



Healthcare Innovation: Challenges and Strategies for Developing
a Financially Sustainable Health Insurance Product for the Senior
Market in Collaboration with AdvanceCare

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Abstract

The Portuguese national health system is strained, causing many individuals to turn to private healthcare. About 20% of the population in Portugal has private health insurance, indicating a market gap for lower-income individuals, especially older people who struggle to find affordable coverage (OECD, 2022). AdvanceCare, a Portuguese healthcare company, provides services and health insurance policies and manages health insurance services between various insurance corporations, clients, and service provider. They aim to develop a health insurance product specifically tailored to the needs of individuals aged 65 and above. This thesis analyzes business opportunities and potential innovations for AdvanceCare in offering such a product. A preliminary framework, which was developed during the project in collaboration with AdvanceCare during September 2022 and January 2023, the "solution layer framework," guides the analysis based on literature and research. The analysis suggests potential in adopting a Preferred Provider Organization (PPO) model, introducing a family policy, and utilizing telehealth and digital services to reduce costs and expand coverage. These strategies address the challenges faced by elderly individuals in accessing affordable healthcare while improving services.

O sistema nacional de saúde português está sob pressão, o que leva muitas pessoas a recorrerem a cuidados de saúde privados. Cerca de 20% da população em Portugal tem um seguro de saúde privado, o que indica uma lacuna no mercado para os indivíduos com rendimentos mais baixos, especialmente os idosos que têm dificuldade em encontrar uma cobertura acessível (OECD, 2022). A AdvanceCare, uma empresa portuguesa de cuidados de saúde, tem como objectivo desenvolver um produto de seguro de saúde especificamente adaptado às necessidades dos indivíduos com 65 anos ou mais. Esta tese analisa as oportunidades de negócio e as potenciais inovações para a AdvanceCare na oferta desse produto. Um preliminar, o "quadro de camadas", orienta a análise com base na literatura e na investigação. A análise sugere potencial para a adopção de um modelo de Organização de Provedores Preferenciais (OPP), a introdução de uma política familiar e a utilização de serviços de telessaúde e digitais para reduzir os custos e expandir a cobertura. Estas estratégias abordam os desafios enfrentados pelos idosos no acesso a cuidados de saúde acessíveis, melhorando simultaneamente os serviços.

1. Introduction

1.1 The problem

In Portugal, the proportion of individuals aged 65 and above accounts for approximately 23.2% of the population, reflecting an increasing trend compared to a decade ago. This demographic shift aligns with the broader European context, where Portugal ranks third in terms of having the oldest population in the European Union, trailing behind Italy and Germany (United Nations, 2020).

Considering the concept of mutualization in insurance, which relies on the participation of younger individuals to sustain profitability, developing a sustainable business model for health insurance becomes crucial. The challenge lies in addressing the fact that seniors, who often experience lifestyle-related diseases, can generate losses exceeding 100%. In light of this, it becomes pertinent to explore profitable business models that can fill the market gap for senior individuals unable to afford private health insurance plans with an average cost of EUR 1,500 per year (AdvanceCare Interview with Head of Marketing & Strategy Bruno Edgar Gonçalves Freitas and Director of Product Tiago Vacas Felgueira, 2022).

The national health system (NHS) in Portugal has undergone significant transitions since the country's transition to democracy in 1974. Following the establishment of the NHS, access to healthcare for the Portuguese population increased rapidly, rising from 58% in 1974 to universal coverage (100%) by 1980 (Simoes, August, Fronteira, & Hernandez-Quevedo, 2017). However, this progress also created inefficiencies that the private market capitalized on, resulting in its dominance in the health insurance sector.

Therefore, the challenge lies in developing innovative products that cater to the needs of the senior population while ensuring financial sustainability. By analyzing the market landscape and identifying the gaps, it becomes possible to design insurance products that strike a balance between affordable premiums and comprehensive coverage for seniors. Such products can offer tailored solutions, addressing the specific healthcare needs and risks associated with an aging population, thereby filling the market gap and providing access to affordable healthcare services.

In summary, addressing the healthcare needs of Portugal's aging population requires a sustainable business model that considers the challenges posed by mutualization, the rising prevalence of lifestyle diseases among seniors, and the existing market gaps. By developing innovative insurance products and solutions, it is possible to bridge the affordability gap and ensure that quality healthcare remains accessible to senior individuals in Portugal.

1.2 Research questions

The objective of this research is to investigate and analyze healthcare innovations and their applicability in addressing the specific needs of the senior market, ultimately facilitating the development of a financially sustainable health insurance product.

In order to guide the research in a structured manner, the following questions will be answered:

- What are the benchmarks for health insurance in EU countries and what can be derived for the Portuguese market?
- What alternatives are there for older people of healthcare services, is there a market gap?
- What are the factors that prevent elder people from seeking healthcare services?

2. Theoretical Background

2.1 Characteristics of health care systems

Healthcare systems worldwide exhibit significant variations, stemming from divergent approaches to ownership, operation, and financing. Nationalized healthcare systems, found in certain countries, involve government ownership and operation of medical facilities, as well as the employment of medical professionals (Startfield, 2018). Funding for these systems typically relies on taxation and ensures healthcare accessibility for all citizens. In contrast, privatized healthcare systems exist in other countries, where medical facilities and professionals are owned and operated by private entities. Financing in such systems relies on a combination of private insurance and out-of-pocket payments. Hybrid systems, on the other hand, blend elements of both nationalized and privatized healthcare. Additionally, some countries embrace universal healthcare coverage, providing healthcare to all citizens regardless of their ability to pay (Baltagi & Moscone, 2021). Consequently, the modes of healthcare payment, as well as the accessibility and quality of care, differ across countries, reflecting the unique characteristics of each healthcare system.

2.2 Rising costs of health care

In highly industrialized nations, the allocation of national resources to healthcare has become a persistent concern. Within the realm of health insurance, reimbursement models play a vital role in determining how insurance companies remunerate medical services covered under policies. Multiple reimbursement models are employed by health insurers, including the following:

1. Fee-for-service (FFS) model: This traditional model involves insurance companies paying healthcare providers a predetermined fee for each rendered service. Negotiations between providers and insurers may influence the fee structure, and patients may bear a portion of the cost through deductibles or co-payments (Omachonu & Einspruch, 2010).
2. Capitation model: Under this model, insurance companies provide healthcare providers with a fixed monthly payment per patient, regardless of the number of services rendered. Within the allocated budget, healthcare providers are responsible for delivering all necessary medical services to their patients (Baltagi & Moscone, 2021).
3. Bundled payment model: This model entails insurance companies making a fixed payment for a specific set of medical services associated with a particular condition or treatment. It is commonly utilized for complex procedures or surgeries that require multiple services (Baltagi & Moscone, 2021)
4. Pay-for-performance (P4P) model: The P4P model incentivizes healthcare providers to meet or exceed specific quality or performance standards by offering financial bonuses. These standards encompass various metrics, including patient outcomes, satisfaction, and other relevant indicators (Omachonu & Einspruch, 2010).
5. Value-based reimbursement model: Designed to encourage high-quality and cost-effective care, this model links payment to patient outcomes and satisfaction. Healthcare providers may receive rewards for achieving specific quality metrics, such as reducing hospital readmissions or enhancing patient health (Baltagi & Moscone, 2021).

As the healthcare landscape evolves, patients are assuming greater responsibility for outcomes, resulting in a shift towards patient-centric care (Bohr & Memarzadeh, 2020),

2.3 Private health insurers – principle of mutualization

Within a national health system incorporating private health insurers, individuals possess the option to acquire private health insurance as a supplement to the services provided by the public healthcare system. Private health insurers, typically operating as for-profit entities, extend coverage for medical services, treatments, and medications that go beyond the scope of coverage provided by the national health system (Brandt, Horisberger, & Wratburg, 2012).

A fundamental principle governing the functioning of private health insurers is mutualization, which entails the consolidation of resources from numerous individuals to offer financial protection against healthcare expenses. This system involves policyholders contributing premiums into a shared pool, which is subsequently utilized to cover the healthcare costs incurred by those necessitating medical services (Emanuel, 2020).

The principle of mutualization serves to distribute the financial risk associated with healthcare expenses among a larger group of individuals, alleviating the burden on any single policyholder. Furthermore, private health insurers are able to negotiate reduced prices for medical services and treatments with healthcare providers by leveraging the scale of their customer base (Emanuel, 2020).

In a national health system where private health insurers are involved, individuals may be required to obtain a referral from a primary care physician in order to access specialized care or treatment. This requirement serves the purpose of ensuring appropriate and efficient utilization of healthcare services, while also helping to control costs (Fong, Law, & Lee, 2020).

The presence of asymmetric information in the health insurance market prompts insurance companies to adopt cream-skimming tactics aimed at mitigating moral hazard and adverse selection. One such tactic involves imposing an eligibility criterion that requires applicants for health insurance policies to be under the age of 65. This strategy is implemented to manage risk and optimize the balance of the insurance pool (Startfield, 2018).

2.3.1 Demand determinants for voluntary private health insurance (VPHI)

Income and wealth exert a substantial influence on the demand for private health insurance, thereby bearing notable implications for healthcare financing and equity considerations.

Individuals with higher income and wealth exhibit a greater propensity to purchase private health insurance due to their enhanced financial capacity to cover healthcare expenses through

out-of-pocket payments. This form of insurance enables them to access healthcare services of superior quality and exercise greater autonomy in terms of the timing and nature of medical treatments. Conversely, individuals with lower income and wealth encounter challenges in accessing healthcare services, relying more heavily on public health insurance programs or bearing the burden of out-of-pocket payments, which can impose significant financial strain (Pinilla & López-Valcárcel, 2020).

The primary motive behind individuals' decision to acquire voluntary private health insurance (VPHI) often revolves around circumventing long wait times in the public health system. Moreover, VPHI offers supplementary coverage for services such as dental care that are not typically covered by the National Health Service (NHS) (Ministry of Health, 2018). Nevertheless, additional factors such as age and pre-existing health status may also influence the demand for private health insurance. Advanced age is associated with a higher likelihood of experiencing health issues, thus intensifying the demand for private health insurance. Similarly, individuals with pre-existing health conditions or a history of chronic illnesses may exhibit a greater inclination towards acquiring private health insurance to ensure adequate coverage for their specific healthcare needs.

2.4 Health-care of Elderly: Determinants, Needs and Services

Population aging is a developing demographic phenomenon, with the proportion of people 65 and older rapidly rising in many nations already. All countries' healthcare systems are affected by the aging of their populations in terms of costs and an increase in the need for care facilities (Eurostat, 2019).

While the circumstances experienced by older individuals may exhibit notable disparities, the process of aging universally entails a progressive deterioration of physical capabilities and heightened vulnerability to diseases. Consequently, the establishment of a comprehensive healthcare system for the elderly necessitates attentive consideration of their diminishing physiological functions, as well as their psychological and social requirements. Nevertheless, the endeavor to formulate an integrated healthcare system that adequately addresses the unique demands and preferences of aging individuals and their families remains an ongoing global challenge for communities and governments (Wu et al., 2022).

Addressing the unmet care and support needs of an aging population and designing services and solutions centered around what older people need or want is becoming an urgent public health priority.

2.4.1 Changes in elderly consumers' expenditures on products and services

Contrary to popular belief, studies have revealed that older people are more willing than younger people to experiment with new products that are put on the market by exhibiting a certain ease in behavior adoption in the hedonistic goods sector (Boter & Wedel, 1999). However, physical characteristics play a big role: when elderly people experience objective physical limits, companies must keep that in mind when designing (digital) products (Guido, Ugolini, & Sestino, 2022). However, "elderly" people above 65 cannot be treated as a homogeneous group. Because they are still in the early stages of active aging, older consumers being younger may be more inclined to change their consumption habits in an effort to lead healthier lives.

Aging leads to problems of everyday life, i.e., opening packages, reading product labels, using tools, moving, etc., which need to be considered when designing products for the elderly market (Moschis, 2022). In addition to physical problems, they also experience psychological aging, which refers to mental and emotional changes and new fears arising. Older people have two main fears: not being financially able to maintain their standard of living and, secondly, being afraid of getting sick and subsequently having to rely on others for their care in terms of their health (Moschis, 2022). The major worry of the elderly person about the future is the loss of independence, which is influenced by these two anxieties. Elderly individuals look for security in both products and services that directly protect them and those that increase their sense of security.

2.4.2 Segmented Marketing Strategies for the elderly: Tailoring Approaches to Different Age Groups

When marketing to elderly individuals, it is crucial to recognize and accommodate the diverse needs and characteristics of different age groups within this population. Specifically, targeting three distinct age groups—65-75, 75-80, and those above 80—requires tailoring marketing strategies to effectively reach and engage each segment. Here is an evaluation of how marketing should be approached for these target groups:

Age Group: 65-75

Considerations: Individuals in this age group are typically more active, independent, and technologically literate compared to older segments. They may still be employed or enjoy an active retirement (Wu et al., 2022)

Marketing Strategies:

- Emphasize the benefits and features of products or services that align with their active lifestyles, such as travel, hobbies, fitness, and leisure activities.
- Utilize online and digital marketing channels, as this age group is relatively comfortable with technology and frequently uses the internet.
- Incorporate social media platforms, email marketing, and targeted online advertisements to reach this segment effectively.

Age Group: 75-80

Considerations: Individuals in this age group may experience some limitations in physical capabilities and mobility. They may be more focused on health and well-being and may have specific healthcare needs (Wu et al., 2022).

Marketing Strategies:

- Highlight products or services that address their health concerns, such as medical equipment, home care services, and wellness programs.
- Employ traditional marketing channels, including print media, television, and direct mail, as they are more likely to engage with these mediums.
- Collaborate with healthcare professionals, community centers, and senior living facilities to reach this segment effectively.

Age Group: Above 80

Considerations: Individuals in this age group may face greater physical limitations and may require assistance in daily activities. They may also have specific needs related to safety and security (Brandt, Horisberger, & Wratburg, 2012).

Marketing Strategies:

- Focus on products or services that improve safety, convenience, and comfort in their living environment, such as home modifications, assistive devices, and personal care services.
- Engage family members or caregivers in the marketing process, as they often play a significant role in decision-making for this segment.
- Leverage offline channels such as community events, local newspapers, and senior-focused publications to effectively reach this demographic.

In all cases, it is crucial to use clear and concise language in marketing materials, as well as consider factors such as font size, readability, and accessibility to cater to the specific needs of the elderly population. Additionally, emphasizing trust, reliability, and empathy in marketing messages can foster stronger connections with this demographic.

3. Case description

The problem: 1. In Portugal, as of 2022, the population segment aged 65 and over has expanded, constituting approximately 22% of the population (OECD, 2022). This upward trend is accompanied by increasing health concerns; 53% of this demographic reported having at least one chronic ailment, with a substantial subset indicating the presence of multiple chronic conditions (OECD, 2019). Moreover, their economic capabilities are characterized by constrained purchasing power (WHO & OECD, 2021). 2. The national health system has limited capacity to respond (OECD, 2021). 2. The private sector is struggling to develop products that meet the elderly needs at an affordable cost (WHO & OECD, 2021).

A significant portion of elderly individuals in Portugal lacks sufficient health insurance, leading to several challenges and concerns:

Limited access to specialized care:

While Portugal's public healthcare system strives to provide comprehensive services, certain specialized treatments and procedures may have long waiting times or restricted availability. A study conducted by the Health Observatory of the European University, reveals that 48.7% of participants expressed challenges in accessing specialist consultations. Among this group, 30.2% have been awaiting an appointment for over three months (European-Observatory, 2022).

Health insurance can offer seniors access to a wider network of private healthcare providers, ensuring they receive timely and specialized care when needed. Without this supplementary coverage, seniors may face delays or limitations in accessing critical healthcare services.

Inequality in Healthcare Access

The low health insurance rate among seniors exacerbates existing inequalities in healthcare access. Those who can afford private health insurance often gain access to a broader range of healthcare services, shorter waiting times, and a more extensive network of healthcare providers. However, a couple in their sixties might anticipate a monthly premium of €300 combined for a premium plan, which comes with a €15 copayment for doctor consultations (Coles, 2021). On the other hand, seniors relying solely on the public healthcare system may experience disparities in the quality and timeliness of care. This inequality in access to healthcare can lead to varying health outcomes among seniors, creating an unjust system that disproportionately affects those with limited financial means (WHO, 2019).

Strain on Public Healthcare System

The low health insurance rate among seniors exacerbates existing inequalities in healthcare access. Those who can afford private health insurance often gain access to a broader range of healthcare services, shorter waiting times, and a more extensive network of healthcare providers. On the other hand, seniors relying solely on the public healthcare system may experience disparities in the quality and timeliness of care. This inequality in access to healthcare can lead to varying health outcomes among seniors, creating an unjust system that disproportionately affects those with limited financial means. (WHO & OECD, 2021).

Health and Well-being Impact

The lack of adequate health insurance coverage among seniors can have a significant impact on their health and overall well-being. Delayed or limited access to healthcare services can result in undiagnosed or untreated conditions, leading to worsened health outcomes (WHO & OECD, 2021).

AdvanceCare, a prominent health company in Portugal, specializes in providing health insurance and related services to its customers. They have an extensive network of healthcare provider and additional resources. Furthermore, they aim to address the unmet medical care of especially the lower-income senior segment in Portugal. To achieve this, they aspire to develop an affordable voluntary health insurance product tailored for individuals above age of

65, intending to market it to insurance companies. Therefore, it is crucial for the product to appeal to both, insurers and customers, meeting all requirements of desirability, feasibility and viability (AdvanceCare Interview with Head of Marketing & Strategy Bruno Edgar Gonçalves Freitas and Director of Product Tiago Vacas Felgueira, 2022).

4. Methodology

4.1 Methodology Introduction

The selection of the primary research methodology was driven by the objective of obtaining results that would contribute to addressing the research questions effectively. In the present study, the case study approach was adopted, utilizing the case of AdvanceCare, which was previously introduced in the preceding chapter, to collect primary research data.

The theoretical research constructed for this study has identified the key factors that influence the health insurance rate, which are generally relevant considerations for any health insurance product. The primary research aims to identify and analyze these factors within a practical context, thus facilitating a comprehensive understanding. To address our research objectives, we adopted a qualitative research methodology. This approach is favored for its depth, facilitating a comprehensive exploration and nuanced understanding of the pinpointed factors. Central to our inquiry were routine interactions with pivotal organizational figures: the Head of Product and the Head of Strategy. These weekly interviews enriched our dataset, providing direct insights from those deeply embedded in the subject matter. A detailed account of our research methodology, emphasizing these interview sessions, will be discussed in the following section.

The initial phase of the research involved multiple meetings with the head of strategy and head of product at AdvanceCare. These meetings were conducted to gain a holistic and exploratory comprehension of the services offered by the company, its organizational structure, and to acquire further insights into the senior and insurance sectors in Portugal.

Throughout the process, several pertinent studies were meticulously examined. Primarily, the research heavily leaned on authoritative reports from institutions such as the OECD and WHO. These studies provided a deep dive into the Portuguese health status quo, shedding light on the general health landscape and, notably, offering a more detailed perspective on senior healthcare, also in comparison the European countries. This comprehensive approach ensured that the research not only focused on the immediate Portuguese context but also

understood its standing in relation to its European counterparts. With this data, the goal was to derive reasonable solutions for product innovations in healthcare with a concentrated focus on the senior market. The culmination of this rigorous academic investigation is the proposal of an affordable health insurance product, tailored specifically for seniors aged 65 and above. This work serves as a synthesis of scholarly research and practical application, with the potential to inform future policy and industry practices."

4.2 Qualitative Research

Qualitative research is an umbrella term that encompasses multiple practices, all of them with the same exploratory purpose of learning about a social reality. In order to do so, qualitative research collects non-numerical data that is used to explore, describe and analyse a social phenomenon (Leavy, 2015).

Different to quantitative research, methods of qualitative research provide an in-depth understanding about typically small group of people or about a specific case. Additionally, it can identify new variables and explore the relation of these (Francisco, Butterfoss, & Capwell, 2001). On the other hand, the generalization of the findings is limited because the used methods are less structured, and the collected data only represents a small sample. Also, the findings cannot always be replicated due to unique cases or specific time frames (Francisco, Butterfoss, & Capwell, 2001).

In our forthcoming qualitative research phase, we've set a clear trajectory to probe further into the core issues. At the forefront is a benchmark analysis where we'll explore best practices gleaned from a range of countries and reputable companies. This analysis aims to broaden our perspective, positioning us to discern potent strategies and methods that align well with AdvanceCare's vision. Concurrently, we've organized a consistent stream of internal conversations, set to occur on a weekly basis with stakeholders at AdvanceCare, most notably, Mr. Tiago Vacas Felgueira, the Director of Product, and Mr. Bruno Freitas, Head of Strategy and Marketing. These interactions are crucial as they base our research on the real experiences and plans of those leading the company's efforts.

5. Analysis

5.1 National Health System in Portugal

The Portuguese Health System, which was established in 1979, operates under the designation of a National Health Service (NHS) and embodies a model of universal coverage predominantly funded by tax revenues. As such, the majority of medical treatments are encompassed within the scope of coverage for all citizens (Tavares, 2022). Managed by the

Ministry of Health, the NHS in Portugal relies on a combination of general taxation and social security contributions to secure its financial resources.

The NHS in Portugal is structured into three levels of care: primary, secondary, and tertiary. Primary care is delivered through a network of family doctors and health centers, serving as the initial point of contact for patients seeking healthcare services. Secondary care, on the other hand, encompasses hospitals and specialty clinics, catering to patients with more intricate or severe health conditions. Lastly, tertiary care is provided by highly specialized centers, including cancer hospitals and transplant facilities, and caters to patients with rare or extremely severe health conditions (OECD, 2021).

Although the NHS in Portugal is widely acknowledged for its high quality and favorable ranking in international healthcare system comparisons (FREOPP, 2022) the country has encountered challenges in recent years pertaining to the provision of healthcare to its entire population, particularly in the domain of primary care (OECD, 2021). There has been a noticeable increase in demand for primary care services, coupled with a scarcity of available doctors (Demony, 2022). Furthermore, the NHS has confronted financial constraints, and reports have indicated struggles in effectively managing chronic diseases, such as diabetes and heart disease (Simoes et al., 2017).

5.2 Criticism about National Health System in Portugal

Health inequality remains a prominent and persisting concern within the National Health Service (NHS). The disparities in health literacy and internet access among older populations and individuals with low income contribute to the existing challenges since the lack of internet access for the elderly impedes their ability to access vital health information, schedule appointments, and utilize digital healthcare services, thereby exacerbating disparities in health coverage (OECD, 2021). Consequently, accessing reliable and pertinent health-related information available online becomes more arduous for these groups. Moreover, geographic factors pose an additional burden on healthcare accessibility, particularly for individuals residing in remote or interior regions where reaching health services becomes more challenging.

Income disparity stands out as a significant determinant of health inequality within the NHS. Individuals with lower income levels face greater hurdles in affording pharmaceuticals and accessing healthcare services that are not covered by the (Simões et al., 2017). This financial

strain further exacerbates disparities in healthcare access and affordability, perpetuating the existing inequalities within the system.

5.2.1 Voluntary Health Insurance in Portugal

Voluntary health insurance represents a significant component of healthcare financing in various OECD nations, ranking second after government programs, social health insurance, and out-of-pocket expenses. It accounts for approximately 10% of total healthcare costs across OECD countries (OECD, 2022).

In comparison to the EU average, the government's share of health spending in these nations has experienced a decline of over 5,6% since 2010, dropping from 66.6% to 61.0% in 2019 (OECD, 2021). Conversely, out-of-pocket (OOP) spending has witnessed an increase of nearly five percentage points since 2010, constituting 30.5% of total health system revenues, significantly surpassing the EU average of 15.4%. Within Portugal, voluntary private health insurance (VHI) is gradually expanding and currently accounts for 8.6% of total health spending. Notably, user fees for primary care and services prescribed under the National Health Service (NHS) were abolished in 2020. Previously, a flat user fee was required for most services, including urgent care, primary care physician visits, primary care visits, and specialist consultations.

In Portugal, VHI plays a supplementary role by facilitating access to ambulatory consultations and private hospital care (OECD, 2021). In 2017, approximately 25% of the population was covered by a health subsystem or VHI plan (Simões et al., 2017). According to the GlobalData Insurance Database, Portugal's insurance market is projected to grow by 4.6% in 2023. The increased demand for private health insurance and a rise in workplace accidents are expected to be the primary drivers of growth within Portugal's general insurance segment. Moreover, due to inflationary pressure and higher claim amounts, health insurance premiums are anticipated to increase by more than 10% in 2023 (Center, 2022).

Regarding primary care, individuals must be enrolled with an NHS general practitioner, who serves as the gatekeeper for accessing specialists within the NHS. However, individuals with insurance coverage enjoy direct access to specialists from the private sector, as stipulated by their insurance policies. Private doctors can also refer patients to NHS hospitals, providing additional advantages to those with insurance coverage in terms of accessing medical services (Tavares, 2022).

Asymmetric information presents a significant obstacle for the majority of elderly individuals in obtaining health insurance with a growing market as there are only 5% of elderly Portuguese individuals report having any form of optional private health insurance (Tavares, 2022).

5.3 Market Overview of Voluntary Health Insurance in Portugal

As of 2021, the private health insurance market in Portugal exhibits a relatively modest scale when compared to other European countries. According to the Portuguese Insurance and Pension Funds Supervisory Authority (ASF), approximately 2.5 million individuals, representing around 22% of the population, are covered by private health insurance (Tavares, 2022).

Only two major insurance companies dominate the private health insurance market in Portugal, including Grupo Fidelidade and Ageas Grupo. Additional players in the market include Seguradoras Unidas, Allianz Portugal, and Victoria. (Pinilla & López-Valcárcel, 2020).

Company	Market share
Grupo Fidelidade	37.2%
Ageas Grupo	28.9%
Seguradoras Unidas	8.3%
Allianz Portugal	7.7%
Victoria	3.7%

Table: Market share of leading health insurance groups in Portugal in 2019 (Statista, 2023)

Regarding demographics, the majority of individuals covered by private health insurance in Portugal fall within the age range of 35 to 64, with a slight majority being female. Moreover, there is a discernible correlation between higher income levels and a greater likelihood of purchasing private health insurance (Center, 2022).

The average premium paid by individuals for private health insurance in Portugal varies based on the extent of coverage and the insured individual's age. On average, individuals can anticipate monthly payments ranging from €30 to €150 for basic coverage, while more

comprehensive plans can cost upwards of €200 per month for all ages (OECD, 2022). Elderly individuals can anticipate significantly higher prices, potentially up to €300 for a couple per month (Coles, 2021). However, since few providers offer health insurance plans specifically for those aged 60 or 65 and above, the available data is limited.

Despite its relatively modest market size, the private health insurance sector in Portugal is experiencing steady growth, with an annual growth rate of approximately 3%. However, the market remains heavily reliant on employer-sponsored plans, with only a small fraction of individuals acquiring private health insurance on an individual basis (Simoès et al., 2017).

5.3.1 Overview Senior Market in Portugal

The senior market in Portugal holds growing importance due to the country's progressively aging population. Projections from the National Statistics Institute (INE) indicate that the proportion of individuals aged 65 and above is expected to rise to 30% by 2050 an increase from 21.7% in 2020 (INE, 2020). This trend is anticipated to manifest across all geographic regions over the next two decades. Notably, the aging process in Portugal has been predominantly driven by the female population, with approximately 1.4 females for every male aged 65 and above. Concurrently, a migration pattern towards urban areas has resulted in rural regions harboring a notably aged population. Nevertheless, it is noteworthy that the majority of the 65+ segment is concentrated in urban locales, accounting for 69% of the population in this age group. In comparison to other age segments, the 65+ segment in Portugal exhibits the lowest average income, equivalent to approximately 75% of the average income, €1025 net income per month (TradingEconomics, 2023), among individuals aged 20 to 64 (Baltagi & Moscone, 2021). Factors such as low pension levels, constituting only 20% of average income during the working life, and erosion of savings have contributed to reduced purchasing power among seniors in Portugal. The average annual pension in Portugal amounts to €5.8k, representing a mere 22.6% of the average annual income during the working life period (OECD, 2021).

While Portugal's National Health Service (SNS) ensures universal coverage for all citizens, including seniors, many older individuals opt to complement their SNS coverage by acquiring private or voluntary health insurance. This decision allows them to access supplementary benefits and services (Tavares, 2022).

Seniors exert a significant influence on the healthcare sector as they are more prone to require medical care and treatment for various chronic conditions and diseases. According to data

from the National Institute of Statistics (INE), prevalent chronic diseases among seniors in Portugal include hypertension, arthritis, diabetes, and heart disease (Simoes et al., 2017).

5.3.2 Digital Affinity Among Seniors

Recent trends show an encouraging rise in digital tool usage among the elderly. This marks a departure from previous beliefs that technology was predominantly a domain of the younger generation. For health businesses, especially those leaning into digital solutions, this change is pivotal. Embracing digital systems can lead to significant cost savings and open up new revenue opportunities (Omachonu & Einspruch, 2010). These digital methods streamline operations and enhance patient experiences. Moreover, they introduce potential for innovative services (Hannakaisa Länsisalmi, 2006). Engaging seniors in this digital journey is crucial. It ensures they remain integrated in modern healthcare advancements and simultaneously aids health companies in optimizing their strategies (McKinsey, 2023).

According to a 2021 report by the Portuguese National Institute of Statistics (INE), the proportion of seniors aged 65-74 who utilized the internet in the first quarter of 2021 was recorded at 59.7% (OECD, 2021). This figure marks a notable increase from the 34.1% of seniors in the same age group who reported internet usage in 2014. The report further highlights that the primary motivation for seniors to use the internet in Portugal is for communication purposes, including activities such as email correspondence, social media engagement, and video calls. However, there has been a noticeable rise in the utilization of online services for shopping, entertainment, and accessing health-related information. The COVID-19 pandemic has also played a role in accelerating the adoption of digital technologies among seniors in Portugal (Tavares, 2022). With the implementation of lockdown measures and movement restrictions, many seniors turned to the internet as a means to stay connected with their loved ones and access vital information. To promote digital inclusion during the pandemic, the Portuguese government introduced various initiatives, such as providing free digital training and support (GlobalData Insurance Intelligence Center, 2022). Despite these positive trends, significant barriers to digital inclusion among seniors in Portugal persist. A major challenge lies in the lack of digital skills and confidence, particularly among those who did not grow up with digital technologies. Other obstacles include physical limitations, such as visual and hearing impairments, as well as the cost associated with acquiring technology and internet access (Tavares, 2022).

In terms of living arrangements, elderly individuals in Portugal typically reside with others, either with their partners or family members. The proportion of persons aged 65 and over living alone in Portugal stands at 25%, which falls below the European Union average (Federal Statistic Office Germany, 2016).

A study conducted by the Barometer of the Adoption of Telehealth and Artificial Intelligence in the Health System (Barómetro da Adoção de Telessaúde e de Inteligência Artificial no Sistema da Saúde) revealed that a majority of institutions and organizations providing health services in Portugal have incorporated telehealth as part of their digital healthcare offerings as of 2019. Among the various telehealth services provided, synchronous medical appointments and screening appointments emerged as the most frequently offered (Shaver, 2022).

5.4 Benchmark Analysis

While each country possesses its own distinctive characteristics and encounters health-related challenges influenced by demographics, resources, and other individual factors, there exist several countries that share similar healthcare systems and structures. Spain, in particular, presents a suitable basis for comparison due to its comparable demographic makeup and geographic proximity to Portugal (McKinsey, 2023).

To assess and compare the product offerings and approaches of different insurers targeting the senior market, a benchmark analysis can provide valuable insights into the practices and innovative products employed by insurers in other countries. It is particularly informative to examine insurance companies from countries that share the same healthcare system as Portugal, namely Spain and the United Kingdom. Additionally, Canada and Norway, renowned for their successful implementation of national health systems, serve as best-practice countries worth considering (McKinsey, 2023).

A detailed desk research was conducted focusing on the biggest European insurance companies. Emphasis was placed on their product offerings, with particular interest in health plans tailored for the elderly population. The inclusion criteria for the shortlist for benchmark analysis depended on the availability of comprehensive information on their websites. Among the insurance companies analyzed, approximately 50% offer specialized policies tailored for seniors. Telephone consultations are offered by 7 out of 10 insurance companies, while an even greater number (8 out of 10) provide video consultations. In order to reduce costs, the majority (60%) of insurance companies limit the choice of physicians to a predetermined list. Copayments emerge as a popular cost-management instrument, with 90% of insurance companies incorporating it into their policies. Only a small minority (3) of insurance

companies restrict the number of included consultations, and merely 2 out of the ten analyzed insurers offer discounts for partners or impose limits on the quantity of included consultations.

5.4.1 Best Practice Company / Product BluaU (App)

An intriguing example worth mentioning in this context is Bupa, a prominent health insurance company based in the United Kingdom. Over the years, it has pioneered various healthcare initiatives, particularly for seniors. That's why this corporation has been analyzed further for deriving possible solutions that can address by AdvanceCare. Bupa offers a range of tailored services specifically designed for seniors, encompassing comprehensive medical care, preventive screenings, and specialized treatments for age-related conditions. Notably, Bupa stands out among the analyzed insurance companies as it imposes no age restrictions for entry, emphasizing their commitment to inclusivity and accessibility within the senior market.

Bupa's efforts to enhance the accessibility and affordability of healthcare are particularly focused on leveraging digital technologies and services. One notable offering in their digital portfolio is the BluaU app, developed in collaboration with BBVA, a global financial institution headquartered in Spain. In addition to its comprehensive financial services, BBVA also extends its expertise to the insurance domain. BluaU, the result of this collaboration, provides an array of features and benefits, including:

1. **Extensive Network of Specialists:** BluaU boasts a network of over 3,100 doctors spanning various medical specialties, ensuring access to a wide range of healthcare professionals.
2. **Video Consultations:** The app facilitates video consultations, serving both as a means for scheduled appointments and as a 24/7 emergency service, enabling individuals to seek immediate medical attention remotely.
3. **Digital Consultations:** BluaU offers digital consultations in under 24 hours, covering ten different specialties, allowing users to receive prompt medical advice and guidance.
4. **Vital Signs Measurement:** Utilizing facial imaging technology, BluaU enables the measurement of vital signs, promoting continuous health monitoring. This feature proves particularly valuable for individuals managing chronic conditions such as hypertension, obesity (level 2), asthma, or arrhythmias.

5. Digital Health Programs: BluaU provides access to comprehensive digital health programs, offering unlimited sessions to support individuals in their health management journey.

6. Dermatology Video Consultations with AI Integration: BluaU offers dermatology consultations facilitated by video calls, supplemented with image analysis powered by artificial intelligence, enhancing the accuracy and efficiency of diagnoses.

7. Mental Health Programs: Recognizing the importance of mental and emotional well-being, BluaU incorporates digital psychology services aimed at prevention and promotion of mental health, providing users with convenient access to support and guidance.

8. Medication Home Delivery: BluaU facilitates the home delivery of medications, ensuring convenience and accessibility for insured individuals. The service allows for up to six deliveries per year at no additional cost.

9. Medication Reimbursement: To alleviate the financial burden associated with medication expenses, BluaU offers a reimbursement feature, covering 50% of medication costs up to a limit of €200 per insured person per year.

These comprehensive offerings exemplify Bupa's commitment to leveraging digital healthcare solutions to enhance access, convenience, and affordability for seniors, aligning with their objective of providing holistic and patient-centered care.

The analysis conducted on international health insurance companies and their product portfolios targeting seniors provides valuable insights into the strategies employed by these companies to optimize profitability. One commonly observed approach involves the establishment of an entry age threshold, which, although effective in maximizing profitability, introduces discriminatory practices by excluding individuals outside the specified age range. This aspect, however, does not align with the objectives of our client, AdvanceCare, as they aim to provide comprehensive coverage to seniors of all ages, emphasizing inclusivity.

Nevertheless, certain aspects emerged from the benchmark analysis that warrant consideration. Notably, the provision of alternative consultation options such as video or telephone consultations, the implementation of copayment mechanisms, and the application of limitations on the number of consultations represent key elements to bear in mind. These findings contribute to the development of a multi-layered model encompassing diverse solution strategies derived from the examination of various organizations. Moreover, this

model is informed by the broader analysis of health insurance companies' business models within the theoretical framework.

By incorporating these insights into the design of AdvanceCare's product portfolio for seniors, it is possible to strike a balance between profitability and the company's commitment to providing comprehensive and equitable coverage to individuals across all age groups. The consideration of alternative consultation methods, copayment mechanisms, and consultation limitations contributes to the development of a robust and tailored solution for the target demographic, ensuring that the product portfolio meets the specific needs and preferences of seniors while aligning with the principles of fairness and accessibility.

5.5 Solution Layer Framework

"During the project of the master thesis, the 'Solution Layer framework' was meticulously developed. This framework not only integrates all relevant factors previously analyzed, but it specifically targets those factors identified to have a potential impact on cost reduction or revenue increase. In order to offer an affordable and sustainable health insurance plan, our 'Solution Layer framework' articulates the strategic approach chosen to architect a financially sustainable health insurance product. In order to maintain a profitable health insurance product for the company itself, one can either cut costs or increase revenue. Cutting costs would result in less consultation. To achieve this, while also maintaining the same level of quality of health care, insurance companies need to either develop a gatekeeping mechanism for in cooperation with doctors or can set incentives to avoid unnecessary consultation. Another option to cut costs are cheaper solutions in general for doctors to offer the senior segment. Digital services, like telehealth, need to be further analyzed and evaluated in a business case. Furthermore, simply reducing services would also result in cheaper solutions. However, here needs to be carefully and exhaustively evaluated which services can be reduced, to maintain still a high quality product. Furthermore, it might be worth considering alternative models to the ones that are currently in the product portfolio of AdvanceCare. There can be network solutions created when considering possible partnerships. Another alternative plan could be created through a family model, which offsets the risk and resulting premiums of different target groups. Those alternative plans on the one hand reduce costs, on the other hand it also increases revenue as it attracts a different/new customer groups. Last but not least, the fourth dimension is a third party involvement which also pays off to the KPI increasing revenue. We thought about a NGO/charity model, where national or also EU wide

initiatives should be analyzed and evaluated further. Furthermore the robin hood model aims to promote greater participation and affordability in the insurance system by pooling funds collected from healthier individuals and offsetting them for costs of medical treatments, medications, and healthcare services for those with greater healthcare needs.

5.5.1 Less Consultations

Portugal has lower health spending per capita and as a percentage of GDP compared to the EU average (OECD, 2022). It allocates a significant portion of its health budget to outpatient treatment, which includes consultations, diagnostic tests, minor procedures, and follow-up visits. However, there is a wider disparity in unmet healthcare needs between income levels in Portugal. Interviews with AdvanceCare revealed that many doctor's appointments, particularly among the elderly, are medically unnecessary or socially motivated. Based on the benchmark analysis, three recommendations emerged: implementing copayments for doctor's appointments, utilizing limited consultations, and making individual adjustments to patients. Copayments help reduce costs for insurers and promote cost-consciousness among patients. They vary based on the insurance plan and service sought. Limited consultations can be combined with copayments to achieve significant savings. It is important to carefully consider copayment levels for economically disadvantaged seniors to ensure they can access necessary care. Additionally, adjusting consultation intervals and exploring electronic prescription dissemination can enhance the efficacy of consultations, particularly for chronic conditions.

5.5.2 Gatekeeping

In examining health care mechanisms, gatekeeping stands out for its role in both cost control and guiding patients to appropriate care pathways. By incorporating the principle that "Gatekeeping is a prevalent mechanism in health care systems aimed at controlling costs and ensuring that patients receive the most appropriate level of care," any model developed for health care systems should consider its nuances (Fong, Law, & Lee, 2020). While gatekeeping can be effective in directing resources and reducing unnecessary expenses, it's essential to ensure that it doesn't compromise the quality of care. Striking a balance between financial considerations and patient needs is vital for any comprehensive model seeking to optimize health care delivery (Omachonu & Einspruch, 2010).

Gatekeeping in healthcare involves primary care providers serving as gatekeepers, controlling access to specialized medical services. Its purpose is to ensure appropriate and coordinated care while managing healthcare costs by requiring individuals to obtain a referral from a

primary care physician before accessing certain medical services or seeing a specialist. This promotes continuity of care, optimizes healthcare utilization, and prevents unnecessary or duplicative procedures,

Different forms of gatekeeping mechanisms can be implemented, such as the existing practice of general practitioners regulating access to specialists in Portugal. However, employing doctors comes with high costs, averaging at 42 euros per hour. Thus, alternative options have been evaluated. Considering the increasing willingness of individuals aged 65 and above to use digital tools, prompted by the COVID-19 pandemic and ongoing trends, the use of telemedicine instruments is worth considering (PWC, 2022).

Telephone: Every household has a telephone, and smartphone penetration among seniors is increasing in Portugal. A telephone hotline staffed by doctors could serve as a first point of contact for seniors, providing an alternative for those who may have limited mobility or live in rural areas with fewer doctors available. This would be particularly beneficial for seniors who are less mobile or reside in areas with lower physician density.

Video consultations with healthcare professionals, including both medical doctors and nurses, offer an effective approach for delivering remote healthcare services. During an initial video consultation with a general practitioner (GP), patients can have their symptoms, medical history, and overall condition evaluated remotely, mirroring an in-person consultation. This allows primary care providers to allocate healthcare resources efficiently by identifying cases that necessitate immediate attention or in-person visits, while appropriately managing cases that can be handled remotely. As a result, unnecessary visits to specialists are reduced, optimizing the utilization of healthcare resources and minimizing waiting times for patients requiring urgent care. Furthermore, video consultations facilitate follow-up care and monitoring. Patients can engage in subsequent video consultations with their GP to assess treatment progress, address concerns or changes in symptoms, and make necessary adjustments to their care plan. This ongoing management approach supports the effective treatment of chronic conditions and diminishes the need for frequent in-person visits (McKinsey, 2022).

Video consultations with nurses: Considering the cost implications associated with video consultations involving GPs, nurse-led video consultations can serve as a valuable triage and referral mechanism. Leveraging their expertise, nurses can determine the most appropriate course of action for patients. If the patient's condition can be managed through general care, nurses can provide advice, prescribe medication if necessary, or suggest home remedies. In

cases requiring specialized care, nurses can refer the patient to a GP or specialist or request additional investigations. By utilizing video consultations with nurses, healthcare systems can optimize resource allocation, enhance patient care, and promote efficient healthcare delivery (PWC, 2022).

Digital tools: Digital tools have emerged as valuable assets in healthcare, enabling healthcare systems to optimize resource allocation, enhance patient access and convenience, improve care coordination, and reduce unnecessary visits. Telemedicine platforms serve as powerful tools, allowing healthcare providers to conduct virtual consultations with patients. Through video calls or secure messaging, healthcare professionals can remotely evaluate patients' conditions, provide advice, and determine appropriate next steps. This approach aids in triaging patients, identifying those who necessitate in-person visits or specialized care (PWC, 2022).

In addition, digital tools such as wearable devices or mobile apps facilitate remote monitoring of patients' vital signs, medication adherence, and disease-specific parameters. By transmitting their data to healthcare providers, patients enable continuous monitoring of their progress. This proactive approach allows for early intervention, preventing unnecessary visits and enabling timely interventions when red flags arise. Moreover, digital platforms offer patients access to educational resources, self-management tools, and personalized care plans. Patients can acquire information about their conditions, acquire self-care techniques, monitor their progress, and receive reminders for medications or follow-up appointments. This empowerment enables

5.5.3 Gatekeeping Benchmark Analysis

Analyzing gatekeeping practices across diverse healthcare systems affords policymakers and healthcare professionals a comprehensive understanding of different models, their merits, and potential drawbacks. We conducted a comparative examination of gatekeeping mechanisms in eight countries, providing insights into strategies for optimizing healthcare resource allocation, improving patient care coordination, and enhancing overall healthcare system efficiency. Such international benchmarks hold valuable lessons for countries aiming to refine their own healthcare systems and ensure appropriate utilization of specialized care services.

In Portugal, gatekeeping mechanisms have been implemented within the healthcare system. The country follows a primary care-based model where general practitioners (GPs) act as

gatekeepers, regulating access to specialized care. Typically, patients are required to consult with a GP who assesses the need for a referral to a specialist. However, it is worth noting that this step can be bypassed through out-of-pocket payments or voluntary health insurance.

Among the eight countries analyzed, Portugal exhibits the highest out-of-pocket payments, accounting for slightly over 30% of current health expenditures. This finding suggests a reliance on private healthcare providers and raises concerns about the healthcare system's accessibility. Moreover, in comparison to the other countries studied, Portugal's health expenditure as a percentage of GDP is relatively low, indicating insufficient allocation of resources. Consequently, the country currently faces challenges such as inadequate healthcare infrastructure, limited access to quality services (particularly for elderly or lower-income individuals), and suboptimal health outcomes for the population.

The United Kingdom serves as a pioneer and best practice example for gatekeeping processes in the healthcare sector, primarily due to its National Health Service (NHS). The UK's stringent gatekeeping mechanisms contribute to effective care coordination, cost control, and appropriate utilization of specialized services. These mechanisms promote continuity of care and embrace a patient-centered approach by involving GPs as central coordinators of their patients' healthcare journeys. Notably, evolving regulations have also enabled nurses and pharmacists to assume additional responsibilities and operate as independent practitioners.

Strict gatekeeping mechanisms are also prevalent in the Netherlands and Finland. In the Netherlands, health insurance companies offer various copayment options to make voluntary health insurance accessible and affordable for everyone. Additionally, primary care physicians collaborate with diverse partners to alleviate the burden on hospitals. In Finland, efforts to circumvent strict gatekeeping mechanisms have led to an unintended consequence of congested emergency departments. To provide more affordable voluntary health insurance alternatives, companies offer plans with limited numbers of consultations.

Some countries employ gatekeeping mechanisms in the form of requiring patients to first consult with a general practitioner, but alternatives exist that involve additional charges. For instance, in France, Denmark, and Sweden, copayments have been introduced to limit unnecessary consultations. France offers teleconsultations with general practitioners in hospitals or call centers staffed by physicians. In Sweden, shorter waiting times can be experienced by consulting with a nurse as the initial point of contact.

Denmark has implemented innovative solutions to maintain gatekeeping mechanisms, including free consultations with gatekeepers. In Germany, individuals have the freedom to choose among GPs and specialists, and registration with a family physician is not mandatory. However, monetary incentives exist to encourage compliance with gatekeeping rules.

In Australia, while gatekeeping is not mandatory, GPs serve as gatekeepers to specialist care, and most patients have a general GP. If individuals seek specialist care without prior consultation with a GP, they are required to pay the full price out of pocket.

In New Zealand, a new model known as the "provider of first-contact care" was introduced to access new public funding. The government unveiled its Primary Health Care Strategy (PHCS) in 2001, aiming to enhance basic healthcare and reduce health disparities. Funding was allocated to lower the costs of primary healthcare services for patients in New Zealand, increase service utilization, and improve accessibility.

5.5.4 Telehealth

Given the multifaceted advantages of telehealth, it was deemed an essential component when constructing the model. By integrating telehealth, our model capitalizes on its potential to broaden outreach, particularly to the elderly who may face mobility challenges or reside in remote areas. This widespread approach not only ensures that more seniors can access quality healthcare services without the burdens of physical travel but also aligns with our objective to conserve costs and resources (Gajarawala & Pelkowski, 2020). In essence, the inclusion of telehealth in our model underscores our commitment to innovative, cost-effective, and comprehensive care for the elderly population.

Telehealth, the utilization of telecommunications technology for remote healthcare services, has emerged as a transformative tool in modern healthcare, holding the potential to revolutionize healthcare delivery, enhance access to care, and improve patient outcomes. One promising application of telehealth is its integration into gatekeeping mechanisms within healthcare systems. Gatekeeping refers to the process of controlling patient access to specialized care by involving primary care providers or other healthcare professionals. By incorporating telehealth into gatekeeping processes, healthcare systems can harness the advantages of remote consultations, virtual triage, and electronic referrals to optimize resource allocation, enhance care coordination, and improve overall system efficiency.

Telehealth offers several advantages in healthcare delivery. Improved accessibility stands out as a key advantage, as it reduces logistical burdens and saves time for patients. Irrespective of their geographical location, individuals can remotely access healthcare services, benefiting those in rural or underserved areas. This eliminates the need for extensive travel and long waiting times, thereby increasing healthcare accessibility.

Another advantage is the reduction of unnecessary consultations. Through virtual visits, healthcare providers can efficiently triage and evaluate patients, determining whether a physical examination or specialist referral is necessary. This optimizes resource allocation and prevents overcrowding in healthcare facilities, ensuring that patients receive appropriate care in a timely manner (McKinsey, 2023).

Telehealth also facilitates improved interdisciplinary knowledge sharing. Specialists can engage in virtual consultations with primary care providers, exchanging expertise and insights to enhance patient care. This collaboration enables more comprehensive assessments, improved treatment plans, and better patient outcomes.

By offering virtual consultations, telehealth helps to shorten waiting times for patients. Healthcare providers can accommodate more patients within a given timeframe, reducing appointment backlogs and enabling timely access to services. This leads to improved patient satisfaction, faster diagnoses, and timely interventions, particularly for conditions requiring prompt attention.

Telehealth has gained widespread acceptance among patients and physicians. Patients appreciate the convenience, accessibility, and flexibility of virtual consultations, while physicians recognize the value of extending their reach, enhancing patient engagement, and improving healthcare delivery. The growing acceptance and adoption of telehealth technologies contribute to their integration into mainstream healthcare practices.

Furthermore, telehealth can result in significant cost savings for both patients and healthcare systems. By eliminating the need for travel, reducing hospital visits, and optimizing healthcare utilization, telehealth can lead to substantial cost reductions. Studies have shown potential savings of up to \$429 per consultation when utilizing telehealth services compared to in-person visits, making it a cost-effective alternative for patients and healthcare providers alike.

However, alongside its numerous advantages, there are also considerations to bear in mind when using telehealth as a gatekeeping mechanism in healthcare. One potential drawback is

that telehealth consultations may result in a lack of knowledge about patients' pre-existing conditions, as they may lead to more initial contacts. Without a comprehensive understanding of a patient's medical history, healthcare providers may find it challenging to make accurate assessments and provide appropriate care. Thorough documentation and effective communication between healthcare professionals become crucial to ensure continuity of care.

Another concern is that telehealth consultations may offer a poorer assessment of a patient's overall condition due to the absence of face-to-face contact. In-person interactions allow healthcare providers to observe non-verbal cues, physical appearances, and other subtle indicators of a patient's well-being. The absence of these cues in telehealth consultations may pose challenges in accurately assessing certain aspects of a patient's health (McKinsey, 2023).

Data security is another significant concern when utilizing telehealth as a gatekeeping mechanism, as there is a potential vulnerability to cybersecurity breaches and data leaks. As telehealth involves the transmission of sensitive patient information over digital platforms, protecting patient data and ensuring secure communication channels are essential to maintain patient privacy and uphold trust in telehealth services (PWC, 2020).

Furthermore, implementing telehealth systems can entail substantial costs, including infrastructure, equipment, training, and maintenance. Healthcare organizations need to invest in suitable technology.

In Portugal, telehealth has already gained significant traction and has provided a solid foundation for its implementation. One noteworthy aspect is the high smartphone penetration rate among seniors above the age of 65. This indicates that a significant portion of the elderly population in Portugal is equipped with the necessary technology to access telehealth services. The widespread adoption of smartphones among seniors suggests that they are becoming increasingly comfortable with using digital devices and are open to engaging in remote healthcare interactions.

Moreover, it is worth highlighting that the percentage of people in Portugal who have never used a computer is steadily declining. This trend indicates a growing familiarity and proficiency with digital technologies among the population. As more individuals become acquainted with using computers, they are likely to be more receptive to telehealth initiatives and willing to engage in virtual consultations with healthcare providers.

The increasing smartphone penetration rate among seniors and the declining percentage of individuals who have never used a computer reflect a positive shift in digital literacy and

technology adoption in Portugal. These trends suggest that the population is becoming more receptive to telehealth solutions, making it an opportune time to further integrate telehealth into the country's healthcare system. The combination of high smartphone penetration among seniors and decreasing rates of computer non-usage indicates that Portugal has a favorable environment for the implementation and expansion of telehealth services. These factors contribute to the potential success of telehealth initiatives in improving healthcare accessibility, enhancing patient outcomes, and promoting efficient healthcare delivery in the country. To succeed, telehealth must overcome four major challenges (PWC, 2022).

5.5.4.1 Challenges of Telehealth

To ensure the efficacy and accessibility of telehealth for patients facing limitations in internet access or appropriate devices, several strategies can be employed. One approach is to provide custom-formatted tablets designed specifically for telehealth purposes. These tablets come preloaded with the necessary applications and software, accompanied by remote instructions to guide patients in their usage. Another solution is to establish a service that delivers cellular-enabled tablets directly to patients' homes for telehealth consultations, eliminating the need for internet access. For patients uncomfortable with tablets or smartphones, telehealth consultations over the phone can be an alternative, enabling effective communication and information exchange despite the lack of visual components (McKinsey, 2022).

To address limited digital literacy, two strategies can be implemented. "Practice visits" involve trained personnel visiting patients in person to provide hands-on training with telehealth software and hardware. This helps patients build confidence and familiarity with the technology. Additionally, assigning dedicated support personnel to each patient enhances their telehealth experience by assisting with setup, troubleshooting, and addressing technical issues in real-time. For patients with medical conditions hindering their telehealth utilization, having an assistant visit their location becomes crucial. This assistant acts as a liaison between the patient and the physician, assisting with equipment setup, ensuring a stable internet connection, and helping navigate the telehealth platform.

To implement telehealth for high-risk patients requiring regular vital sign monitoring, two provisions are necessary. Patients need to be provided with self-monitoring devices and receive video instructions on their usage to ensure accurate measurements and proper data recording. Additionally, a medical assistant can offer support in telehealth platform setup,

troubleshooting, and organizing vital sign data prior to the physician's meeting, enabling remote monitoring and proactive healthcare management (PWC, 2022).

In the pursuit of affordable healthcare, several drivers can be implemented to control costs. Limiting consultations encourages judicious resource use, coverage restrictions for specific providers reduce expenses, and gatekeeping options incentivize patients to consult primary care providers first, minimizing unnecessary consultations. Copayments also play a crucial role by introducing a financial burden on patients for each healthcare service, discouraging non-essential utilization and contributing to cost containment.

5.6 Drivers for a Financially Sustainable Healthcare Product

In the pursuit of affordable healthcare, it is crucial to implement drivers that limit services to essentials, thus controlling costs. Several drivers within the healthcare system contribute to this goal.

One driver is the limitation of consultations, encouraging judicious use of healthcare resources by setting a maximum number of visits. This prompts patients to assess the necessity of each visit, leading to more efficient resource allocation and cost containment.

Coverage restrictions for specific healthcare providers are another driver. Health insurance plans negotiate agreements with a limited network of providers to secure favorable reimbursement rates. By offering coverage only for services provided by selected providers, healthcare systems control costs and reduce expenses associated with out-of-network services. This strategy promotes cost-effective care delivery within the network.

Financial incentives for gatekeeping options serve as a driver to limit non-essential services. Patients are incentivized to consult their primary care provider (PCP) before accessing specialist care, promoting coordinated and controlled healthcare delivery. This minimizes unnecessary consultations and procedures, contributing to cost containment.

Copayments play a crucial role in limiting services to essentials and controlling costs. By introducing a financial burden on patients for each healthcare service, copayments deter the utilization of non-essential care, reducing healthcare costs and utilization.

5.7 Family Model

The very essence of the business model of health insurance companies is built upon the principle of mutualization. This essentially means pooling risks from various individuals, ensuring that losses suffered by a few are borne by many (WHO, 2019). When we examined this principle in the context of devising a new product offering, its implications were profound. This model of risk-sharing is especially pivotal for vulnerable demographics, such as senior citizens. Without the safety net of mutualization, these individuals, given their typically higher propensity to health issues, would be subjected to prohibitive premium rates.

Recognizing the weight of this challenge, our newly-designed family model introduces a strategic counterbalance (Brandt, Horisberger, & Wratburg, 2012). By including younger individuals, known for their generally lower healthcare costs and risks, the equation is tipped in favor of affordability. The inclusion of this younger demographic ensures a healthier risk pool, wherein their lesser expected healthcare costs offset the higher costs associated with senior members. This approach not only facilitates equitable premium rates but also fosters a sense of intergenerational solidarity (WHO, 2019). It's a model that underscores the importance of community and collective responsibility, making health insurance not just an individual benefit, but a shared value for families and broader societal units.

Risk Pooling: The principle of mutualization enables the pooling of risks among a diverse group of individuals. By combining the risks of younger, healthier individuals with older, potentially higher-risk individuals within the family model, the overall risk is spread across a larger population. This pooling of risks helps alleviate the financial burden on seniors and ensures a more equitable distribution of healthcare costs among the members (McKinsey, 2023).

Cost Sharing: Mutualization facilitates cost sharing among members of the family model. Younger individuals, who generally have lower healthcare expenses, contribute to the overall premium pool. This contribution helps offset the higher costs associated with providing healthcare coverage to seniors. By sharing the financial burden, the family model promotes fairness and affordability for all members (PWC, 2020).

Cross-Generational Benefits: The family model not only benefits seniors but also provides advantages for younger individuals. By participating in the family package, younger members gain access to comprehensive healthcare coverage that may be more affordable compared to individual plans. This creates a mutually beneficial situation where the insurance company can attract and retain a broader customer base across different age groups (PWC, 2022).

Scalability and Market Potential: By offering family-oriented products based on the principle of mutualization, health insurance companies can tap into a larger market potential. Family packages appeal to households that include both seniors and younger individuals, allowing insurers to target a wider range of customers. The scalability of this approach enables insurance providers to reach a greater number of families and expand their market share (McKinsey, 2022).

Enhanced Risk Management: The family model, supported by mutualization, allows for more effective risk management. By diversifying the risk pool, insurance companies can better anticipate and manage healthcare costs associated with different age groups. This approach promotes stability and sustainability in providing affordable coverage for all members, regardless of their individual risk profiles (PWC, 2022).

5.8 Network Solutions

In order to achieve cost reduction and provide a low-cost insurance product, insurance companies often adopt the Health Maintenance Organization (HMO) model. This model restricts services to a specific network of healthcare providers for the insured individuals. HMOs typically prioritize preventive care, control costs through emphasis on primary care, utilization management, and network restrictions. Members usually pay fixed monthly premiums and may have low or no copayments for in-network services. However, research indicates a shift in the utilization of less expensive services, which is disadvantageous for insured individuals and does not significantly reduce costs for the healthcare organization.

On the other hand, the Preferred Provider Organization (PPO) model involves contracting with medical providers, such as hospitals and doctors, to establish a network of participating providers. Individuals using providers within the plan's network incur lower costs. They also have the option to seek care from doctors, hospitals, and providers outside the network, but at an additional cost. Studies have shown that this model leads to a decrease in usage, resulting in an average cost reduction of 12% (PWC, 2022).

Considering these findings, effective conversations with healthcare providers emerge as a promising approach for cost savings, which can be realized through the implementation of the preferred provider model.

5.9 EU / NGO initiatives

An increasing tendency can be observed among organizations and initiatives to explore unconventional funding sources beyond traditional channels as a means to secure financial backing for their projects and endeavors. Within this context, one notable strategy involves seeking funds from non-governmental organizations (NGOs) and European Union (EU) initiatives. While private agencies and NGOs present an opportunity to obtain grants valued at \$31.61 million in monetary funds, goods, or services, it is crucial to carefully evaluate the appropriateness of such support for AdvanceCare, a healthcare organization. The presence of a national health system in Portugal, which provides healthcare services, raises pertinent questions regarding the potential scenario in which elderly individuals would be deprived of medical care. However, a comprehensive examination and analysis are necessary to reach a definitive conclusion on this matter.

5.10 Robin Hood Model

The Robin Hood model, inspired by the legendary outlaw who redistributed wealth from the rich to the poor, encompasses an economic concept that seeks to address social inequalities and promote social responsibility through the redistribution of resources or wealth from more affluent entities to those in need. Within the context of Advance Care, this model involves the voluntary allocation of a portion of their profits towards initiatives that benefit disadvantaged individuals or communities.

Our proposed approach in implementing the Robin Hood model in Advance Care entails the development of a strategy where insured individuals would pay a higher premium or an additional fee to cover the premiums of seniors within the healthcare system. The objective is to achieve equal utilization of voluntary health insurance (VHI) services between individuals over 65 and those between 25 and 64 years old, while also shifting 50% of insurance costs for seniors to the younger population (OECD, 2021).

To determine the required additional funding, we have set an intended base premium of 160€ per year for individuals above 65. To ensure a fair distribution of costs, an additional funding source of 26,620,960€ per year would be necessary. Consequently, the costs shifted from the second policy to the first policy would result in an annual payment of 48€ per individual (AdvanceCare Interview with Head of Marketing & Strategy Bruno Edgar Gonçalves Freitas and Director of Product Tiago Vacas Felgueira, 2022).

Although the Robin Hood model holds potential benefits, its successful implementation faces various barriers that need to be addressed. Marketing poses a particular challenge, as incentivizing individuals to choose the first policy requires careful consideration. Alternative approaches, such as formulating a charitable purpose and establishing a foundation, have been explored. Linking the purchase of the policy to a charitable cause and offering tax benefits through donations could serve as incentives for individuals to participate.

To fully leverage the strengths of the Robin Hood model, these initial barriers must be diligently overcome. Effective marketing strategies should be designed to highlight the advantages of the model, while ensuring that the incentives provided are compelling enough for individuals to opt for the first policy. Additionally, establishing clear guidelines and regulations for the allocation and utilization of funds within the foundation will contribute to transparency and accountability, fostering trust among stakeholders.

In conclusion, the proposed implementation of the Robin Hood model in Advance Care involves the voluntary allocation of profits to benefit disadvantaged individuals. By adjusting premiums and redistributing costs, the aim is to achieve equity in healthcare utilization and financial support for seniors. Overcoming challenges in marketing and incentivization, such as formulating a charitable purpose and exploring tax benefits, can enhance the appeal and feasibility of this model.

Ultimately, careful planning and effective implementation strategies are essential to fully harness the potential of the Robin Hood model in the context of AdvanceCare.

6. Conclusion

In this concluding chapter, we reflect on the analysis conducted throughout the preceding chapters, which focused on healthcare innovation in the form of offering an affordable voluntary health insurance product specifically tailored for individuals above the age of 65. By examining various aspects of this innovation, including its rationale, design, financial implications, and potential barriers, we have gained valuable insights into the feasibility and implications of such an initiative. This chapter aims to consolidate the findings and provide a comprehensive conclusion that highlights the key takeaways, implications, and potential future directions for implementing and refining this innovative approach to healthcare for the elderly population.

Based on the analysis conducted and the insights gained throughout our examination of offering a health insurance product for the elderly through Advance Care, we propose the following recommendations to guide the organization in implementing this innovative approach.

6.1 Product Design Recommendations for Advance Care

The recommended approach for Advance Care's health insurance product for the elderly involves adopting a Preferred Provider Organization (PPO) framework. This model offers a limited network of healthcare providers, allowing individuals to choose providers based on their preferences. Implementing a PPO framework enables Advance Care to address the diverse healthcare needs of the elderly while controlling costs. PPOs negotiate discounted rates with providers, emphasizing desired health outcomes rather than individual services, promoting efficiency and collaboration among healthcare professionals. The PPO model also allows flexibility for individuals to seek care outside the network, maintaining continuity and trust in healthcare relationships.

Furthermore, offering a family policy package benefits both Advance Care and policyholders. By targeting families, Advance Care gains a competitive advantage through mutualization, cost reduction for the elderly, and potential cross-selling opportunities. Policyholders benefit from a comprehensive and cost-effective family policy that caters to the health needs of all family members while potentially accessing additional coverage options.

To tailor a health insurance product specifically for the elderly, the following key characteristics are recommended:

1. **Predominant use of telehealth services:** Incorporating telehealth as the primary mode of healthcare delivery provides convenience, accessibility, and cost-effectiveness. Incentives such as additional benefits or reduced copayments for telehealth consultations encourage its use.
2. **Cost savings through gatekeeping options:** Requiring referrals or authorizations from primary care physicians before accessing specialty care or medical procedures can manage costs by minimizing unnecessary services and promoting care coordination.
3. **Limited number of consultations:** Setting a cap on the number of covered consultations within a specified period encourages responsible use of healthcare services, balancing costs for the insurer and policyholders.

4. Coverage limited to essential services and treatments: Prioritizing coverage for preventive care, essential diagnostics, emergency services, hospitalizations, and medically necessary treatments ensures necessary support while managing overall costs. Non-essential or elective procedures are excluded.

By incorporating these characteristics, the aim is to optimize access to care, control costs, and provide essential healthcare coverage for the elderly. This approach considers the unique healthcare requirements of the elderly population while promoting efficient resource allocation within the insurance system.

Limitations

Despite the comprehensive research conducted for this master thesis on "Healthcare Innovation: Challenges and Strategies for Developing a Financially Sustainable Health Insurance Product for the Senior Market in Collaboration with AdvanceCare," certain limitations should be acknowledged. Firstly, the exploration of the product's desirability and willingness to pay among the elderly population requires further investigation through interviews. These interviews would provide valuable insights into the preferences and needs of the target market, ensuring the product aligns with their expectations.

Secondly, the adaptation of digital solutions in the health insurance product remains a limitation. While this study acknowledges the importance of incorporating digital technologies, further exploration is needed to assess the level of acceptance and usability among the elderly population. Conducting user tests and gathering feedback would enhance the understanding of potential challenges and facilitate the creation of a user-friendly digital solution.

Additionally, due to initial scoping with the client, the thesis did not delve into detailed price calculations of the health insurance product. It is essential for future studies to include a thorough analysis of the pricing strategy to ensure the financial sustainability of the proposed product.

Furthermore, the viability and feasibility of the health insurance product in collaboration with AdvanceCare could be further explored through expert interviews with stakeholders from the healthcare sector and startups. This would provide a deeper understanding of the industry dynamics, potential challenges, and opportunities for successful implementation.

In conclusion, while this master thesis addresses several aspects of developing a financially sustainable health insurance product for the senior market in collaboration with AdvanceCare, the limitations discussed above necessitate additional research. Conducting interviews with the elderly, exploring digital adaptation, performing price calculations, and gathering insights from industry experts would contribute to a more comprehensive evaluation of the product's desirability.

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Appendix

International benchmark analysis insurer (1/2)

	Insurance	Country	Special senior offer	Maximum age	Consultation limits	Telephone consultations	Video consultation	Specialists included	Dental policy	free choice of doctor	Reimbursement of pharmacy expenses	Co-payments	Special features
1	DKV seguros	Spain	yes	75	unlimited	24h	yes	all	yes	no (only with plan mundisalud classic)	no (only with plan mundisalud classic)	no (only with plan integral classic)	
2	Sanitas Seguros	Spain	no	75	unlimited available with special plan	24h	yes (special digital plan)	all	yes	List of doctors	50% of drugs	depends on the plan	discounts per year; Special digital plan
3	SegurCaixa Adeslas	Spain	yes	n.a.	n.a.	yes	yes	yes, but with copayments	optional	list of doctors	yes	yes, for special services	
4	Aviva	UK	no	n.a.	depends on health plan	yes	yes (5 consultations with GP per year)	depends on health plan	depends on health plan	no, list of doctors	only special drugs	optional excess to reduce premium (paid once a year)	discount if partner added

International benchmark analysis insurer (2/2)

	Insurance	Country	Special senior offer	Maximum age	Consultation limits	Telephone consultations	Video consultation	Specialists included	Dental policy	free choice of doctor	Reimbursement of pharmacy expenses	Co-payments	Special features
5	Bupa	UK	no	no age limit	n.a.	24/7	yes	yes, but with copayments	special insurance	list of doctors	n.a.	depends on plan	
6	The Exeter	UK	no	n.a.	n.a.	n.a.	n.a.	depends on chosen plan	n.a.	list depends on chosen plan	n.a.	depending on chosen out-patient limit	
7	canadalife	CAN	yes	n.a.	n.a.	yes	yes	yes, but with copayments	optional	yes	85%	depends on chosen plan	vision care included
8	surehealth	CAN	yes	80	monetary limit	n.a.	n.a.	yes	yes	n.a.	depends on plan (up to 80%)	yes	vision care included
9	blue cross	CAN	yes	n.a.	n.a.	yes	yes	depends on plan	coverage of up to 80%	yes	depends on plan (up to 80%)	yes	vision care included
10	if insurance	NOR	no	67	n.a.	n.a.	yes	yes	n.a.	n.a.	yes	no	

Gatekeeping – International Benchmarking (1/2)

Country	System	Health expenditure (% of GDP) ¹	Out-of-pocket expenditure (% of current health expenditure) ¹	% of people with a private insurance (Commonwealth-fund, 2017)	Gatekeeping mechanisms
Portugal	National health insurance model	9.53%	30.45%		Theoretically, GPs act as gatekeeper. However, patients visit emergency departments of hospitals to see a specialist - 40% do not need immediate care (data SNS, 2015)
Germany	universal multi-payer health care system	11.7%	12.82%	11%	Individuals have free choice among GPs and specialists. Registration with a family physician is not required, and GPs have no formal gatekeeping function. However, incentives for complying with gatekeeping rules.
UK	Universal health insurance approach (merger of public and private insurance)	10.15%	17.07%	10.5%	Strict gatekeeping system; in the private sector the major insurers demand a referral from a general practitioner (and few cover primary care), but those paying for themselves may in some cases be able to self-refer.
Australia	Universal healthcare	9.91%	15.98%	46% (private hospital coverage) 55% (private general treatment coverage)	General practitioners act as gatekeepers. GP referral necessary for specialist services or hospital treatment, except accidents and emergency departments. Direct access to specialists is possible but requires full out-of-pocket payment.
Denmark	National health model	9.96%	14.17%	42% (private complementary coverage) 30% (private supplementary coverage)	GP as gatekeeper: Free consultations with gatekeeper model, copayments with free choice of provider, waiting times guarantee for NHS, general practitioners have a large amount of freedom regarding benefit-related decision-making.

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Achieve
Greatness

Gatekeeping – International Benchmarking (2/2)

Country	System	Health expenditure (% of GDP)	Out-of-pocket expenditure (% of current health expenditure)	Share of people with a private insurance	Gatekeeping mechanisms
Finland	National health model	9.15%	17.45%	21% (complementary/ supplementary coverage)	Patients require a referral to access public specialist care; however, only a minority of hospital patients are referred by a health centre general practitioner. Many patients get access through hospital emergency departments, or by referral from private practitioners.
Netherlands	National health insurance model	10.13%	10.58%	84% (private complementary coverage without any advantages regards time slots or offer of doctors)	Strict gatekeeping system: Entitlement to medical, surgical and obstetric care is conditional upon referral from a general practitioner, another specialist to whom a general practitioner had referred the patient or, in case of obstetric care, a midwife.
France	Statutory health insurance system	11.06%	9.26%	96% (private complementary coverage)	99.6% of gatekeepers are general practitioners. Gatekeeping is mandatory in France.
New Zealand	Mandatory health insurance	9.74%	12.24%	23%	Gatekeeping not mandatory but GPs serve as gatekeepers to specialist care and most patients have a regular GP. New models: "provider of first-contact care" (normally their "usual" GP) in order to access the new public funding. The scheme is voluntary for both practices and patients, but higher subsidies are available only through PHOs and to their enrollees and practitioners.
Sweden	Universal health care system	10.87%	13.88%	6% supplementary coverage	In the public sector patients require a referral to consult a specialist; however, patients may choose to access secondary care directly through a hospital polyclinic if they are prepared to pay a fee.

Cost shift for Robin-Hood effect

Current utilization >65 years: 3.2%

Additional people >65 needed: $People > 65 \text{ wanted with VHI} - People > 65 \text{ already having VHI} = 244781 - 78400 = 166,381$

Base premium: $320 \frac{\text{€}}{\text{year}}$

→ Desired base premium >65: $160 \frac{\text{€}}{\text{year}}$

Total amount needed to finance Robin-Hood effect: $116,381 + 160 \frac{\text{€}}{\text{year}} =$

$26,620,960 \frac{\text{€}}{\text{year}}$

→ Premium added to first policy:

$$\frac{\text{Amount needed}}{\text{amount VHI} < 65} = \frac{26,620,960 \frac{\text{€}}{\text{year}}}{555,500} \approx 48 \frac{\text{€}}{\text{year}}$$

Age	Individual VHI 2018	Population 2021
0-4	56700	407594
5-9	60100	432694
10-14	55300	490900
15-19	48500	528190
20-24	45600	559897
25-29	58100	541861
30-34	71800	561085
35-39	91600	645232
40-44	97000	757622
45-49	77300	797793
50-54	61700	748929
55-59	53400	743288
60-64	44600	704342
65-69	35700	654094
70-74	23900	589932
75-99	18800	1179613
Total	900100	10343066

Source: Input AdvanceCare

NEW

Inpatient

		Low Risk < 15.000€	High Risk ≥ 15.000€
Outpatient	Low Risk < 250€	ADV - Ligth ADV - Valor Mais Médis - Vintage Médis - Vintage Plus Multicare - Activcare 1 & 2	Multicare - 60+ 1 MGEN - Qualquer opção
	High Risk ≥ 250€		Multicare - 60+ 2

Price →

Price ↓

	ADV Ligth	ADV Valor Mais	Médis Vintage	Médis Vintage Plus	Multicare Activcare 1	Multicare Activcare 2	Multicare 60+ 1	Multicare 60+ 2
Preço	144€ Flat	480€ Flat	415€ Flat	617€ Flat	82€ Flat	180€ Flat	1.040€ 61 Anos	1.546€ 61 Anos
Subscrição	Mín. > 55	Mín. > 55	Mín. >=55	Mín. >=55	Mín. > 60	Mín. > 60	Mín. > 60	Mín. > 60
Idade Subscrição	Máx NA	Máx NA	Máx 75	Máx 75	Máx NA	Máx NA	Máx 70	Máx 70
Idade Permanência	s/ Limite	s/ Limite	s/ Limite	s/ Limite	s/ Limite	s/ Limite	75	75
Pré-Existências	N.A.	N.A.	S.I.	S.I.	N.A.	N.A.	S.I.	S.I.
Quest. Médico	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	S.I.	S.I.
Internamento	N.A.	5.000€	2.500€	5.000€	N.A.	N.A.	50.000€	200.00€
Subsídio Diário	30€	N.A.	N.A.	N.A.	25€	25€	N.A.	N.A.
Ambulatório	Acesso Rede	Acesso Rede	150€	250€	Acesso Rede	Acesso Rede	Acesso Rede	2.000€
Consultas	Acesso Rede	15€ (6)	50%	50%	Acesso Rede			
Urgência	Acesso Rede	Acesso Rede	50%	50%	Acesso Rede	Acesso Rede	40€ (2)	40€
Programadas	Acesso Rede	15€ (6)	50%	50%	Acesso Rede	15€ (6)	15€ (8)	15€
Online	2 Gratuitas	2 Gratuitas	N.A.	N.A.	N.A.	0€	0€	0€
Domicílio	15€	N.A.	N.A.	N.A.	N.A.	25€	25€	25€
Exames	Acesso Rede	Acesso Rede	50%	N.A.	Acesso Rede	Acesso Rede	Vários (2)	Vários
Medicina Dentária	N.A.	N.A.	N.A.	N.A.	Opcional	Opcional	Opcional	Opcional
Ort. Oculares	N.A.	N.A.	N.A.	N.A.	Acesso Rede	Acesso Rede	Acesso Rede	Acesso Rede
Serv. Assistência	Incluído	Incluído	Incluído	Incluído	Incluído	Incluído	Incluído	Incluído
Rede Bem-Estar	Incluído	Incluído	N.A.	N.A.	Acesso Rede	Acesso Rede	Acesso Rede	Acesso Rede
Doenças Graves	N.A.	N.A.	N.A.	Incluído	N.A.	N.A.	N.A.	N.A.

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Serviços Assistência	55 MAIS	Médis VINTAGE	Multicare Activcare	Multicare 60+
Transporte não Urg.	Não Incluído	2 transportes por anuidade	Não Incluído	Não Incluído
Transporte Urgente	Incluído	Não Incluído	Incluído	Incluído
Envio Médico Domicílio	Incluído	Não Incluído	Incluído	Incluído
Enfermagem Domicílio	Light 175€ e Valor Mais 750€ por anuidade	5 utilizações por anuidade (Vintage); 10 utilizações por anuidade (Vintage Plus)	Incluído	Incluído
Exames Domicílio	Não Incluído	1 recolha por anuidade	Incluído	Incluído
Fisioterapia Domicílio	Não Incluído	5 sessões por anuidade (Vintage); 10 sessões por anuidade (Vintage Plus)	Não Incluído	Não Incluído
Limpeza Higiene	Light 5 dias e Valor Mais 7 dias por anuidade	5 dias p/ anuidade (Vintage); 10 dias p/ anuidade (Vintage Plus)	Não Incluído	Não Incluído
Alimentação	Light 5 dias e Valor Mais 7 dias por anuidade (alimentação a cargo PS)	Custo da alimentação a cargo da PS: 5 dias (Vintage); 10 dias (Vintage Plus)	Não Incluído	Não Incluído
Guarda Animais	Máx. 10 dias em caso hosp.	Não Incluído	Não Incluído	Não Incluído
Envio Medicamentos	Incluído	1 entrega por anuidade		
Teleassistência	Linha de orientação médica & Serviço de informações médicas	Não Incluído	Não Incluído	Não Incluído
Check-up	Acesso a Valores Convencionados	Gratuito 1 Check-up por Anuidade	Não Incluído	Gratuito 1 Check-up por Anuidade

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