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Research Article

Cooperation Networks in Old People's Homes (Oph): An Exploratory Study in the Social Sector

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A B S T R A C T

This study aims to understand and explore the role of cooperation networks in Old People's Homes (OPH), highlighting the importance of this type of relation in improving the quality and efficiency of services. To do so, a qualitative approach based on the multiple case study method was adopted. More precisely, four OPHs/cases were selected, holding semi-structured interviews with their managers. From content analysis, the results show that cooperation networks bring significant benefits to the OPHs involved in this type of network, including resource optimization, cost reduction and improved care provided. However, challenges related to this mechanism were also identified: strategic alignment and managing expectations among partners. Adopting technology, such as management systems, was shown to be beneficial in improving OPHs' response to their residents' needs. This study contributes significantly to the literature by providing a detailed, contextualized analysis of cooperative practices in OPHs and makes valuable contributions for managers of this type of organisation and the academic community, underlining effective strategies to improve the quality and efficiency of care provided to old people.

Keywords: Cooperation networks, Old people's homes, Quality of care, Technological innovation, Old people

1. Introduction

The aging population is one of the most important social transformations of the 21st century, with an impact on many sectors such as the labour market, health systems and family structures. With the increase in the number of old people, the demand for specialized services has grown, especially for those who need continuous care[1,2].

In this connection, Old People's Homes (OPH) are crucial components, providing not only accommodation but also integrated health and social care. The creation of cooperation networks aims to improve the quality and efficiency of services. This review analyses the characteristics of these networks in the social sector, addressing their benefits, challenges, coordination strategies and impact on service quality[3-5]. It is essential to establish networks among organisations in order to discover and guarantee competitive advantages[6], a concept that applies directly to OPHs, where cooperation can significantly improve the quality and efficiency of services.

Although the literature deals extensively with cooperation networks in various care contexts, gaps are noted regarding

the specific integration and cooperation dynamics in OPHs. Previous studies[3,4] discussed the importance of accountability and integrating services for old people in the United States and Canada, highlighting integral care models. Nevertheless, there is a still lack of research exploring how these cooperation networks have a direct influence on service quality and user satisfaction in OPHs, particularly in European or specific contexts such as Portugal.

In Portugal, government strategy to meet old people's needs has traditionally been to support and supervise private non-profit organisations, rather than providing services directly. This approach created a diversified ecosystem of social responses facilitated by various programmes, such as PARES, PAII, PILAR and the National Strategy for Active, Healthy Aging. Organisations such as Associations for Social Welfare and Mutual Societies are crucial, with IPSS (Private Institutions for Social Welfare) managing around 91,8% of services in some regions. These institutions, benefiting from tax exemptions and financial support due to their public utility status, face a unique set of challenges. They operate according to a model whereby their sustainability depends heavily on state funding.

Most existing studies are concentrated on countries with different health systems and care structures, leaving a significant gap in understanding of how those networks function in Portugal. Highlight the positive impact of specific integrations, such as having nurses trained in geriatrics in old people's homes[5], but they do not explore the wider structure of cooperation networks among the different entities of the social sector.

This study aims to fill this gap through an in-depth analysis of the cooperation dynamics and challenges faced by OPHs in Portugal. In doing so, it contributes to fuller, contextualized understanding of the best practices and strategies to optimize the quality of care provided to old people. More precisely, the aim is to explore how cooperation networks influence the efficiency and quality of services provided in OPHs, emphasizing the integration and dynamics of cooperation in this specific context. The following research questions were defined:

How do cooperation networks between OPHs and other organisations impact operational efficiency and the quality of care provided to old people?

What are the main benefits and challenges perceived by OPHs from involvement in these cooperation networks?

How can coordination and integration in cooperation networks between OPHs and social and health organisations be optimized to improve service quality?

This study follows the general lines of Network Theory, which lets us explore how OPHs articulate and cooperate with stakeholders and also provides an analytical framework to understand how these entities interact and compete within complex ecosystems, explaining the impacts of those cooperative relations on the quality of services provided to old people. The main contribution of this study lies in deeper understanding of the cooperation and partnership structures within the sector of long-term care for old people, paying particular attention to the variables influencing service quality. Developing a theoretical and practical framework that can be used to improve management practices and promote efficiency and effectiveness, through well-structured and mutually beneficial collaboration networks, also provides valuable insights into how strategic partnerships can be effectively designed and implemented to maximize the benefits for all parties.

2. Literature Review

2.1. Cooperation networks in the context of healthcare for old people

Cooperation networks play a crucial role in improving the quality of services provided and in the sustainability of operations. These networks cover a diversified range of partnerships involving the private, public and third sector, forming a complex system, where many actors interact and collaborate[7]. Effective cooperation between organisations/entities not only facilitates a response that adapts to adverse economic conditions, but also promotes innovation in human resources and care practices[8].

The literature on cooperation network theory emphasizes the importance of inter-organisational interaction and shared value creation among independent bodies. According to this theory[9,10], inter-organizational cooperation is a strategic response in a globalized, uncertain market. Cooperation can improve organisations' competitive position and increase their organisational capacities.

In this context, cooperation network theory can facilitate the implementation of effective collaborative strategies, promoting sustainable innovations and improvements in the care provided. Previous studies have shown that cooperation networks support not only the share of knowledge and resources, but also increase operational efficiency and service quality by reducing transaction costs and optimizing processes[11,12]. Creating a collaborative environment allows organisations to develop and prosper even in challenging market conditions.

The nature of cooperation networks, in the long term, involves mainly resource sharing, coordinating services and collaborative efforts to meet citizens' needs effectively and efficiently[7,13]. These networks are vital to overcome the fragmentation of services and social support which are essential for integrated assistance and continuous care[13-15].

Strategic partnerships, together with innovation in human resources, are seen as adaptive responses to adverse economic conditions[1]. Partnerships formed between organisations can be either formal, generally structured through agreements or contracts or informal, based on less formal relations, frequently motivated by ad hoc needs or opportunities arising[3].

A notable example of formal cooperation can be observed in the integration of care provided through models such PRISMA, which illustrates how effective coordination and collaboration between different care providers can improve results for old people[16]. These models emphasize the importance of creating an integrated network that facilitates communication between care providers and improves efficiency through sharing information and resources.

During the pandemic, inter-institutional collaboration, involving government bodies, academics and industry, demonstrated that organisations can work together to implement effective solutions in times of crisis. Cooperation can facilitate rapid, effective responses, maximize resources and coordinate efforts efficiently[17].

The challenges associated with these networks include the need for strategic alignment, managing conflicts of interest

and maintaining quality and continuity of care in different organisations. In addition, cultural and operational differences between partners can be significant barriers to effective cooperation[7]. This author explored the integration of health and social services as a fundamental solution to overcome fragmentation in care for old people. He emphasized the need for a coordinated approach to improve the continuity of care, highlighting successful models such as the Program of All-Inclusive Care for the Elderly (PACE) in the USA, which integrates medical care, social support and re-insertion services. Consequently, Kodner discusses the importance of effective management of stakeholders and overcoming barriers such as resistance to change and the lack of interoperability of information systems[7], suggesting these challenges can be addressed through strong leadership, continuous training and investment in technology.

Stewart, et al. present evidence supporting the effectiveness of integrating long-term care services, showing that this type of approach can increase efficiency and improve results for old people[13]. The study details how coordination among different service providers can reduce unnecessary duplication and discusses the positive impact on reducing the use of emergency and in-patient services. Furthermore, the authors make practical recommendations for the implementation of integrated services, such as forming multi-disciplinary teams and creating effective communication protocols. They underline that, despite the challenges, integration of care represents a significant opportunity to improve old people's quality of life and increase the sustainability of health and social work systems.

2.2. Benefits and challenges of cooperation

Cooperation among organisations caring for the elderly is widely discussed in the literature, revealing complex interaction of benefits and challenges. The need for efficiency and cost reduction has led many governments to outsource public services, particularly in sectors such as care for the elderly, where the need for economic and financial efficiency is one of the main reasons for outsourcing[18].

The benefits of cooperation in care for the elderly are multi-faceted. Kodner and Stewart, et al. emphasize that service integration can significantly improve access to[7,13] and the quality of care, besides reducing costs through optimizing resources and eliminating unnecessary duplication. A cooperation network can also facilitate innovation in care practices[19] by promoting the exchange of knowledge and experiences among different entities[4,13,15,20]. Moreover, partnerships with health institutions can allow faster access to specialized medical care, while collaboration with community organisations enhance the provision of social activities that improve old people's quality of life[21]. Communication is crucially important in forming cooperative relations and effective coordination can result in significant improvements in the services provided[22].

There are also various challenges in the field of cooperation networks. The main ones include the coordination of policies and practices among different entities, managing different expectations and maintaining effective communication. Cultural and structural differences between partners can also prevent effective collaboration[14]. Indeed, cooperation networks face considerable challenges, such as the difficulty in aligning objectives among different bodies and integrating information systems. Drennan, et al. and Arthur, et al., also point out the complexity of maintaining effective and continuous communication among partners with different organisational cultures and structures[21,14]. Ineffective coordination can lead to service fragmentation, with a negative impact on the continuity and quality of care provided.

The literature highlights that although cooperation networks make health and social services more accessible and optimize resources through the share of infrastructure and knowledge, they face significant challenges such integrating information systems and aligning objectives among entities with different cultures and priorities[23].

Systemic problems related to regulating and financing care in old people's homes, together with the emphasis on market ethics in care provision, do not properly support the creation of an environment where the ethics of care is a priority. Responsibility for the quality of care tends to be attributed to individuals, nurses, general practitioners, managers and care providers, without appropriate recognition of the wider context in which care is provided.

The COVID-19 pandemic accelerated the integration of emerging technology in care for the elderly, highlighting the need for telemedicine and integrated health data platforms to deal effectively and safely with urgent requests for care, minimizing the risk of infection. Yoon, et al. underline that the rapid adoption of technology allowed more efficient remote coordination and management of care[20], redefining the interaction between technology and healthcare during the global crisis.

Furthermore, the sanitary crisis underlined the need for flexible, adaptable cooperation networks. Collaboration between governments, health institutions and community organisations was shown to be fundamental in implementing effective responses, such as vaccination campaigns and support for old people living alone. Goodwin, et al. demonstrate that these inter-institutional partnerships not only mitigated the impacts of the pandemic[17], but also created precedents for dealing with public health emergencies in the future, highlighting the importance of well-coordinated collaborative strategies in times of crisis.

The complexity of inter-organisational dynamics in care for the elderly underlines the critical need for well-drawn up strategies to overcome obstacles to collaboration. The implementation of emerging technology, such as telemedicine, was proven to be essential during the COVID-19 pandemic, redefining the interaction between technology and healthcare. These innovations, together with well-coordinated collaborative strategies, not only mitigated the impacts of the pandemic but also set precedents for future responses to public health crises. To maximize the benefits of partnerships, it is necessary to develop more effective communication protocols and invest in continuous training for managers and care providers, to ensure that the quality and continuity of care are maintained in all circumstances.

Effective coordination and strategy are vital for successful cooperation networks in the long-term care sector. Hsiao, et al. stress that efficient integration of services is fundamental for a user-centred approach[16], ensuring consistency, high quality and efficient management. Communication is essential, not only as an operational tool, but as a means to build consolidated, long-lasting relations, promoting high performance cooperation among the parties involved[6].

Different cooperation models can influence operational effectiveness and results during public health crises[15,20,24]. Stewart, et al. highlight that implementing effective management models facilitates communication and coordination among the parties[13], such as using information technology to coordinate care and monitor residents' health, besides holding regular meetings and workshops to align strategies and share best practices.

Technology plays a crucial role in coordinating cooperation networks, serving as a bridge for communication between the entities involved. Using electronic health register systems can significantly improve the exchange of information among health professionals, residential entities and other partners, facilitating an integrated approach to care for the elderly[7,8,20]. However, inequalities in digital literacy and concerns about data security are significant barriers[8].

To improve coordination and strategy in cooperation networks, there must be continuous focus on developing competent leadership and evaluating management practices. A solid basis for understanding and applying effective coordination and management strategies in cooperation networks in the social sector, focused on care for the elderly, is important in institutions' dynamics.

2.3. Impact of cooperation on service quality

The impact of cooperation networks on the quality of services provided is a central topic in managing health and social care. Cooperation networks among different entities are essential to improve old people's health and well-being results, being reflected in key quality indicators. The need for strategic adaptations in response to changes in regulations and financing underlines the importance of robust partnerships to maintain sustainability.

Partnerships with health institutions are crucial for successful initiatives to improve quality, creating standard protocols for treating and managing chronic illness in long-term care contexts and facilitating inter-institutional mobility and continuity of care[16,25]. These networks operate in highly regulated fields, highlighting the need for flexibility, effective inter-organisational operating relations for resilient adaptation to reforms and to ensure the continuity and quality of services[26].

Some studies show that well-structured, efficiently managed networks contribute significantly to raising service quality. For example, Lisk, et al. conclude that the implementation of integrated services and collaboration between health and social work services results in lower hospitalization rates and improvement in old people's physical and mental health indicators[5]. These networks provide a more holistic, personalized approach to care, which is essential to respond to the complex health requirements of old people. Cooperation networks promote communication, as they facilitate learning and the transfer of knowledge[6], vital elements for continuous improvement in the quality of care provided. Therefore, cooperation networks have a major impact on service quality, providing important guidelines for professionals and managers in the sector and being fundamental in promoting more effective and personalized care.

3. Methodology

3.1. Type of study and selection of cases

The methodological design of this study is based on a qualitative approach and more specifically, the multiple case study method. Case studies allow in-depth analysis of the specific dynamics among organisations and detailed examination of the organisational and inter-organisational interactions in real, complex contexts. Choosing the multiple case method was particularly pertinent given its potential to reveal variations and generate deeper insights into the strategic practices and challenges faced by different organisations in a cooperation network. This study focuses on four cases, i.e., four OPHs involved in inter-organisational cooperation networks. This design allowed comparison of the different cases, increasing the robustness of the conclusions and facilitating identification of emerging patterns and critical factors in the context of cooperation networks.

The cases were chosen carefully, based on specific criteria of convenience, relevance, accessibility and diversity, to ensure the sample reflected different aspects of cooperation networks formed by OPHs. This careful selection was essential not only to ensure the sample reflected the complexity and variety of cooperation networks in OPHs, but also to deepen understanding of the specific dynamics and strategies of cooperation in different organisational contexts. This sampling technique is appropriate due to the flexibility it offers in exploratory studies, where access and depth are priorities.

3.2. Gathering information

Data collection was meticulously planned and carried out via semi-structured interviews with those in charge of OPHs and documentary analysis. These techniques were fundamental due to the need to understand the specific contexts and complex interactions among the various network partners. This study was guided by a pre-defined protocol developed from an exhaustive review of the literature and the specific objectives of the research, as recommended. The protocol was carefully drawn up to ensure complete coverage of the emerging and relevant topics, including an interview script dealing in detail with the key topics identified in the literature. The interviews were structured so as to address topics such as formation of the partnerships, the perceived benefits and the challenges faced, in this way providing broad understanding of the cooperation strategies used. Participants were chosen due to their strategic position in the organisation, in order to give a wide-ranging vision of the operational and strategic dynamics of the cooperation networks and how these influence the quality of services provided. (Table 1) characterises the OHPs selected, as well as the interviewee profiles.

The OHPs analysed vary significantly in terms of capacity, from small institutions with 22 and 25 users to a large one with 120 users. This variation indicates the different scales of operations and the management models adopted by OPHs in the region (Source: GEP, Social Charter).

3.3. Analysis and treatment of information

The data were subject to content analysis, which identified patterns and formed a cohesive narrative (Baxter & Jack, 2008) about the cooperation practices in the OPHs studied. This thorough analysis facilitated interpretation of how cooperation networks influence the quality of care and organisational sustainability.

Each case (OPH) was analysed individually and jointly, to identify patterns and variations in the cooperative practices, as will be revealed in the results section. This process reflected the

direct alignment with the research questions proposed, seeking to explain how OPHs can optimize cooperation networks, in order to improve the quality of the services provided to old people and the institutions' operational efficiency.

Table 1: Characterisation of the sample.

		OHP 1	OHP 2	OHP 3	OHP 4
Characterisation of the interviewees	Date of interview	26/04/2024	02/05/2024	07/05/2024	08/05/2024
	Form of interview	Face-to-face	Face-to-face	Face-to-face	Face-to-face
	Gender	Female	Female	Female	Male
	Age	40	40	34	86
	Academic qualifications	Degree in Social Work	Master in Social Work	Degree in Social Work with Master in Food Quality	Degree in Pharmacy
	Function	Technical Director	Technical Director	Technical Director	President of the Board
	Experience in the position	14	18	6	40
Characterisation of the institution	Founded	1999 (Foundation)	1992 (Religious Charity)	2006 (Association)	1900/1982 (Association)
	Number of residents	46	22	25	120
	Number of employees	48	23	31	96

Source: Own elaboration.

Documentary analysis **(secondary sources)** complemented the interviews, improving the quality of the information obtained and strengthening the validity and reliability of the study. The data were treated with maximum confidentiality and analysed rigorously, using appropriate methods to ensure the validity and reliability of the results, according to practices recommended. Rigorous compliance with ethical standards was a priority in the study. Confidentiality was guaranteed and all participants gave their informed consent, protecting those involved and ensuring the integrity of the research process.

4. Results and Discussion

With a view to understanding the impact of the OPHs' cooperation networks on the quality of care provided to their elderly residents and based on content analysis of the interviews, it was possible to identify some topics which will be presented in this section.

4.1. Cooperation networks in OPHs

The empirical evidence shows the complex dynamics of cooperation networks in OPHs, highlighting that this type of organisation has been responding to the needs of an aging population. To respond to these old people's needs, the OPHs studied here are involved in cooperation networks to improve the quality of care and face operational and strategic challenges in the long-term care sector. Indeed, the evidence extracted from the interviews provides valuable empirical support for the implementation of more effective, adaptable cooperation strategies in the OPH context.

When the interviewees were asked about the main organisations, firms and entities with which they cooperate, Social Security was the institution recognised by all as the main one, this relation being regarded as formal cooperation since the organisations belong to the OPH network. From this perspective, the network can be classified as vertical, since there is a hierarchy and interdependence between them and a formal network, since they are bound by contracts[27]. However, OPH2 mentions "… being responsible for the sustainability of the institution…"

The forms of cooperation established with Local Authorities, Community Councils, collectives and suppliers are informal networks, where convenience is the dominant factor and relations are based on trust. A variety of objectives have led to seeking cooperation networks. For OPH1, "obtaining the best prices in the market…"; OPH2 "reducing costs and obtaining products and services that would not be possible otherwise…"; OPH3 "… ensuring professional work placements …" and OPH4 "… sharing doubts, difficulties and exchanging ideas…". With these existing partnerships, the aim is also to ensure more human resources and tackle adverse economic conditions, as mentioned[1].

This study also shows the importance of inter-organisational networks. One technical director underlined that: "collaboration with local hospitals and health centres has been vital to improve the service and respond in situations in the health context" (OPH2). This type of cooperation, therefore, is crucial for the sustainability of long-term care practices and agrees with studies emphasizing the importance of networks for improved quality of care, as demonstrated[4,5]. This empirical evidence is also in line with cooperation network theory[9], which suggests collaboration among organisations gives a better competitive position and increases operational capacities.

4.2. Benefits, Challenges and Coordination strategies

The benefits of cooperation networks in these OPHs are shown primarily in improved quality of care and in accessing resources which they could not obtain otherwise. According to one of the interviewees, "sharing resources and joint training with other institutions has allowed continuous improvement of our care practices, giving access to a greater number of experiences and facilitating social insertion and interaction" (OPH2). This idea is supported by OPH1 who stresses the importance of cooperation networks for stimulating activities and human resources. OPH3 also mentions the importance of activities developed in coordination to "break the daily routine". This collaboration shows a vital inter-dependence that transcends institutions' individual limitations. Through these interactions, OPHs can adopt new approaches, improve the quality of services provided and respond more effectively to their residents' emerging needs[7,15,20], as well as sharing resources and competences. As OPH2 says, "… collaboration with the IEFP lets us obtain human resources with specific training, which stimulates the learning process within the organisation."

The benefits identified during the interviews, such as sharing resources and knowledge, are echoed in the literature, which highlights operational efficiency and improved service provision as direct results of cooperation networks. A clear example of this is given by another manager: "sharing training and resources with other institutions let us reduce costs significantly" (OPH2). These statements corroborate studies such as Stewart, et al., who discuss how networks can lower costs and optimize service provision[13].

However, the challenges associated with these cooperation networks are also significant, above all concerning strategic and operational alignment with partners. As one interviewee pointed out, "keeping an effective channel of communication with so many different partners requires a constant effort and it's not always easy to manage expectations, however, the positive side outweighs the negative one" (OPH2). Different expectations among collaborating entities were indicated as significant barriers. OPH3 highlighted that "the difficulty in synchronizing operational procedures with external partners occasionally leads to delays in service delivery". These challenges show that, despite the clear benefits, effective management of partnerships is crucial for successful interaction. That situation underlines the complexity of harmonizing objectives and practices among multiple entities.

The challenges mentioned, such as strategic alignment: "… sometimes we get refusals, because it's not the right moment or they're not available, sometimes there's no answer to a simple attempt to make contact" (OPH3), are often consistent with the barriers identified in the literature. Kodner (2006) emphasizes the need for effective management of stakeholders to overcome those difficulties. Another interviewee says that "sometimes we have to have capacity to adapt our relationship with the partner… " (OPH2). These factors of an operational nature can hinder effective cooperation.

Summarising, the balance between benefits and challenges is essential to form policies and practices that maximize the positive impacts of cooperation networks in care for the elderly, ensuring that OPHs are equipped to face the demands of an increasingly aging population.

The strategies to ensure effective collaboration among the OPHs studied include regular meetings with partners, using digital communication platforms and establishing clear protocols for the exchange of information and services. One of the interviewees said: "we use integrated management software (MySenior®), which lets us keep all the partners in the field of health up to date about residents' needs and changes in daily operations" (OPH2). Another said that "drawing up an annual activity plan, which is discussed in weekly meetings, lets us coordinate activities with some partners" (OPH1). These statements confirm that implementation of regular communication and collaboration platforms is essential to maintain the quality and continuity of care provided to the elderly. As another interviewee says, "we use monthly meetings and integrated management systems to ensure that all partners are in line with our objectives" (OPH2). OPH4 also mentions holding "monthly meetings, with sector heads, the secretary, head of the nursing team, the head of purchasing…". These procedures are crucial to ensure that all those involved are in tune and informed about operational needs and changes.

Standing out among the evidence obtained is the use of social networks and information technology as an effective strategy to increase the visibility of the activities carried out and to encourage network partners' active participation. As mentioned by one interviewee, "social networks and information technology give visibility to what is done, encouraging partners' participation and families' involvement" (OPH2). Strategies to improve cooperation in OPHs, such as using technology, facilitate communication and information sharing, as well as effective coordination to integrate services. Hsiao, et al. also underline the importance of technology in facilitating efficient communication and improved care management[16]. Another interviewee explained: "We implemented a care home management system that lets us keep everyone up to date about users' needs in real time" (OPH2).

These practices not only reinforce coordination among the various OPHs involved in an inter-organisational cooperation network, but also promote efficiency and the quality of services provided. Using technological tools and holding regular meetings are also fundamental strategies to overcome operational challenges and ensure successful collaboration. In this connection, Jatoba, et al.[6] highlight the importance of effective communication among partners for a successful cooperation network and Goodwin, et al.[17], during the COVID-19 pandemic, showed that inter-institutional collaboration can significantly improve the response to health crises. More recently, Yoon, et al. also conclude that rapid adoption of technology allows more efficient coordination of care[20], highlighting cooperation networks' potential to innovate and improve the quality of services. However, challenges such as strategic alignment and managing expectations are still significant barriers to effective cooperation[7].

4.3. Impact of cooperation networks on the quality of services for old people

The impact of OPHs' cooperation networks on the quality of services provided to old people is widely perceived as beneficial, reflected by key indicators such as residents' satisfaction, the time to respond to incidents and the frequency of hospitalization. As stated by one of the managers interviewed: "since we intensified cooperation with suppliers of material for incontinence, we observe a reduction in the changes associated with the nappies and an improvement in our residents' general health" (OPH3). For OPH2, "strategic partnerships with teaching institutions gave the institution access to activity leaders and we observe improvement in our users' satisfaction and well-being". One interviewee also mentioned that "cooperation with local pharmacies and health services allowed a faster, more effective response in our users' healthcare" (OPH1).

The results underline the effectiveness of cooperation networks in improving operational efficiency and the quality of care, confirming that "collaboration with local hospitals and health centres has been vital in improving our service and response in emergency situations" (OPH3). This strategic integration not only facilitates access to specialized services but also reinforces the response capacity in critical situations, showing the need to maintain and expand these networks.

These statements reinforce the positive impact of cooperation networks in improving the quality of services provided.

As defended by Stewart et al. (2013), effective cooperation contributes to lower hospitalization rates and improved health indicators.

OPH2 refers to the care home management system, which "can improve records and the transmission of information and also manage the user's Individual Plan" and OPH1 refers to users' Individual Plan as a way to measure the impact of multi-disciplinary interventions. Through these interventions, OPHs can adopt new approaches, improve the quality of services provided and respond more effectively to needs arising among their residents[7,15,20]. Moreover, the positive impact of cooperation networks on service quality is shown by users' increased satisfaction and reduced hospitalization, corroborating the arguments of Lisk, et al.[5]. The interview with the director of another OPH illustrates this situation clearly: "We note a significant improvement in our users' satisfaction since we intensified collaboration with local partners" (OPH3). This can be explained through cooperation network theory, which claims that inter-dependence among organisations promotes innovation and operational efficiency[9,10]. Furthermore, recent studies[11] corroborate that cooperation among organisations can reduce costs and optimize processes. Cooperation networks can ensure continuity and the quality of care in OPHs. As Kodner concludes, effective integration of health and social services is fundamental to overcome fragmentation of care[7] and recent studies[16] suggest that standardized management of chronic conditions can prevent re-hospitalization, showing the need for continuous collaborative practices.

Summarising, these results underline the strategic importance of cooperation networks in OPHs, showing how this type of effective collaboration with different stakeholders not only improves operational indicators but also raises users' perception of the quality of care.

5. Future and Improvements

In the prospective analysis of cooperation networks in the four OPHs studied here, the participants highlighted the urgent need to improve and expand the existing networks, with a particular emphasis on incorporating technology. This trend is shown by the interest in increasing the use of technological solutions, as indicated by the manager of OPH2: "We want to explore more technological partnerships to improve remote monitoring of residents, which we believe will improve our response capacity even more", an opinion shared by OPH3. The interviewee from OPH1 underlines "… being alert to the new vision of old people, more directed towards technology, looking to the future…".

The interviewees also say that the inter-institutional collaboration network must be expanded, joining resources and sharing knowledge. As mentioned by one interviewee, it is "important to increase the cooperation network, optimize communication with Social Security" (OPH1). OPH2 says that "the focus must be on joint working between institutions and sharing human and material resources, mediated by local authorities and community councils; working in inter-institutional networks should join resources and share resources" (OPH2). From a more economic perspective, OPH4 stresses "underfinancing institutions, alerting to the poverty of users, whose pensions are very low and the money really isn't enough". From the above, the interviewees are optimistic about the future of cooperation networks, concentrating especially on innovation and technological adaptation to face emerging challenges and satisfy the needs of an aging population, despite economic difficulties. The recommendations for future improvements, such as integrating more advanced technology and developing new strategic partnerships are echoed in the guidelines in the literature. These guidelines underline the importance of continuous innovation in management and care practices, as discussed in several recent studies on the subject[20,28]. The involvement of residents' families is also important[28].

The evidence also reveals specific areas for developing and expanding cooperation networks, with a special focus on adopting advanced technology. This vision agrees with current trends in managing care for old people, as mentioned by Yoon, et al.[20]. These authors highlight the growing applicability of telemedicine and digital platforms in effective care management.

These perspectives and plans for integration of new technology reflect a pro-active, adaptive path that OPHs are willing to follow, aiming not only for immediate improvement of the services provided, but also long-term sustainability and effectiveness in caring for old people's n**eeds.** The emphasis on technological innovation and strategic collaboration is crucial to ensure that OPHs can respond efficiently to emerging challenges and the growing expectations of a rapidly aging society.

5.1. Proposal of an integrative framework

From the empirical evidence obtained, an integrative framework is proposed **(Figure 1)** to address and understand the complex dynamics of cooperation and in OPHs. This framework provides a structure to allow analysis and optimization of inter-organisational cooperation in OPHs.

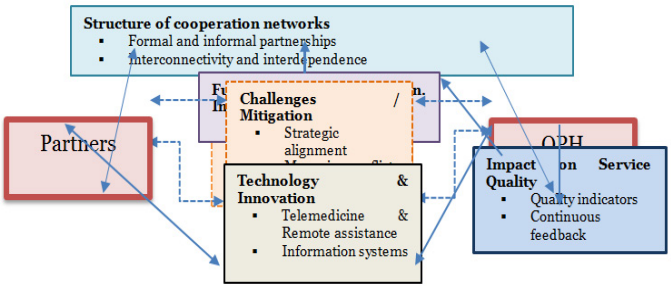

Figure 1: Integrative Framework for Cooperation Networks in OPHs.

This integrative framework was developed to give wide-ranging understanding of the dynamics of cooperation in OPHs and was projected to explore and optimize cooperation strategies, aiming to improve operational efficiency and the quality of care provided to residents/old people.

It addresses the types of partnerships OPHs can form, including formal contracts with health suppliers and informal collaboration with community associations. These partnerships are essential for the share of resources and services. Management and coordination of cooperation networks involve the use of digital platforms and regular meetings to ensure that all parties are aligned and informed. Furthermore, it is necessary to develop leadership competences, implementing collaborative strategies to manage partnerships effectively.

In the area of technology and innovation, the study highlights the implementation of electronic health management systems to

monitor and share information about residents, as well as using telemedicine technology to monitor continuously and respond rapidly to residents' needs. Among the challenges and mitigation strategies is harmonization of the objectives of the entities involved to ensure effective cooperation and development of strategies to solve conflicts arising among partners.

The impact of cooperation on service quality is measured by indicators such as residents' satisfaction, reduced hospitalization and response times to incidents. Therefore, including feedback from residents and their families is essential for continuous improvement of services.

This framework not only confirms the relevance of cooperation networks documented in the literature, but also provides a practical, contextualized vision for the OPH sector. The model shows how cooperation can directly improve old people's quality of life, suggesting that the implementation of strategies based on evidence can lead to significant improvement in the quality and effectiveness of care provided.

6. Conclusions and Implications

This study explored the importance of cooperation networks in OPHs, highlighting how these networks improve operational efficiency and the quality of care provided to the elderly. The empirical evidence obtained confirms that inter-organisational partnerships facilitate access to critical resources and shared specialization, promoting a culture of continuous improvement and mutual learning. These benefits are especially significant in the context of an aging population and more demand for long-term care, where OPHs face increasing challenges related to sustainability and service quality. Moreover, the study indicated the complexity of the challenges faced by OPHs, including the need for strategic alignment of different organisations with a variety of missions and capacities. Rising to these challenges is therefore a valuable opportunity to strengthen institutional capacities and promote effective integration of care.

This study also led to the conclusion that the OPHs involved in cooperation networks with health and social entities and suppliers improve the quality of care and increase their operational efficiency.

6.1. Theoretical and practical contributions

Concerning theory, this study advances knowledge about how cooperation networks in OPHs can be structured and managed to maximize the benefits for providers and beneficiaries of care. The guidelines contained in the framework proposed allow implementation of strategies that can lead to significant improvements in the quality and effectiveness of care. Therefore, this study is also relevant for policy-makers, OPH managers and the academic community. In addition, it confirms many of the principles of cooperation network theory and sets the path for new research on this topic.

Regarding practical implications for OPH management, this study confirms the need for collaborative strategies that consider both structural and cultural factors. It emphasizes the importance of a holistic approach for integration of service provision and shows how cooperation networks can be optimized to serve the needs of old people in various contexts. Here, cooperation networks need personalized, adaptive management to overcome barriers and maximize their effectiveness.

For OPH managers, the indication is that a cooperation strategy can influence their organisations' internal management, since collaborative practices can stimulate internal changes in policies and procedures. That influence of cooperation on organisations' internal changes can be explained by the need to align internal practices with collaborative partners' expectations and standards. Therefore, this study suggests that cooperation not only improves OPHs' external response capacity, but also promotes a culture of excellence and continuous adaptation to emerging standards in care and management. These contributions are fundamental to guide future improvements and ensure that cooperation strategies are implemented effectively, maximizing the benefits for both users and the institutions involved.

The nature and success of cooperation networks can have a significant influence on future policies regarding care for the elderly. Policies that encourage formal and informal partnerships between OPHs and health entities can be crucial. Reinforcing such policies could solve the main challenges faced by OPHs when collaborating with other organisations or firms. In addition, those in charge of this type of organisation should adopt effective coordination strategies and innovation in care practices**.**

Finally, the study provides valuable insights for policy-makers, OPH managers and the academic community, suggesting that the implementation of strategies based on evidence can lead to significant benefits in the quality and effectiveness of care. These contributions are crucial to orient future improvements and ensure that cooperation strategies are implemented effectively to maximize the benefits for users and the institutions involved.

6.2. Limitations and future agenda

In carrying out this study, various limitations were identified, having an impact on the extent and depth of the research. The choice of semi-structured interviews with the technical directors of the OPHs, despite generating valuable insights, was based on a sample of convenience, which limits generalization of the results obtained. In addition, the analysis of qualitative data presents unique challenges, such as the researcher's interpretation and bias. Another limitation was depending on the interviewees' capacity to articulate, which can vary significantly. Therefore, concerning methodology, future research could adopt a mixed approach for broader understanding of the network dynamics, combining qualitative and quantitative methods.

Another limitation concerns the focus on a specific geographic region, which may not reflect national or international variations in OPH management. Therefore, research in other regions of Portugal or international comparative analyses are necessary to confirm the applicability of the results in different geographic and cultural contexts.

The impact of emerging technology, such as telemedicine, on OPHs' cooperation networks merits future research. Longitudinal studies to accompany the long-term effects of cooperation networks are also necessary. Incorporating dynamic network theories would give deeper understanding of interactions over time.

Innovative management models that facilitate effective cooperation should also be explored and extending the range of stakeholders involved in cooperation networks to include families and health professionals will help to gain a more holistic perspective.

The development of predictive models integrating socio-economic, demographic and operational variables would be valuable in order to predict the success of cooperation strategies and help strategic decision-making in OPHs.

Finally, according to the topics identified and explored from the evidence found here, **(Table 2)** summarises possible future lines of research on each topic.

Table 2: Future lines of research.

Cooperation Networks	Expansion of Inter-Organisational Networks: Study how expansion of inter-organisational networks can be optimized to include more strategic partners, such as hospitals, universities and community organisations and how these networks influence OPHs' operations and sustainability. Models of International Cooperation: Investigate how models of international cooperation between OPHs in different countries can be formulated and what impacts they have on innovation and sharing best practices.
Benefits, Challenges and Co-ordination Strategies	Comparative Analysis of Benefits: Make comparative studies to quantify the specific benefits of cooperation networks, such as improved operational efficiency and identify the factors that maximize those benefits. Conflict Management and Operational Challenges: Develop effective strategies for conflict management within cooperation networks and explore how operational challenges are perceived and managed by the different parties involved. Coordination Technology: Research the role of new technology in coordinating cooperation networks, particularly the use of communication and data-management platforms and how they can be implemented better in OPHs. Development of Leadership Competences: Focus on developing leadership competences in OPH managers in order to improve inter-organisational coordination and the implementation of collaborative strategies.
Impact of Cooperation on Service Quality	Measuring Results based on Evidence: Based on evidence, implement and test result measurements to assess the impact of cooperation networks on the quality of services provided, focusing on indicators such as residents' satisfaction and reduced hospitalization. Long-Term Studies: Carry out long-term studies to monitor and assess the continuous impact of cooperation networks on the quality of care and old people's quality of life.
Future and Improvements	Innovation in Long-Term Care Services: Investigate how innovations, especially those related to assisted technology and artificial intelligence, can be integrated in OPH operations in order to improve the efficiency and personalization of care. Sustainability and Business Models: Develop sustainable business models that take advantage of cooperation networks to improve OPHs' financial viability, considering variables such as demographic change and public health policies.

7. References

1. Almeida V, Barata MJ, Daniel F. The Impact of Crisis and Austerity on Long Term Care for Older People in Portugal-An Analysis Based on the Experiences of Social Workers in Private Institutions for Social Solidarity. Journal of Social Service Research, 2022;48: 108-119.
2. Guedes MBOG, Lima KC, Caldas CP, et al. Apoio social e o cuidado integral à saúde do idoso. Physis, 2017;27: 1185-1204.
3. Ferreira A, Bandeira AM, Santos C, et al. Can Online Transparency Improve Accountability? The Case of Portuguese Private Social Solidarity Institutions. Sustainability (Switzerland), 2022;14(3).
4. Kodner DL. Whole-system approaches to health and social care partnerships for the frail elderly: An exploration of North American models and lessons. Health and Social Care in the Community, 2006;14: 384-390.
5. Lisk R, Yeong K, Nasim A, et al. Geriatrician input into nursing homes reduces emergency hospital admissions. Archives of Gerontology and Geriatrics, 2012;55: 331-337.
6. Jatoba MN, Franco M, Rodrigues M. The role of communication between partners in the process of strategic alliances: a systematic literature review. Journal of Business & Industrial Marketing, 2023;38: 1511-1531.
7. Kodner DL. Whole-system approaches to health and social care partnerships for the frail elderly: An exploration of North American models and lessons. Health and Social Care in the Community, 2006;14: 384-390.
8. Marques ICP, Franco M. Cooperation networks in the area of health: systematic literature review. Scientometrics, 2020;122: 1727-1750.
9. Gulati R, Nohria N, Zaheer A. Strategic Networks. In Strategic Management Journal, 2000;21.
10. Provan KG, Fish A, Sydow J. Interorganizational networks at the network level: A review of the empirical literature on whole networks. Journal of Management, 2007;33: 479-516.
11. Rodrigues M, Franco M. Green Innovation in Small and Medium-Sized Enterprises (SMEs): A Qualitative Approach. Sustainability (Switzerland), 2023;15.
12. http://www.jstor.org/about/terms.html
13. Stewart MJ, Georgiou A, Westbrook JI. Successfully integrating aged care services: a review of the evidence and tools emerging from a long-term care program, 2013;13.
14. www.chhs-scsc.ca
15. Prajankett O, Markaki A. Integrated older people care and advanced practice nursing: an evidence-based review. International Nursing Review, 2021;68: 67-77.
16. Hsiao YL, Bass EB, Wu AW, et al. Preventing Avoidable Rehospitalizations through Standardizing Management of Chronic Conditions in Skilled Nursing Facilities. Journal of the American Medical Directors Association, 2023;24: 1910-1917.
17. Goodwin J, Harizaj A, Armstrong J, et al. Lessons Learned from the Connecticut Response to COVID-19 in Nursing Homes during the First 2 Years of the Pandemic. Journal of the American Medical Directors Association, 2023;24: 1573-1578.
18. Vos D, Voets J. Why do Local Governments Externalise Public Service Delivery? An Empirical Analysis of the Drivers of Corporatisation, Public-public Collaboration and PPP in the Flemish Elderly Care Sector. Lex Localis - Journal of Local Self-Government, 2022;20: 215-237.
19. Davies SL, Goodman C, Manthorpe J, et al. Enabling research in care homes: An evaluation of a national network of research ready care homes. BMC Medical Research Methodology, 2014;14.
20. Yoon S, Goh H, Chan A, et al. Spillover Effects of COVID-19 on Essential Chronic Care and Ways to Foster Health System

Resilience to Support Vulnerable Non-COVID Patients: A Multistakeholder Study. Journal of the American Medical Directors Association, 2022;23: 7-14.

21. Drennan V, Iliffe S, Haworth D, et al. The feasibility and acceptability of a specialist health and social care team for the promotion of health and independence in “at risk” older adults. Health and Social Care in the Community, 2005;13: 136-144.
22. Suchek N, Franco M. Inter-organisational Cooperation Oriented Towards Sustainability Involving SMEs: a Systematic Literature Review. Journal of the Knowledge Economy, 2023.
23. Woods M, Phibb, S, Severinsen C. When morals and markets collide’: Challenges to an Ethic of Care in Aged Residential Care. Ethics and Social Welfare, 2017;11: 365-381.
24. Zunzunegui MV, Rico M, Béland F, et al. The Impact of Long-Term Care Home Ownership and Administration Type on All-Cause Mortality from March to April 2020 in Madrid, Spain. Epidemiologia, 2022;3: 323-336.
25. Selzler AM, Lee L, Brooks D, et al. Exploring factors affecting the timely transition of ventilator assisted individuals in Ontario from acute to long-term care: Perspectives of healthcare professionals. Canadian Journal of Respiratory Therapy, 2023;59: 223-231.
26. Monro C, Mackenzie L, duToit S, et al. A Preliminary Exploration of the Impact of Aged Care Reforms on the Governance of Two Australian Residential Care Facilities. Gerontology and Geriatric Medicine, 2023;9.
27. Balestrin A. A Dinâmica da complementaridade de conhecimentos no contexto das redes interorganizacionais, 2005.
28. Tiamiyu MF, Bailey L. Human services for the elderly and the role of university-community collaboration: Perceptions of human service agency workers. Educational Gerontology, 2001;27: 479-492.