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Article

Healthcare Innovation in Greece: The Views of Private Health Entrepreneurs on Implementing Innovative Plans

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Abstract: In the field of healthcare innovation, Greece ranks 26th in FREOPP's World Index of Healthcare Innovation (WIHI) 2021 analysis. Such a standing illustrates low performance in the dimensions of quality, science and technology and fiscal sustainability. This article seeks to shed light on this backwardness and examine the obstacles and weaknesses in the development of innovative projects by Greek health entrepreneurs. Furthermore, this research aims to trace entrepreneurs' views on innovation issues and assess the existence of innovative plans from four perspectives: at the level of service to citizens, in the functionality of health business structures, at the level of facilities and technology, and in a clinical setting. Qualitative research was conducted with the entrepreneurs of 12 health companies in the form of semi-structured interviews. This study has shown that healthcare entrepreneurs do not reject the development of innovative projects and that those who have implemented innovative practices have had positive results; however, various obstacles negatively impact the implementation of innovative ideas. A primary research contribution will capture the factors that negatively affect the development of innovative projects and represent a crucial element for Greece to remove barriers and improve its performance on innovation issues. The results of the research will provide support for not only innovation decision-making centres but also other health entrepreneurs.

Keywords: health enterprises; innovation; innovative ideas; innovative projects

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1. Introduction

Modern entrepreneurship is characterised by relentless competition and changing technology. Firms that want to grow or are just trying to survive encounter continuous change and differentiation in relation to their products or processes [1–3]. To achieve and maintain a competitive advantage, the top management team of each company should devote at least the same amount of time as it would to internal affairs, research and reflection on customer needs and the possible ways to achieve them through the innovation process [4,5]. Such an advantage is not only expressed in economic profit but also other forms, such as domination in the market (market power), an increased market share and so forth. Following the OECD's Oslo manual for measuring innovation, four types of innovation can be defined: (a) process innovation that may improve an existing product or reduce the time and cost needed for the production, (b) product innovation, which is the creation of new or significantly differentiated product), (c) marketing innovation, which makes improvements to the promotion and pricing process, and (d) organizational innovation, which includes administrative changes and new business practices) [6,7]. A successful new product could provide a firm with a competitive advantage and market leadership (i.e., being the 'first mover'), exploit the advantage of 'knowledge economies', and build significant entry barriers for potential competitors. The knowledge acquired from this process enables the company to move one step ahead of its competitors, as it

can diversify the products and retain a significant market share even after a long period and numerous new entries into a competitive industry [8]. Furthermore, the ability to reduce production costs will prove particularly useful in times (and markets) of intense competition, where price compression should capture the maximum possible market share [9]. However, one innovation is not enough. Under fear of competition innovators must continue to create new products or services to maintain their position [6]. According to Denton [3], "in order to stay in the same position, you have to run a lot".

Greece's health sectors, both private and public, do not perform well in implementing innovative projects. Placing 26th in FREOPP's 2021 World Index of Healthcare Innovation (WIHI) confirms the country's poor performance in innovative activity in a critical sector for the economy and its overall prosperity. This primary research seeks to assess the causes and barriers that create low performance by health businesses in implementing innovative plans. We focus on health entrepreneurs from the private sector, aiming to identify their point of view on innovation and how they perceive the lag in implementing innovative ideas, such as the obstacles and weaknesses they encounter developing innovative projects. This issue represents a research gap for countries that perform poorly in implementing innovation projects. We attempt to bridge that gap, analysing health entrepreneurs' attitude relative to innovative plans, identifying potential obstacles in terms of government policies and the legal framework that imposes strict operating protocols that prevent the implementation of innovative ideas. Finally, some suggestions are made, on the need for change in the healthcare industry and the adoption of open innovation processes in line with recent research findings [10–12]. The results of the research will provide support for innovation decision-making centres.

2. Literature Review

Various studies strongly relate innovative process and research and development (R&D) activities with firm performance and growth [13,14]. Innovation-either incremental or radical and concerning products or processes-aims to help firms gain competitive advantage [4,15,16] and compete with their counterparts [17,18]. Innovators can succeed domestically and in international markets [19], and they present higher survival rates, even during severe economic recessions [20,21]. Most research indicates that innovative firms appear to be more profitable than their non-innovative counterparts, grow faster and enjoy a larger market share [22,23]. However, apart from the economic benefits, innovators also enjoy crucial indirect benefits, as the innovative process can contribute to the transformation of a company's characteristics and capabilities, improving its ability to perceive the risks and opportunities occurring in the market [24,25]. Active R&D appears to be a principal factor for technological and economic progress. Various surveys highlight the strong positive relationship between financial performance and fast growth rates [26], both at the company and at the country level [18,27–29]. Following research in France, Delapierre et al. [30] conclude that R&D increases the performance of sectors and national economies, diffusing innovative products.

Among the most prevalent barriers in the development of an active innovative process is the uncertainty of the outcome and the (usually) high cost. Potentially troublesome projects include a high-risk factor for the financier, especially if there are unknown parameters. The risk of default is more pronounced in enterprises that develop innovative projects, and potential financiers (internal or external) face marked difficulties in the evaluation process [18,31]. Innovative activities (especially in the primary stages) require access to adequate funding. The need for financing and the establishment of the necessary infrastructure is critical for innovation, a fact first highlighted by Joseph Schumpeter in his 1942 position, which strongly relates successful innovation with monopolistic firms large enough to support the required investments. Following the Schumpeterian point of view, various studies highlight financing as a critical determinant for R&D and innovative activity. Such a process includes long and uncertain payback periods, with collateral acting as a predisposition for any external source of finance. Thus, firms should attempt to innovate and enjoy the

benefits of their activity, already be profitable (retain earnings) and have access to external finance [32,33] or the government's financial support for the establishment of new products and services.

The improvement of a specific care pathway, could be product or process innovation. Innovation that is considered successful is both viable and desirable for society, and successful innovators aim to gain competitive advantage. Previous studies have focused on five types of innovations by healthcare providers: new products, new markets, new supply sources, new production methods (process innovation), and industry organisation [34]. According to the World Health Organisation (WHO), enterprises should introduce new or improved health practices, products and processes. They should also improve the quality, cost, diagnosis, treatment and sustainability of the health system [35]. Effective healthcare organisations facilitate the development of knowledge and emphasise market orientation, enabling them to continuously collect information about customers' (i.e., patients') needs and competitors' capabilities. This approach makes the organisation more customer-centric and helps create customer value [34]. Thus, such an organisation would be open to adopting an innovative idea that will provide a competitive advantage. According to Lerro [36], private and public organisations in health care need to develop innovative processes in order to determine both efficiency and quality of the services provided. Sarkies et al. [37] focus on the influence of certain mechanisms in the implementation of innovations in healthcare organisations by examining selected theories, models and frameworks and identifying obstacles at various levels of their operations. Innovation in healthcare systems is of primary concern for society [38], and digital innovations [39] and smart technology [40] could provide crucial improvements in providing healthcare services to the public. However, even though the advantages of innovative activity seem to have significant importance, both for healthcare providers and patients, new scientific knowledge and innovations in healthcare are slow to spread [41]. Recently, due to the pandemic crisis, the healthcare sector experienced dramatic change, with novel business models, unexpected collaborations and accelerated timelines requiring organisations to rethink how they operate. In their survey of 100 leaders in the healthcare industry, Cohen et al. [42] find that 90 per cent agree that the pandemic will fundamentally change the way they conduct business, requiring new products, services, processes and business models. Open innovation can positively affect health innovation. Liu et al. [43] underline, that in response to the COVID-19 pandemic, there have been innovative incentives for readjustments in medical companies, many of which happened in an open collaborative way. The leading players in the health care industry-pharmaceuticals and medical device companies–seem, over the last decade, to be adopting an open innovation model that aims to reduce uncertainty and create sustainable growth [12]. Innovation in healthcare is part of the field of social innovation, which encourages new approaches to tackle issues of poverty, education, health and other human development problems by making system-level changes [35]. According to Yun et al. [44] the use of open innovation that providing advanced products or services to the people could also be considered as social innovation.

Although Greece has recorded many years of poor performance through indicators such as the FREOPP index, little research has identified obstacles and weaknesses in developing innovative plans for the public and private healthcare sectors. Research by Biginas & Sindakis [45] examines the public-private partnerships and the impact of the activity on developing innovative projects. They capture the prevailing problematic situations in Greece that hinder the development of innovative projects in partnerships. Karampli et al. [46] assess pharmaceutical innovation in relation to health expenditures and capture the determinants in the diffusion of pharmaceutical innovation. Another study shows that pharmaceutical innovation in Greece reduced expenditure in hospitals and increased the average age of death [47]. Research by Makris and Apostolopoulos [48] shows that 40 per cent of health investors are content with traditional forms of operation and are reluctant to implement innovative plans.

Innovation in Healthcare: The Case of Greece

According to the European Innovation Scoreboard [49], Greece is a moderate innovator, with R&D expenditure in the business sector in the last decade amounting to between 15 and 42 per cent of the EU average. Even though the contribution of R&D in economic growth is crucial, the country (along with most nations on the European periphery) presents poor performance due to (among others) the severe financial crisis and the COVID-19 pandemic. According to the following graph, Greece ranks at the bottom in R&D expenditures in the Eurozone (In Figure 1).

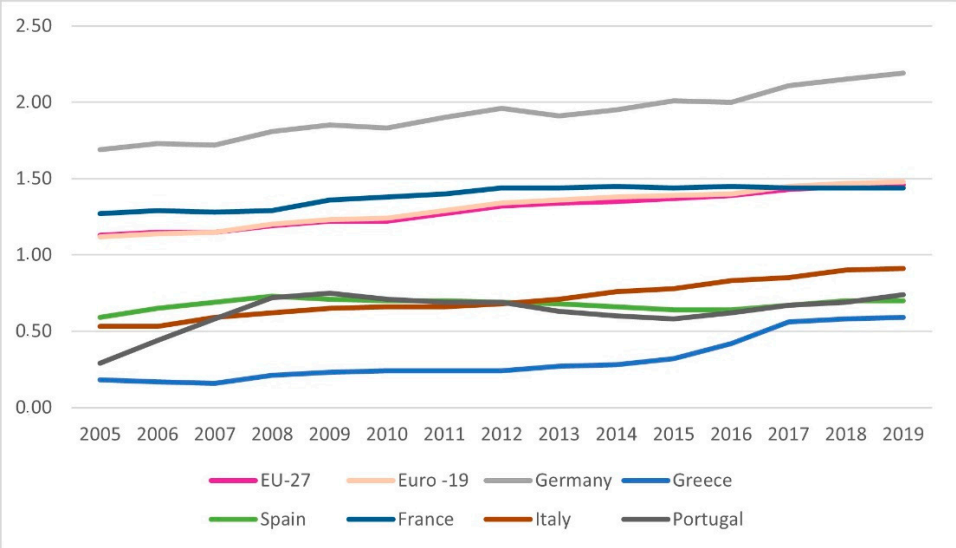

Figure 1. R&D Expenditures (total-%GDP)/Source: Eurostat, own calculations.

It is clear that the country is performing better in R&D expenditure after 2014 in the aftermath of the economic crisis. However, the relevant indexes remain far from the EU and Euro area average and the other countries of southern Europe. Critically, the findings show a substantial gap in support from the public sector to innovators. Even though the Government's support for business R&D has doubled from 15 per cent relative to the EU in 2014 to 29.7 per cent in 2021, the figure remains lower than the EU average during the COVID-19 pandemic, when more support has been necessary for health providers. Furthermore, the use of information technology in Greece is less than 50 per cent of the EU average [49]. According to WIHI [50], the Greek healthcare system comprises 283 hospitals, with 55 per cent being publicly owned establishments that account for two-thirds of all hospital beds. Privately owned hospitals represent 45 per cent of Greece's hospital infrastructure and comprise only one-third of its hospital beds. Before 2011, Greece offered a robust private health insurance market with a diversified range of premiums, benefits and cost-sharing provisions for patients. However, after 2011, this largely private insurance network was replaced by a single-payer system under the National Organisation for Healthcare Provision (EOPYY). This change saw that most private providers, for-profit hospitals and diagnostic centres have entered into contracts with EOPYY to provide services and health expenditures for Greece in 2021. Moreover, health expenditures were 8.4 per cent of its GDP, lower than the EU average (9.5 per cent of GDP) (In Figure 2). Social health insurance and taxes provide around 60 per cent of the system's financing, while private spending makes up the remaining 40 per cent.

In healthcare innovation, Greece ranks 26th in FREOPP's WIHI analysis in 2021, achieving poor performance in the dimensions for quality, science and technology and fiscal sustainability (the latter primarily due to a high debt-to-GDP ratio). Data from the Eurostat [51] also indicates that the gross fixed capital formation in Greece's overall healthcare system accounts for only 0.1 to 0.2 per cent of GDP in the last decade, including expenditure for infrastructure, machinery and intellectual property products (closely

related to innovation and R&D outcome). Such figures indicate that Greece is one of the lowest countries relative to other European countries with available data, including Finland, Ireland, Austria, Latvia, Estonia and Hungary. According to the same dataset (diagrams 1 and 2), Greece appears to see a steady reduction in the financing of government schemes for health services, from 6.6 per cent of GDP (2010) to only 4.7 per cent (2018). That reduction is potentially even more substantial in monetary terms, as GDP decreased heavily from 2010 until 2016. However, in other European countries that present available data-namely, France, Belgium, Czech Republic, Denmark, Germany, Estonia and Austria-the overall trend is either an increasing contribution, or stabilised figures with a small reduction in the GDP percentage, such as in Spain, Portugal, Italy and Slovakia. However, the healthcare sector's specific characteristics and the requirement for capital and public financial support is crucial for a successful process, as the outcome of the innovative activity will benefit not only the innovator itself but society as a whole. Most of the users of private healthcare providers are publicly insured. According to official data, Greece has a 20 per cent lower health expenditure from public sources, as a share of total health spending, compared to the EU27 average [51]. The same holds for health expenditure from public sources, as a share of total government expenditure, which is 50 per cent lower than the EU27 average (10 per cent instead of approximately 15 per cent, respectively) [52]. In this context, we attempt to examine the obstacles and weaknesses in the development of innovative projects from the point of view of health entrepreneurs in Greece, using semi-structured interviews. The research process followed is analysed in the next section.

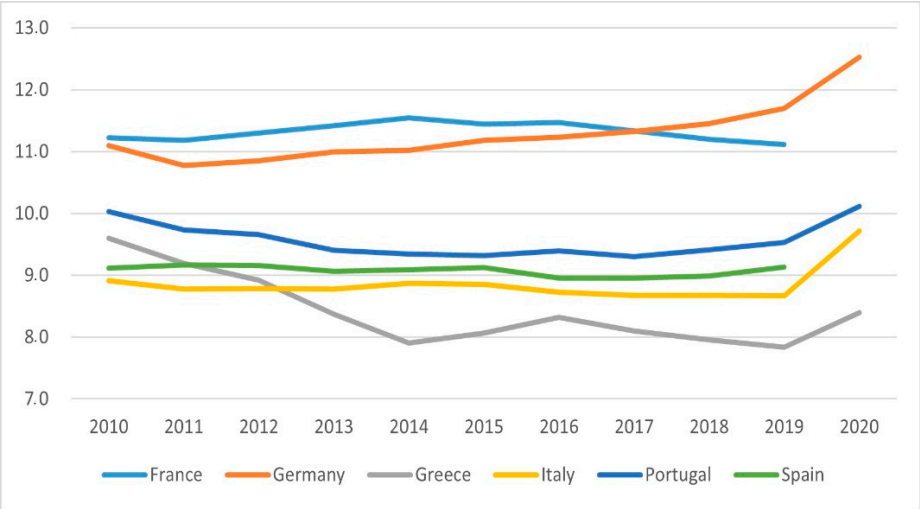

Figure 2. Current Expenditure on Health (all functions, all providers, %GDP)/Source: OECD, own calculations.

3. Materials and Methods

Qualitative research examines the prospects, experiences and interpretations of business owners and their environments [53]. This method is better suited to topics concerning business and entrepreneurship since it contributes to a greater understanding of their unique, variable and natural attributes [54,55]. At the same time, it clarifies and explains their complexity [56,57]. Based on the international literature, this study uses qualitative methods due to the effectiveness these have shown in healthcare business research [58–60].

For the sample identification, the researchers use convenience sampling, which is commonly employed in qualitative approaches on primary care and allows the isolation of emerging trends [61–63]. Sample collection took place using an individual semi-structured interview, which is the most commonly used method in qualitative research and has been shown to be the most effective [64–67] (In Figure 3). Semi-structured interviews allow the researcher to investigate particular aspects of business [68]. Given that qualitative research requires a smaller sample to maintain their subjective and personalised attributes, the

sample in this research comprises 12 healthcare enterprises [62,69] (Table 1). This sample size was determined on the principle of saturation [70].

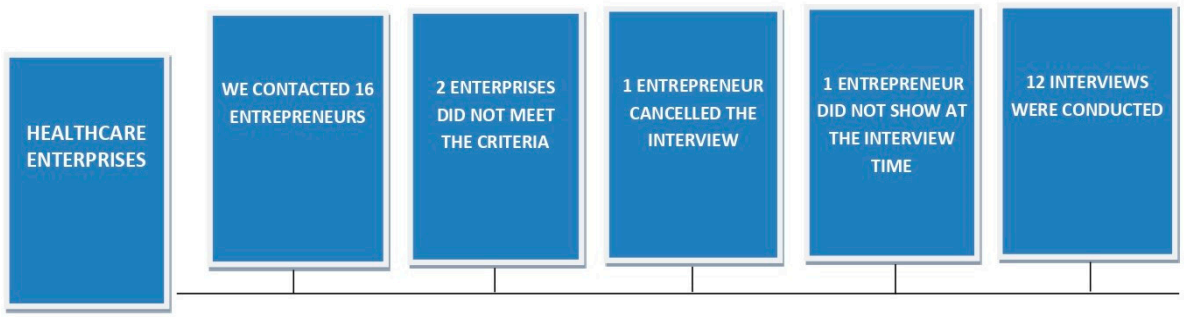

Figure 3. Presentation of the course of data collection.

Table 1. Table of selected healthcare enterprises.

Enterprise	Year Established	Number of Employees	Type of Business	Area
R1	2010	100	Rehabilitation Centre	Southern Greece
R2	1997	10	Diagnostic Centre	Central Greece
R3	2009	30	Hemodialysis Centre	Southern Greece
R4	2020	45	General Clinic	Southern Greece
R5	2004	21	Hemodialysis Centre	Southern Greece
R6	1983	3	Physiotherapy Centre	Northern Greece
R7	2013	76	Psychiatric Clinic	Northern Greece
R8	2000	100	Psychiatric Clinic	Northern Greece
R9	2008	145	Rehabilitation Centre	Central Greece
R10	1991	3	Physiotherapy Centre	Central Greece
R11	2017	24	Diagnostic Centre	Southern Greece
R12	2012	70	Mental Health Clinic	Central Greece

The research took place during the period of the third COVID-19 pandemic wave in Greece. The interviews commenced in February 2021 and ended in May 2021. Each interview lasted an average of 45 min. Based on the literature, interviews conducted using Skype or telephone calls are as reliable as face-to-face data collection [71–73]. The study of Sweet [74] shows that telephones interviews show compatibility with interpretative and phenomenological research, which is why qualitative researchers should be able to use these methods and not be restricted to only in-person interviews. Conducting the interviews with the help of technology (Skype, Viber and WhatsApp) and telecommunications also solved practical issues since, during the research's implementation period, the onset of the COVID-19 pandemic resulted in restricted movements.

Data Analysis

The data analysis uses the qualitative data processing software NVivo12. NVivo12 is a programme widely used in qualitative research, including in the research field of entrepreneurship [75–77]. The use of NVivo12 enables the assessment and coding of collectable data by completing a thematic analysis of the content. The interviews were initially examined separately after an inductive approach before being compared [78,79]. This approach highlighted emerging issues and sub-issues (see in Table 2) [80]. The creation of the categories was exhaustively defined, and the coding was exclusive and independent [81,82]. The codification was conducted jointly by the authors and there was

unanimity in the group [83]. Data analysis was carried out in Greek, the mother tongue of the healthcare entrepreneurs participating in the survey. This strategy allowed the research team to ensure the accuracy and reliability of the data and avoid misinterpretations [84,85]. Only the entrepreneurs' references used in the article have been translated into English [86].

Table 2. Emerging issues and sub-issues in relation to innovation.

Emerging Issues	Sub-Themes	Summary
The existence or non-existence of innovative ideas in healthcare enterprises; obstacles and weaknesses	➢ Innovative ideas at the level of citizen service ➢ Innovative ideas in the functionality of the enterprise's structures ➢ Innovative ideas in facilities and technology ➢ Innovations in a clinical environment Obstacles and weaknesses in the development of innovative projects	An examination of the views of the entrepreneurs who invested in innovative projects showed that where innovative ideas were implemented, they produced positive results. Entrepreneurs consider open innovation strategies as positive progress. The obstacles in implementing innovative projects are found in the strict protocols, innovative services not being covered by the insurance systems, and the 'clawback' and 'rebate' barriers.

4. Results

Five sub-issues arose. The first concerned the implementation of innovative projects at the level of citizen service. The second concerned innovations in the functionality of the enterprise's structures. The third concerned innovation at the level of facilities and technology. The fourth one concerned innovation in the clinical environment. Finally, the fifth category emerged, which indicated the obstacles and weaknesses in implementing innovative projects in healthcare enterprises.

- Innovative interventions in patient service and the operational structures of the enterprises

The healthcare entrepreneurs in the study declared that they proceeded to implement innovative practices offering more effective care for the patients and improving the provided health services. The findings reflect their interest in innovative patient management projects that they consider effective.

> "We follow the international literature and the developments. We try to evolve, to innovate. The innovative solutions in our equipment and in the service of our patients continues. The innovative investment projects are effective, and our business becomes increasingly competitive. The innovative programme of patient service with our means of transport, without cost and waste of time, gave us a strong competitive advantage". (R5)

> "We are in favour of innovation. The field of healthcare needs innovative projects. We innovated in the development of outpatient clinics for the immediate and effective service of the patients. We successfully implemented the bank factoring in order to have better liquidity. We are now working on a new innovative plan to better serve our patients". (R7)

- Innovative interventions in the functionality of the structures

Implementing innovative projects in the functionality of the enterprise's structures produced positive results. The implementation of these projects also strengthened the resilience of the enterprises during the economic crisis and the COVID-19 pandemic.

> "We made innovative moves that helped us cope with the economic crisis. We expanded our number of beds, and we upgraded the level of nursing care. With innovative ideas, many of our structures were improved, and we created new amenities with a clever design. We invested in the innovation of our daily operation, and this empowered us and kept us alive during the crisis". (R8)

> "What makes the difference is the development of innovative solutions in our daily operation for the citizen service. The innovation in the private health sector widens the gap from the public health structures to its advantage. We saw in practice how the innovative projects we implemented into its operation and promotion pay dividends". (R10)

- Innovative interventions in facilities and technologies

The findings highlighted that the entrepreneurs who innovated in their facilities and technologies feel satisfied. Their investment into technologies with innovative applications upgraded their provided services to become more appealing.

> "We were interested in investment into innovative medical devices. We invested in robotic rehabilitation. We innovated with a programme of robotic therapy in order for the local population to become acquainted with it. This innovative idea of ours satisfied us along the way". (R1)

> "We tried to make use of the technological development of the devices in the field of imaging equipment in order to offer our services through modern and innovative methods by upgrading our services, and the result satisfied us. The field had lacked both devices of high level and innovative ways of using them". (R2)

- Innovative interventions in the clinical environment

The healthcare entrepreneurs also proceeded to intervene by investing in the clinical environment. They preferred to implement innovative practices that upgraded the clinical space and, as the entrepreneurs declare, at the same time, they made it more cozy to the patients.

> "We invested in the clinical environment with a new clinical intervention and by applying existing medication in a new environment. We developed innovative and effective strategies by improving the environment at the level of clinics". (R9)

> "The investment with innovative ideas in the environment where the patient will stay for recovery was among our priorities because this does not exist in public hospitals, and it is an important factor in every patient's choice. They want a human environment which does not differ from their home". (R4)

- Obstacles and weaknesses in the development of innovative projects

The findings highlight multifactorial aetiology in the barriers and problems encountered by healthcare entrepreneurs when implementing their innovative projects. The entrepreneurs faced uncertainty with the insurance associations and arrangements they imposed, especially with the 'clawback' and 'rebate' barriers. According to the study, the strict protocols applied in healthcare do not leave much room for innovative changes. Entrepreneurs believe that the absence of the public sector's digital services and the insurance funds with which they work on a daily basis also creates obstacles in their own digital transformation.

> "There is no room for many innovative ideas; the guidelines and the protocols in our health services are very specific, and we are obliged to follow them. This does not mean that there is no scope for the implementation of innovative ideas but it is limited. Another problem is that the public services and insurance funds have not made progress with the digital transformation". (R3)

> "Many innovative services that we offer are not covered by the insurance funds of the patients, some others are costly, and of course there are the mechanisms of 'clawback' and 'rebate' that limit the development of new innovative ideas". (R4)

5. Discussion: Healthcare Entrepreneurs, and Open Innovation

Learning about the problems of implementing innovative programmes faced by entrepreneurs who have invested in the health sector is of particular importance. Entrepreneurs are market agents and shape market environments. Varkey et al. [87] argue

that even innovative best practices can fail to yield successful results if the environment or market fails to adopt them. Although there have been significant improvements in the provision of health services, inefficiencies remain in addressing problems through innovative interventions [34,88]. This fact is more pronounced in less wealthy nations such as Greece and prompts poor performances in implementing innovative health plans [51]. The present research has shown that health entrepreneurs remain positive about implementing innovative plans; they appear to be looking for solutions and are determined to apply innovative ideas that can offer improvement to their operation and general strategy. In other words, they are looking for open innovation-a fact compatible with the international literature [89–92]. Open innovation shows growth in the private healthcare sector and achieves benefits from the rise of technology [93–96]. Digitalisation and the creation of innovative health ecosystems provide many promising opportunities for entrepreneurs and the care industry as far as open innovation is concerned [97–100]. Utilizing digital solutions and capabilities in open innovation benefits companies in terms of interconnection with the external environment and effective communication of all parties [101]. This is a positive element since, according to Wass & Vimarlund (2016), in the field of healthcare, open innovation is limited [102]. This process, among other factors, is caused by the restrictions of the institutional regulatory framework which continue to affect the dynamics of open innovation in the private health sector [103–107]. The entrepreneurs who participated in the survey and implemented innovative plans to improve their services, improve their operation, and provide seamless service to their patients were satisfied with the results. Innovative projects related to their operation, technology and clinical environment were particularly successful. Also, the innovative projects they implemented helped them with the resilience of their businesses during the economic crisis of 2008 and the health crisis of the COVID-19 pandemic. Obstacles were detected in terms of government policies and a legal framework that imposes strict operating protocols. These protocols leave no room for flexibility and prevent the implementation of innovative ideas. This evidence aligns with the results of other studies. Research by Desveaux et al. [108] reveals the crucial role of governments in developing the vision that will shape innovation activities. Shaw et al. [109] make the same claim. The complexity of the system creates obstacles for innovative interventions [110]. The legal framework and policies should support and not hinder the development of innovative projects. Team et al. [111] argue that institutional structures are crucial to the sustainability of innovations in the health sector. Policy strategies should support users' needs [112].

Health entrepreneurs claim that insurance funds do not cover innovative services. Greece's legal framework favours the signing of service contracts between the private health sector and public insurance organisations [113–115], which has helped the profitability of healthcare enterprises. In Greece, the largest consumers of private health services are the public health structures and insurance organisations [116,117]. The sustainability of private health units directly relies on the large consumption of services, namely, the public sector and insurance funds. The latter organisations create and often impose the terms of the above collaboration. If insurance organisations do not cover innovative services to insured persons, it creates difficulties investing in innovative projects and raises fears that the cost of services will increase without having the means to amortise them. The present research illustrates this situation. Findings on that issue are in line with those made by Storey [118] for the UK, concluding that new expenditure in times of financial stringency and cost-cutting makes the task of developing a "business case" hard work and discouraging. The adoption decision requires evidence of impact and cost effectiveness. The private health sector bases its growth on the weaknesses and distortions of the public health sector to offer hassle-free/high-quality services without informal payments [119–123]. Especially after the financial crisis of 2008 and the inclusion of Greece in the stability and supervisory mechanisms, there were large cuts in the financing of public health services that resulted in the inability of healthcare units to invest in modern technological equipment and develop innovative strategies [124,125]. The gaps in the public sector are filled by the private sector,

which is more trusted by patients [126], but this depends on insurance organisations since their insured patients consume the majority of these enterprises' services.

The present research reveals another obstacle for health sector entrepreneurs in the development of innovative projects, which correlates to government policies and the legal framework of Greece. These are the barriers imposed by the 'clawback' and 'rebate' mechanisms on health companies which force them to restrict their requirements for services they had provided to insured persons of the National Organisation for the Provision of Health Services–EOPYY [127,128]. The absence of digital services in the public sector and insurance organisations that cooperate with healthcare companies-the largest consumers of their services-also creates obstacles for these enterprises in terms of their digital transition. The digital transition of the National Health System and insurance organisations lags behind [129,130]. Research by Katehakis et al. [131] shows that the function of modern health systems requires efficient cooperation between stakeholders, such as insurance organisations, and the public sector. Moreover, the interoperability of information and communication technology systems is a prerequisite. Strong political will and structural interventions are required to complete the digital transition that will facilitate the development of innovative projects. Despite the reported obstacles, the research reports a positive trend for innovative interventions in health companies. Those entrepreneurs who implemented innovative plans boosted the resilience of their businesses during the 2009 economic crisis and the COVID-19 pandemic. The projects that were successful were primarily innovative patient management plans, technical projects with innovative applications, and clinical environment schemes.

6. Conclusions

According to the findings, the entrepreneurs identify obstacles in the strict operating protocols applied in Greece by the current institutional framework, which causes a deterrent effect in implementing certain innovation practices. They consider the non-coverage of innovative services by insurance funds to be a damaging policy. The public mechanisms of 'clawback' and 'rebate' imposed on healthcare enterprises also constitute a major obstacle which creates problems in their financial liquidity. The above facts provided by the examined dimensions were related to the implementation of innovative projects at the level of citizen service, innovations in the functionality of the enterprise's structures, innovation at the level of facilities and technology, innovation in the clinical environment, and finally tracing the obstacles and weaknesses in implementing innovative projects in healthcare enterprises. To improve its position on health innovation issues, Greece must revise the framework governing the relationship between health companies and their two major consumers of service: namely, public health structures and insurance organisations. Greece also needs to reform the operating protocols of the private sector's health units and create interoperability by completing the digital transition. Interoperability has also represented a real problem in other European countries, many of which have successfully tackled it [132].

Research has shown that entrepreneurs operating in the health sector have the will, under certain conditions, to develop innovative projects. Furthermore, those who took the risk had positive outcomes. However, this study also has limitations. The development of innovative projects in the field of healthcare not only relates to the private sector but also concerns the public health sector, which is why it is appropriate in the future to carry out corresponding research on this area.

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References

1. Urbig, D.; Bönte, W.; Procher, V.D.; Lombardo, S. Entrepreneurs embrace competition: Evidence from a lab-in-the-field study. *Small Bus. Econ.* **2020**, *55*, 193–214. [CrossRef]
2. Brouwer, M. Entrepreneurship and uncertainty: Innovation and competition among the many. *Small Bus. Econ.* **2000**, *15*, 149–160. [CrossRef]
3. Denton, K.D. Gaining competitiveness through innovation. *Eur. J. Innov. Manag.* **1999**, *2*, 82–85. [CrossRef]
4. Distanont, A.; Khongmalai, O. The role of innovation in creating a competitive advantage. *Kasetsart J. Soc. Sci.* **2020**, *41*, 15–21. [CrossRef]
5. Christensen, J.L. The Role of Finance in Industrial Innovation. Ph.D. Dissertation, Aalborg University, Aalborg, Denmark, 1992.
6. Dosi, G. Technical Change and Industrial Transformation: The Standards of Industrial Dynamics in the National Innovation System. In *Economic Theory and Technology*; Giannitsis, T., Ed.; Gutenberg Publications: Athens, Greece, 1991; pp. 91–132.
7. OECD. Available online: https://www.oecd.org/site/innovationstrategy/defininginnovation.htm (accessed on 10 September 2021).
8. Teece, D.J. Technological change and the nature of the firm. In *Technical Change and Economic Theory*; Dosi, G., Ed.; Francis Printer: London, UK, 1988; pp. 256–281.
9. Johne, A. Successful Market Innovation. *Eur. J. Innov. Manag.* **1991**, *12*, 6–11.
10. Bigliardi, B.; Ferraro, G.; Filippelli, S.; Galati, F. The past, present and future of open innovation. *Eur. J. Innov. Manag.* **2021**, *24*, 1130–1161. [CrossRef]
11. West, J.; Salter, A.; Vanhaverbeke, W.; Chesbrough, H. Open innovation: The next decade. *Res. Policy* **2014**, *43*, 805–811. [CrossRef]
12. Kim, D.; Gyu, H.; Ryu, K.S.; Kyu-Sung, L. What Are the Success Factors for a Partnership with Global Medical Device Companies? Evidence from Korea. *J. Open Innov. Technol. Mark. Complex.* **2021**, *7*, 237. [CrossRef]
13. Exposito, A.; Sanchis-Llopis, J.A. Innovation and business performance for Spanish SMEs: New evidence from a multi-dimensional approach. *Int. Small Bus. J.* **2018**, *36*, 911–931. [CrossRef]
14. Prajogo, D.I. The relationship between innovation and business performance-a comparative study between manufacturing and service firms. *JKnowl. Process Manag.* **2006**, *13*, 218–225. [CrossRef]
15. Anning-Dorson, T. Innovation and competitive advantage creation: The role of organisational leadership in service firms from emerging markets. *Int. Mark. Rev.* **2018**, *35*, 580–600. [CrossRef]
16. Ageron, B.; Lavastre, O.; Spalanzani, A. Innovative supply chain practices: The state of French companies. *Supply Chain. Manag.* **2013**, *18*, 265–276. [CrossRef]
17. Koellinger, P. The relationship between technology, innovation, and firm performance—Empirical evidence from e-business in Europe. *Res. Policy* **2008**, *37*, 1317–1328. [CrossRef]
18. Makris, I.A. How the Greek banks manage risky projects. *Oper. Res.* **2006**, *6*, 183–195. [CrossRef]
19. Garcia, R.; Calantone, R. A critical look at technological innovation typology and innovativeness terminology: A literature review. *J. Prod. Innov. Manag.* **2002**, *19*, 110–132. [CrossRef]
20. Karlsson, C.; Rickardsson, J.; Wincent, J. Diversity, innovation and entrepreneurship: Where are we and where should we go in future studies? *Small Bus. Econ.* **2021**, *56*, 759–772. [CrossRef]
21. Autio, E.; Parhankangas, A. Employment generation potential of new, technology-based firms during a recessionary period: The case of Finland. *Small Bus. Econ.* **1998**, *11*, 113–123. [CrossRef]
22. Apostolopoulos, N.; Liargovas, P.; Sklias, P.; Apostolopoulos, S. Healthcare enterprises and public policies on COVID-19: Insights from the Greek rural areas. *Strateg. Chang.* **2021**, *30*, 127–136. [CrossRef]
23. Nguyen, S.K.; Vo, X.V.; Vo, T.M.T. Innovative strategies and corporate profitability: The positive resources dependence from political network. *Heliyon* **2020**, *6*, e03788. [CrossRef]
24. Durana, P.; Valaskova, K.; Vagner, L.; Zadnanova, S.; Podhorska, I.; Siekelova, A. Disclosure of strategic managers' factotum: Behavioral incentives of innovative business. *Int. J. Financ. Stud.* **2020**, *8*, 17. [CrossRef]
25. Geroski, P.A.; Machin, S. Innovation, profitability and growth over the business cycle. *Empirica* **1993**, *20*, 35–50. [CrossRef]
26. Storey, D.J.; Tether, B.S. New technology-based firms in the European union: An introduction. *Res. Policy* **1998**, *26*, 933–946. [CrossRef]
27. Makris, I. The effect of innovative activity in firm performance and development: Analysing data from the Eurozone. *Int. J. Bus. Econ. Sci. Appl. Res.* **2016**, *9*, 87–92.
28. Fagerberg, J.; Verspagen, B. Innovation studies-the emerging structure of a new scientific field. *Res. Policy* **2009**, *38*, 218–233. [CrossRef]
29. Holak, S.L.; Parry, M.E.; Song, M. The relationship of R&D/sales to firm performance: An investigation of marketing contingencies. *J. Prod. Innov. Manag.* **1991**, *8*, 267–282.
30. Delapierre, M.; Madeuf, B.; Savoy, A. NTBFs: The French case. *Res. Policy* **1998**, *26*, 989–1003. [CrossRef]
31. Bank of England. Domestic Finance Division. In *Financing of Technology-Based Small Firms*; Spring: London, UK, 2001.
32. Coad, A.; Rao, R. Firm growth and R&D expenditure. *Econ. Innov. New Technol.* **2010**, *19*, 127–145.

33. Munier, F. Firm size, technological intensity of sector, and relational competencies to innovate: Evidence from French industrial innovating firms. *Econ. Innov. New Technol.* **2006**, *15*, 493–505. [CrossRef]
34. Thakur, R.; Hsu, S.H.; Fontenot, G. Innovation in healthcare: Issues and future trends. *J. Bus. Res.* **2012**, *65*, 562–569. [CrossRef]
35. Kimble, L.; Massoud, M.R. What do we mean by Innovation in Healthcare. *Eur. Med. J.* **2017**, *1*, 89–91.
36. Lerro, A. Knowledge-based perspectives of innovation and performance improvement in health care. *Meas. Bus. Excell.* **2012**, *16*, 3–13. [CrossRef]
37. Sarkies, M.; Robinson, S.; Ludwick, T.; Braithwaite, J.; Nilsen, P.; Aarons, G.; Weiner, B.J.; Moullin, J. Understanding implementation science from the standpoint of health organisation and management: An interdisciplinary exploration of selected theories, models and frameworks. *J. Health Organ. Manag.* **2021**, *35*, 782–801. [CrossRef]
38. Dafny, L.; Mohta, N.S. New marketplace survey: The sources of health care innovation. *NEJM Catal.* **2017**, *3*, 1.
39. Przybilla, L.; Klinker, K.; Wiesche, M.; Krcmar, H. A Human-Centric Approach to Digital Innovation Projects in Health Care: Learnings from Applying Design Thinking. In Proceedings of the 22nd Pacific Asia Conference on Information Systems (PACIS 2018), Yokohama, Japan, 26–30 June 2018.
40. Redfern, J. Smart health and innovation: Facilitating health-related behaviour change. *Proc. Nutr. Soc.* **2017**, *76*, 328–332. [CrossRef]
41. Balas, E.A.; Chapman, W.W. Road map for diffusion of innovation in health care. *Health Aff.* **2018**, *37*, 198–204. [CrossRef]
42. Cohen, D.; Furstenthal, L.; Jansen, L. *The Essenatials of Healthcare Innovation.* Available online: www.mckinsey.com (accessed on 5 July 2021).
43. Liu, Z.; Shi, Y.; Yang, B. Open Innovation in Times of Crisis: An Overview of the Healthcare Sector in Response to the COVID-19 Pandemic. *J. Open Innov. Technol. Mark. Complex.* **2022**, *8*, 21. [CrossRef]
44. Yun, J.J. How do we conquer the growth limits of capitalism? Schumpeterian Dynamics of Open Innovation. *J. Open Innov. Technol. Mark. Complex.* **2015**, *1*, 17. [CrossRef]
45. Biginas, K.; Sindakis, S. Innovation through Public-Private Partnerships in the Greek Healthcare Sector: How is it achieved and what is the current situation in Greece? *Innov. J. Public Sect. Innov. J.* **2015**, *20*, 1–11.
46. Karampli, E.; Souliotis, K.; Polyzos, N.; Kyriopoulos, J.; Chatzaki, E. Pharmaceutical innovation: Impact on expenditure and outcomes and subsequent challenges for pharmaceutical policy, with a special reference to Greece. *Hippokratia* **2014**, *18*, 100.
47. Lichtenberg, F.R. Pharmaceutical innovation, longevity, and medical expenditure in Greece, 1995–2010. *Int. J. Econ. Bus.* **2015**, *22*, 277–299. [CrossRef]
48. Makris, I.; Apostolopoulos, S. Investing in healthcare enterprises in the non-metropolitan areas: Incentives, reflections, and innovative ideas. In Proceedings of the 16th European Conference on Innovation and Entrepreneurship, Lisbon, Portugal, 15–17 September 2021; pp. 1160–1166.
49. European Commission. European Innovation Scorecard. Available online: https://ec.europa.eu/growth/industry/policy/innovation/scoreboards_en (accessed on 7 July 2021).
50. Dornauer, M. Index of Healthcare Innovation, Greece, The Foundation of Research on Equal Opportunity (FREOPP). Available online: https://freopp.org/greece-freopp-world-index-of-healthcare-innovation-1c86a4d716f2 (accessed on 30 June 2021).
51. Business Enterprise R&D Expenditure, Eurostat database. Available online: https://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do (accessed on 15 July 2021).
52. OECD Health Statistics. Financing of Health Expenditure, Health at a Glance: Europe 2020: State of Health in the EU Cycle OECD iLibrary. Available online: https://www.oecd-ilibrary.org/social-issues-migration-health/health-at-a-glance-europe-2020_82129230-en (accessed on 19 September 2021).
53. Denzin, N. *Handbook of Qualitative Research*; Lincoln, Y., Ed.; SAGE Publications Ltd.: Thousand Oaks, CA, USA, 1994.
54. Van Burg, E.; Cornelissen, J.; Stam, W.; Jack, S. Advancing qualitative entrepreneurship research: Leveraging methodological plurality for achieving scholarly impact. *Entrep. Theory Pract.* **2020**, *46*, 3–20. [CrossRef]
55. Hindle, K. Choosing Qualitative Methods for Entrepreneurial Cognition Research: A Canonical Development Approach. *Entrep. Theory Pract.* **2004**, *28*, 575–607. [CrossRef]
56. Neergaard, H.; Ulhøi, J.P. (Eds.) *Handbook of Qualitative Research Methods in Entrepreneurship*; Edward Elgar Publishing: Cheltenham, UK, 2007.
57. Apostolopoulos, N.; Apostolopoulos, S.; Makris, I.; Stavroyiannis, S. Rural Healthcare Enterprises in the Vortex of COVID-19: The Impact of Public Policies on the Internal and External Environment. *Adm. Sci.* **2021**, *11*, 82. [CrossRef]
58. Sharma, G.D.; Talan, G.; Srivastava, M.; Yadav, A.; Chopra, R. A qualitative enquiry into strategic and operational responses to COVID-19 challenges in South Asia. *J. Public Aff.* **2020**, *20*, e2195. [CrossRef]
59. Matthews-Trigg, N.; Citrin, D.; Halliday, S.; Acharya, B.; Maru, S.; Bezruchka, S.; Maru, D. Understanding perceptions of global healthcare experiences on provider values and practices in the USA: A qualitative study among global health physicians and program directors. *BMJ Open* **2019**, *9*, e026020. [CrossRef]
60. Dieckmann, P.; Friis, S.M.; Lippert, A.; Østergaard, D. Goals, success factors, and barriers for simulation-based learning: A qualitative interview study in health care. *Simul. Gaming* **2012**, *43*, 627–647. [CrossRef]
61. Althalathini, D.; Al-Dajani, H.; Apostolopoulos, N. Navigating Gaza's conflict through women's entrepreneurship. *Int. J. Gend. Entrep.* **2020**, *12*, 297–316. [CrossRef]
62. Moser, A.; Korstjens, I. Series: Practical guidance to qualitative research. Part 3: Sampling, data collection and analysis. *Eur. J. Gen. Pract.* **2018**, *24*, 9–18. [CrossRef]

63. Given, L.M. (Ed.) *The Sage Encyclopedia of Qualitative Research Methods*; Sage publications: New York, NY, USA, 2008.
64. Apostolopoulos, N.; Newbery, R.; Gkartzios, M. Social enterprise and community resilience: Examining a Greek response to turbulent times. *J. Rural. Stud.* **2019**, *70*, 215–224. [CrossRef]
65. Hassink, J.; Hulsink, W.; Grin, J. Entrepreneurship in agriculture and healthcare: Different entry strategies of care farmers. *J. Rural. Stud.* **2016**, *43*, 27–39. [CrossRef]
66. Steiner, A.; Atterton, J. Exploring the contribution of rural enterprises to local resilience. *J. Rural. Stud.* **2015**, *40*, 30–45. [CrossRef]
67. Exton, R. Enterprising health: Creating the conditions for entrepreneurial behaviour as a strategy for effective and sustainable change in health services. *J. Health Organ. Manag.* **2010**, *24*, 459–479. [CrossRef] [PubMed]
68. Qu, S.Q.; Dumay, J. The qualitative research interview. *Qual. Res. Account. Manag.* **2011**, *8*, 238–264. [CrossRef]
69. Polit, F.D.; Hungler, P.B. *Nursing Research: Principles and Methods*; Lippincott: Philadelphia, PA, USA, 1999.
70. Fusch, P.I.; Ness, L.R. Are we there yet? Data saturation in qualitative research. *Qual. Rep.* **2015**, *20*, 1408. [CrossRef]
71. Lacono, V.L.; Symonds, P.; Brown, D.H. Skype as a tool for qualitative research interviews. *Sociol. Res. Online* **2016**, *21*, 103–117. [CrossRef]
72. McIntosh, M.J.; Morse, J.M. Situating and constructing diversity in semi-structured interviews. *Glob. Qual. Nurs. Res.* **2015**, *2*, 2333393615597674. [CrossRef]
73. Deakin, H.; Wakefield, K. Skype interviewing: Reflections of two PhD researchers. *Qual. Res.* **2014**, *14*, 603–616. [CrossRef]
74. Sweet, L. Telephone interviewing: Is it compatible with interpretive phenomenological research? *Contemp. Nurse* **2002**, *12*, 58–63. [CrossRef]
75. Alharthi, M.; Alamoudi, H.; Shaikh, A.A.; Bhutto, M.H. "Your ride has arrived"—Exploring the nexus between subjective well-being, socio-cultural beliefs, COVID-19, and the sharing economy. *Telemat. Inform.* **2021**, *63*, 101663. [CrossRef]
76. DeJonckheere, M.; Vaughn, L.M. Semistructured interviewing in primary care research: A balance of relationship and rigour. *Fam. Med. Community Health* **2019**, *7*, e000057. [CrossRef]
77. Wong, L.P. Data analysis in qualitative research: A brief guide to using NVivo. *Malays. Fam. Physician Off. J. Acad. Fam. Physicians Malays.* **2008**, *3*, 14.
78. Thomas, D.R. A general inductive approach for analyzing qualitative evaluation data. *Am. J. Eval.* **2006**, *27*, 237–246. [CrossRef]
79. Creswell, J. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*; Sage Publications: Newbury Park, CA, USA, 2005.
80. Gioia, D.A.; Corley, K.G.; Hamilton, A.L. Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organ. Res. Methods* **2013**, *16*, 15–31. [CrossRef]
81. Krippendorff, K. *Content Analysis: An Introduction to Its Methodology*; Sage Publications: Los Angeles, USA, 2018.
82. Smith, J.; Harre, R.; Van Langenhove, L. *Rethinking Methods in Psychology*; Sage Publications: London, UK, 2001.
83. Hayes, A.F.; Krippendorff, K. Answering the call for a standard reliability measure for coding data. *Commun. Methods Meas.* **2007**, *1*, 77–89. [CrossRef]
84. Maneesriwongul, W.; Dixon, J. Instrument translation process: A method review. *J. Adv. Nurs.* **2004**, *48*, 175–186. [CrossRef]
85. Temple, B.; Young, A. Qualitative research and translation dilemmas. *Qual. Res.* **2004**, *4*, 161–178. [CrossRef]
86. Van Nes, F.; Abma, T.; Jonsson, H.; Deeg, D. Language differences in qualitative research: Is meaning lost in translation? *Eur. J. Ageing* **2010**, *7*, 313–316. [CrossRef]
87. Varkey, P.; Horne, A.; Bennet, K.E. Innovation in health care: A primer. *Am. J. Med. Qual.* **2008**, *23*, 382–388. [CrossRef]
88. Puertas, R.; Marti, L.; Guaita-Martinez, J.M. Innovation, lifestyle, policy and socioeconomic factors: An analysis of European quality of life. *Technol. Forecast. Soc. Chang.* **2020**, *160*, 120209. [CrossRef]
89. Tomaskova, H.; Maresova, P.; Penhaker, M.; Augustynek, M.; Klimova, B.; Fadeyi, O.; Kuca, K. The business process model and notation of open innovation: The process of developing medical instrument. *J. Open Innov. Technol. Mark. Complex.* **2019**, *5*, 101. [CrossRef]
90. Bullinger, A.C.; Rass, M.; Adamczyk, S.; Moeslein, K.M.; Sohn, S. Open innovation in health care: Analysis of an open health platform. *Health Policy* **2012**, *105*, 165–175. [CrossRef] [PubMed]
91. Long, G.; Shen, T.; Tan, Y.; Gerrard, L.; Clarke, A.; Jiang, J. Federated learning for privacy-preserving open innovation future on digital health. In *Humanity Driven AI*; Springer: Cham, Switzerland, 2022; pp. 113–133.
92. Orlando, B.; Ballestra, L.V.; Magni, D.; Ciampi, F. Open innovation and patenting activity in health care. *J. Intellect. Cap.* **2021**, *22*, 384–402. [CrossRef]
93. Leckel, A.; Veilleux, S.; Dana, L.P. Local Open Innovation: A means for public policy to increase collaboration for innovation in SMEs. *Technol. Forecast. Soc. Chang.* **2020**, *153*, 119891. [CrossRef]
94. Bogers, M.; Chesbrough, H.; Heaton, S.; Teece, D.J. Strategic management of open innovation: A dynamic capabilities perspective. *Calif. Manag. Rev.* **2019**, *62*, 77–94. [CrossRef]
95. Kankanhalli, A.; Zuiderwijk, A.; Tayi, G.K. Open innovation in the public sector: A research agenda. *Gov. Inf. Q.* **2017**, *34*, 84–89. [CrossRef]
96. Dandonoli, P. Open innovation as a new paradigm for global collaborations in health. *Glob. Health* **2013**, *9*, 41. [CrossRef]
97. Marshall, A.; Dencik, J.; Singh, R.R. Open innovation: Digital technology creates new opportunities. *Strategy Leadersh.* **2021**, *49*, 32–38. [CrossRef]
98. Nambisan, S.; Siegel, D.; Kenney, M. On open innovation, platforms, and entrepreneurship. *Strateg. Entrep. J.* **2018**, *12*, 354–368. [CrossRef]

99. Secundo, G.; Toma, A.; Schiuma, G.; Passiante, G. Knowledge transfer in open innovation: A classification framework for healthcare ecosystems. *Bus. Process Manag. J.* **2019**, *25*, 144–163. [CrossRef]
100. Toma, A.; Secundo, G.; Passiante, G. Open innovation and network approaches in healthcare ecosystems. In Proceedings of the 28th International Business Information Management Conference, Seville, Spain, 9–10 November 2016; pp. 1–5.
101. Pikkarainen, M.; Hyrkäs, E.; Martin, M. Success factors of demand-driven open innovation as a policy instrument in the case of the healthcare industry. *J. Open Innov. Technol. Mark. Complex.* **2020**, *6*, 39. [CrossRef]
102. Wass, S.; Vimarlund, V. Healthcare in the age of open innovation–a literature review. *Health Inf. Manag. J.* **2016**, *45*, 121–133. [CrossRef] [PubMed]
103. Ooms, W.; Piepenbrink, R. Open Innovation for Wicked Problems: Using Proximity to Overcome Barriers. *Calif. Manag. Rev.* **2021**, *63*, 62–100. [CrossRef]
104. Gessa, A.; Jiménez, A.; Sancha, P. Open innovation in digital healthcare: Users' discrimination between certified and non-certified mhealth applications. *J. Open Innov. Technol. Mark. Complexity.* **2020**, *6*, 130. [CrossRef]
105. Pavani, C.; Plonski, G.A. Opening new pathways for innovation in healthcare. *Innov. Dev.* **2020**, *10*, 139–153. [CrossRef]
106. Bogers, M.; Chesbrough, H.; Moedas, C. Open innovation: Research, practices, and policies. *Calif. Manag. Rev.* **2018**, *60*, 5–16. [CrossRef]
107. Fascia, M.; Brodie, J. Structural barriers to implementing open innovation in healthcare. *Br. J. Healthc. Manag.* **2017**, *23*, 338–343. [CrossRef]
108. Desveaux, L.; Soobiah, C.; Bhatia, R.S.; Shaw, J. Identifying and overcoming policy-level barriers to the implementation of digital health innovation: Qualitative study. *J. Med. Internet Res.* **2019**, *21*, e14994. [CrossRef]
109. Shaw, J.; Wong, I.; Griffin, B.; Robertson, M.; Bhatia, R.S. Principles for Health System Capacity Planning: Insights for Healthcare Leaders. *Healthc. Q. (Tor. Ont.)* **2017**, *19*, 17–22. [CrossRef]
110. Desveaux, L.; Shaw, J.; Wallace, R.; Bhattacharyya, O.; Bhatia, R.S.; Jamieson, T. Examining tensions that affect the evaluation of technology in health care: Considerations for system decision makers from the perspective of industry and evaluators. *JMIR Med. Inform.* **2017**, *5*, e50. [CrossRef]
111. Team, T.T.M.C.V.; Carter, M.C.; Corry, M.; Delbanco, S.; Foster, T.C.S.; Friedland, R.; Simpson, K.R. 2020 vision for a high-quality, high-value maternity care system. *Women's Health Issues* **2010**, *20*, S7–S17.
112. Desveaux, L.; Shaw, J.; Saragosa, M.; Soobiah, C.; Marani, H.; Hensel, J.; Agarwal, P.; Onabajo, N.; Bhatia, R.S.; Jeffs, L. A mobile app to improve self-management of individuals with type 2 diabetes: Qualitative realist evaluation. *J. Med. Internet Res.* **2018**, *20*, e8712. [CrossRef]
113. Grigorakis, N.; Floros, C.; Tsangari, H.; Tsoukatos, E. Out of pocket payments and social health insurance for private hospital care: Evidence from Greece. *Health Policy* **2016**, *120*, 948–959. [CrossRef] [PubMed]
114. Papatheodorou, C.H.; Mousidou, A. *Healthcare and Inequality in Greece: The Distributive Effect of the Health System*; Observatory of Economic and Social Developments, GSEE Labor Institute: Athens, Greece, 2011.
115. Siskou, O.; Kaitelidou, D.; Economou, C.; Kostagiolas, P.; Liaropoulos, L. Private expenditure and the role of private health insurance in Greece: Status quo and future trends. *Eur. J. Health Econ.* **2009**, *10*, 467–474. [CrossRef] [PubMed]
116. Apostolopoulos, N.; Ratten, V.; Stavroyiannis, S.; Makris, I.; Apostolopoulos, S.; Liargovas, P. Rural health enterprises in the EU context: A systematic literature review and research agenda. *J. Enterp. Communities People Places Glob. Econ.* **2020**, *14*, 563–582. [CrossRef]
117. Kondilis, E.; Gavana, M.; Giannakopoulos, S.; Smyrnakis, E.; Dombros, N.; Benos, A. Payments and quality of care in private for-profit and public hospitals in Greece. *BMC Health Serv. Res.* **2011**, *11*, 234. [CrossRef]
118. Storey, J. Factors affecting the adoption of quality assurance technologies in healthcare. *J. Health Organ. Manag.* **2013**, *27*, 498–519. [CrossRef]
119. Giannouchos, T.V.; Vozikis, A.; Koufopoulou, P.; Fawkes, L.; Souliotis, K. Informal out-of-pocket payments for healthcare services in Greece. *Health Policy* **2020**, *124*, 758–764. [CrossRef] [PubMed]
120. Kaitelidou, D.C.; Tsirona, C.S.; Galanis, P.A.; Siskou, O.C.; Mladovsky, P.; Kouli, E.G.; Prezerakos, P.E.; Theodoroy, M.; Sourtzi, P.A.; Liaropoulos, L.L. Informal payments for maternity health services in public hospitals in Greece. *Health Policy* **2013**, *109*, 23–30. [CrossRef]
121. Liaropoulos, L.; Siskou, O.; Kaitelidou, D.; Theodorou, M.; Katostaras, T. Informal payments in public hospitals in Greece. *Health Policy* **2008**, *87*, 72–81. [CrossRef]
122. Siskou, O.; Kaitelidou, D.; Papakonstantinou, V.; Liaropoulos, L. Private health expenditure in the Greek health care system: Where truth ends and the myth begin. *Health Policy* **2008**, *88*, 282–293. [CrossRef]
123. Tountas, Y.; Karnaki, P.; Pavi, E.; Souliotis, K. The "unexpected" growth of the private health sector in Greece. *Health Policy* **2005**, *74*, 167–180. [CrossRef] [PubMed]
124. Apostolopoulos, N.; Liargovas, P.; Sklias, P.; Makris, I.; Apostolopoulos, S. Private healthcare entrepreneurship in a free-access public health system: What was the impact of COVID-19 public policies in Greece? *J. Entrep. Public Policy* **2022**, *11*, 23–39. [CrossRef]
125. Makris, I.; Stavroyiannis, S.; Apostolopoulos, S. The European Financing Tools in the Health Sector. In *The Impact of Eu Structural and Investment Funds on Greece (1981–2019): Successes, Failures, Lessons Learned and Comparisons with Other EU Members*; Jean Monnet Centre of Excellence Governance, University of the Peloponnese: Corinth, Greece, 2020; p. 193.

126. Souliotis, K.; Tsimtsiou, Z.; Golna, C.; Nikolaidi, S.; Lionis, C. Citizen Preferences for Primary Health Care reform in Greece. *Hippokratia* **2019**, *23*, 111–117.
127. Kampouris, D. *The Diagnosis for Diagnostic Centers Is Particularly Alarming*; Financial Business Systems: Thessaloniki, Greece, 2019. (In Greek)
128. Palamari, A. *Financial Analysis of Health Care Sector: A Comparative Analysis between Public and Private Institutions of Greece*; Hellenic Open University: Patra, Greece, 2018.
129. Katehakis, D.G. Electronic medical record implementation challenges for the national health system in Greece. *Int. J. Reliab. Qual. E-Healthc.* **2018**, *7*, 16–30. [CrossRef]
130. Aanestad, M.; Grisot, M.; Hanseth, O.; Vassilakopoulou, P. (Eds.) Information Infrastructures for eHealth. In *Information Infrastructures within European Health Care*; Health Informatics; Springer: Cham, Switzerland, 2017.
131. Katehakis, D.G.; Kouroubali, A.; Fundulaki, I. Towards the Development of a National eHealth Interoperability Framework to Address Public Health Challenges in Greece. In *SWH@ ISWC*; Foundation for Research and Technology: Heraklion, Greece, 2018.
132. COCIR; IHE-Europe. The Personal Health Connected Alliance: We Are All in This Together: Advancing eHealth Interoperability. Available online: http://www.cocir.org/fileadmin/Publications_2017/17022_COC_Interoperability_web.pdf (accessed on 16 October 2017).