies are frequently encouraged to streamline operations, save costs, and increase efficiency. Private partners, with their skills and experience, may apply management solutions that improve hospital efficiency and better allocate resources, thereby resulting in cost savings. A considerably relevant advantage of this model is the risk transfer (as long as the risk is allocated to the partner better prepared to deal with it). This encompasses construction, maintenance, and facility management hazards. The public sector may be protected against possible financial constraints coming from unanticipated expenses, maintenance concerns, or infrastructure breakdowns if these risks are shared.

Merits of PPP model are not only financial. Hospital PPPs can also outperform publicly-owned hospitals in terms of efficacy and effectiveness.[8] PPPs have the potential to speed the delivery of healthcare infrastructure and services. Private partners may be more flexible in project execution and may be able to speed up building and operating procedures. This can lead to speedier deployment of healthcare facilities, shorter patient waiting times, and meeting the rising demand for healthcare services. Private partners often make long-term commitments to offer certain services under PPP contracts. This can give stability and predictability in healthcare delivery, assuring the continued supply of key services. Long-term contracts can also contain performance metrics and quality criteria that hold private partners accountable for healthcare service delivery.

Based on credible quantitative and qualitative data, a consistent strategic analysis is required to set clear goals for public healthcare management and a concrete path to attain them. Understanding the internal and

external settings of healthcare delivery PPP and considering how the public sector might use them is critical for developing a long-term strategy that protects the economy and the population.

The purpose of this study is to do an organic SWOT (Strengths, Weaknesses, Threats, and Opportunities) analysis on the implementation and execution of PPPs in the Portuguese healthcare sector, followed by a strategy formulation with suggestions. Thus, this work aims at improving the quality of information accessible for public decision-making in this area. Creating a strategic management approach is a complex task. The paper gives an internal and external environment analysis to the public sector's approach to hospital PPPs prior to the SWOT analysis and strategy formulation. The methodology began with a thorough review of the literature, focusing on the international (Spain and the United Kingdom as two main benchmarks) experience with the use of PPPs in general and in the healthcare sector, as well as the national context (motivation for implementation, legislative progress, contract specifications, and execution). Further, we conduct our own strategic proposal, which was then refined after a survey conducted to some experts on the field. In the possession of such an information, we could design a strategy that not only shall improve the performance of contract management of existing hospital PPPs as well as to help designing and managing contracts of the possible second-wave of hospital PPPs in Portugal.

2. The international experience with the use of PPPs

2.1. The UK and the Private Finance Initiatives

The Private Finance Initiative (PFI) is a finance model in which the duty for providing a public service is shifted to the private sector for a certain length of time.[11] In other words, PPPs are commonly referred as PFIs in the UK.[12] When the PFI was originally implemented, the government developed the instruments required to achieve the broadest possible use of private money. This rash approach aroused concerns about the public sector's ability to form advantageous relationships and the private sector's willingness to engage in the program.[13] PFIs have been widely employed in the UK since the 1990s to finance, build, and run public infrastructure, including hospitals. Under this framework, private entities invest their capital in the designing, development, construction, and maintenance of a project (actually, infrastructure projects like hospitals, roads, or public utilities), sharing responsibilities and risks with their public counterparts as defined in the long-terms contracts (spanning from 25 to 30 years, typically). In the healthcare sector, the hospital complex is built by a private partnership, which generally includes construction businesses, facilities management corporations, and financial institutions. In exchange for their investment and supply of services, the private consortium receives recurring payments from the public sector known as unitary charges or availability payments. Construction expenditures, ongoing maintenance, site management, and the supply of supplementary services are often covered by these fees. Payments are given throughout the course of the contract and are contingent on satisfying particular performance and service quality objectives.[14]

As mentioned by the HM Treasury, some criticisms have erased concerning the PFI model: slow and expensive procurement, lack of transparency, accountability, and contract flexibility, as well as increased profit of the private sector and low or limited public control over essential healthcare services. PFIs, according to critics, might also result in greater long-term expenditures than standard public procurement procedures. Long-term contracts, high borrowing rates, and related fees have all been identified as reasons leading to higher public-sector spending.[13,15]

Using off-balance-sheet finance, the only budgetary constraint became the project's long-term affordability. PFIs might therefore be exploited politically to conceal a poor financial condition. This situation provided investment temptation since spending timing could be postponed, justifying the transfer of risks to the private sector over which they had no control.[16,17]

When compared to the procurement procedure for regular projects, the private sector questioned the high expenditures necessary for realizing bids. When the PFI was originally implemented, there was no time constraint for the tendering phase. The procurement procedure may run up to five years and was always longer than intended. Financial uncertainty and schedule delays are indicators of ineffective project management, which necessitates the expenditure of more resources to meet the initial goal.

According to Heald,[18] the VfM is connected to ideas of efficiency and effectiveness, however they are not specified, frequently relying on the political context utilized by public accountants when reviewing PFI projects. The government first concluded that the errors were due to optimism bias, approval of improper projects, and a lack of market competition. In response, guidance literature was amended with the goal of resolving these issues with precise and comprehensive evaluations, emphasizing openness in the process, and requiring fiscal flexibility. However, the efforts had little effect on the likelihood of VfM assessments favouring the PFI model consistently. In what concerns the healthcare sector, the Department of Health's approach to private money has proven to be detrimental to the NHS. Pollock et al.[19] contended that the PFI made hospital construction costlier. Higher financial expenses and VfM achieved by inappropriate risk transfer limit future investment alternatives. The PFI approach enhanced budget flexibility in the near term but added costs in the long run. Some further claimed that the PFI is a financing strategy that significantly raises the cost of NHS capital expansion to taxpayers. In actuality, the PFI strategy was based on the assertion that the private sector constructs projects more effectively and is less risk-averse. Furthermore, in terms of risk management, the expected fines did not assure the efficiency of public services, as there were no substitute services supplied to the public in the case of private sector failure. The absence of reliable data on individual performance and benchmarking is a fundamental issue when evaluating healthcare PFI contracts. The performance evaluations offered are self-made, and while project/contract managers are best suited to evaluate performance on behalf of the trust, they have incentives to demonstrate VfM.

Perhaps because of these criticisms, there has been a shift in the UK away from the PFI model. Alternative funding options, such as the PF2 (Private Finance 2) [20] and the Building Better Hospitals Program, have been established by the government in order to address some of the issues and increase VfM in the delivery of public assets, including hospitals. It is worth noting that the usage of PFIs in the UK has been a point of contention for some time, and the government has conducted evaluations and reforms to improve the approach to PPPs in the healthcare sector.

2.2. Spain and the Alzira model

The Alzira hospital PPP model was implemented in 1997 with a ten-year contract issued by the Valencian government to RSUTE, a joint venture comprised mostly of healthcare provider RiberaSalud and insurance business ADESLAS. The approach was unique in that it managed both clinical and non-clinical facilities, in the so-called Hospital de La Ribera (Valencia, Spain). The main key aspects of Alzira model include: private provision of healthcare services, public funding (per capita-based payment) and control over the contract for compliance, public regulation and sanctions if necessary, and public ownership.[21]

The original deal was not successful, resulting in the contract with RSUTE being terminated in December 2002 and a new one being established with RSUTE II. The primary causes for termination include issues of decreased job security for workers, with lower pay scales and longer working hours; a strong relationship between political control and financial institutions; and financial difficulties. The procedure of contractual termination and partnership reestablishment was also criticized, because there was no viable option for supplying the services. The contract might have been renegotiated, the compensation procedures were ineffective, and the competitive environment discouraged additional bids. The new contractual arrangement introduced several new clauses to address the difficulties mentioned. It also introduced primary care to the previously existing specialty care by opening two more outpatient clinics and 30 healthcare centres. Despite its shortcomings, the hospital has gained formal recognition for its contributions to healthcare innovation and service excellence. Despite the fact that Valencia's administrative concession expanded the concept to other four healthcare regions, Valencia's Health Authority opted to discontinue the concession and return to direct public service at the conclusion of the contract in 2018.[22,23]

Allard and Trabant [23] highlight the need for additional finance and enhanced infrastructure in Spain for PPPs to establish VfM. However, there is a lack of government strategy for VfM and contract negotiation, with the Spanish government relying heavily on private initiative and market forces. Thus, concerns about governance and financial achievements led to Alzira model's reversion. The most relevant topics include: lack of competition (bidding processes with only one offer), risk of collusion and corruption, lack of clarity of

contract and difficulties in designing it, and costs of contract oversight. Spanish PPP approach shows little government effort in openness, communication, and achievements compared to UK efforts.

3. The Portuguese experience with healthcare PPPs

Portugal's PPP concept, established with Decree-Law 86/2003, following the New Public Management principles and global trends, outlines broad criteria for state intervention in all sectors and stages of partnership (definition, conception, preparation, tender, adjudication, monitoring, and control). The initial law was reviewed multiple times to address difficulties and ensure effective monitoring and control of PPPs.[24]

3.1. Evolution of the PPP contractual process

Portugal's PPP project contracts are costly and intricate (more than in public procurement), as outlined by Decree-Laws 86/2003 and 141/2006. The stages of contractual process in PPPs are as follows:[25,26]

1. Notification of Ministry of Finance by the interested sector governance entities;
2. Strategic study;
3. Monitoring commission nomination (Parpublica, since 2003, via Normative Order 35/2003);
4. Development of project study and evaluation by the monitoring commission;
5. The sector governance organization in charge of project planning and recommendations review.
6. Approval of PPP launch conditions;
7. Nomination of a Proposal Evaluation Commission;
8. Launch of the tender;
9. Evaluation of contents and nature of proposals by the Proposal Evaluation Commission;
10. Adjudication;
11. Contract celebration.

In the case of the Ministry of Health, until 2011, the *Estrutura de Missão Parcerias.Saúde* (EMPS) was in charge of monitoring the first wave of hospital PPPs. Nowadays, that responsibility lies in*Administração Central do Sistema de Saúde* (Central Administration of the Health System, ACSS).

The Court of Auditors emphasized program deadline and sliding concerns in PPP hospitals and motorway concessions. This led to reform of the legislative framework, focusing on application scope, internal public sector organization, monitoring, and transparency (Decree-Law 111/2012). It was theoretically achieved via the creation of UTAP (*Unidade Técnica de Acompanhamento de Projetos*) in the same Decree-Law. The committee oversees preparation, development, implementation, monitoring, and worldwide support for the Ministry of Finance, focusing on technical, economic, and financial aspects. The improvements to the contractual process adopted under the new legal framework followed attempts to introduce a stringent cost and risk management in Portugal.

3.2. The first wave of hospital PPPs in Portugal

In 2001, the Portuguese government announced the first wave of PPP hospitals, consisting of five partnerships: two new hospitals (Sintra [not executed] and Loures) and three replacement hospitals (Cascais, Braga, and Vila Franca de Xira). Table 1 presents some characteristics of the first wave's four PPP hospitals.

Table . Some features about the four PPP hospitals of the first wave.

Hospital	Cascais	Loures	Braga	Vila Franca de Xira
Area (m^2)	46 000	63 000	102 000	49 000
Started	2010	2012	2012	2013
Beds	277	424	704	280
Operating theatres (rooms)	6	8	12	9
Medical offices	33	44	59	33

Hospital	Cascais	Loures	Braga	Vila Franca de Xira
Population (,000 inhabitants)	285	272	1 093	244

In the first wave model, private society assumes hospital construction, finance, and exploration, while providing clinical services. EGED contracts for infrastructure construction and maintenance for a 30-year period, while EGEST commits to hospital management and healthcare provision for 10 years (possibly extending up to a 30-year period). The model aimed to improve patient health and increase public sector value for money (VfM) through advanced healthcare management and finance.

The XV Constitutional Government assumed office in 2002, announcing a second wave with five more PPPs, which has yet to materialize.

3.3. Project and contract management entities

PPP adoption in the healthcare industry necessitates a set of complicated and demanding project development processes for both public and private organizations. Therefore, some remarkable entities intervening in project and contract management are as follows:[6]

1. Court of Auditors, which holds a consulting job, of both technical and political nature. It also has a preventive and jurisdictional control over the PPP contracts;
2. UTAP, which develops and monitors processes in PPPs delivering support to public entities in contract management;
3. Joint commission, who elaborates contract modification proposals, monitors execution of agreed activities and proposes performance boosting measures;
4. ACSS (and EMPS until 2011), which supervises healthcare PPPs, conducting a monitoring and evaluation analysis to the partnerships;
5. Regulator (*Entidade Reguladora da Saúde*¸ or ERS) who ensures equity on access and quality in healthcare provision, penalizing providers (including PPPs) for disrespecting the principles of the NHS (universal, general, and tendentiously free); and
6. Patient delegate, who receives complaints from patients and reports them.

4. Results and discussion: Strategic analysis of Portuguese hospital PPPs

4.1. Hospital PPP value chain analysis

A PPP value chain is a series of coordinated and sequential operations carried out by public and private actors in order to bring a profitable infrastructure project to the market. It must take into account all stages of the project, from project conception through partnership contracts, as well as the key players and their duties. Healthcare is delivered by the private sector in the case of Portuguese hospital PPPs, emphasizing the importance of investigating both the general PPP process value chain and the specialized PPP healthcare delivery process value chain.

Management entities (EGED and EGEST) are private stakeholders who engage with the EPC, financing institutions, subcontractors, and public users. PPPs in healthcare reflect a combination of duties split and shared by the public and private sectors in the pursuit of the best VfM. According to management contracts designed for first wave PPP hospitals, hospital management may be examined using its own value chain.

The PPP model integrates the public and private sectors in healthcare delivery, with PPP hospitals serving as a key component of the Portuguese NHS. The value chain begins with pre-hospital care, which is essentially the duty of the public sector and includes primary care, preventative education, social care, and screenings. The EGEST is in charge of health promotion and preventive activities at PPP hospitals, while the public sector is in charge of determining patient referrals and monitoring their implementation in all health facilities.

The EGED is only responsible for PPP healthcare institutions, which do not include all publicly administered establishments that are part of the NHS network. Admission, care, and discharge are the duties of private partners, with the EGEST coordinating the full healthcare providing process. Patient experience is critical for the public sector, as represented by the EPC. The state is concerned with assuring both excellent results in terms of the hospital's financial status and the quality of the patient experience. User happiness is one of three EGEST performance evaluation components, and patient experience becomes a private partner obligation indirectly.

These value chains seek to use both the public and private sectors' capabilities in healthcare delivery. The public health system has the capacity to develop an articulation system between different healthcare establishments, ensuring universal healthcare almost free at the point of use and continuity of care from primary to long-term care. Infrastructure projects are expensive for the government, and the healthcare sector is no exception. The state entrusted infrastructure management to a private business, such as new hospitals in Loures and replacement hospitals in other three cases. Admission, care, and discharge are often the primary focuses of private sector healthcare management, which has greater strengths and fewer flaws than the public sector. Publicly run hospitals expose various issues in different stages of the value chain, prompting the government to seek high-level expertise from the private sector.

4.2. PESTLE analysis

A Political, Economic, Social, Technological, Legal, and Environmental (PESTLE) study is a strategy tool used to understand external macro-environmental trends and their influence on strategic planning. We have identified the main factors for each PESTLE dimension as stated in Figure 1.

The PESTLE framework highlights the interconnectedness of variables in the healthcare sector, emphasizing the significance of taking risk factors into account while developing future collaborations. The PPP model for hospitals in Portugal strives to enhance public perception of the NHS by utilizing private sector capabilities in healthcare delivery and administration. However, political opposition to PPPs in Portugal might result in excessive private sector profits, degrading the NHS and causing significant social issues. Political cycles, which occur every four years, also have an important effect in PPPs. Portugal must continue to explore innovative advancements in the healthcare industry as its healthcare budget grows owing to an aging population and rising requirements. The social effect distribution of establishing a new hospital PPP must be thoroughly researched, taking into account environmental, social, and geographic variables. The selection on site has a considerable influence on public opinion, the referral process, and the region's economic impact. Hospital characteristics and specialty must be consistent with the healthcare network's strategic strategy.

PPPs are a business concept that partners with hospitals to optimize value for the public sector. However, the government has restricted the use of PPPs to supplemental and temporary contracts that should only be issued in 60 situations of well-founded need. Economic and legal realities are inextricably linked to the political context and are essential for PPP implementation. The healthcare industry is linked with significant management and infrastructural expenditures. Long-term hospital PPP partnerships reflect these expenditures as well as the costs connected with the PPP process. Economic relationships between partners are essential for a good and long-term connection. If the economic scale favours the private partner, this indicates that the initial VfM appraisal and management contract monitoring were ineffective. This calls into question the legislative procedure for PPP growth, as well as the technical ability of key teams and the broader political choice to push the model. On the other hand, if the economic scale favours the public partner too much, this might be viewed as a success owing to lower State charges. In fact, this form of collaboration is usually unsustainable for the private party, resulting in litigation conflicts and the public sector taking over previously contractual activities.

The present legislative framework for PPPs is intended to develop best practices for managing PPP procedures. To ensure public and private openness and accountability, current PPP regulations must be followed. However, because to its complexity, it can cause setbacks and delays, particularly in the healthcare industry. The Portuguese PPP legislation was enacted without prior testing with a pilot project, and various legal

revisions have been made since the first wave of PPP hospitals were announced. Evaluating the adaptability and efficacy of legal procedures is critical. The only method to determine if the model is effective is to compare original expectations and theoretical advantages of PPPs with facts acquired from real management of PPP projects and contracts. When creating PPP contracts, the rapid expansion of healthcare and IT solutions must be considered. PPPs can stimulate technical developments, serve as a platform for new architecture and construction, and provide an efficient articulation with clinical care modernisation.

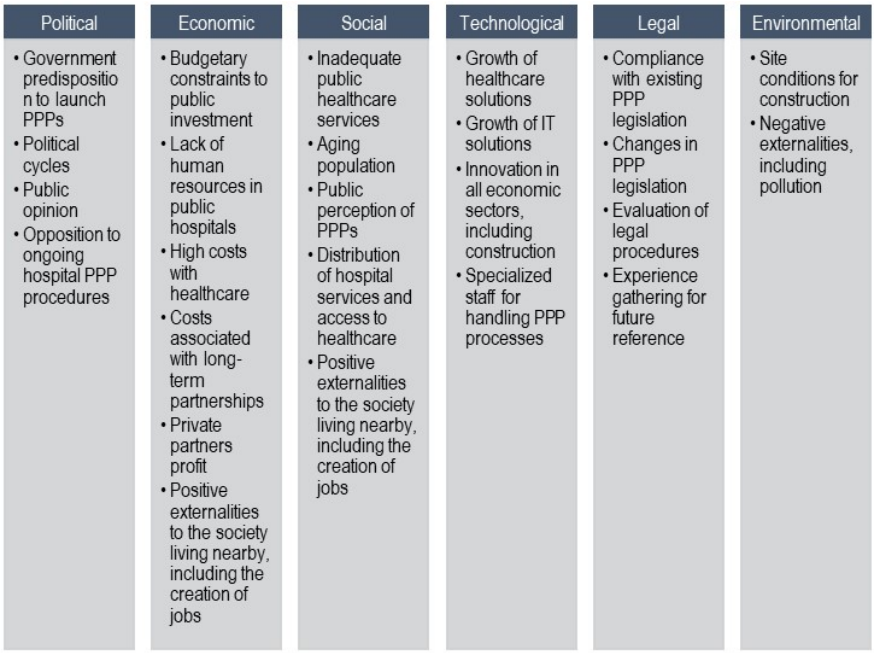

Figure . PESTLE analysis.

4.3. SWOT analysis

The SWOT analysis matrix is a strategic thinking analytical tool. Its principal application is to identify strategic choices by connecting internal and external elements, analysing alignment, and revealing mismatches between both environments.

The assessment of VfM and management in Portugal's hospital PPPs has been difficult. Instead of supplying products and services directly with public management, the adoption of the Public Sector Comparator (PSC) to assess VfM enabled the public sector to develop partnerships for each of the four hospitals. However, only the inclusion of clinical services in the management contract permitted the State to choose the PPP model for three of the four hospitals. This situation becomes increasingly troublesome in the face of the second wave of PPP hospitals, which will not contain clinical services. Furthermore, there is a definite danger of operational synergies between private partners being lost, which must be accounted for in future actions.

Contract bundling in PPPs is advantageous when governments cannot readily identify the long-term risks associated with public investments ex ante but can evaluate performance ex post. This is unquestionably true with hospital PPPs. However, information asymmetries increase since the partner in charge of the business (private) has access to more information than the partner in charge of the business (public). Because of the long-term nature of PPPs, asymmetries have more time to develop, which might result in disproportionate profits for the private partner.

The lack of pilot projects to test the new model's implementation, along with the general complexity of procurement and contract administration, creates a climate of uncertainty and increased risk for the public

sector. The PPP model, with or without healthcare services, has the potential to be a competitive alternative to traditional procurement. However, the flexibility argument for PPPs includes drawbacks, such as differences between effective contractual production and base case forecasts.

Hospital benchmarking in the NHS is a fantastic potential to improve healthcare quality in Portugal, but its sluggish implementation has restricted its advantages. Hospital PPP management contracts involve the provision of a performance metric matrix for services and outcomes, which might impede ex post review of healthcare efficiency, efficacy, quality, and economy.

Following the preceding discussion, we constructed the SWOT matrix for the use of hospital PPPs in Portugal, as in Figure 2. Factors from this SWOT matrix must be tied to each other in order to establish a good plan for the public sector approach to hospital PPPs. Strengths may be exploited to capitalize on opportunities and avoid dangers, whereas weaknesses can be mitigated by capitalizing on chances or reduced by avoiding threats. Figure 3 displays the organic SWOT matrix, which acts as guide plan creation after studying and debating internal and external aspects, as well as positive and negative qualities of hospital PPPs.

4.4. The inclusion of some experts' judgements – a refined SWOT analysis

Creating a thorough and organic SWOT analysis necessitates developing links between Strengths/Weaknesses and Opportunities/Threats, drawing on the perspectives of national PPP specialists. For reaching such a goal we contacted and surveyed a set of twenty experts through a questionnaire of 20 questions to be answered with a 7-point Likert scale (1 – totally disagree to 7 – totally agree). Experts included professionals linked to the contract management, policy-makers (including a former Ministry of Health), and managers of the private partners of some PPPs. The questionnaire affirmations focus on VfM, risk allocation, and public interest, examining the factors explored in the SWOT matrix. It then reveals the use of private sector skills for public sector services, resulting in an important organic SWOT analysis with stakeholder involvement, which should serve for future PPP projects. The survey is available in the Appendix.

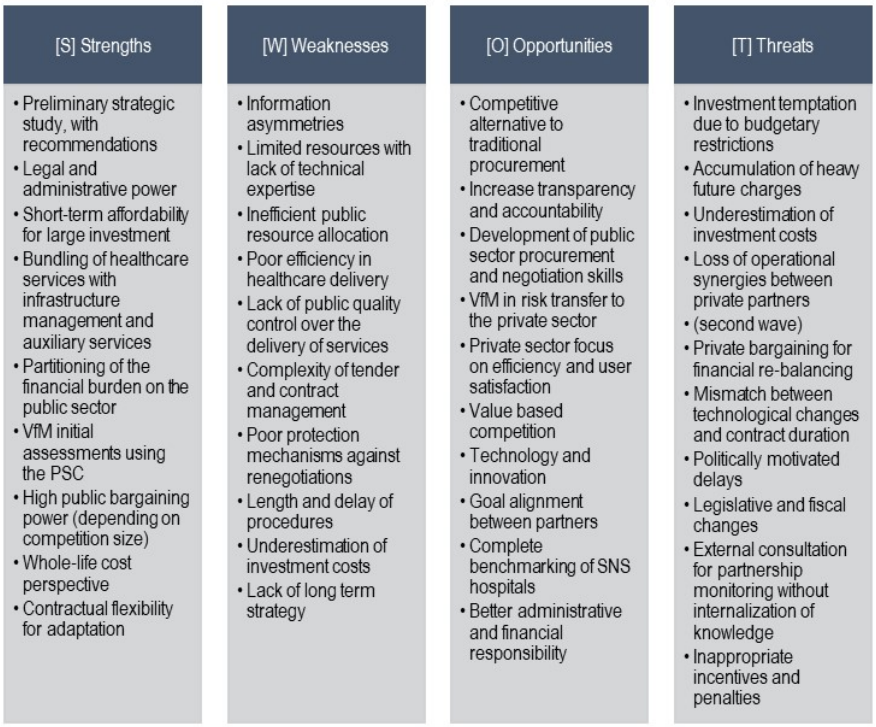

Figure . SWOT matrix.

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`image3.emf` available at https://authorea.com/users/636812/articles/653499-project-and-contract-management-in-hospital-public-private-partnerships-a-strategic-analysis-of-the-portuguese-experience

Figure . Organic SWOT analysis (first attempt).

The majority of participants in the study agree on the existence of a coherent medium-long term strategy implemented by the Portuguese State regarding the use of PPPs in hospitals. However, there is a major disagreement regarding the balance achieved by the risk allocation in these PPPs. While 37.5% of participants agree that hospital PPP risk allocation allows for efficiency gains compared to publicly managed hospitals, 50% strongly disagree, indicating a heterogeneity in opinions. Despite this, it is possible to assess some tendencies based on the majority of opinions. At least half of the participants agreed or totally agreed that PPPs are an effective public management tool for NHS necessities, but their lack of accountability in government deficits and debt is a determinant factor. Delays in PPP development and implementation lead to additional costs for the public sector. Lack of PPP monitoring know-how impacts technical decision-making, and incomplete benchmarking in NHS hinders PPP hospital evaluation. Accountability mechanisms regarding risk allocation promote public interest and respond to performance failures. The state benefits from private sector management skills in PPPs. The current political situation threatens the continuity and deepening of healthcare PPP models, as lack of cooperation and confidence between public and private partners hinder efficiency gains. Additionally, legislation regarding PPPs was implemented in Portugal without prior economic and social studies.

In the opposite end, half (or more) of the participants disagreed that the robustness of VfM tests in healthcare PPPs ensures efficient global charges prediction, or the public entities have adequate negotiation capacities,

or hospital PPP contracts combat information asymmetries effectively. They also disagree on the effective capacity of contract management mechanisms to handle healthcare sector contractual complexity, and on the impacts of whether including or not clinical services when structuring partnerships.

The lack of awareness of the influence of law on the success of PPPs is linked to the diversity of perspectives about legislation and technical improvements in healthcare PPPs. Transparency and long-term pledges to technical adequacy are also important aspects in the success of PPPs. Healthcare PPP specialists' perspectives largely reflect the need for defining a strategy, which is currently lacking.

The UK experience demonstrates ambiguity about the soundness of VfM evaluations, a lack of effective contract monitoring and control, and significant delays in the PPP value chain. Experts agree on enormous procedural delays and risk transfer difficulties that jeopardize the public sector's attainment of VfM. Inadequate information to compare PPP and non-PPP hospitals is also to blame for limiting the potential advantages of the UK and Portuguese models. The Spanish experience also revealed a lack of strategy, a lack of defined standards for obtaining VfM, problems in government openness, and inadequate communication. Neither the UK nor the Spanish models have been shown to outperform publicly maintained hospitals. International experience reveals many of the same issues that the Portuguese method does, particularly the primacy of political power above the actual quest for VfM. In principle, the concepts presented before establish a favourable setting for the implementation of PPPs in the healthcare sector, but execution is very difficult and has the potential to derail expectations of service quality and innovation at a reduced cost.

Some survey participants maintained the present method and processes for partnership planning and execution, but these projects were hampered by implementation experimentation and a common belief that PPP advantages from private sector expertise would materialize in the absence of strict public sector management. The initial wave of hospital PPPs demonstrated an unsustainable structure for both sectors, with cost underestimates and a lack of knowledge internalization on the public side.

Implementing the simpler second wave model, which is more widespread in the healthcare industry, will not fix the current issues with hospital PPPs. Preparation from assessing the economic and financial consequences of modifications from the first wave model is critical but currently lacking. The atmosphere around PPPs is now set up for mistake recurrence and the resulting reactive actions. The absence of consensus demonstrates the disparities between the public and private sectors, making it difficult to resolve concerns expressed by each party when collaboration is required, and can lead to crucial conflicts and unsatisfactory outcomes, resulting in partnership termination. Using these inputs, we refined the SWOT organic matrix, as shown in Figure 4, which reached the agreement of 90% of the surveyed experts.

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Figure . Refined SWOT organic matrix after the experts' judgments.

4.5. A possible strategy formulation

Strategy development is an important step in identifying an organization's mission and strategic goals, while also considering social responsibility and the influence on stakeholders. Strategy in the public sector entails the systematic use of public resources and authority to achieve public goals. To achieve policy success, a successful strategy must clarify difficult problems, overcome impediments, and take cohesive and coordinated measures. In the private sector, value is tied to the organization's social mission, which ensures that clients receive services, are happy with them, and accomplish social results.

Public and private entities in the healthcare industry have diverse purposes, visions, and strategic goals, which causes issues. The public interest must be preserved in healthcare PPPs, but the aims of private

partners must be recognized. It is critical to devise methods that balance the interests of many stakeholders while safeguarding the political support required for political negotiations.

In Portugal, there is no agreement on the superiority of the PPP model in the healthcare sector. While audits have the potential to defend the public interest, hospitals have shortcomings such as procurement practices and contract management. As a result, building a model that is backed by a consistent strategic approach is critical to its success.

International experience focuses mostly on hospital infrastructure, whereas domestic experience focuses on infrastructure and clinical services management. The missions of the public and private sectors are comparable, and the strategic approach is similar, with minor variations based on model specifics.

Finally, the PPP option for providing public services, such as healthcare-related services, cannot be ruled out as a public-sector investment alternative. However, issues and weaknesses in implementation and execution must be addressed.

It is necessary to examine the advice offered in the following areas in order to meet the public sector's goal (associated with accessible healthcare services that assure VfM) and build effective PPPs in the healthcare sector:

- Assessment of Value for money and creation of guidelines based on international benchmarks, like the one presented by the EPEC (European PPP Expertise Center);
- Improvement of public sector negotiation skills, providing public partners with improved negotiating skills to confront private partner demands not only in contract creation but also in renegotiation procedures;
- Enhancement of renegotiation mechanisms, avoiding unnecessary renegotiations (and protecting contracts from them or from their outcomes including payment of additional fees), increasing transparency and accountability, reducing information asymmetries, and enhancing regulation of contracts (turning it more efficient and effective) – mitigating renegotiations can result from clarifying which events are renegotiable and which are not, setting a waiting period within which renegotiations are not possible, and defining an independent entity to validate costs associated with these renegotiations;
- Accountability improvement, reducing budgetary temptation by accounting for the previously expected costs using PPPs in order to reflect their impact on public debt, and reducing bureaucratic complexity for responsibility assessments;
- Monitoring, controlling, and managing the contracts with better tools, improved guidelines based on benchmarks like the Global Infrastructure Hub, more key performance indicators, improved decision-making processes based on a cooperating network of contract managers with distinct experiences, with non-political entities gathering technical knowledge;
- Creation of consistent and frequent benchmarking exercises, comparing hospitals based on a comprehensive set of criteria for monitoring quality, access, productivity, and efficiency, considering also the operational environment to avoid wrong comparisons;
- Improvement of cooperation, risk assessment, contingency plans, communication of results, respect and trust among partners, and finally dispute resolution;
- Avoiding differentiating the model too much, especially if it has shown to be beneficial in other experiences, either international or national;
- Avoiding political-based decisions without any evidence-based support – it seems that the end of hospital PPPs was not based on any particular empirical evidence, while several authors agree that the initial hospital PPP model in Portugal is not without merits; and
- Fully specify the second wave model (to happen), analyzing the logistical and financial consequences of the lack of synergy between infrastructure management and clinical services.

5. Concluding remarks

The research sought to produce a complete strategic analysis on project and contract management of hospital PPPs in Portugal, with the goal of producing a comprehensive record for future reference. With an innovative,

sophisticated, and poorly defined methodology, the Portuguese PPP framework was meant to create problems in the healthcare industry. Legislative procedures intended to build public and independent frameworks for effective collaborations, but they did so reactively. The early phase of hospital PPP implementation was characterized by a lack of qualified employees, heavy bureaucracy, and delayed procedures. There was a lack of experience and transparency in first-wave hospital PPPs, and contract execution produced varied results in terms of financial performance and service quality.

The application of the SWOT analysis as a strategic management tool is the fundamental innovation of this work. The shift to a more organic SWOT analysis necessitates the creation of a SWOT matrix that incorporates the perspectives of national PPP specialists, as well as the subsequent strategic formulation. The developed plan addresses the key difficulties raised and proposes specific steps to be taken in order to successfully accomplish the anticipated VfM on future hospital PPPs, primarily for the second wave. The VfM assessment procedures for initial bids should be reconsidered, and public sector technical knowledge for future PPP proceedings should be strengthened. The failure to account for costs in public debt issuance is to blame for investing temptation, which overlaps with genuine VfM aims. Regardless of the model adopted, creating a stronger climate for trust and collaboration between public and private institutions is critical for partnership success.

Acknowledgments: N/A

Funding: This work is part of the research activity carried out at Civil Engineering Research and Innovation for Sustainability (CERIS) and has been funded by Fundação para a Ciência e a Tecnologia (FCT) in the framework of project UIDB/04625/2020.

Conflict of Interest Statement: The authors declare the absence of any conflict of interest.

Ethic statement: Not applicable.

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