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Perspective

Vertical Integration in Healthcare and Patient Satisfaction: An Exploratory Analysis of Portuguese Reforms

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Abstract: The performances of public corporate hospital units are being influenced by user behaviour, delayed service responses, and sustainability risks. Consequently, there is a need for these units to adopt a different approach to user care in order to attain overall success and mitigate discontent arising from delays and waiting lists. The faults within the public system are becoming increasingly apparent as a result of the growing emphasis on the transparency and authenticity of information. The reform of the Portuguese health system aims to enhance coordination among public, private, and social services. Additionally, it prioritises the integration of various levels of care within the Portuguese National Health Service, specifically by promoting the amalgamation of hospital business entities with primary care under single organisations known as Local Health Units. The objective of this study was to utilise the SWOT framework to examine the reform from the standpoint of citizens, as they are the focal point of the system and its long-term sustainability. The study revealed several benefits associated with the reform. However, it is crucial to address potential risks and opportunities in order to achieve the intended outcomes. If health managers and policy-makers effectively utilise the available opportunities, it can be inferred that there exists a favourable circumstance to implement a Local Health Unit model that seeks to integrate comprehensive care. This approach, by addressing the health issues of citizens, will create a larger scope for improvement and enhance citizen contentment. Moreover, it will ensure the long-term viability, ethical conduct, transparency, and genuineness of health outcomes.

Keywords: patient satisfaction; hospital management; healthcare reforms; vertical integration; primary healthcare

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1. Introduction

In the course of health system evolution, a multitude of obstacles have been encountered in many developed nations, particularly those with a dominating public health system. The sustainability of this system is a crucial aspect that calls for attention. It is closely linked to the rising costs of care, which are influenced by factors such as inflation, innovation, and the scarcity of raw materials. Additionally, the ageing population, the prevalence of chronic diseases, and the challenges in recruiting health professionals further contribute to this issue [1].

The investigation of patient satisfaction with healthcare services and the determinants that exert an influence on it have emerged as prominent areas of inquiry within the realm of scientific research. The satisfaction of patients' expectations and demands is contingent upon the efficient delivery of accessible, high-quality services. This approach enables patient problems to be resolved quickly, thereby mitigating the negative consequences of prolonged waiting lists [2].

The Portuguese National Health Service (SNS) initially offered care through two distinct levels: primary care and hospital-based services. The care services encompass a wide range of activities aimed at promoting health and preventing diseases. These services include the consultation and monitoring provided in various settings, such as

homes and hospitals. Additionally, they involve treatments and complementary diagnostic and therapeutic procedures such as clinical analyses, pathological anatomy examinations, and treatments like chemotherapy and radiotherapy [3]. The implementation of health monitoring initiatives led to a rise in the average life expectancy of the population. This, along with a decline in birth and fertility rates, resulted in the inversion of the demographic pyramid [4]. Nevertheless, the advent of demographic factors originating from sources external to the health sector has given rise to novel issues and challenges. These include the appearance of previously unseen diseases, a surge in chronic illnesses, and the manifestation of more severe pathologies resulting in heightened levels of impairment. Consequently, the health system has had to proactively equip itself to effectively address these concerns [5]. The aforementioned circumstances necessitated a reaction from the SNS, prompting the development of novel and intricate solutions, as well as a heightened commitment to addressing the requirements of all individuals and upholding the constitutional principle of ensuring universal and comprehensive accessibility. Consequently, a modification in political authority was implemented in the health plan, accompanied by a restructuring of primary care, a reconfiguration of the public hospital network, and the establishment of novel approaches [3].

In adherence to the updated regulations, there was a prioritisation of post-hospital care, achieved by implementing an integrated provision response within the SNS. Consequently, a nationwide Integrated Continuous Care Network has been established to provide a comprehensive solution for patients in need of rehabilitation or medical supervision and allow them to regain their functional capacities over an extended period of time. In recent times, we have witnessed the integration of a palliative care response that takes into account the comprehensive requirements of patients until the latter stages of their lives [6].

The sustainability of the health system has been brought into question due to the rise in coverage, the expansion of needs, and the presence of resource waste and inefficiency. This has resulted in the state having a significant financial burden. The promotion of reforms aimed at enhancing the efficiency of the SNS was driven by various factors. Therefore, in the early 21st century, the emergence of state inefficiencies in health service management and challenges in accessing suitable healthcare prompted the implementation of novel approaches associated with new public management. Consequently, there has been a notable enhancement in public sector accountability, wherein the traditional hierarchical structure has been supplanted by contractual or quasi-contractual arrangements governing the interactions between the state and public services. Notable examples encompass (i) the process of corporatising public hospitals, thereby granting them greater autonomy from central and regional governments, as they become integrated into the state's business sector; (ii) the establishment of public–private partnerships (PPPs) for the purposes of constructing, financing, and operating public hospitals; and (iii) the establishment of contractual agreements between public hospitals and private entities [6,7].

Throughout the past 43 years, while facing financial constraints, the SNS has consistently advocated for allocating resources in a way that promotes the development of human capital and technology advancements. This strategic approach aims to enhance the capabilities of all health units within the system, ensuring the provision of cutting-edge scientific knowledge and state-of-the-art technologies. Consequently, the construction of new hospitals, establishment of new primary care centres (often referred to as health centres), and implementation of renovation and adaptation projects took place. Nevertheless, it is important to note that during the various changes, careful consideration was consistently given to preserving the distinct characteristics of the sector and ensuring adherence to the constitutional provisions of the Portuguese Republic pertaining to the right to health [3].

Now, the SNS in Portugal is confronted with significant challenges related to access, resulting in patient discontentment. Despite a substantial increase of 72% in public health expenditure in recent years, it is evident that health outcomes have not exhibited a commensurate rate of improvement. In addition to fostering discontent, this situation has also engendered a sense of mistrust among individuals who believe they lack adequate

coverage of their healthcare requirements and encounter several obstacles when attempting to receive treatments. Several notable examples can be cited to illustrate the existing challenges in the healthcare system. One such example pertains to the approximately 15% of the population who lack a designated primary care physician for their primary healthcare needs. Additionally, it is worth noting that a significant proportion, ranging from 40% to 50%, of hospital consultations do not adhere to the maximum guaranteed response times. Furthermore, surgical procedures often surpass the maximum acceptable waiting times, as evidenced by previous studies [8,9]. In order to address the challenges anticipated to come to the fore in 2024, the government is proposing a reform centred around the concept of vertical integration in the healthcare sector. This reform entails consolidating the various levels of care into single entities referred to as Local Health Units, which would assume exclusive responsibility for healthcare provision throughout the state. The primary objective of the healthcare system is to ensure the well-being of the people it serves. To achieve this goal, it strives to deliver comprehensive healthcare services that are efficient, of high quality, and satisfactory to its users. This can only be accomplished via the effective management of the many levels of care and the coordination of the healthcare network, which involves all individuals participating in the provision of healthcare services. To address the aforementioned challenges, the primary objective is to enhance the integration of healthcare services in a more cohesive manner. This will involve the elimination of regional administrations responsible for managing primary care and instead prioritising healthcare delivery through a novel Local Health Unit model. This model aims to consolidate healthcare services and bring them closer to the population across the entire country, transitioning from the current eight units situated predominantly in interior regions to a more robust and comprehensive system spanning from the northern to the southern regions. The overarching goal is to strengthen the overall autonomy of the SNS and its constituent institutions.

The objective of this paper is to provide a comprehensive analysis of the development and present state of the SNS by conducting a SWOT analysis, drawing from existing literature, and incorporating insights from both national and international experts. This paper's analysis will focus on identifying the strengths, weaknesses, opportunities, and threats associated with the recent reform of the NHS. Thus, the central research question is as follows: from the perspective of citizens, what are the effects that the reform based on the integration of healthcare could have on improving the responsiveness of the Portuguese National Health Service?

2. Literature Review

2.1. The Organisation of the Portuguese National Health Service

In light of advancements in innovation and technology, it is imperative for health systems to possess a proactive and adaptable ability to coordinate services, encompassing political, social, and economic dimensions. Nevertheless, there exist intricate factors that, as supported by agreement in scholarly works, can be used to assess the ability of healthcare systems to adjust to contemporary advancements. Several drivers contribute to these factors, such as population ageing, changes in epidemiology, advancements in disease treatment, information technology, emerging healthcare models, quality enhancement, resource allocation, personalised medicine practices, and economic sustainability [10,11].

Initiatives aimed at reorganising the healthcare sector have emerged as a response to the need to adapt to new challenges and improve efficiency. These initiatives involve implementing a set of strategies during the process of reforming health systems. The influence of theoretical models such as New Public Management (NPM) and governance is particularly noteworthy in the development of integrated organisations. The primary objective of these organisations is to address the issue of fragmented healthcare provision by promoting a more cohesive approach. The Portuguese SNS has undergone significant development since its establishment in 1979. It has adopted a universal coverage approach, encompassing the entire population, and offers comprehensive healthcare services that

address all individual needs. In terms of its financial aspects, the initial implementation of the system was entirely cost-free; however, subsequently, there was a shift to a state of general affordability from 1989 up to the present day [3,6].

The health system in Portugal comprises a network of entities and services overseen by the Ministry of Health, the governmental department tasked with formulating and implementing the country's national health policy. This ministry is responsible for assuring the effective allocation and utilisation of resources, as well as evaluating achieved outcomes. The entity in question carries out several essential tasks within the healthcare system, including but not limited to regulating, planning for, financing, supervising, monitoring, evaluating, auditing, and inspecting the SNS, as well as other institutions that may or may not be integrated into the broader health system. The Ministry of Health fulfils its responsibilities by utilising various services that are incorporated within the direct administration of the state, as well as bodies that are integrated into the indirect administration of the state. Additionally, consultative bodies, as well as other structures and companies that are part of the state's business sector, are also involved in the ministry's operations [3].

The Ministry of Health implements a decentralised and deconcentrated approach to managing the SNS, with the overarching goal of delivering comprehensive healthcare services to the entire population. The SNS places particular emphasis on Regional Health Administrations (ARSs), which are decentralised structures within the Ministry of Health. The primary objective of these ARSs is to ensure that the population, within their respective geographical areas, has access to healthcare services. This involves effectively allocating resources to meet the needs of the population and enforcing health policies and programmes. Portugal is divided into five Regional Health Administrations which are strategically located across the primary areas of the country. These regions include the North region, the Central region, Lisbon and Tagus Valley, Alentejo, and Algarve [12].

The organisation of healthcare services under the National Health Service involves the participation of both public institutions under state ownership and private or social institutions in cases when the state lacks the capacity to act, with the state assuming the financial responsibility. The healthcare services provided by the SNS are categorised as follows:

- Primary healthcare serves as the primary entry point to the health system, with a primary emphasis on providing accessible care. It also prioritises the implementation of health promotion and disease prevention initiatives, directly engaging with individuals within the community. The present arrangement of care is structured into clusters of health centres, known as ACES, which encompass multiple health centres and a range of functional units. This configuration aims to facilitate enhanced accessibility to healthcare services to individuals residing in various regions of the nation.
- Hospital healthcare facilities encompass a diverse range of specialised medical facilities that provide a wide array of services for curative and rehabilitative medical care. These services include hospitalisation, consultations with medical specialists, day hospital sessions for treatment administration, surgical procedures for both inpatients and outpatients, and urgent/emergency care. Furthermore, hospital units are equipped with a diverse array of technical equipment to facilitate the execution of supplementary diagnostic and treatment procedures.
- Integrated continuing care refers to a series of health and/or social support interventions that are implemented following a collaborative assessment. These interventions are aimed at facilitating overall recovery, which is understood as an ongoing therapeutic and social support process. The primary objective of this process is to enhance autonomy by improving the individual's functionality in a state of dependence. This is achieved through rehabilitation, readaptation, and the individual's reintegration into their family and social environment.
- Palliative care, often known as end-of-life care, involves a comprehensive approach to supporting patients and their families during the final stage of life, with the primary goal being to maximise comfort [3].

2.2. The Evolution of Health Reforms in Portugal

The recent reforms of the SNS were primarily influenced by the principles of NPM. This influence was particularly evident in the healthcare sector at the onset of the 21st century, which coincided with economic stagnation and an increase in public debt. This period followed a period of robust economic growth in the latter half of the 1990s [6]. The objectives for lowering the budget deficit were established at approximately 2.7% of GDP as a result of various factors, including the need to implement budgetary policies and recommendations aimed at restricting public expenditure in sectors such as the healthcare, education, and social security sectors. This compelled the government to implement strategies aimed at enhancing efficacy, curbing costs, and augmenting the efficiency of services all while ensuring that accessibility and quality remain uncompromised [13].

The health programme, influenced by the principles of NPM, introduced a comprehensive reform of the SNS with the aim of enhancing collaboration with other sectors such as the social services sector and the private sector. This reform sought to guide the public service in delivering an integrated and tailored response to the needs of citizens/clients while also striving to improve efficiency and quality in the management of health services, specifically within hospitals [14]. Some examples of the aims of this reform are as follows:

- The corporatisation of public hospitals to reduce public expenditure on hospitals and to raise efficiency to introduce private management practices;
- Creating a network of primary healthcare services to arrange primary healthcare services across the country and improve citizens' access to healthcare;
- The establishment of an independent regulator to enhance equity in terms of access and quality;
- The integration of hospitals into the state's business sector in 2005 to reduce public expenditure on hospitals;
- The creation of hospital centres in 2005 to increase efficiency (based on the concepts of economies of scale and horizontal merging);
- The development of an initial Local Health Unit model to increase efficiency (based on the concept of vertical merging);
- The reorganisation of primary care, hospitals, and long-term units under the same umbrella (management);
- The creation of the SNS contact centre (a call service for health information, counselling, and health advice), a public–private partnership service established to raise the equity of access, efficiency, and cost containment;
- The creation of Family Health Units to improve citizens' relationships with healthcare teams (greater accessibility, better monitoring of health status);
- The creation of groups of health centres (ACES) in 2008 to increase efficiency (reorganisation of primary care based on the concept of economies of scale);
- Establishing four hospital public–private partnerships to increase efficiency (by adopting management practices from the private sector that are likely more efficient than those used in the public sector);
- The electronic prescription of medicines to increase efficiency and cost containment (the rationing of resources);
- Redefining the conventional sector to increase efficiency (by clarifying the relationship with the private sector);
- Striking an agreement with the pharmaceutical industry to cap pharmaceutical expenditure;
- The development of information systems to increase efficiency;
- Reducing copayments to promote equity in terms of access;
- Expanding primary healthcare to increase the scope of the services provided in primary care centres (exams, oral health appointments, visual health screenings);
- Establishing incentives, either financial or not, to increase the social mobility of doctors from deprived areas and increase efficiency and equity in terms of access;
- Sharing resources between SNS hospitals to increase efficiency and equity in terms of access [3,6,15].

2.3. The Inefficiencies of the SNS

Despite the notable strides made previously towards the reformation of the National Health Service, it is evident that these efforts did not yield the desired outcomes. Moreover, the advent of the COVID-19 pandemic exacerbated the preexisting issue of limited access to healthcare services. Additionally, the introduction of transparency measures such as the publication of data and information pertaining to care provision revealed certain inefficiencies that have contributed to user discontentment [15].

In order to illustrate the existing challenges, it is pertinent to consider the facts that relate to users' accessibility to services within the Portuguese health system, namely in primary healthcare and hospital care, which are widely regarded as the most typical levels of treatment.

Since 2018, there has been an increasing prevalence of individuals lacking a designated primary care physician at the primary healthcare level. In 2023, 16% of the population lacked a designated primary care physician at the primary healthcare level, as depicted in Figure 1.

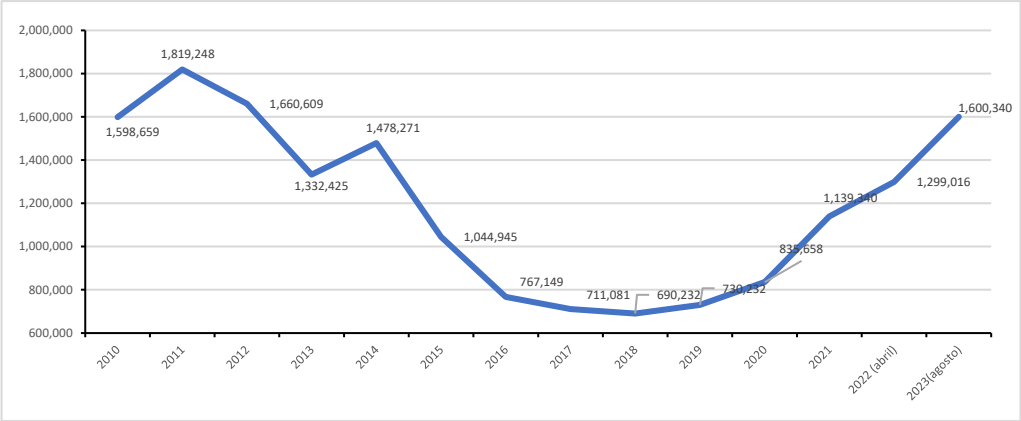

Figure 1. Users without a primary care physician at the primary healthcare level. Source: [8].

In the context of hospital healthcare, a prominent source of user dissatisfaction pertains to the extended waiting periods for specialist visits, which are predominantly contingent upon referrals from primary healthcare family physicians. Figure 2 illustrates a comparison of consultation requests that surpassed the TMRG (maximum waiting time for a guaranteed response). The TMRG varies depending on the priority levels of cases (30 consecutive days for high-priority cases, 60 days for priority cases, and 120 days for cases of normal priority).

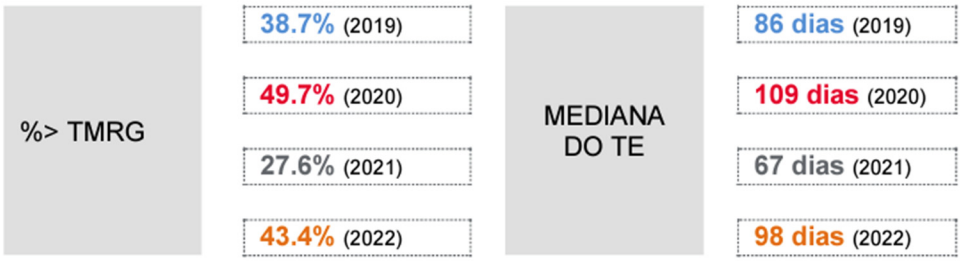

Figure 2. Waiting times for an initial in-hospital medical appointment. Source: [9].

From Figure 2, it is discernible that in the year 2019 (excluding the influence of COVID-19), a total of 38.7% of initial hospital specialty consultation requests surpassed the legally established maximum duration. This equated to a delay of 86 days beyond the optimal timeframe. In instances of normal priority, the waiting period extended to 206 days, approximately equivalent to seven months. In the year 2020, due to the disruption of regular activities, there was an 11% increase in this particular statistic. Consequently, the

average waiting time exceeded the maximum projected duration by 109 days. In 2021, there were two contrasting factors at play. Firstly, with the return of normal activity, efforts were made to incentivise and encourage efficiency, resulting in more balanced waiting time statistics. Secondly, due to the lower number of referrals in the previous year, there was no significant build-up of patients waiting for treatment. Nevertheless, in the absence of supplementary initiatives, the statistics exhibited a deterioration upon reverting to pre-pandemic conditions in 2022, as reflected by a 43.4% increase in the surpassing of the maximum time limit and an average waiting period that extended 98 days beyond the legally prescribed maximum duration observed in 2019.

From a regional perspective, it is evident that in the year 2019, there existed disparities among various regions, as depicted in Figure 3. In the year 2022, their lack of significance led to a notable national issue. According to data from the Health Regulatory Authority, there was a notable increase in the number of users awaiting their first appointment between 2019 and 2022. Specifically, the number of citizens in this category rose from 539,055 in 2019 to 581,909 in 2022. This surge signifies a non-compliance rate of almost 47% in relation to the overall volume of requests [9].

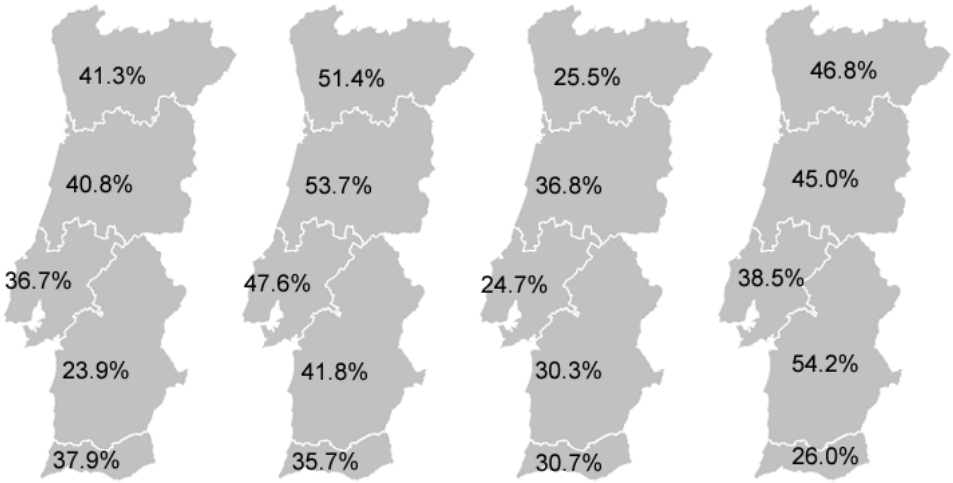

Figure 3. Regional non-compliance with TMRG. Source: [9].

Within the realm of hospital healthcare, one of the primary issues that leads to heightened discontent among users is the prolonged duration of waiting periods for surgical procedures. Figure 4 displays a comparison of the percentages of consultation requests that surpassed the TMRG, as specified by the following priority levels: level 1 (180 days), level 2 (60 days), level 3 (15 days), and level 4 (72 h) [9].

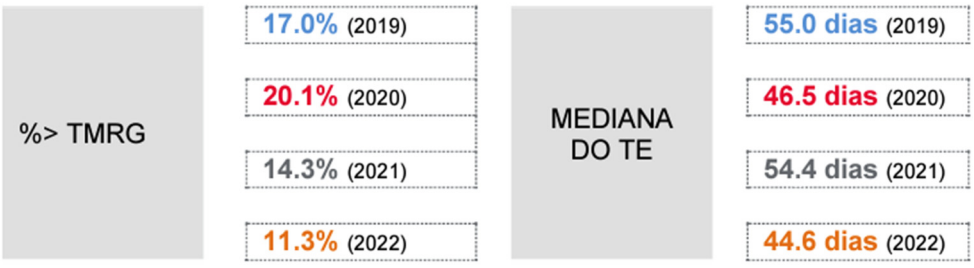

Figure 4. Waiting times for surgeries. Source: [9].

From Figure 4, it is discernible that in the year 2019 (excluding the influence of COVID-19), a total of 17.0% of surgical procedures surpassed the legally stipulated maximum duration. This equated to a surplus of 86 days beyond the optimal timeframe. For instance, in instances of normal priority, the waiting period extended to 206 days, approximately

7 months. In the year 2020, due to the disruption of regular activities, the aforementioned indicator had a significant increase, reaching a value of 20.1%. Consequently, the average waiting period exceeded the maximum anticipated duration by 109 days. During the period spanning from 2021 to 2022, efforts were made to stimulate activity and incentivise consultations, resulting in a successful equilibrium being achieved. However, the end of 2023 has a projected waiting period of 44.6 days, exceeding the anticipated maximum duration. In the context of surgical procedures, there are discernible regional disparities, with particular concern surrounding the southern area of the country in the year 2022 (Figure 5) [9].

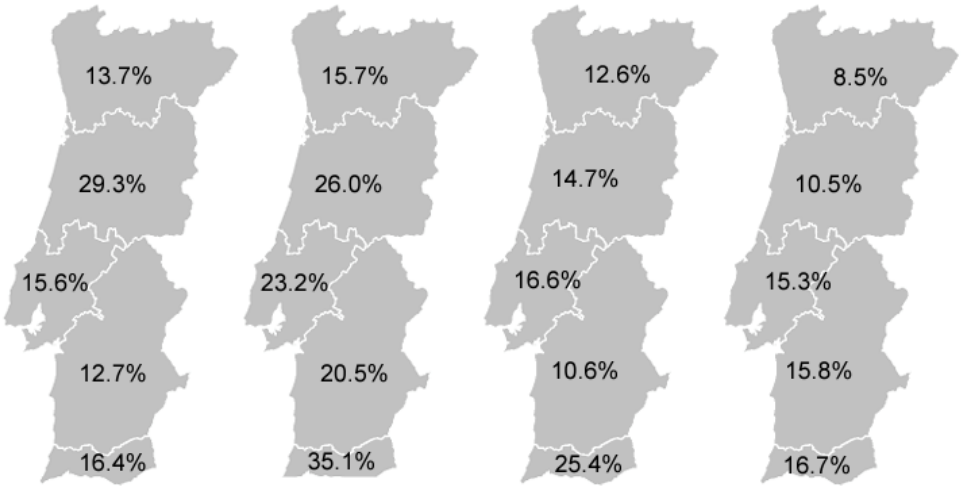

Figure 5. Regional non-compliance with TMRG for surgeries. Source: [9].

Another issue that underlies the recent health reform is the phenomenon of patients transitioning from hospital admissions to lower levels of care due to an improvement in their health status. Based on the findings of a survey on social hospitalisations conducted in 2023, it was observed that approximately 50% of patients who have been clinically discharged continue to stay in hospitals due to the lack of response within the continued care network. Additionally, 28% of these patients are awaiting placement in nursing homes, while another 10% remain in hospitals due to social reasons or the absence of a supportive family structure [16].

For a better understanding of the workforce shortages driving such long hospital waiting times, see Table 1. This table presents the absolute and relative number of health staff (total and per inhabitant) for each of the five administrative regions in Portugal.

Table 1. Workforce by region. Source: [9].

	Number of Citizens	Number of Doctors	Number of Nurses	Number of Health Technicians
North region	3,586,586	12,639 (283.8 inhab/doctor)	18,828 (190.5 inhab/nurse)	2980 (1203.6 inhab/techn)
Central region	2,227,239	5661 (393.4 inhab/doctor)	10,074 (221.1 inhab/nurse)	1785 (1247.6 inhab/techn)
Lisbon and Tagus Valley	2,870,208	10,916 (262.9 inhab/doctor)	16,767 (171.2 inhab/nurse)	3693 (777.2 inhab/techn)
Alentejo	704,533	979 (719.6 inhab/doctor)	2549 (276.4 inhab/nurse)	594 (1186.1 inhab/techn)
Algarve region (South)	467,343	1172 (398.8 inhab/doctor)	2387 (195.8 inhab/nurse)	524 (891.9 inhab/techn)

Upon analysing the supplied statistics, it is evident that the areas of Lisbon and Porto exhibit the highest doctor-to-population ratio. Nevertheless, there is not a clear correlation between the quantity of current specialists and the deficits that are evident. This is due to the unavailability of data for specific specialties, which is responsible for a significant portion of the waiting periods. Furthermore, the integration of care is anticipated to address another issue which is evident in this context. The integration of care is achieved by enabling each Local Health Unit under its jurisdiction to provide more precise information on the specialists available in each specialised field and the patients on the waiting list.

2.4. A New Reform Perspective

Considering the challenges faced in 2022, which the reforms implemented in the past two decades were unable to fully address, and taking into consideration the aforementioned issues, a significant initial stride towards a novel reform is envisioned for 2024. This entails the establishment of a new organisational framework, akin to the United Kingdom's model, known as the Executive Directorate of the National Health Service. This entity will assume ultimate responsibility for steering healthcare initiatives in Portugal. The introduction of this approach has brought about a novel perspective on the management and operational structure of the SNS. It is crucial to equip it with a proficient operational capability to effectively execute policies and initiatives that foster equal access, enhance resource utilisation, and continuously enhance the quality of services provided, all within the framework of an SNS network concept. The newly established organisation has taken on a central role in overseeing the management of the SNS. This approach is characterised by its innovative and dynamic nature, which facilitates the coordination and collaboration of all elements within the system. These elements encompass various aspects, such as healthcare provision, resource management efficiency, health promotion, disease prevention, recovery, and care integration.

The establishment of the Executive Directorate has resulted in a significant transformation within the organisation, which highlights the government's unwavering dedication to establishing a robust, flexible, and resilient SNS. The objectives of the SNS underscore the significance of innovation, citizen engagement, fairness, and the long-term viability of the system. Establishing an SNS that exhibits increased autonomy and responsibility by seamlessly integrating planning and organisational aspects with resource allocation, personnel management, and investment while also incorporating performance monitoring and prioritising the needs and preferences of citizens is the ultimate goal. To fulfil its objectives, the organisation consists of a collective of 11 distinct departments. The areas of focus within this framework include the following: (i) Studies and Planning; (ii) Contracting; (iii) People Management, the Promotion of Well-Being, Diversity and Sustainability; (iv) Management of the Health Services and Resource Networks; (v) Facilities and Equipment Management; (vi) Economic–Financial Sustainability; (vii) Digital Transformation Management; (viii) Purchasing and Logistics; (ix) Chronic Disease Management; (x) Quality Management in User Health and Safety; and (xi) Training, Research, Innovation and Development [17].

Regarding an integrated approach to managing primary healthcare and hospital care, there is a recognition of the significance of coordinating these levels of care to enhance the delivery of healthcare services, with a particular emphasis on prioritising the needs of individuals. This acknowledgement stems from the understanding that the effective provision of healthcare to beneficiaries can yield substantial benefits. In this context, the primary objective will be to guarantee that individuals have access to healthcare services that align with their specific needs. This will be achieved by enhancing the delivery of care and enhancing overall efficiency and effectiveness through the implementation of the Local Health Unit (LHU) model. The centrality of the individual is paramount in an integrated care model, as it enables the attainment of health improvements through the close alignment of decision-making processes, enhanced autonomy, the promotion of primary healthcare as the foundation of the system, and the strengthening of the requisite means and resources to fulfil the system's aims.

The incorporation of hospitals, hospital centres, and existing ACES into the LHU model encompassed eight distinct experiences. These experiences served to enhance the response of the SNS by streamlining procedures; fostering better collaboration among healthcare teams; prioritising patient experience and care pathways across various levels of the healthcare sector; granting greater managerial autonomy; enhancing the involvement of citizens, communities, professionals, and local authorities; monitoring and assessing health policies; and optimising the accessibility and efficiency of the SNS [18,19]. However, the forthcoming reform will not merely replicate this model, but rather endorse it with a level of maturity. In this regard, the 32 new LHUs that are to be established in 2024 will benefit from novel management instruments. These instruments encompass (i) a risk-based stratification approach which identifies the distribution of disease burden within the population; (ii) information systems that facilitate the seamless integration of care via the implementation of a unified electronic health record system; (iii) performance incentives, both financial and non-financial, that are centred on achieving results and generating value; and (iv) innovative models of care delivery characterised by team-based approaches that prioritise responsiveness to individuals. Notably, emphasis will be placed on the Family Health Units within primary care settings, as well as the Integrated Responsibility Centres within hospitals.

3. Materials and Methods

The examination of patient satisfaction with healthcare services and the various elements that impact patient satisfaction have emerged as a prominent area of investigation in several scientific studies worldwide, as exemplified by the research conducted by Amado et al. [18]. It is imperative to prioritise the provision of services that are both accessible and of high quality in order to effectively meet the expectations and requirements of patients [2]. Therefore, an analysis was conducted on the collection of materials and content provided by various experts, including researchers, political decision-makers, hospital directors, hospital centres, LHUs (pilot model), and directors of Health Centre Groups. This analysis aimed to examine the potential for reforming the SNS by considering the challenges, current issues, and future vision associated with the new LHU model. To achieve this, a SWOT analysis was performed to identify the strengths, weaknesses, opportunities, and threats associated with the implementation of this new model. To conceptualise the concepts of the LHU model, the concepts of vertical integration, efficiency, access, and user satisfaction were taken into account.

The economic concept of vertical integration is predicated on the shared ownership of distinct portions within the vertical production chain [20]. In the field of healthcare, this notion pertains to the amalgamation of services across several tiers of care, such as primary care, acute care, and post-acute care, as opposed to horizontal expansion, which occurs when hospitals (specifically acute care facilities) merge with one another [21]. The integration of healthcare providers from various levels into a unified entity serves as a means to prevent the fragmentation of care. Nevertheless, the majority of previous research has linked the concept to the amalgamation of primary and hospital care [22,23].

Considering the significant influence of the health conditions of a population on its productivity, degree of well-being, and economic growth [24], the interconnection between health and the economy, which exerts pressure on managers, becomes readily apparent to citizens. Efficiency emerges in this context, embodying a compromise between costs and the corresponding production. Given the increasing demand to enhance the effectiveness of healthcare systems, healthcare managers are advised to contemplate novel strategies to tackle these obstacles [25]. These initial methodologies may encompass merger tactics, as well as cost-sharing agreements [26], technology acquisition, or even leadership development programmes [26,27]. Therefore, the efficiency of a manufacturing unit is determined by comparing it to other units that engage in similar activities.

Enhancing access to healthcare and the quality of healthcare is an increasingly prominent concern for healthcare managers and decision-makers, similar to the emphasis placed

on efficiency. The concepts of quality and access in healthcare systems are inherently intricate and multifaceted. As stated by Ferreira and Marques [28], the concepts of quality and access can be categorised into distinct groups. According to Donabedian [29], Navarro-Espigares and Torres [30], and Ferrier and Trivitt [31], quality can be classified into two distinct categories: adequacy of care and clinical safety. Access to services can be conceptualised in three dimensions: the timeliness of services, the availability of services, and the characteristics of the population at risk [32,33]. These ideas frequently co-occur in the academic literature, and their assessment can encompass multiple indicators that offer insights into the overall accessibility and quality of healthcare, yielding reliable outcomes [34].

In the context of the LHU model, the significance of user satisfaction becomes more salient, as it pertains to the patient's response to diverse facets of their service experience. The evaluation of patient satisfaction can yield significant and distinctive insights about the quality of hospital treatment and its day-to-day provision. The inclusion of internal components of hospital treatment is commonly acknowledged as an independent dimension of quality of care. The concept of patient satisfaction has historically received limited attention and has been marginalised; however, it is progressively gaining significance. Donabedian [29] incorporates it inside the realm of health service outcomes, thus emphasising the criticality of assessing care quality. Multiple researchers contend that there exists a correlation between patient satisfaction and health outcomes [35–37]. Therefore, the current study aims to elucidate the primary factors that exert the greatest influence on patient satisfaction. By utilising this information, managers are able to optimise resource allocation in order to enhance patient experience and satisfaction.

4. Results and Discussion

Following the establishment of communication with renowned authorities in the realm of health reforms, a comprehensive SWOT analysis was conducted, the findings of which are delineated in Table 2.

The Portuguese viewpoint on the vertical integration of treatment within a unified Local Health Unit system aligns with a notion of integration that, as described by Amado et al. [18], centres around the patient and encompasses two separate models. On one hand, the current ownership structure of infrastructures and the services provided within them, as observed in the existing eight LHUs in Portugal, exhibits a vertical and interconnected supply chain. On the other hand, the new proposed model emphasises functional integration, which goes beyond the mere infrastructure aspect and strives to foster effective coordination among services. This functional integration, when combined with the integrated management of primary healthcare and hospital care, aims to achieve improvements in health outcomes, enhance institutional autonomy through appropriate management tools, prioritise patient-centric care through centralised services, and facilitate differentiation, training, and research endeavours.

It is understandable that achieving functional integration may provide greater challenges compared to structural integration, as the latter is primarily concerned with organisational factors [38–40]. The evidence for this assertion lies in the vertical integration process that was first introduced in Portugal in 1999 as a pilot experience in Matosinhos. This approach was subsequently replicated in seven additional units located in interior and/or older regions, namely the northeast of Portugal, Alto Minho, Guarda, Castelo Branco, North Alentejo, Baixo Alentejo, and Litoral Alentejano. However, it is important to note that these units only incorporated the structural integration component of the model, which ultimately failed to meet expectations as it did not yield any significant improvements in health outcomes. The primary reason for these subpar outcomes can be attributed to the intricate nature of the system, characterised by the simultaneous presence of decentralised regional structures known as Regional Health Administrations. These entities curtailed the autonomy of the administrations operating within these units, thereby restricting their managerial capabilities. Additionally, the rules associated with procuring healthcare services

from the Central Administration of the Health System further constrained their operational capacities [18].

Table 2. SWOT analysis of the LHU model.

Strengths	Weaknesses
- The establishment of effective coordination mechanisms among various levels of care. - The proximity of provision, which refers to the spatial closeness or nearness of a certain service or resource to its intended users or beneficiaries. - The integration of primary healthcare and hospital care management, ensuring that beneficiaries of the SNS have equitable access to the most appropriate care based on their specific requirements. - The acquisition of health benefits by means of proximity to decision-making processes and the attainment of enhanced autonomy. - Advocating for the prioritisation of primary healthcare as the fundamental pillar of the healthcare system. - Enhanced capabilities and institutional independence through increased competencies.	- The insufficient readiness of infrastructures. - Challenges in achieving the seamless integration of information systems. - Potential financial constraints, particularly for university hospital centres within the LHU framework. - The level of participation among municipalities exhibits asymmetry based on their political alignment. - The potential for inadequate financial resources linked to performance incentives centred on outcomes and the generation of value. - The new LHU model has a heightened level of diversity and complexity, deviating from the existing model of administration and supervisory bodies. - The risk associated with the user's unrestricted selection of a healthcare institution. - The risk of failing to uphold the terms of authority delegation to local governing bodies. - The potential transfer of outstanding debts from defunct entities leading to the establishment of LHUs. - The integration of ACES workers who have not been consolidated into a unified ULS.
Opportunities	Threats
- Network management. - The realisation of the fundamental right to health protection. - Strengthening health promotion and disease prevention policies. - Strengthening primary care in the proximity response. - Maximising access, quality, and efficiency in resource management. - Meeting the growing demands and expectations of citizens. - The participation of citizens, communities, professionals, and local authorities in the definition, monitoring, and evaluation of health policies. - Focusing on people; that is, centring care on citizens. - Increased efficiency and effectiveness. - The reinforcement of necessary means and resources. - Greater management autonomy. - The stratification of the population by risk, which identifies the distribution of the disease burden in the population. - The generalisation of the Family Health Unit model at the level of primary healthcare. - The promotion of Integrated Responsibility Centres at the level of hospital healthcare. - Promoting differentiation, training, and research. - Integrating interventions to alleviate addictive behaviours and dependencies.	- Increased health and well-being needs among the population. - Ageing. - Disease burden. - The installed organisational culture. - A lack of municipal collaboration. - The hospital-centric system installed in the perception of citizens, responsible for non-urgent access to emergency services. - Coordination between teams of healthcare professionals. - The lack of a singular electronic health record system. - Workers and healthcare professionals having to adjust to the transition.

Source: The author.

Regarding the existing literature, it is worth noting that while comprehensive outcomes akin to those observed in the Portuguese context are lacking, there have been documented instances of integration processes emphasising consultation and surgical interventions in the United States. These experiences have yielded positive outcomes that align with the results anticipated for the Portuguese reform. One illustrative study is the research conducted by Haddad et al. [41], which determined that there is a correlation between the association of primary surgical and procedural practices with hospitals and an enhanced accessibility to surgical care for Medicaid patients, in comparison to traditional models. Similarly, a study conducted by Gillies et al. [42] found that the integration of hospitals and physicians' practices yields superior outcomes in terms of the processes of care quality measures such as breast cancer screening, adolescent immunisation screening, and the management of high blood pressure when compared to non-integrated models.

The study conducted by Caballer-Tarazona and Vivas-Consuelo [43] on the Alzira model is particularly noteworthy and aligns with the objectives of the Portuguese healthcare system. This model effectively integrates primary care and acute care, resulting in improved efficiency and certain quality indicators, such as reduced waiting list delays. However, this study does not provide substantial evidence regarding cost models in comparison to non-integrated public systems. In their study spanning from 2003 to 2015, Comendeiro-Maaløe et al. [44] conducted an analysis on the same model and found that the integration of primary care providers and hospitals through PPP contracts displayed varying levels of performance in terms of quality and efficiency measures in comparison to comparable public providers. Additionally, a study conducted in Spain by Falces et al. [45] examined the integration of one hospital and seven primary care providers. The study found that the integration of primary and secondary care in the delivery of cardiology services leads to improvements in the quality of care processes. This finding is of particular relevance. The implementation of specific interventions for managing ischaemic heart disease (such as cholesterol control), heart failure (such as the prescription of beta blockers), and atrial fibrillation (such as conducting etiological studies followed by echocardiography) can be compared to the standard treatments provided in the field of cardiology. A study conducted by Curry et al. [46] highlights the significance of the English experience. For this study, the researchers examined the integration of two hospitals and three community healthcare service providers. They found that comprehensive integration across all levels of care, particularly focused on elderly patients, yielded comparable process of care quality measures, such as blood pressure control and dementia-case finding, when compared to baseline data from England. In contrast, a single study conducted in China examined the application of this approach. Yuan et al. [47] determined that the integration of primary care with hospitals did not yield any statistically significant differences in the quality of treatment compared to more loosely coordinated collaborative systems. Regarding integration involving the establishment of Integrated Responsibility Centres, Taiwan's experience is noteworthy. Chu et al. [48] conducted an evaluation of a pilot project and found that the implementation of the hospital–physician integration strategy, specifically the creation of responsibility centres, resulted in improved revenue efficiency for the hospital when compared to pre-strategy data. The authors of the aforementioned study further expanded their research to include an additional 90 units [49]. Their findings further support the conclusion that the implementation of hospital–physician integration techniques such as responsibility centres, comprehensive quality management, and physician fee programmes leads to enhanced efficiency in hospitals compared to non-integrated hospitals.

The findings of Amado et al. [18], reported in their comprehensive literature analysis, indicate that integration in healthcare yields superior outcomes and enhances quality. However, caution must be exercised regarding the potential emergence of inefficiencies, particularly in the absence of strategic alignment. It is imperative to exercise caution in light of the potential decline in quality, as discussed by Post et al. [50] and Machta et al. [51], in cases when integration between disparate structures is ineffective.

5. Conclusions

The Local Health Unit model presents a promising opportunity for health reform in Portugal. This model facilitates the integration of healthcare services, enabling the alignment of various entities under a unified strategy. Additionally, it promotes collaboration with the social and private sectors, emphasising the importance of complementarity. Ultimately, this approach prioritises the citizen as a central element within the healthcare system.

In the context of healthcare, particularly within a largely public system model, it is imperative to shift the perspective away from financial considerations and instead prioritise the well-being of patients and the citizens who fund the system. Hence, effective resource management is crucial in order to assure the delivery of user-centred care, resulting in improved response rates, enhanced accessibility, and high-quality services aligned with best practices. This analysis highlights the issues pertaining to access, including individuals lacking a primary care physician and the concerning trend of increasing wait times for initial hospital consultations and surgical procedures.

The majority of the strengths and opportunities assume that the adoption of vertical integration in a generic manner will result in enhanced efficiency, effectiveness, and quality. Nevertheless, the literature highlights several concerns that should be addressed, given the reliance on the logical framework and the various divisions of the Executive Directorate of the National Health Service which are responsible for coordinating multifaceted procedures.

This study listed several strengths, including the potential for enhanced collaboration between hospitals and health centres, leading to improved accessibility. Additionally, the implementation of centralised procurement and purchasing mechanisms could result in cost savings. Furthermore, the system could achieve greater efficiency in resource management and an improved coordination of human resources. Moreover, there is a focus on patient-centred care rather than solely treating the illness. Lastly, the system emphasises disease prevention and health promotion, aligning with the recommendations of the World Health Organisation. Nevertheless, there exist vulnerabilities that may undermine the system's goals, and these vulnerabilities are primarily centred around inadequate infrastructure and human resources, especially in less populated regions. Disparities in municipalities' financial capacities, caused by regions with larger populations enjoying greater financial resources, also pose a challenge. Additionally, the burden of previous debt models being transferred to the new system and the influence of the private health sector on the public system exert further pressure.

Hence, it can be inferred that the aforementioned Local Health Unit model holds promise and is theoretically expected to yield improved health outcomes while adhering to the principles of efficiency, effectiveness, and quality, which are commonly associated with exemplary public management models. This conclusion is drawn from an integrated health governance standpoint.

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