



The Role of Pensioner Councils in Regional Healthcare Policy: A Holistic Perspective

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Abstract

To ensure older individuals actively engage in healthcare service development and policymaking, it is crucial to counteract declining social and civic participation with age. It is also necessary to clarify the potential and impact of participatory activities. This study examines citizen participation among older adults in Swedish health policy development. Using Thurston et al.'s (2005) holistic framework, the study analyzes pensioner councils (PCs) in politically governed healthcare regions. Through 13 interviews and six years of PC meeting minutes, findings from a deductive content analysis suggest that PCs build trust and foster deeper dialogues between older adults and politicians, due to their long-term nature. A trusting relationship between citizens and decision-makers may benefit society at large by enhancing the legitimacy of policy decisions. Although achieving direct policy impact is challenging, these councils serve vital participatory and deliberative democratic functions, contributing to a stronger policy community and increased transparency in the democratic process. This study highlights the complexities of assessing PCs solely based on policy influence and immediately evident outcomes, emphasizing their role in promoting democratic values, while also drawing attention to the tension between participatory and representative democracy.

Keywords Pensioner councils · Citizen participation · Patient and public involvement · Regional healthcare policy · Participatory democracy · Healthcare policy-making

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Introduction

Older persons use healthcare services more than do younger age groups. In Sweden, for example, the number of episodes of care for the whole population is approximately 13,300 per 100,000 inhabitants whereas for individuals aged 75–84 years, this number increases to about 37,000, and for those aged 85 and over, it rises to 58,100 (KOLADA 2023). In accordance with the principle that the users of services should have a say in what they are receiving and how services are conducted and delivered (Casado et al., 2020), older persons are a group that is essential to include, not only in decisions about their own care, but also more broadly in the development of healthcare services and in policymaking (UNECE 2021).

Participatory approaches in policymaking may have several benefits, such as making policy more effective and legitimate. By integrating diverse viewpoints, participatory approaches can provide fresh perspectives and solutions, thereby improving the overall quality of decisions (Modigh et al., 2021). However, research has shown that older persons experience social exclusion from civic participation (Walsh et al., 2017) and that barriers to participation include social isolation, digital exclusion, habits, culture, ageism, and lack of political will (Pinto, 2017). Furthermore, studies indicate that social participation, including political and civic activities, declines over time (Pinto, 2017). The older population tends to withdraw from public events due to low energy levels and capacity, as well as a shift in focus to family or other hobbies. Therefore, to encourage this group to engage in interest organizations or similar activities, it is crucial to understand the potential benefits of involvement and the expected outcomes of participating in, for example, a pensioner council (Thornton, 2000; Serrat et al., 2018). Nevertheless, evaluating outcomes or impact is challenging due to, for example, the influence of environmental and contextual factors, and the fact that some outcomes may show years later, and be confused with outcomes of other efforts. The impact of public participation at the level of political decision making in healthcare policy is particularly challenging (Modigh et al., 2021). To address this, it has been suggested that studying initiatives from a holistic perspective can clarify the potential diversity of purposes, stakeholders, and outcomes (Ocloo et al., 2021; Thurston et al., 2005). In this article, we examine pensioner councils (PCs) in politically governed regions responsible for funding and providing healthcare in Sweden. The purpose of this study was to examine both the processes and outcomes of citizen participation among older people in health policy development in Sweden. To achieve this, the study utilizes a holistic theoretical framework developed by Thurston et al. (2005), specifically designed for analysing regional healthcare policy-making.

Public Participation Among Older Adults

There is a growing body of literature on the participation of older persons in service planning and policy decision-making. Some studies focus on the benefits of individual-level participation, such as improved well-being, emancipation, and personalized care for the individual person, with only spill over effects on public values (Fraczkiewicz et al., 2020).

wicz-Wronka and Kozak 2021; Stolee et al., 2015; Holroyd-Leduc et al., 2016). Others focus on the citizen level with implications for a larger population, including the older population in different public participation forums (Cook & Klein, 2005). The former tends to have a stronger focus on the involvement of frail older individuals (Barnes & Bennett, 1998), and has highlighted that services need to be more flexible to enable participation (Casado et al., 2020), while the latter pertains more to active and healthy older individuals, often with political or civic engagement (Barnes, 2005; Serrat et al., 2018). This distinction is important in terms of expected outcomes from participation. However, identifying the actual impact of public participation among initiatives directed to older people can be difficult and such initiatives are rarely evaluated (Thornton, 2000).

The literature on public participation among older people acknowledges the range of purposes and motives behind participation initiatives (Falanga et al., 2021; Barnes, 2005; Carter & Beresford, 2000). One form of participation is through standing committees or councils where older citizens are invited to discuss policies that are particularly relevant to them. These councils may serve different purposes, with some emphasizing co-production practices and public health, while others focus more on their advisory role in policymaking (Fraczkiewicz-Wronka et al. 2019; Barnes, 2005). Councils like these exist in many European countries, including Spain, Germany, and the Nordic countries (Feltenius and Henriksson 2022).

Several studies emphasize the importance of individual resources among participants, including both material and civic resources (Serrat et al., 2018; Postle et al., 2005). Lack of such resources can be self-reinforcing, as older adults lacking experience in participation may not be included or encouraged to become involved (Serrat et al., 2018). Therefore, it is important to clearly communicate the expected impact and potential of public involvement to attract older participants. The resource perspective is supported by studies on older people's civic engagement in a Nordic context (Nygård & Jakobsson, 2013; Feltenius, 2008), in which the pensioner movement's civic engagement is unusually strong, resourceful, and established. The pensioner movement has had a strong position in political decision-making since the 1970s, particularly at the national level (Feltenius, 2008). Feltenius argues that this influential position is a result of the organizations' strength and advocacy rather than a result of them being invited by the government. Additionally, the strength is explained by the high national member rates and professional management. Today, about 680,000 out of Sweden's 2.3 million pensioners are members of one of the three largest pensioner organizations.

Pensioner Councils in Sweden

Pensioner Councils (PCs), which are the subject of this study, exist at both municipal and regional levels in Sweden. Elderly care is the responsibility of municipalities, while funding and provision of healthcare are the responsibility of the regions. Both levels are governed by elected politicians. The councils typically comprise representatives from larger pensioner organizations, as well as local and regional politicians. According to Wånell (2007), the councils have primarily consultative and advisory

roles, with a strong emphasis on information exchange. They are, to a lesser extent, referral bodies with decision-making power. The councils are located differently in different municipalities or regions' organizational set-ups; for instance, under the social or elderly committee, under the municipal or regional board, or directly under the local parliament (Wånell, 2007). In municipalities, the PCs' role and influence have been surveyed and compared across the Nordic countries (Feltenius and Henriksson 2022). Overall, it is concluded that the councils are important for society as a whole and strengthen the connection between civil society and local government. However, there are concerns about their actual influence. The councils have not yet been examined at the regional level, where they could have a different function and potential for influence. An important distinction between municipal and regional PCs is that in municipalities, any issue that affects older citizens can be raised. Because the regions' responsibilities are more narrowly focused on healthcare and regional public transport, these councils have a narrower scope, which could impact their influence.

Theoretical Framework

Theoretical guidance on evaluating the impact of public participation on policymaking is limited, especially in regionalized health governance. However, Thurston et al. (2005) developed a holistic framework that considers various elements relevant to understanding the potential impact of public participation. The framework emphasizes that policy-making is not a linear and unidimensional process but rather a reflexive process that depends on a complex set of circumstances within the health system, as well as broader societal and cultural issues that shape initiatives and integrate policy change. This circular approach, depicted in Fig. 1 by double-pointed arrows, helps identify impacts that may not be directly linked to a policy decision but actions

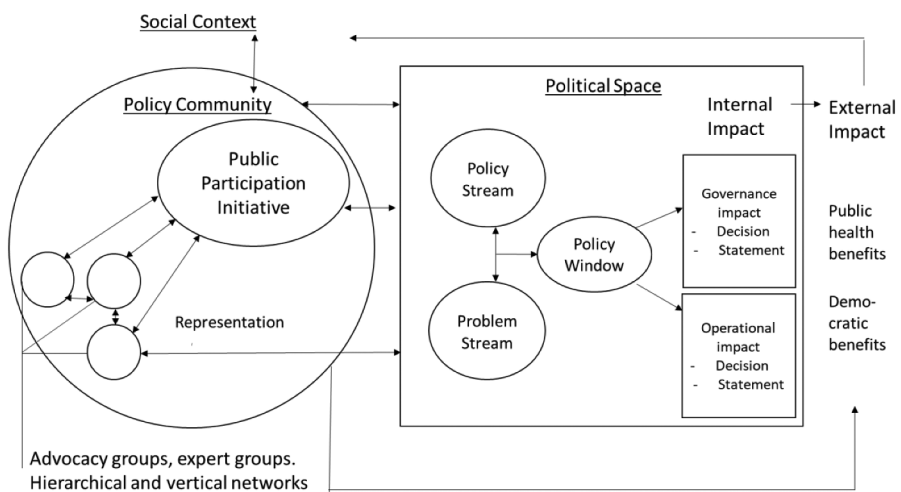


Fig. 1 Theoretical framework based on Thurston et al., 2005

at different levels and potentially aimed at non-political actors. Healthcare policy's complexity makes it challenging to trace the process from problem identification to public participation initiatives and eventual changes in government decisions, making Thurston et al's approach particularly relevant.

When describing the potential of their framework, Thurston et al. encourage applying the framework to new cases to broaden its use and to enable comparisons across cases and fields (Thurston et al., 2005, p. 239, 250). In this study, the framework is adapted to the Swedish context of public participation, which involves member-based representative organizations and political governance at the local, regional, and national levels. The core elements and ideas of the framework are however kept intact. The main components of the framework with our adaptations are described below.

The Social Context

Society at large shapes and influences healthcare policy. Specifically, with regard to public participation, the course of events in the social context determines what motivates public participation and which types of initiatives may be carried out. Inspired by structuration theory (Giddens, 1984), Thurston et al. describe the social and cultural context as a feedback loop that serves as both the starting point for an initiative for change and the destination of such change. Power perspectives and social injustices concerning, gender, race, religion and age, are important. Power is here understood as fluid, related to "having an influence over" rather than formal decision-making power (Thurston et al., 2005). In the case of PCs, important elements to consider are the reality of older individuals, such as ageism, which is found in many aspects of society. Lesser (2012) highlights three common aspects where ageism often exists; employment, in general behaviour against older people and in resource distribution, such as provision and access to welfare services. Ageism within healthcare services mainly concerns unfair behaviour (for instance from healthcare professionals) and unfair resource distribution, and may lead to poorer quality of healthcare, problems accessing healthcare services or obstacles in having power/influence over one's healthcare (Wyman et al., 2018). The intensity of public participation, the actual impact of the public participation, and participation initiatives may depend on what occurs in the social context.

Public Participation Initiatives

In the Thurston framework, a *public participation initiative* is a general term for different techniques and processes of including the public in the policy process, such as the regional PCs. The type of technique used (e.g., advisory councils or citizen juries), formal and informal functions (e.g., advocacy or a platform for information exchange), and credibility and legitimacy (who is invited and represented) are important aspects to consider when characterizing an initiative. The initiative should be viewed as a process that involves what occurred before, during, and after the occurrence, rather than a limited event. PCs naturally align with this temporal perspective as a standing initiative with recurring meetings.

Policy Community

Thurston et al. define a *policy community* as the group of people, actors, and networks interested in a specific policy topic, but government actors are not explicitly included. Policy communities vary in different political systems (Wright, 1988; Atkinson & Coleman, 1992). In Sweden's neo-corporate political context, it is vital to include government actors. Hence, we define the policy community broadly, including civil, private, public, and political sectors, and collaborations among these actors. Thus, the PCs and the interest organizations represented in them should be regarded as an integral part of the policy community. A potential outcome of participation initiatives is capacity building, leading to a more professional and active policy community.

The *representativeness* is an integral part of understanding and evaluating both the policy community as a whole and the *credibility* and *legitimacy* of a specific participation initiative. Representativeness is particularly important in the Swedish context, as political parties, and interest groups such as pensioner organizations are built around a local member base, with local representatives at a district level, who, in turn, have representatives at the national level. Therefore, we discuss representation as a separate theme.

Problem Streams, Policy Streams and Policy Windows

The literature on multiple streams models (Kingdon, 1995) describes policy formation and implementation as different streams: problem, policy, and politics. These streams are driven by different participants, such as experts, the public, politicians, and policymakers (Rawat & Morris, 2016). When these streams meet, a policy window opens, allowing for policy implementation.

The Thurston framework uses the concepts problem and policy streams. Problem streams involve how public participants identify and present problems in healthcare services or policy. Important aspects to study include how public participants become aware of problems, whether the problems are general or reflect a particular interest, and whether they are prioritized on the agenda. It is also essential to consider whether the identified problems can be expected to be solved by policymakers. Policy streams are the political processes of identifying and working towards a solution to a problem. This can be studied by investigating at what phase of the policy stream the public is invited, and whether the suggested solution is open to feedback from public participants or not. The public participation initiative can serve the purpose of influencing either the policy or the problem stream or both (Thurston et al., 2005).

When policy windows are studied in the literature, the focus is often on identifying them as major, unforeseen events, such as a new government, or even crises such as nature disasters or a pandemic that provide a strong impetus to implement specific policies (Rose et al., 2020; Milton & Grix, 2015). A public participation initiative can both identify and utilize an existing policy window or work strategically to create one (Thurston et al., 2005).

Responses to Participation Initiatives – Internal and External Impact

While the Thurston framework primarily focuses on impact within the healthcare sector, with only passing mention of impact outside the health system in terms of improving population health, we choose to place greater emphasis on impact and differentiate between internal and external impact.

Internal Impact

Thurston et al. distinguish between governance-level impact and operational-level impact. Governance-level impact mainly concerns the influence of public participation initiatives on the political governance of healthcare. This type of impact is often considered the most important, as initiatives that affect political processes and decisions have a far-reaching impact. Operational-level impact refers to changes at a clinical or administrative level, often small-scale but tangible. This type of impact tends to be very localized and may not necessarily follow the same formal and transparent process as governance-level impact.

At both the governance and operational levels, impact can also be characterized as either decision impact or statement impact. Decision impact refers to impact on formal decisions usually made through a political or management board and expressed in widely disseminated documents. Statement impact results from informal discussions and interactions between public participants and civil servants or administrators and can be challenging to identify as actual impact.

External Impact

Expanding the scope beyond healthcare policy, PCs can have an impact beyond the organizational level, which we define as external impact. Although Thurston et al. emphasize improving population health as a possible outcome of participation initiatives, one could also argue that the ability to influence one's environment, i.e., public participation itself, is a determinant of health (Swedish Agency of Public Health, 2023). Additionally, based on Dukhanin et al's (2018) identification of "influence on broader public" as another type of external impact, we suggest adding the democratic role of public participation initiatives as a crucial external impact. This encompasses educating the public not only about health-related matters but also about how the healthcare system is governed, current reform, and policy changes that politicians are discussing. This is particularly significant in the Swedish healthcare system, where elected politicians are closely linked to local healthcare policy processes.

Method

The study builds on two different empirical sources: semi-structured interviews with representatives from three PCs as well as meeting minutes from these PCs. The three PCs are located in regions representing a variety in size and population and are located in different parts of the country. Based on the Swedish Ethical Review Act

(2003:460), the Swedish Ethical Review Agency made the assessment that the study did not require vetting since no sensitive personal data was collected. The agency issued an advisory opinion that it did not consider there to be any ethical obstacles to the research being carried out (No. 2019–04650).

The meeting minutes were analysed first and cover the time period 2016–2021 (62 documents). This period was chosen in order to capture two different political terms, enabling the placement of the PCs' discussions in a context with potentially shifting political majorities. The purpose of analysing the minutes is partly to better understand what type of discussions had taken place in the councils, and thereby formulate relevant interview questions at a suitable level of concretion and using a language familiar to the respondents. Moreover, the minutes are referred to in the findings section as a validation of the results obtained from the interviews. If a respondent mentions something in the interviews that is also present in the meeting minutes, it is assumed to be generally experienced in the PCs and relevant enough to include in the brief documentation, therefore not only being the point of view of one individual respondent.

The interview study provided a more detailed and nuanced understanding of the potential impact and iterative nature of the policy process in which the participants were involved. The study consisted of 13 interviews, with four interviews conducted in each region, except for one region where five interviews were performed. Two respondents in each region represented different pensioner organizations, and the other two were politicians, among them the region commissioners who also serve as the head of the PC. Table 1 provides an overview of the respondents. The respondents were recruited through the PC secretary, and the PC suggested potential interviewees. The interviewees were informed about the purpose of the study and that participation was voluntary. The interview guide only included questions concerning the council and participation in general, and the interviews did not generate sensitive personal data.

The interviews were conducted by the first author from April to August, 2022, either in-person, digitally, or by phone, depending on the respondents' preferences. All interviews were recorded, transcribed professionally, and analysed deductively (Elo & Kyngäs, 2008; Hsieh & Shannon, 2005) according to the theoretical frame-

Table 1 List of interviews

Interview reference	Region	Role in council
1	Large	Organization representative
2	Large	Organization representative
3	Large	Politician, head of council
4	Large	Politician, vice head of council
5	Medium	Organization representative
6	Medium	Organization representative
7	Medium	Organization representative
8	Medium	Politician, head of council
9	Medium	Politician
10	Small	Organization representative
11	Small	Organization representative
12	Small	Politician, head of council
13	Small	Politician

work by Thurston et al., using the text analysis software Nvivo. The second author was involved in analysing and interpreting the interviews.

Findings

The Social Context Shaping the PCs

According to the organization representatives, the social context includes macro-level developments, such as demographic changes, technological advancements, and power structures like ageism. It also includes sudden and unexpected events such as the COVID-19 pandemic, which all affect the practical conditions for participation initiatives. These factors also influence the prioritization of issues in the problem and policy streams, ultimately shaping the potential impact of the PCs.

Despite being a growing demographic group, older citizens often face limited influence and low status in society, according to many of our respondents. In particular, they struggle to make their voices heard in political decision-making and are underrepresented in decision-making bodies like the Swedish parliament. This *ageism* motivates the PCs according to both politicians and organization representatives. There are several examples in the interviews of the low status of the PCs; how they struggle to get politicians interested in issues concerning the older population and to prioritize the PCs feedback on different policy issues.

Ageism is concretely expressed in healthcare policies developed in the regions, as many policy decisions fail to address the practical needs and challenges encountered by older citizens. The minutes from the PC meetings indicated that accessibility was a major concern. The centralization of healthcare services within regions poses a challenge for the older population due to mobility issues and the respondents brought up difficulties faced by the older individuals living in rural areas or small towns with limited access to healthcare. The representatives mentioned long waiting times at emergency rooms as an issue they often raise, which is particularly challenging for this citizen group who may find it harder and more painful to sit uncomfortably for hours.

Another example of a societal development that heavily influences what the PCs discuss is digitalization. Everything from obtaining a free coupon for collective transportation to healthcare appointments, accessing information, and communicating with healthcare services, requires digital knowledge. Many respondents also consider this to be ageism.

Sometimes people forget that us older people may not be as quick and skilled with our hands. It takes us longer to do things, and our hands might tremble. We might accidentally press the wrong button, and then we have to start all over again. And you get nervous on such occasions... So, it is difficult for older people to reach the healthcare centre, for example. Something simple to others can be quite challenging. (Respondent 2)

The COVID-19 pandemic is an example of a disruptive factor that heavily influenced the older population and, consequently, the work of PCs during the time of the study. Interviews revealed that older people were traumatized by the pandemic and forced into passivity, while also being subjected to increased attention from policymakers and healthcare decision-makers. The inadequate treatment of the most vulnerable older adults led to debates within the healthcare regions and the PCs, but at the same time, there was a low level of activity in the PCs and the pensioner organizations during the pandemic. While PC meetings continued digitally, the low activity in pensioner organizations hindered discussions and engagement.

The PCs as Public Participation Initiatives

PCs are standing committees (councils) with recurring meetings with the same group of people throughout the political term, which lasts for four years. The council includes leading and oppositional politicians, along with representatives from pensioner interest organizations, enabling continuous discussions. One leading politician expressed a preference for this approach over individual initiatives from advocacy organizations, stating:

When you meet with individual interest organizations, my experience is that you often start over at the exact same place as you were the last time. So, you grind the same issue over and over again and don't really make progress. (Respondent 8)

Another interviewed politician highlighted the strong benefit of advisory councils as a guarantee that both sides in a discussion share the same understanding of an issue: *"It is better to have your enemies around the table than to have them standing outside with placards. That benefits no one, unlike having a shared understanding."* (Respondent 3).

According to council regulations, the formal function of the PCs is to be advisory. However, some respondents are dissatisfied with this advisory status and would prefer being a formal referral body. The interviews revealed different understandings of the function, with some seeing it as a forum for advocacy while others view it primarily as a platform for information sharing. Additionally, PCs were described as serving as a bridge between the region and the policy community/public or as a capacity-building tool for the policy community. These topics will be discussed further in the next section. These points are also evident in the minutes, where discussions on developing the council through education and collaboration with other PCs are common.

During the meetings, there is a strong focus on the regions providing information to the organization representatives. The purpose of this information sharing and the expectations for the representatives' actions regarding it are important topics discussed in the interviews, which we will discuss below. The healthcare policy field is complex, and some interviewees question whether the PCs have enough knowledge to participate in policy debates. Examples were given where politicians put an issue on the meeting agenda with the aim of educating representatives on a specific issue's

background, allowing them to better understand the motives behind a political decision. Taken together, the PCs serve multiple functions, although the formal documents emphasize their role in information exchange and advisory capacity.

The credibility of the PCs is closely tied to the quality of representation among organization representatives and the political clout of participating politicians. Typically, high-profile politicians lead the work of PCs. However, the lack of engagement among some less influential politicians is a recurring theme in interviews as it questions the council's status and, consequently, its credibility. Respondents note that the individuals engaged in PCs are often seasoned "lobbyists" who have worked as local politicians for many years, giving them extensive knowledge of the local political system and healthcare policy issues. Nevertheless, some respondents express frustration regarding the engagement of their own organizations. Many struggle to get the attention of their local organizations, and few members, or even leaders, may know about their representation in the PC. The issue of representation is examined further under its own analytical category.

Policy Community

The PCs operate within a policy community that has both vertical and horizontal dimensions, as revealed by the interviews. The community involves networks and relationships between actors at both the regional and municipal levels, as elderly care in Sweden is the responsibility of municipalities while healthcare is the responsibility of regions. Moreover, Swedish interest organizations are typically organized in a federative manner with local branches, regional/district boards, and national offices. The PCs with participating politicians exist at both the municipal and regional levels. Looking only at the regional level, highlighting the horizontal dimension of this policy community, PCs were described by the respondents as serving as a bridge between the region and the policy community or as a capacity-building tool for the policy community. These points are also evident in the minutes, where discussions on developing the council through education and collaboration with other regional PCs are common.

The challenge of engaging members in regional PCs compared to municipal PCs was clearly expressed by organization representatives. Municipal councils deal with issues that are "close to home," making it easier to get people involved and relate. The complex healthcare system and the larger geographical area of regions can make it difficult for people to form opinions or feel a connection to issues that may be affecting other parts of the region. As one organization representative pointed out, the scope of regional PCs can lead people to question the relevance of discussions about problems that may not directly affect them.

While the municipal level may be more engaging for participants, the availability of both levels of PCs benefits pensioner organizations' advocacy work and the policy community. The federative structure of pensioner organizations allows them to work on multiple policy arenas simultaneously, sparking debates and drawing attention to their interests. Joint efforts between pensioner organizations to lobby for an improved PC status have also occurred, including making it compulsory for all regions to have

a PC, changing their advisory role to a referral body, and providing financial compensation for participating.

In addition to the two levels of PCs, the policy community includes local patient councils attached to primary healthcare centres. These councils comprise representatives from patient, user, and pensioner organizations active in the PCs. For this reason, the pensioner organizations see themselves as having a bridging function; they can catch problems and issues in one council and present it to the other council, in hope of a stronger impact.

Representation Mechanisms Connecting PCs to the Policy Community

Many of the PC representatives are involved in various public participation initiatives, and many have a background in local politics. Active representatives tend to have extensive networks and platforms, indicating that they are professional public participants. As a platform for sharing experiences and promoting collaborations between organizations, the PC plays an important role in the policy community, of particular importance during the COVID-19 pandemic. Meeting minutes demonstrate that many representatives use the open discussion point to share with the other their organization's plans and challenges. Overall, PCs enhance the capacity of the policy community by facilitating information sharing and collaborations across different governing levels.

The representation of active individuals within the PCs is a crucial aspect of how well the PCs reflect the needs and voices of the people it concerns. When being asked whom they represent, representatives differ in their views on whether they represent only the members of their organization or the older population in general.

Representation in these organizations is discussed in terms of how they can provide a channel for members to voice their concerns, but it is also about returning information from the participation initiatives such as the PC to the members. This involves gathering input from members in local organizations, deciding what to propose on the PC agenda, and finding forums to present the results of the meetings. The exact structure for this work varies between organizations, but there is a common understanding of the importance of this feedback loop. However, not all organizations have managed to establish functional routines for this, which is further discussed under the section of external impact.

In general, the issue of representation (and lack thereof) of older individuals in policy making is considered important and problematic by all respondents. Pensioner organizations are well aware that they do not represent those older individuals who are in the most need of healthcare and a voice. The individuals who are active in organizations and sit on these councils tend to be the most resourceful of the older people community. The respondents acknowledge that older people tend to leave as they require more assistance and utilize healthcare services more frequently, which leads to them losing the opportunity to voice their concerns through these organizations.

Problem Streams, Policy Streams and Policy Windows

Problem Stream

The interviews reveal that the issues brought up by the PC representatives originate mainly from two sources. The first is in response to public debates on healthcare services or other regional responsibilities, often inspired by local or national news on misconduct or long wait times. The second is from their own local organizations or national boards, highlighting issues that they find interesting to monitor or lobby for.

The pensioner organizations raise various issues, some of which are not widely discussed in the public debate despite being nationwide concerns. Representatives emphasize the importance of persistence, often revisiting issues in cycles until they receive attention. This approach is reflected in meeting minutes, where issues are revisited over a time span of several years, and representatives ask for feedback on previously discussed issues. Experienced representatives actively employ this “nagging” strategy, saying that *“You can’t give up, you just have to keep on bringing it up. At some moment, it will break through”* (respondent 2).

A PC chair confirms that if you miss an opportunity to time a discussion in the council with an expected political decision, you just wait until the next time the issue comes up. The PCs’ agenda setting has a cyclical nature, rather than quickly reacting to incidents and current events. Examples of recurring issues are access to vaccines and screening for prostate or breast cancer for the older population.

During the interviews, respondents highlighted various challenges, such as the digitalization of health care and its accessibility. While the PC can address some issues, such as digitalization, some problems identified were too complex for the PC or even regional politicians to resolve. For instance, the problem of recruiting healthcare professionals is a nationwide issue that requires a time-consuming process. Long waiting times and access to vaccinations also pose significant challenges. The PC representatives acknowledge that their role is limited in solving these problems. However, a politician suggested that PC representatives need not be healthcare experts to fulfil their responsibilities. Their primary role is to identify and raise concerns faced by the older population, and it is the politicians’ responsibility to find solutions to these problems.

Policy Stream

Although it is a simplification (Robinson & Eller, 2010), we consider the policy stream to be mainly driven by the political representatives in the PCs. The chair and vice chair of the PC are high-profile politicians in the region, often heads of healthcare or hospital boards. They have a unique overview of the healthcare policy processes in the region, and the chair is responsible for putting together the PC agenda. Besides these two leading politicians, there are usually a handful of politicians representing other parties but who do not necessarily have a seat in any regional political committees. Both politicians and representatives express confusion regarding the role of these politicians, for instance whether their role is to voice the position of their parties. This confusion was also confirmed by one of them, who expressed that their

party never asked questions about the PC discussions. Some suggest that politicians start their careers in the PCs and then move up to more prioritized committees. In one PC, this issue made it into the minutes as a formal complaint several times, first in 2017, then in 2019, and later in 2020.

The budget policy stream is a recurring topic. As the regions have their own tax-based budgets, it is a core political conflict. The regional budget covers primarily healthcare (90%), but also includes collective transportation and culture to some extent. Due to its complex nature and preceding political negotiations, the budget is challenging to influence or change. Nonetheless, most PCs have included in their regulations that they should provide feedback and be involved in the budget process. From a political standpoint, the budget process is viewed as a crucial discussion that serves as the foundation for healthcare policy work throughout the year. However, they do not believe that the PC should have a significant impact on the budget. According to one politician: “... *if you want to be involved in political decisions, you have to engage in a political party, because the PC should not be a shortcut to decisions. That is undemocratic.*” (Respondent 5)

In general, it appears that PCs require stability and predictability for representatives to plan, meet, and discuss their viewpoints together and gather input from members. Predictability enables politicians to schedule issues at the most opportune time in a policy stream and secure the best presenter, among other things. However, it may come at the cost of public initiatives if agenda-setting remains primarily in the hands of those already in power. Furthermore, policy streams that cover an extended period of time seem to provide an opportunity for the council to have a significant impact and be heard. Examples are long-term region projects that have invited the council to give feedback continuously, and even participate in reference groups and workshops, which have resulted in the council feeling heard and their feedback considered when forming the policy process.

Policy Window- The Meeting of Problem Stream and Policy Stream

Policymakers or public participants can identify and leverage an unexpected policy window, or they can strategically plan to create one by timing the introduction of specific issues onto the agenda. The interviews revealed several examples of unexpected policy windows, including the COVID-19 pandemic. One respondent speculated that her proposal for increased access to defibrillators was implemented due to an unexpected state subsidy to her municipality resulting from the pandemic. However, she had to leverage her contacts within the region to make it happen. Another example is the delayed care resulting from the pandemic, which brought attention to the long-standing issue of long waiting times and prompted extensive discussion even after the pandemic. Nonetheless, respondents noted that the complexity of the healthcare field makes it challenging to effect change quickly, rendering policy windows difficult to leverage for public participation initiatives. They are according to some respondents more suitable for the national level of the pensioner interest organizations.

A more common way of using policy windows in the context of PCs, as mentioned in interviews, is to plan and schedule meeting agendas to allow for timely discussions before a political decision is made on a given matter. Both administrators and

politicians can determine the ideal timing for proposing a specific policy and suggest bringing it to the PC when they believe it is appropriate. Typically, the [timing of] policy decisions are known well in advance, which facilitates such planning:

... budget and plans and investments and such, you know about that very far in advance and then you can make sure that the PC gets information, gets the opportunity to give opinions in good time while preparing a matter. And then maybe you can come back when you start having proposals for decisions.
(Respondent 7)

However, politicians admit that it can sometimes be difficult to schedule meetings because they occur infrequently throughout the year. There is always a risk that the meeting may be scheduled too early in a specific policy process, and that the next meeting may be too late. Although the politicians agree that it is important for the PC to be included early on in these processes, many of the representatives feel they are invited too late in the process.

Responses to Participation Initiatives - Internal and External Impact

Internal Impact - Governance Impact as Statements or Decisions

In this theme, we differentiate between the impact at governance level and operational level. Since the PCs are located at the political level, it is not a direct channel to the healthcare services. When asked to provide examples of issues where the council has contributed to a change or affected the policy process, most respondents gave vague responses such as “I really hope so”, “I need to believe that”, “They seem to listen to us,” or “They seem interested in what we have to say.” Concrete examples were rare, which was also the impression from the minutes that showed little actual policy input and a focus on information sharing. Some respondents noted that it may be easier to have an impact at the operational level, but this would require other participation initiatives or contacts, such as local patient councils at healthcare centres. In the discussions about their actual *decision impact*, many returned to the fact that the PC is not a decision-making body and does not have that possibility (even though some would prefer that). Instead, respondents tightly connect their ability to influence policy decisions with the role, power, and enthusiasm of the politicians in the councils and that the PCs’ impact is directly dependent on whether politicians are willing to bring the council’s feedback forward.

Moving on to the *statement impact* at the governance level, we observe that this is mainly achieved through participants providing feedback to civil servants in the preparation and implementation of policies. During the PC meetings, which mainly consist of civil servants or other experts presenting their ongoing work, most representatives direct their comments and feedback to the presenter. Nevertheless, the representatives assume that the politicians also listen and take note of what they say. However, the presenter may be better equipped to respond to their feedback and also see how their feedback can be brought forward. The representatives provide examples of giving feedback on how digital services can be developed favourably for

the older population, or suggestions for how healthcare professionals should contact older peoples in a way that is comfortable and preferable, which does not need to involve political decision making.

The most successful examples of actual impact, as highlighted by both politicians and representatives, are those in which participants have been involved in longer policy processes and have been able to provide feedback multiple times on the issue. Participating in a reference group that arranges meetings solely with public participants and civil servants is considered an efficient way of having an impact, repeatedly and directly to those managing a project. It enables representatives to give feedback on smaller, practical issues that can be easily integrated. One politician agrees and says that this is a more effective way of influencing, as direct engagement with policy-makers can be a slow process. On the other hand, these methods, for example reference groups, are uncertain and informal ways of influencing, and the discussions do not end up in formal protocols or in the public diary.

External Impact

The Thurston et al.'s framework emphasizes the impact on public health as an important external impact, but many respondents do not see it as their responsibility to contribute to improving the health of the older population. However, the pandemic has brought attention to the issue of isolation among older people, prompting discussions within the PCs about the role that pensioner organizations and regional politicians can play in addressing it. These discussions have primarily focused on the social activities organized by pensioner organizations, such as training, walks, and social events, as a means of preventing isolation. While interest politics has not been the primary focus of these discussions, they demonstrate the potential for PCs to address important public health issues through their engagement with pensioner organizations.

Overall, the perception of how the PCs can have an impact outside of the healthcare organization and region appears to be quite limited. The way in which PC respondents perceive their impact on society and citizens is primarily through the dissemination of information they receive during PC meetings. However, there appears to be no active intention to educate the broader public due to perceived resource demands. Instead, representatives focus on providing feedback to their own organizations, with many acknowledging the need for improvement in this feedback loop. Some respondents adopt a pragmatic approach, recognizing that not everyone in their organizations is interested in listening or contributing ideas. There is a general belief that representation mechanisms are crucial to pensioner organizations, suggesting that the most significant external impact for them is to contribute to democratic values such as well-functioning representation, transparency, and accountability. The meeting protocols and PowerPoints presented are publicly available online, which is seen as an easy and practical way of creating transparency and enabling both members of the pensioner organizations and citizens in general to access this information.

Among politicians, there seems to be a difference in perception regarding the role of the representatives in spreading the information they receive. Some consider it a central purpose of the councils, while others emphasize that the purpose of the coun-

cil should be to promote dialogue since information can be disseminated in many other ways.

Discussion and Conclusions

The purpose of this study was to examine the processes and outcomes of citizen participation among older people in health policy development in Sweden, with a focus on pensioner councils (PCs) embedded in the regional political organization. The study employed a holistic approach developed by Thurston et al. to evaluate public participation in regional health policy, enabling us to better understand the connections and interdependence between the processes and outcomes of involving older citizens. We conclude that it is not so simple as to judge the PCs contribution based on whether they have succeeded in influencing policy or not. Rather, contributions to building a strong policy community, increasing transparency in the democratic process, and persistently advocating for their core issues with politicians, should also be acknowledged even if the outcomes are not immediate. Below, we discuss some of our main findings.

The low status of older individuals and ageism in the social context motivate the PCs as a way of increasing citizen participation among older people in policymaking and to create a greater focus on core issues of the older population, e.g. the effects of digitalization in society and the health services. After the pandemic, digital services in health services has increased and the ageism connected to digitalization will likely continue to be of significant concern (Zoorob et al., 2022). The interviews highlight that systemic problems in healthcare such as waiting times and accessibility issues have a more significant impact on the older population, in ways that might not be considered by policy-makers. As Lesser discusses, the challenge lies in determining when the treatment of such problems should be uniform for both young and old individuals, and when treatments should vary between age groups to ensure fairness (Lesser, 2012). Although a special treatment of older people may seem fair in some cases, it is difficult to balance this so that shortcuts to healthcare services are not given due to age instead of need.

To this end, the PCs format as a public participation initiative seems crucial. As members of the councils are skilled representatives of large member-based pensioner organizations, the PCs are perceived as credible and legitimate among policy makers. The continuous and long-term nature of the platform further foster trust between the representatives and between the representatives and politicians, enabling a deeper dialogue than isolated participation initiatives. This format also facilitates education for both sides and allows for the return to issues when the timing is appropriate. This could likely increase the chances that the problem stream and policy streams may be synchronized, enabling policy windows where the PCs may have an impact (see Kingdon, 1995).

However, the recurring nature of the PCs may also create a sense of routine, where the format (which favours democratic legitimacy and transparency) is more important than its governance or operational impacts. Upon studying the problem stream, it becomes apparent that the organization representatives use the long-term stable char-

acter of the PCs to revisit ‘old topics’ multiple times. While many of the issues pensioner representatives raise may be too complex for the PCs – and even the regional politicians – to have an impact on (e.g., staffing numbers or waiting times), they are still considered important to discuss during the meetings. Impact on issues stemming from the problem stream, was dependent on what actions the politicians in the PCs choose to take and that potential governance impact goes through the PC politicians (see also Feltenius and Henriksson, 2022). Initiatives from the politicians, i.e. the policy stream, have better chances of coming at the right time, with a precision in what the council can contribute with and how. The political side also has more power to shape how the issues are discussed, for instance by initiating workshops or inviting relevant guests. The leading politicians’ willingness and ability to schedule meetings at the right moment is also important in trying to create policy windows by planning the PCs agenda after what issues are in the pipeline in regional policy-making. Due to the complex processes of healthcare policy, the interviews indicated that it is difficult for the PCs to identify and utilize policy windows that suddenly appear. The main focus is not reacting on incidents or current events.

Even though some representatives wanted to move beyond the advisory role, others held the opinion that the PCs must not have too much decision-making capacity or power because it would jeopardize the democratic foundation of the regions, i.e. the representative democracy at the regional level. The region’s budget is the most prominent example where the role of the PCs is somewhat ambiguous. The PCs are informed and regularly discuss the budget, but at the same time it is pointed out that the PCs should not have a significant impact on it because it would be undemocratic. It is a clear example of the conflict between participatory and representative democracy that is ever present in the Swedish context (Amnå, 2006). Perhaps ironically, several organization representatives thought it might be easier to have impact on the operational level (through e.g. patient councils) and it was widely believed that it is more effective to provide feedback to civil servants on smaller, practical issues.

However, even if actual policy decisions are difficult for the PCs to impact, and the representatives acknowledge this, the participatory and deliberative democratic function of the PCs is still important to the representatives. This is a type of external impact, potentially extra relevant in the Swedish neo-corporatist system, where interest organizations and politicians are expected to negotiate and compromise. The mere existence of the dialog may be important enough as it strengthens the ties between the public and policy makers and creates potential for transparency for older citizens in their organizations that get reports from the PCs. This seems very important to the representatives. In practice, however, not many people seem to be asking for such reports. Among the representatives the question remains: Is it a forum for advocacy or for information sharing? Regardless, PCs seem to have the potential of strengthening the policy community and its capacity by connecting municipal representatives and initiatives with regional ones, and by connecting representatives from different interest organizations. Most participants can be described as elite representatives with extensive networks, and this may have enabled them to better understand the potential and limitations of the PCs in a political context and to adjust their expectations accordingly. As they point out themselves, the PCs represent active individuals, not the older individuals most in need of a voice. Although these representatives are

competent and resourceful, letting active older persons (third-agers) be the voice for fragile older persons (fourth-agers) risks present a skewed understanding of their needs and potential in consuming healthcare services (Gilleard & Higgs, 1998).

A limitation to this study is the relatively small sample of interviews (13). The small number of interviews was in part remedied by the meeting minutes, that are used to validate the statements made in the interviews. Another limitation is that only three regional PCs were studied, and experiences may vary across the country. Nevertheless, there were no notable differences in our findings across the different regions, which indicates that such differences may not be substantial.

This study can inform future policy development and contribute to effective structures for citizen participation among older people in health policy. For instance, our findings encourage long-term initiatives as we find the longevity and recurrent character of the dialog as especially positive for impact. Furthermore, even though the dimension of external impact is important to the PCs, communication to members and the public is rather weak in practice and we see a risk that politicians inaccurately assume that information is disseminated to older citizens by the involved organizations. A key takeaway from this study is the pivotal role played by leading politicians within these councils, upon whom much of the potential impact relies. While PCs are designed to facilitate participation at the political decision-making level, their effectiveness is compromised in the absence of engaged politicians. Without their active involvement, the potential impact is likely to be more pronounced at operational levels. In sum, the study clarifies the potential of the PCs and broadens the perception of what citizen participation among older people can contribute to in terms of democratic values. According to previous studies (Bombard et al., 2018; Carter & Beresford, 2000; Thornton, 2000), such clarification may encourage older individuals to participate. Additionally, the study makes a theoretical contribution by extending Thurston et al.'s framework, enabling the analysis of broader social and democratic benefits within the context of external impacts from participation initiatives. While the significance of these findings is particularly noteworthy in the Swedish neo-corporatist setting, we believe that this development has applicability in countries with different traditions of public participation.

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Author Contribution AM and MF designed the study and analysed the interviews together. AM carried out the interviews, collected the meeting minutes and was responsible for drafting the manuscript. Both authors finalized the manuscript, and have read and approved the final version.

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Declarations

Ethical Approval Based on the Swedish Ethical Review Act (2003:460), the Swedish Ethical Review Agency made the assessment that the study did not require vetting since no sensitive personal data was collected. The Agency issued an advisory statement that it did not consider there to be any ethical obstacles to the research being carried out (No. 2019–04650).

Competing Interests The authors declare that they have no competing interests.

References

- Amná, E. (2006). Playing with fire? Swedish mobilization for participatory democracy. *Journal of European Public Policy*, 13(4), 587–606.
- Atkinson, M. M., & Coleman, W. D. (1992). Policy networks, policy communities and the problems of governance. *Governance*, 5(2), 154–180.
- Barnes, M. (2005). The same old process? Older people, participation, and deliberation. *Ageing & Society*, 25(2), 245–259.
- Barnes, M., & Bennett, G. (1998). Frail bodies, courageous voices: Older people influencing community care. *Health & Social Care in the Community*, 6(2), 102–111.
- Bombard, Y., Baker, G. R., Orlando, E., Fancott, C., Bhatia, P., Casalino, S., & Pomey, M. P. (2018). Engaging patients to improve quality of care: A systematic review. *Implementation Science*, 13, 1–22.
- Carter, T., & Beresford, P. (2000). Age and change. Models of Involvement for Older People; *Joseph Rowntree Foundation: York, UK*.
- Casado, T., Sousa, L., & Touza, C. (2020). Older people's perspective about their participation in Health Care and Social Care Services: A systematic review. *Journal of Gerontological Social Work*, 63(8), 878–892. <https://doi.org/10.1080/01634372.2020.1816591>.
- Cook, G., & Klein, B. (2005). Involvement of older people in care, service, and policy planning. *Journal of Clinical Nursing*, 14, 43–47.
- Dukhanin, V., Topazian, R., & DeCamp, M. (2018). Metrics and evaluation tools for patient engagement in healthcare organization- and system-level decision making: *A Systematic Review International Journal of Health Policy and Management*, 7(10), 889–903.
- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, 62(1), 107–115.
- Falanga, R., Cebulla, A., Principi, A., & Socci, M. (2021). The participation of senior citizens in policymaking: Patterning initiatives in Europe. *International Journal of Environmental Research and Public Health*, 18(1), 34.
- Feltenius, D. (2008). From outsiders to influential insiders: Pensioners' organizations in the policy process in Sweden. *Journal of Comparative Policy Analysis*, 10(1), 29–46.
- Feltenius D & Henriksson L (2022) Participation Without Influence? On the Role of Councils for Elderly and Councils on Disability. In Egner B, Heinelt H, Lysek J, Silva P & Teles, F (eds) *Perspectives on Local Governance Across Europe Insights on Local State-Society Relations*. Basingstoke: Palgrave Macmillan
- Frączkiewicz-Wronka, A., & Kozak, A. (2021). Facilitating co-production in health promotion: Study of senior councils in Poland. *European Research Studies*, 24(4B), 182–201.
- Frączkiewicz-Wronka, A., Kowalska-Bobko, I., Sagan, A., & Wronka-Pośpiech, M. (2019). The growing role of seniors' councils in health policy-making for older people in Poland. *Health Policy*, 123(10), 906–911.
- Giddens, A. (1984). *The Constitution of Society: Outline of theory of Structuration*. University of California Press.
- Gilleard, C., & Higgs, P. (1998). Old people as users and consumers of healthcare: A third age rhetoric for a fourth age reality? *Ageing & Society*, 18(2), 233–248.
- Holroyd-Leduc, J., Resin, J., Ashley, L., Barwich, D., Elliott, J., Huras, P., & Muscedere, J. (2016). Giving voice to older adults living with frailty and their family caregivers: Engagement of older adults living with frailty in research, health care decision making, and in health policy. *Research Involvement and Engagement*, 2(1), 1–19.
- Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277–1288.
- Kingdon, J. W. (1995). *Agendas, alternatives, and public policies*. 2nd. NY: HaperCollins College Publisher.
- KOLADA. Kolada.se 2023-08-07.
- Lesser, H (2012). Ageism. In R. Chadwick (Ed.), *Encyclopedia of applied ethics* (2nd ed., pp. 79–85). Academic Press.

- Milton, K., & Grix, J. (2015). Public health policy and walking in England—analysis of the 2008 ‘policy window’. *Bmc Public Health*, *15*(1), 1–9.
- Modigh, A., Sampaio, F., Moberg, L., & Fredriksson, M. (2021). The impact of patient and public involvement in health research versus healthcare: A scoping review of reviews. *Health Policy*, *125*(9), 1208–1221.
- Nygård, M., & Jakobsson, G. (2013). Senior citizens and political participation—evidence from a Finnish regional study. *Ageing & Society*, *33*(1), 159–180.
- Ocloo, J., Garfield, S., Franklin, B. D., & Dawson, S. (2021). Exploring the theory, barriers and enablers for patient and public involvement across health, social care and patient safety: A systematic review of reviews. *Health Research Policy and Systems*, *19*, 1–21.
- Pinto, J. M., & Liberalesso Neri, A. (2017). Trajectories of social participation in old age: A systematic literature review. *Rev bras Geriatr Gerontol*, *20*(2), 259–272.
- Postle, K., Wright, P., & Beresford, P. (2005). Older people’s participation in political activity—making their voices heard: A potential support role for welfare professionals in countering ageism and social exclusion. *Practice*, *17*(3), 173–189.
- Rawat, P., & Morris, J. C. (2016). Kingdon’s streams model at thirty: Still relevant in the 21st century? *Politics & Policy*, *44*(4), 608–638.
- Robinson, S. E., & Eller, W. S. (2010). Participation in policy streams: Testing the separation of problems and solutions in subnational policy systems. *Policy Studies Journal*, *38*(2), 199–216.
- Rose, D. C., Mukherjee, N., Simmons, B. I., Tew, E. R., Robertson, R. J., Vadrot, A. B., & Sutherland, W. J. (2020). Policy windows for the environment: Tips for improving the uptake of scientific knowledge. *Environmental Science & Policy*, *113*, 47–54.
- Serrat, R., Warburton, J., Petriwskyj, A., & Villar, F. (2018). Political participation and social exclusion in later life: What politically active seniors can teach us about barriers to inclusion and retention. *International Journal of Ageing and Later Life*, *12*(2), 53–88.
- Stolee, P., Elliott, J., McNeil, H., Boscart, V., Heckman, G. A., Hutchinson, R., & Judd, M. (2015). Choosing Healthcare Options by Involving Canada’s Elderly: a protocol for the CHOICE realist synthesis project on engaging older persons in healthcare decision-making. *British Medical Journal Open*, *5*(11), e008190.
- Swedish Agency of Public Health. (2023). *Folkhälsopolitikens målområden. Målområde 7: Kontroll, inflytande och delaktighet*. Swedish Agency of Public Health.
- Thornton, P. (2000). Older people speaking out. Developing Opportunities for Influence; *Joseph Rowntree Foundation: York, UK*.
- Thurston, W. E., MacKean, G., Vollman, A., Casebeer, A., Weber, M., Maloff, B., & Bader, J. (2005). Public participation in regional health policy: A theoretical framework. *Health Policy*, *73*(3), 237–252.
- United Nations Economic Commission for Europe, UENCE (2021). Meaningful participation of older persons and civil society in policymaking. DESIGNING A STAKEHOLDER ENGAGEMENT AND PARTICIPATION PROCESS. <https://unece.org/statistics/documents/2021/08/meaningful-participation-older-persons-and-civil-society-policymaking>.
- Walsh, K., Scharf, T., & Keating, N. (2017). Social exclusion of older persons: A scoping review and conceptual framework. *European Journal of Ageing*, *14*, 81–98.
- Wänell, S. E. (2007). *Pensionärsråd: Ett verktyg för pensionärsinflytande?* Stiftelsen Stockholms läns äldrecentrum.
- Wright, M. (1988). Policy community, policy network and comparative industrial policies. *Political Studies*, *36*(4), 593–612.
- Wyman, M. F., Shiovitz-Ezra, S., & Bengel, J. (2018). Ageism in the health care system: Providers, patients, and systems. *Contemporary Perspectives on Ageism*, 193–212.
- Zoorob, D., Hasbini, Y., Chen, K., Wangia-Anderson, V., Moussa, H., Miller, B., & Brobst, D. (2022). Ageism in healthcare technology: The older patients’ aspirations for improved online accessibility. *JAMIA open*, *5*(3), ooac061.

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