Linnaeus University Dissertations
No 495/2023

MARIA NILSSON

UNPACKING THE WELFARE TECHNOLOGY SOLUTION DISCOURSE

An analysis of society's perceptions of formal and informal care of older people

LINNAEUS UNIVERSITY PRESS

Unpacking the Welfare Technology Solution Discourse

An analysis of society's perceptions of formal and informal care of older people

Linnaeus University
Dissertations
No 495/2023

UNPACKING THE WELFARE TECHNOLOGY SOLUTION DISCOURSE

An analysis of society's perceptions of formal and informal care of older people

MARIA NILSSON

LINNAEUS UNIVERSITY PRESS

Unpacking the Welfare Technology Solution Discourse: An analysis of society's perceptions of formal and informal care of older people
Doctoral Dissertation, Department of Health and Caring Sciences, Linnaeus University, Växjö, 2023

ISBN: 978-91-8082-032-5 (print), 978-91-8082-033-2 (pdf)

DOI: https://doi.org/10.15626/LUD.495.2023
Published by: Linnaeus University Press, 351 95 Växjö
Printed by: Exakta Print AB, 2023

“Santa Claus is comin' to town
He sees you when you're sleepin'
And he knows when you're awake
He knows if you've been bad or good
So be good for goodness sake”

- Pop music tune “Santa Claus is comin’ to Town” written by J. Fred Coots and Haven Gillespie in 1934

Contents

Abstract

The overarching aim of this thesis is to examine how the welfare technology solution discourse can provide insights into society's views of formal and informal care for older people.

The thesis employs a qualitative inductive design based on social constructionism and discourse analysis. The studies illuminated the welfare technology solution discourse from the angle of international research (Study I), Swedish local policy (Study II), local politicians (Study III) and older adults represented by pensioners' organisations (Study IV). The temporal demarcations were from 2013-2022. The studies made use of the following research methods: scoping review (I), poststructural policy analysis (II), poststructural interview analysis (III) and focus group interviews (IV). The findings were derived from narrative descriptions and interpretations of the empirical data supported by previous empirical, theoretical and grey literature in the field.

The findings highlighted that the welfare technology solution discourse focused on prevention in order to keep older people active and independent and thereby avoid further increases in demands for formal care. Health was positioned as a means to achieve that goal and as an individual responsibility for the older person her/himself. Passive remote monitoring, gaming and digital leisure activities were considered to be part of "good" care, while participation and inclusion were downplayed.

Informal carers were positioned as part of the older person's social sphere, a position that ignores the help, support and/or care they provide to their elder family member or friend on a weekly or even daily basis. The discourse did not include any welfare technology to support or facilitate participation by informal carers. The reviewed empirical literature (I) and policy documents (II) did not take up the issue of health inequalities among older people and their informal carers to any great extent.

The pensioners' organisations viewed the discourse with concern, cautioning about an increased gap between those digitally included and those excluded in what they perceived as a "harsh and impersonal society". They positioned informal carers as crucial for the older person's security and wellbeing.

The thesis challenges the conceptualisation of health in old age as an individual enterprise and argues that interventions using welfare technology for older people need to be targeted towards participation and facilitate reciprocal relationships between all parties involved. Further, informal care needs to be further lifted on the political agenda to illuminate informal carers' role in the provision of informal care of older people within the modern welfare state in Sweden.

Keywords: Welfare technology, discourse, older people, informal carers, informal care, elder care, policy analysis, local health and social care policy of older people, Nordic welfare state model, healthy ageing

Abbreviations

AAL	Ambient Assisted Living
AI	Artificial Intelligence
EC	European Commission
EU	European Union
GDP	Gross Domestic Product
NBHWS	The National Board of Health and Welfare Sweden
NKA	The Swedish Family Care Competence Centre (Swedish abbreviation)
OECD	The Organization for Economic Cooperation and Development
PHAS	The Public Health Agency of Sweden
PIA	Poststructural Interview Analysis
SALAR	The Swedish Association of Local Authorities and Regions
SDC	The Swedish Dementia Centre
SEP	Socioeconomic Position
SFCCC	The Swedish Family Care Competence Centre
UN	United Nations
WHO	World Health Organisation
WPR	“What’s the problem represented to be” -method

Original articles

I Nilsson, M., Andersson, S, Magnusson, L, Hanson, E. Ambient assisted living technology-mediated interventions for older people and their informal carers in the context of healthy ageing: A scoping review. *Health Sci Rep*. 2020; 4:e225. https://doi.org/10.1002/hsr2.225

II Nilsson, M., Andersson, S., Magnusson, L., & Hanson, E. (2022). Keeping the older population and their informal carers healthy and independent using digital technology: A discourse analysis of local policy. *Ageing and Society*, 1-31. doi:10.1017/S0144686X22000514

III Nilsson, M., Andersson, S., Magnusson, L., & Hanson, E. (submitted 2023-03-06 to *Health and Social Care in the Community*) Welfare technology within community care of older people and informal carer support: the saviour of the welfare state. An interview study with local politicians in twelve Swedish municipalities.

IV Nilsson, M., Andersson, S., Magnusson, L. & Hanson, E. (in manuscript)
"Don't leave anyone behind" – perceptions and positions of board members in Swedish pensioners' organisations regarding the implementation and use of welfare technology for older people and their informal carers.

Articles I and II are included as reprints with the permission of the publishers.

Preface

My doctoral journey started with my interest in digital technology and the opportunities I saw for using digital technology in eldercare and other healthcare contexts. Through my prior experiences as a nurse, I could identify several positive opportunities that could make things easier for patients. For example, in working with older individuals with dementia, I found it easier to connect with them through old songs, music, or familiar rhymes. Even though their memory failed them in other areas, music could make them calmer when they heard a familiar tone. Imagine how much more could have been achieved with the streaming music services that came just a few years later.

In my work at the emergency primary care centre, I sometimes had difficulty explaining directions to patients who didn't have Swedish as their first language; when they had to enter a street name with letters Å, Ä, Ö into their sat nav devices, it immediately became complicated for them in a stressful moment. Today, I could directly send a GPS link to their mobile phone, and the problem would be solved. Finally, from my years on the surgical ward, I remember how often I had to explain to patients and their families what the doctor had just said during rounds. Sometimes, I printed out test results or patient information from the ward's computer, which patients appreciated. What a difference it made when patients had access to their medical records via their computer or on their mobile phones and could read notes and become more involved in their care.

These are just a few examples that now, in retrospect, seem distant. Development is moving at a lightning pace, from when we started with electronic health records in the early 2000s to now. As I write the last sentences of my thesis, I can get assistance from artificial intelligence (AI) in tasks such as rephrasing a sentence or taking notes and creating images.

However, my doctoral journey also started from an interest in older people and their families. Like many of us, I, too, have experience as an informal carer. That's not to say I understood all the issues, far from it. When I worked as a nurse in eldercare, I went up one day to one of the units wearing shoes with a few centimetres of heels. There was some commotion when I arrived, and the staff looked stressed when they saw me.

"Oh, it was you? We thought it was Marie," they said, looking much calmer.

Marie was the daughter of one of the residents. She had many complaints and opinions and did not hesitate to yell at the staff when dissatisfied. Like me, she also wore high heels, and the staff reacted to the sound in the corridor.

Back then, I didn't understand what was going on and couldn't provide the appropriate support or guidance to any involved parties. It is my hope now, after spending these years researching in the field of formal and informal care of older people, that I come better equipped.

Växjö 7th May, 2023

Maria Nilsson

Introduction

The Swedish welfare system is increasingly under pressure (Rostgaard et al., 2022). The welfare sector is currently facing major recruitment problems and staff shortages and is projected to continue to do so in the coming years. In six out of ten municipalities, the number of people of working age is decreasing, while the need for welfare services is expected to increase due to an ageing population (Swedish Association of Local Authorities and Regions [SALAR] 2022a). Regional demographic differences between larger and smaller (in remote locations) municipalities are affecting the capacity of the municipalities to fulfil their obligations and provide welfare services.

To meet these challenges, policy is arguing for a different way of working by making use of welfare technology as part of the digitalisation of the formal health and social care for older people (Committee of Inquiry for National coordinator for skills supply in the health and social care for older people, 2021). Formal care for older people refers to paid care services with formal carers mostly trained in the field (Li & Song, 2019). The largely uncritical and optimistic view on welfare technology and digitalisation is by no means purely a Swedish phenomenon. The OECD (2019) stated that health care lags far behind other sectors in harnessing the potential of digital technology and that a digital transformation is urgently needed at a time of increasing pressure on health systems and budgets. The European Commission (EC) (2020) released the policy "Transformation of Health and Care in the Digital Single Market", stating that one of the three top priorities for the coming years is using digital tools to empower people to look after their health, stimulate prevention and enable feedback and interaction. The EC further stated that the digital transformation will benefit people, health care systems and the economy through innovative approaches to independent living or integrated health and social care (European Commission, 2020).

Viewing welfare technology as the 'solution' is also prevalent in the communication from the Swedish government:

Through increased use of digital technology in eldercare, the government wants to increase safety and security for elder citizens and, at the same time, *improve the working environment for health and care staff. The government believes that increased use of welfare technology is needed to maintain the quality of care for older people, as they acknowledge that the need for care among older people will increase sharply in the coming years.* (Press release, Ministry of Health and Social Affairs, April 13th, 2023).

This position in policy can be regarded as part of a discourse, namely what I refer to as the welfare technology solution discourse – underlining the urgent need to change the ways of working within health and social care of older people by the implementation and use of welfare technology in order to meet the challenges of an ageing population, finite financial resources operating in the municipalities and regions, and health and social care staff shortages. In this thesis, I use this discourse as a unit of analysis for how contemporary Swedish society views older people with health and/or care needs and the role of their informal carers. Society's views are, in this thesis, illuminated by empirical and grey literature, local policy from Swedish municipalities, local politicians chairing the municipal health and social care committees and by district board members of pensioners' organisations. By informal carers, I refer to a person who provides (usually) unpaid care, outside a professional or formal framework, to a family member, relative, neighbour or friend (Eurocarers, 2023).

The main concern of my thesis is to critically examine and thereby gain an increased understanding of the major driving forces underpinning the welfare technology solution discourse. I take an interest in the subjectification processes of older people and their informal carers following this discourse, how key concepts are affected and with what potential consequences for older people and their informal carers in relation to their health and caring situation.

Welfare technology can be divided into four main categories; i) technology for safety and security, ii) technology for compensation of capabilities and wellbeing, iii) technology for social contacts and iv) technology for communication and treatment in healthcare (Thygesen, 2019). Welfare technology is defined as technical assistance contributing to increased safety and security, social inclusion, mobility and physical and cultural activities, empowering the individual to be independent in daily activities despite illness or impairment. Thygesen (2019) argued that it is the context which decides whether a given technology is actually a welfare technology or not. To exemplify, when contacting the primary care physician for a video consultation using mobile phone, then the mobile phone and the app used for this purpose becomes a welfare technology. The Swedish government is promoting an increase in the implementation and use of welfare technology within the care of older people through legislation (Ministry of Health and Social Affairs, 2022b) and through funding (see, for example, Ministry of Health and Social Affairs and SALAR, 2023). There are high expectations that this technology will increase the quality of life of citizens, improve services, and improve the working environments of care personnel and positively affect the private sector in terms of the development of welfare technology products and "know-how" (Frennert & Östlund, 2018).

Sweden is one of the "super-aged societies" defined by the UN as a society where more than 20% of the total population is aged 65 years and older (Koohsari et al., 2018). Bosch-Farre et al. (2018) argued that if people are experiencing added years derived from increasing longevity in good health and live in a supportive environment, their ability to do the things they value will have few limits. However, the authors argued that ageing is not a uniform process. Evidence from advanced and emerging economies shows that highly educated and wealthier individuals have greater chances of living longer. On average, across OECD countries, a 25-year-old man with an academic degree can expect to live 7.5 years longer than his peer with less formal education (Rouzet et al., 2019). There are also strong associations between socioeconomic position (SEP) throughout the lifecourse and healthy ageing (Wagg et al., 2021). In 2022, Statistics Sweden revealed that a smaller proportion of older people (60 years and older) with compulsory education or upper secondary education reported being in good health compared to older people with higher formal education. Equally, foreign-born older people (60-69 and 70-79 years) had lower proportions of reported good health compared to Swedish-born older people (Statistics Sweden, 2022).

Informal care constitutes a cornerstone of long-term care in Europe (Zigante, 2019). Estimations show that informal care constitutes as much as 80% of all care in Europe (Eurocarers, 2023). 44 million people (12 % of the adult population) provide informal care on at least a weekly basis (Eurofound, 2020). However, providing care to a next-of-kin has previously been identified as one of the life circumstances that can contribute to ill-health, poverty and social exclusion among informal carers (Eurocarers, 2018). Further, Kröger (2022) highlighted how social policy failures entail financial, emotional and health costs for informal carers. That said, informal care has gained increased attention and recognition in policy, especially following the COVID-19 pandemic (Eurocarers/INRCA-IRCSS, 2021). In September 2022, the European Commission (2022) presented the first European Care Strategy in which the Commission calls on the member states to improve long-term care by supporting informal carers through training, counselling, and psychological and financial support.

Turning to the Nordic countries, mainstream social policy literature in the 1980's mainly focused on the relationship between the market and the welfare state. However, following well-founded critique in the 1990's of Esping-Andersen's (1990) classical work on how it disregarded care and the family-state axis, empirical research on informal care has since been established as a key part of social policy studies (Kröger, 2022). In Sweden, population survey data from 2012 and 2018 revealed that about 15-20% of the Swedish adult population provides informal care on at least a monthly basis, and more than half of this group provides care to an older person (Ekman et al., 2021; National Board of Health and Welfare Sweden [NBHWS], 2020). Informal care is estimated to constitute at least 70% of all care for older people in Sweden (Katzin, 2014). A recent population survey conducted by the Swedish Family Care Competence Centre (SFCCC) showed that nearly 1 in 4 informal carers were themselves 65 years or older (SFCCC, *in manuscript*). Thus, it is important to note that while writing about older people and their informal carers, the carers may, in many cases, also belong to the group labelled older people.

Rationale

The Swedish welfare state is undergoing rapid changes in demographic terms and in relation to welfare technology and digitalisation developments. The discourse that I refer to as the welfare technology solution discourse, briefly introduced in the above section, is reflected in both empirical research and public policy in the field of health and social care for older people. Thereby, the discourse can be argued to have an impact on concepts of health and care for older people and subsequently affect older people with care needs and their informal carers via changes in the provision of welfare and healthcare services. Further, the discursive constructions of older people and their informal carers can be argued to limit their ability to participate and have an impact on health and social care as well as in society. How we view and approach issues regarding older people with care needs and their informal carers is not given by nature but rather socially and politically constructed and has changed throughout history. As welfare and healthcare services are undergoing profound changes, there is arguably a need to critically examine and thereby increase our understanding of the driving forces underpinning this discourse.

Aim

The aim of this thesis is to examine how the welfare technology solution discourse can provide insights into society's views of formal and informal care for older people.

The following research questions guided the thesis:

1) What are the major driving forces in research and policy for implementing welfare technology within care for older people?
2) What subject positions become available for older people with health and/or care needs and their informal carers following that discourse?
3) In what way/s are the concepts of health of older people and formal and informal care for older people constructed within the discourse?
4) What potential consequences for older people and their informal carers can be identified following the welfare technology solution discourse?

The empirical material includes i) an extensive literature review that provides an overview of international empirical research in the field of Ambient Assisted Living (AAL) technology for older people and their informal carers; ii) policy documents regarding health and social care for older people and informal carer support on a local level; iii) individual interviews with local politicians chairing the local health and social care committees and, iv) focus group discussions with board members of pensioners' organisations on a regional level.

In this PhD thesis, I aim to contribute to the existing body of knowledge in the field of care for older people with an increased understanding of the ideas underpinning health and social care arrangements, with a particular focus on the use of welfare technology for older people and their informal carers. It is intended that the findings can be used to influence policy programmes for elder-friendly and carer-friendly health and social care, as well as to form arguments about how best to sustain future health and social care. In this thesis I develop my arguments for a relationship centred care and recognition of interdependencies between older people, informal carers and health and care staff and the surrounding society.

The sub-aims in each study are as follows:

I To scope and review the nature and extent of prior intervention studies involving ambient assisted living technology-mediated interventions for older people and their informal carers, and how and in what ways (if any) the goals and aims of these interventions reflected the domains of the World Health Organization framework for healthy ageing.

II To critically interrogate the "welfare technology solutions"-discourse in local Swedish health and social care policy. The main concern of the analysis is the discursive constructions of older people and their informal carers and how the concept of health is constructed within this discourse.

III To examine local politicians' assumptions and perceptions regarding care for older people and support for their informal carers via welfare technology.

IV To identify how representatives of the two largest pensioners organisations in Sweden perceived and formulated positions regarding the implementation and use of welfare technology in the health and social care sector for their members as care recipients and for members in their role as informal carers.

Disposition, composition and demarcations

The PhD thesis disposition is as follows. Following an Introductory chapter, I continue with a Background chapter that provides a more in-depth understanding of key concepts; critical gerontology, ageing and ageism, informal carers, and inequalities in health. The Background chapter ends with an overview of the development of welfare technology in the health and social care sector of older people, a brief overview of the current empirical literature in the field and finally, a section focusing on digital exclusion. The area of digital exclusion can be seen as a crossroads where the key concepts meet. There then follows a chapter where I describe the Contextual background for the thesis, starting with a brief historical overview regarding formal and informal care of older people, the welfare state and the role of the family, a brief description of the Swedish health and social care systems and ending with an overview of the current policy landscape regarding formal and informal care of older people in Sweden today. After this, there is a chapter describing the Theoretical Framework. Since I use a discourse as the unit of analysis, it is important to explain the basic philosophical assumptions that make such an approach feasible, namely a social constructionism approach and discourse analysis. I then turn to the Material and Methods describing the design, data collection and analysis conducted in studies I-IV. This is followed by a chapter in which I summarise the Findings of my studies I-IV. The findings are synthesized and discussed based on the research questions and relevant literature in the Discussion chapter. I identify certain trends and reflect on problematic issues in need of deeper examination and discussion, with a particular focus on how older people and informal carers are positioned in the discourse. I also address the limitations of the design and the methodological challenges I've encountered. Finally, the Concluding section provides central arguments and implications for policy and practice, together with suggestions for further research in the area.

Regarding the composition of the PhD studies, I have the following point of departure. In all four studies, I illuminate the welfare technology solution discourse. First, from the angle of international research (I), then subsequently turning to focus on the Swedish context by looking at how local policy reflects the discourse (II) and how local politicians reason about it (III). Finally, I turn the perspective to the older adults themselves, in this thesis represented by the pensioners' organisations (IV), to form an understanding of their perceptions and positions regarding the welfare technology solution discourse.

The thesis contains several demarcations. Firstly, the thesis focuses on the group of older people aged 65 or older with care needs and their informal carers aged 18 or older. Through this demarcation, I wish to clarify that I'm not stating that all older people are relying on carers, neither informal or formal. That said, it is arguably neither optimal or desirable to talk about a group of older people with care needs, thereby dichotomising between that group and older people currently without care needs. I would like to make my position clear early on; throughout the life course, we may all be exposed and vulnerable and rely on care and support from time to time (see, for example, Tronto, 2015). As I will develop in this thesis, I argue against a division between some older people being independent and others as dependent. Being a human being is arguably to be vulnerable and dependent regardless of age (Braga, 2022). So, therefore, having explained my position, I will, hereafter, refer simply to older people and their informal carers. Regarding informal carers, I include all those co-habiting with the older person, living close by or at a distance, caring for a community-dwelling older person or supporting an older person living in a residential care or nursing home facility.

And secondly, apart from the first study providing an international perspective, there is an overall focus on the Swedish context. With few exceptions, there is no direct comparison to other countries. Further, while taking an interest in welfare technology, I'm not concerned with assessing outcomes on an individual level in a more traditional understanding, such as quality of life or carer burden inventories. Instead, I strive to achieve a meso (the group of older people and their informal carers) - and macro-level (societal level, focusing on local and national governance) understandings.

Finally, the temporal demarcation for the body of the thesis (with the exception of the historical overview of care for older people) consists of the period from 2013-2022, a period of rapid technological development and major societal changes that included the Covid -19 pandemic which is considered in the Contextualisation and Discussion sections of the thesis.

Background

In this chapter, I outline key concepts that act as foundations for the thesis. The chapter begins with the first group in focus, namely older people with a chronological age of 65 or older. I explain my approach to the group and to the concept of ageing and how it can be viewed through the ideas underpinning the development of eldercare.

The next group in focus is informal carers. In this section, I give an account of previous empirical literature describing and discussing the consequences of informal care on an individual and a societal level.

To clarify the health inequalities perspective, I then have a section where I describe my point of departure concerning health. I also explain the term health inequality and its relation to older people and their informal carers.

Finally, I explore the concept of welfare technology in more depth, together with a brief historical review of technology development and current empirical literature regarding welfare technology in the health and social care of older people and welfare technology aimed at supporting informal carers. The chapter ends with a review of recent empirical literature regarding digital exclusion, which ties together several of the key concepts in this thesis, namely welfare technology, ageism, inequalities in health and informal carers.

Critical gerontology, the concept of ageing and ageism

Older people include people from different socioeconomic groups and positions, genders, ethnic backgrounds, and generations (Jönson & Harnett, 2015). It is, therefore, problematic to talk about older people as a group with specific characteristics in common. On the other hand, such categories form part of the social and cultural landscape and form part of identities and political processes (Nilsson, 2008). Nevertheless, there is a risk when using the label older people, distinguishing them from other humans by pointing to specific characteristics of that group, thereby inadvertently and unfortunately contributing to stereotypes and othering. The risk is the same when discussing other groups who are potentially vulnerable under present circumstances. Aware of the problematic issues of the "older people" category, this thesis uses this label and includes older adults with a chronological age of 65 years and older.

In this thesis, I adopt a critical gerontology perspective to reflect upon the findings and support for explanations as to why and how certain statements and ideas are made legitimate and how they might be challenged.

In this perspective, age and ageing are studied from a critical view of social structures, norms, and cultural representations rather than seen from individual ageing (Nilsson, 2008). The term critical means that the approach looks beneath the surface appearance of a concept or phenomenon and offers an explanation as to why it is this way (Baum, 2016). In dominating gerontological perspectives, these critical perspectives are only seen as contextual factors. The reduction of the ageing process to a process of decline, much like a disease, is also called the biomedical perspective of age. The biomedical perspective tends to dominate gerontology as a way to solve problems (Nilsson, 2008).

Within the critical gerontology perspective is the theory of age stratification, meaning the unequal distribution of wealth, power and privilege among people at different ages of life. Within the different age strata, there are ideas about characteristics and roles and what is expected. As individuals travel through the strata, they meet expectations but can also contribute to changing them. The theory of age stratification describes two trajectories and the interface between them, the life course of the individual and the changes in society. Cohorts of generations travel through time, and it is easy to mistake strata for a cohort. For example, if drugs are not commonly used by people in their 70's, it does not mean drug use decreases by age but rather that the cohort did not grow up in a drug-liberal culture (Jönson & Harnett, 2015).

Tornstam (2018) stated that critical gerontology is underpinned by ideas from Marxism as well as hermeneutics and postmodernism. Critical gerontology is one of several theories under the umbrella term social gerontology. The theory was generated in the tension between disengagement theory and theories based on activity, between the perspective of "decrepit" older people and older people as competent, skilled, independent persons, or between describing older people in general terms and focusing on the differences and heterogeneity of the group (Achenbaum, (2009) in Tornstam, 2018). To summarise, the critical gerontology perspective provides support throughout the thesis in both the design and analysis of studies I-IV, as well as the interpretations and discussion of findings of the PhD studies.

The concept of ageing

The onset of "old age" throughout recorded history has been considered to occur at age 65, give or take 15 years. A span larger than any other period of life, consequently with a large variance in people's physical, mental, economic and social status. Inequalities in health persist throughout the life-course into old age (Achenbaum, 2013). Arguably, there is a need to redefine images and perceptions of ageing. The FrameWorks Institute (2017) argued that old age, like any other time in life, has its challenges as well as opportunities, highly influenced by social context and social policy. However, as the FrameWorks Institute showed, policy texts often refer to terms such as "the ageing populations" and "senior citizens" instead of using "we" or "us", thereby creating a distance and contributing to viewing older adults as "the others".

Different representations of ageing can be identified by looking at the development of eldercare. Elmersjö (2020) described the ideas underpinning each decade, beginning in the 1950's and 1960's when old age was often seen as a sickness and something for treatment. In the 1970's, the focus shifted to emphasising more meaningful activities, social integration, and service-minded care, and older people were regarded as active citizens. Throughout the 1980s, there was a focus on how the needs of older people were created by prejudices, both from society as well as from older people themselves. Elmersjö showed how the ageing in place ideology was emphasized, manifested in the 1990's Swedish reform called Ädel[1], and care was guided by self-determination, integrity and freedom of choice. The customer concept emerged, emphasizing service, much like in the 1970's. However, as Elmersjö usefully pointed out, the service sector idea, "that the customer is always right," was not transferred into the customer concept in health and social care. In the 2000's, focus was on assistance to develop one's resources and an emphasis on individual responsibility and self-determination (Elmersjö, 2020). Herrman and Castillo (2022) emphasised

---

[1] For more about the reform see Trydegård, G. B. (2003). Swedish care reforms in the 1990s. A first evaluation of their consequences for the elderly people. *Revue française des affaires sociales*, (4), 443-460.

the importance of problematizing the view of older adults and ageing to meet the increasing demands for high-quality eldercare.

Ageism

The concept of ageism offers support in the data analyses in studies II, III and IV when looking at how older people are positioned, what space they are given to make their voices heard and what characteristics and activities were spoken of as positive outcomes. In the proposal document “Decade of healthy ageing 2020-2030” (WHO, 2019), the WHO stated that stereotyping, prejudice and discrimination based on age affect people of all ages but have particularly harmful effects on the health and wellbeing of older people themselves. The WHO emphasised the need not only to challenge stereotypes but also to create more positive, realistic understandings about age and ageing (WHO, 2019). Ageism is defined as discrimination based on prejudices about age, with assumptions built into institutions and systems affecting the lives of older people. We are all surrounded by negative messages about old age, making it an implicit bias when our brains form judgements about people based on age (Frameworks Institute, 2017). According to Foster & Walker (2015), previous work concerned with ageing at the EU level has mainly focused on active ageing and prolonged working life, and there is a risk that policymakers over-emphasise activity according to middle-aged or youth perspectives, thereby making it coercive to older people.

We all have explicit and implicit assumptions about older people, growing old and being old. These assumptions, expectations and beliefs shape the ageing process in society. We tend to speak about older people in general and the ageing process, neglecting the multiple unique courses of the diverse and heterogeneous living situations of older people (Ayalon & Tesch-Römer, 2018). For this thesis, I find the results from Saif-Ur-Rahman et al. (2021) regarding age discrimination in health care services of particular interest. Saif-Ur-Rahman et al. showed how technology is a barrier to accessing health care for older people due to less access to and experience in handling digital tools and platforms. In this way, the combination of age and technology-related discrimination constitutes a dual burden of exclusion. Mannheim et al. (2022) showed how ageism is also evident in the technology design process. Despite often involving older people in design and development programs, there can be upper-age exclusion criteria, or people with lower digital literacy skills can be excluded. Further, there can be a general mismatch between intended users and recruited older participants when only fit and healthy older adults are recruited to develop technology to support those with declining physical and/or cognitive capacity (Mannheim et al., 2022).

The understanding of age becomes enriched when recognised as socially constructed in interaction with other categorisations, such as gender, class, race and ethnicity. Age must be understood as an important power structure that has a key role in organising society, informing groups' identities and their access to power, and intersecting with other power relations (Krekula et al., 2018). In Study IV, I analyse the power structures more closely, looking at how influence and participation are described and experienced by the pensioners' organizations.

Tornstam (2005) referred to ageism as a general despisement for weakness in society, characterised by a strong emphasis on achievements/accomplishments and values such as productivity, efficacy, and independence as overarching ideals. This perspective could, though, lead to positive special treatment. Older people can be described as friendly, wise, free, and politically powerful, but still seen as the different other (Nilsson, 2008). Should older people be seen as a minority, then? Probably not, argued Tornstam (2018), even though there are signs pointing in that direction. The FrameWorks Institute (2017) similarly advised against talking about ageism as a civil rights issue, since doing so prompted people to compare ageism to racism and reducing the meaning of ageism to incidents that could be addressed in legal terms. To summarise, based on the literature briefly exemplified above, I consider the ageism concept as a central consideration when striving to address the aim of this thesis to form an understanding of society's view of older people within the welfare technology solution discourse.

Being an informal carer

As outlined above, informal carers provide the bulk of all long-term care, both in a European context and in Sweden (Eurocarers, 2023, Siira et al., 2022). With what consequences though for the informal carers themselves? A Swedish longitudinal cross-sectional study showed that providing informal care was associated with a lower quality of life (Sacco et al., 2020). Verbakel et al. (2017) highlighted that informal carers suffer from reduced mental well-being compared with non-caregivers. Negative mental health consequences were more severe for intensive carers (providing care for a minimum of 11h/week) and for female carers. According to their analysis, the negative consequences of informal caregiving outweighed the positive ones (Verbakel et al., 2017). As people age, it is common for them to take on care and support for their spouse. However, this can lead to carers experiencing functional decline over time, especially if they are carrying out several hours of caring while having health issues themselves (Liu & Lou, 2019). Informal carers are faced with a wide variety of tasks and roles as part of their caring experience. Within a European context, informal care commonly consists of household chores, emotional support, transport to physician appointments and/or social visits, coordination of professional care and/or social companionship and support, financial management and personal care (e.g., help with personal hygiene and dressing) (Broese van Groenou & De Boer, 2016; Eurocarers 2023). According to Jegermalm and Torgé (2021), activities included in the definition of informal care have changed within a Nordic context, from mainly referring to the provision of personal or hands-on tasks with instrumental activities of daily living (such as help with housework, food shopping, collecting medicines) to the inclusion of help and support in a broader perspective, such as planning and assessing the quality of care, and coordination of formal health and social care services. Jegermalm and Torgé (2021) argued that it is important to be aware of these differences regarding informal care as it makes comparisons between different studies rather precarious. The number of tasks, complexity, and time required to plan and perform them subsequently influence the perception of burden and stress among informal carers. Further, Boyle (2023) noted that informal carers may take on caregiving tasks that are often increasingly complex and multifaceted without any prior caring/nursing experience to draw on. (Boyle, 2023).

Among people of working age, informal caring responsibilities can lead to difficulties in balancing paid work and care, affecting labour market participation and both immediate financial income and future pension for informal carers (Hanson & Champeix, 2023). An earlier study highlighted that 44% of working informal carers have difficulties making ends meet, and 26% are in the lowest income quartile (Eurofound, 2017). Most informal carers are women aged 45 to 75, and more women than men provide more demanding and intensive forms of care, implying that informal care is an area where more work is needed regarding gender equality policies and practices (Eurocarers, 2021). In Sweden, 17% of working carers (those informal carers combining paid work with informal care) indicated that their employment status had been affected due to caring, in terms of a reduction in working hours, decreased ability to work and affected career or study opportunities (Vicente et al., 2022). Von Saenger et al. (2023) showed that gender and class inequalities also exist in Sweden, as women in low SEP (meaning social and economic factors such as education, individual and household income and wealth, occupation, and housing conditions) provided more intensive informal care compared to both women with higher SEP and men with low SEP. Szebehely and Meagher (2017) earlier revealed that informal care is more common among older people with less formal education. The opposite pattern was evident however for purchased home help and care services. In this way, Szebehely and Meagher (2017) argued that refamilization and privatisation of health and care services have diminished the equalizing goal of the Nordic welfare state. Edebalk (2022) argued that this trend follows from a development characterized by austerity in health and social care for older people since the ‘90s leading to inequalities that will be further developed in the following section.

The concept of health and health inequalities among older people and informal carers

Health science acts as the overall discipline for my PhD thesis. Health science emphasizes the study of health in a transdisciplinary perspective, and studies conditions that affect health, at the individual, group, societal and global level, as well as interactions between people and the surrounding environment. When attempting to analyse and formulate arguments concerning the potential impacts on the health of older people and their informal carers, it is important to examine the concepts of health and health inequalities. How does the welfare technology discourse relate to health and health inequalities? In what respect/s should health policy and health interventions (using welfare technology) benefit individuals and communities? And which health outcomes are considered relevant and why? This section outlines the approaches to health in this thesis and an overview of the concepts of health, inequalities in health and healthy ageing.

Approaches to health in studies I-IV

In Study I, to increase the understanding of how the technology research field perceives health for older people and what aspects of health are measured and assessed, I used health outcomes, as defined by Wilson & Cleary (1995), as an inclusion criterion for the scoping review. I then used the framework of Healthy ageing (WHO, 2015) to analyse if and how the interventions corresponded to this framework. The framework of Healthy ageing is described in the 2015 World Report on Ageing and Health. Healthy ageing spans the life-course and is relevant to everyone, not just those currently free from disease. Healthy ageing means developing and maintaining the functional ability that enables well-being in older age. Functional ability is determined by the intrinsic capacity of an individual, the environment in which s/he lives (understood in the broadest sense) and the interactions among them (WHO, 2019). The framework emphasizes trajectories of ability and capacity, building on but still distinct from previous work on ageing. However, the focus is not on function in itself, but on building abilities that will allow older people to navigate the changing world around them (Beard et al., 2016).

In studies II and III, I explored how policy and politicians write about and understand health and from what perspective they look at health for older people and their informal carers. The main paragraph in the Swedish Health and Medical Services Act (2017:30) states that a good health is the goal for all healthcare. However, health can be perceived as a slippery concept (Blaxter, 2009). Throughout studies II and III, it has been evident that even though the aforementioned legislation is guiding the municipalities, the interpretation and conceptualisation of health differs. Health isn't always seen as a goal. The World Health Organisation's (WHO) definition, formulated in 1948, defined health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity". Although this definition has been criticized for over 60 years, it has not been significantly adapted. Huber et al. (2011) highlighted three important limitations of the definition affecting health policy. Firstly, the requirement for complete health would leave most of us unhealthy most of the time, and thereby it unintentionally contributes to the medicalization of society. The second problem is that it minimizes the human capacity to cope with chronic disease or disability, declaring people with such conditions as definitively ill. Lastly, using the word "complete", the definition is neither operational nor measurable. The authors (2011) argued for the need to redefine health, proposing that the definition should be replaced by a concept[2]. Keeping in mind that the WHO definition of health from 1948 has been influencing policy and practice for a long time, but without providing operational definitions of health, it is interesting to see how policy operationalizes the concept of health for older people and their informal carers (Study II).

In Study IV, the focus was on democratic consequences expressed in terms of participation and agency and the consequences for health as perceived by the pensioners' organisations for their members as older people and in the role of informal carers. Health is understood in this study not merely in terms of physical and psychological perspectives but also in terms of options for participation, agency and inclusion, in line with the United Nations' resolution for a Decade of Healthy ageing (United Nations, 2020).

Finally, it can be argued that both the WHO definition, Huber (2011) and the WHO Healthy ageing framework (2015) adopt anthropocentric perspectives, meaning they focus solely on human and mostly individual health outcomes. What is problematic about that? Whitmee et al. (2015) stated that human health and civilisation depend on flourishing natural systems. The authors (2015) argued for the concept of Planetary health, calling for a widening of the responsibility for health across disciplines and sectors and judicious attention to political, economic and social systems and their dependence on natural systems. This is largely in line with the recent EU Strategy on Global Health (Ministry for Foreign Affairs, 2022) emphasizing the need to deliver better health and wellbeing for people throughout the life course by addressing basic determinants such as poverty, inequality, climate change and humanitarian crisis. Further, implementing a One Health[3] perspective that builds on the interaction and interconnection between people, animals, plants and their shared environment. In the discussion of the findings, I reflect on the possibility of adopting a Planetary Health perspective in the field of welfare technology for older people and their informal carers.

---

[2] A general concept represents a characterisation of a generally agreed direction in which to look, as a reference (Blumer, 1969)

[3] For more about OneHealth, see for example the One Health Initiative homepage https://onehealthinitiative.com/

Health inequalities and healthy ageing

As this PhD thesis lies within the overall discipline of health science, I took a special interest in how, if at all, health inequalities were considered a priority when implementing welfare technology (I, II and III). McCartney et al. (2019) proposed the following definition of health inequalities:

> *Health inequalities are the systematic, avoidable and unfair differences in health outcomes that can be observed between populations, between social groups within the same population or as a gradient across a population ranked by social position (p28).*

Braveman and Gruskin (2003) earlier argued that health inequalities place disadvantaged groups at a further disadvantage with respect to health, diminishing their opportunities to be healthy.

The term health inequalities is often used as a synonym for health inequities. However, it is important to recognize the difference between equality and equity. Jurado de los Santos et al. (2020) explained that equality refers to having access to the same resources and opportunities and also in non-discrimination, non-sexist and non-stereotypical attitudes in treatment. Equity refers to a system where common goods are redistributed, striving for equality (Jurado de los Santos et al., 2020). In Study III, the local politicians were asked whether they considered welfare technology to affect inequalities in health, thus reflecting on their perceptions of welfare technology as a possible means for health equity.

Inequality implies that not only is having sufficient means to make ends meet important, but so too is what we have relative to others (Marmot, 2015). Marmot (2021) asked if we should, much as modern medicine strives to do, at great expense, look for technical solutions and simply educate people and patients about healthy behaviour. Marmot exemplified from the UK how people in the most disadvantaged households would need to spend 75% of their disposable income on groceries in order to eat according to the healthy eating guidance provided by the NHS while also needing to spend 40% of their income on housing, arguing that it is not a matter of knowledge or motivation to pursue healthy eating, it is rather a matter of income distribution (Marmot, 2021).

In Study III, SEP is used in both sample selection and in the interviews with politicians to increase an understanding of if and how health inequalities are considered a priority in the health and social care of older people and support for their informal carers and how, if at all, the welfare technology solution discourse might affect inequalities in health for these groups. With the present recession, health inequalities, as well as economic inequalities, have gained increased relevance, as Europe is facing a cost-of-living crisis hitting persons with low financial margins the hardest (The Lancet Regional Health – Europe 2023a). An Oxfam report (Walker et al., 2022) highlighted that Sweden is fairing the worst among the Nordic countries at fighting economic inequality. Sweden has the highest at-risk-of-poverty rate among the Nordic countries; 16% of the Swedish population live at risk of poverty (Lancet Regional Health Europe, 2023b).

The link between SEP and poor health is well established. While households in the Nordic countries are among the wealthiest in the world, more than 30% of women aged 85 and older live in relative poverty (a disposable household income lower than 60% of the national median) (Public Health Agency of Sweden [PHAS], 2022a). Even though welfare policies have contributed to reducing inequalities in income, housing quality, health care access and other social and economic structures, these policies have been insufficient in eliminating health inequalities. Indeed, Mackenbach (2012) earlier argued that there is a lack of association between the extent or intensity of welfare policies and the magnitude of health inequalities (Mackenbach, 2012). That said, in Study III and Study IV, I approached the local politicians and the pensioners' organisations to endeavour to form an understanding of how economic factors as part of older people's SEP are positioned in the welfare technology solution discourse.

In Study IV, the health inequality concept was mainly discussed regarding economic vulnerability and social exclusion of older people. WHO (2019) stated that healthy ageing is closely linked to social and economic inequity. Disadvantages in health, education, employment and income tend to reinforce each other and accumulate over the life course. However, Holman et al. (2020) suggested caution when drawing conclusions. Whilst they acknowledged that inequalities in the burden of growing disease amongst older adults are a significant public health challenge, they pointed to the gaps in the knowledge on how healthy ageing and chronic disease centre around the complex interaction of sociocultural, political and biological factors. The authors used a key set of biomarkers of healthy ageing and brought an intersectional lens to the analysis of these markers (intersectionality, in essence, means that multiple social attributes overlap and interact with each other to drive health outcomes). More specifically, the authors used gender, ethnicity, education and income to address this gap. Their results showed no simple pattern for the biomarkers in relation to social attributes, concluding that intersections "per se" cannot discern which particular person is healthy or sick. Caution is therefore required, not least in terms of the risk of stigmatising people who are assumed to have a particular level of health or illness by virtue of their social attributes (Holman et al., 2020). Thus, when discussing older people and their carers from disadvantaged socioeconomic groups, as in the case of studies II-IV, this is an important aspect to take into consideration in order to avoid generalisations.

Welfare technology – definitions, background and a critical perspective

When using the welfare technology solution discourse as a unit of analysis, it is necessary to provide definitions and a background to the concept of welfare technology and related concepts used in current literature. Since the area is still developing, it is important not to limit it too quickly with fixed definitions, which is why several concepts currently coexist in research and policy (Gustafsson, 2021).

In Study I, taking an international perspective, the term *Ambient Assisted Living-technology (AAL-technology*) was the main reference point within the scoping review. These technologies are defined as information and communication technologies (ICT), stand-alone assistive devices, and smart home technologies in a person's daily living and working environment, which enable individuals to stay active longer, remain socially connected and live independently into old age (Blackman et al., 2016).

In studies II-IV that focused on a Swedish context, the definition of welfare technology proposed by the NBHWS was used as the main point of reference; "digital technology that aims to maintain or increase the safety, activity level, participation or autonomy of a person who has or is at risk of functional impairment. Examples of welfare technology are digital safety alarms, peer supervision, sensors with reminders or robots that can perform tasks such as feeding or showering a person" (NBHWS, 2021). However, while in Study II the general term *digital technology* was employed when referring to the technology in the actual policy texts, in studies III and IV the term *welfare technology* was adopted, a term whose use is limited to a Nordic context and whose usage reflects the Nordic countries' attitudes towards the welfare state and welfare services (Brynn, 2016). The decision to use digital technology in study II was based on how the term is generally accepted in an international empirical research context. The decision to change to welfare technology was made, as it became clear following the findings in Study II that related to the Swedish context, how values echoing from the welfare state ideology were connected and incorporated into the term welfare technology in the policy context. Frennert and Östlund (2018) argued that it is impossible to draw any sharp boundaries between technology in general and technologies for eldercare and how the definitions tend to cover a heterogeneous group of technologies and services. In the introduction to this thesis, I used Thygesen's (2019) definition of welfare technology. Namely, technical assistance contributing to increased safety and security, social inclusion, mobility and physical and cultural activities empowering the individual to be independent in daily activities despite illness or impairment, which is substantially consistent with the NBHWS (2021) definition described above. I find the argument by Thygesen (2019), stating that it is the context that determines whether a technology is a welfare technology, particularly important since it serves as a reminder of the fact that when mobile phones or tablets, for instance, are used as mediators of digital health and social care services, they become welfare technology when used in that context.

Technology development in eldercare

Östlund and Frennert (2021) divided technology development in health and social care for older people into five waves, beginning in the 1960's automatisation, with inspiration from the industrial sector. Users were supposed to be passive receivers; an example was the washing machine for older residents. In the 1970's, the focus turned to telecommunication, with safety alarms as part of the ageing in place policy. In the 1980's, domestic technologies came with the microwave oven, which helped to automate the homes of older people. In the 1990's, home-shopping terminals for older people were tried but were not a success. In the 21st century, robots are being introduced as part of welfare technologies. They are much talked about but less used and Frennert & Östlund (2018) stated that in current research, the responsibility and use of technology in eldercare is interpreted as being down to the individual's capabilities. They argued that this focus on the individual level brings the danger of underestimating the social and organisational components of technology implementation.

Literature overview of technology within formal and informal care of older people (2016-2022)

The rapidly growing field of technology in the health and social care of older people makes reviews highly relevant for overviewing the field from different perspectives, which formed part of the rationale for Study I. The reviews that serve as examples of the current empirical literature cited below can be seen to have been written from a medical diagnosis perspective, from a technology perspective and an intervention perspective. A recent review (Sohn et al., 2022) focusing on various types of digital healthcare technology for dementia and mild cognitive impairment pointed to a radical increase in the literature in the last ten years. The technology studies included in the review referred to both prediction and diagnosis tools as well as technology to prevent deterioration and induce improvement. For formal and informal care, there was monitoring and assistive technology to reduce the caregiver burden (Sohn et al., 2022). From a technology perspective, Jovanovic et al. (2022) showed how older adults are the primary beneficiaries of AI models for activity assistance and recognition. The models were based on deep learning, natural language processing, instance-based learning and robotic devices. The authors emphasised the importance of involving formal and informal carers in the design and use, improving transparency and privacy, and explaining decisions to the users (Jovanovic et al., 2022).

Diener et al.,'s (2022) review focused on e-health and m-health interventions for older adults to promote physical activity. The authors found that 24 of the 28 reviewed articles focused on exergaming, and several used open-market gaming technology. However, none incorporated m-health (Diener et al., 2022). Interestingly, several review articles pointed to the same critical issues in the use of technology, namely data storage, privacy, safety, high costs, and internet connectivity (Hung et al., 2022; Ji & Kim, 2022; Jovanovic et al., 2022 Sohn et al., 2022).

Other recent reviews have focused on issues related to research methodology and knowledge gaps in the recent literature. Kokorelias et al. (2022) reviewed studies regarding digital health technologies to support hospital-to-home transitions for older adults. They took a particular interest in the characteristics of the study populations, and their findings showed how many groups of older adults were excluded from the interventions, such as older people with cognitive impairment, poor health status and the oldest old, and few studies described the sociodemographic background of the participants (Kokorelias et al., 2022). Concerning the implementation of welfare technology, Borg et al. (2022) reviewed 21 articles and pointed to considerable knowledge gaps regarding barriers and facilitators of acquirement and adoption and acceptance of welfare technology among older people and informal carers. The authors pointed to further research needs in terms of comparative studies and longitudinal designs and the development of co-design processes, not least seen in the involvement of informal and formal carers (Borg et al., 2022). This is in line with Taylor et al. (2021), who also pointed to an absence of comprehensive scientific literature in the field of remote delivery of health services for older adults (Taylor et al., 2021).

In the area of informal care, Deeken et al. (2019) estimated the efficacy of 33 RCT studies regarding technology-based interventions for informal carers, showing a small but significant effect on depression and burden (Deeken et al., 2019). Newman et al. (2019) reviewed 23 articles regarding internet-based digital tools for reducing social isolation among informal carers, supporting the use of these tools as a cost-effective and convenient way to access support for informal carers (Newman et al., 2019). Ploeg et al. (2018) reviewed 14 web-based interventions (education, peer and professional psychosocial support, remote monitoring) for informal carers of older people living at home with at least one chronic condition. They found indications of positive effects regarding carers' self-efficacy, self-esteem and reduced strain. However, the authors cautioned about the low quality of the included studies (Ploeg et al., 2018). Shin et al. (2018) summarized technology-mediated interventions for informal carers to cancer patients and pointed to how technology-based interventions were still in the early phases, and that while most interventions focused on providing medical information, there was a lack of interventions facilitating active participation through two-way communication with providers or peers.

Domínguez-Rué and Nierling (2016) approached the development and technology use from a human perspective, claiming that previous technological advancements have ignored this perspective in favour of viewing the ageing individual as a malfunctioning machine whose limitations must be overcome using technology (Domínguez-Rué & Nierling, 2016). Dahler et al. (2016) reviewed the literature concerned with the meaning of assistive technologies in older people's everyday lives and stated that technology enters the lives of older people in a complex way, giving rise to both feelings of safety as well as worries among the older users. Finally, Kernisan (2016) provided a useful contribution to the discussion of technology, pointing to potential pitfalls when integrating technology in the care of older people. The author (2016) pointed to how older adults run a higher risk of isolation and loneliness, and thus it is reasonable to be concerned that integrating more technology into their homes might increase loneliness. For example, if the family visits less often because the older next-of-kin now has a tablet to socialize, or if the home help spends more time entering data into the tablet and less time talking with and tending to the needs of the older person. Kernisan (2016) highlighted how the integration of technology in eldercare is likely to come with unintended consequences in the process.

The digitised healthy citizen

Whilst writing my thesis, I have regularly returned to the work of Deborah Lupton (2018) and to what she refers to as 'critical digital health studies'. Her work offers a critical perspective on technology and digital health, identifying the social, cultural and political underpinnings of digital health. Lupton examined how people engage with digital technologies and how digital technologies affect people's conceptualization of bodies, health, illness and health promotion. These changed conceptualizations also affects the politics of health and medicine as a response to digital technologies. Importantly, Lupton challenged the techno-utopian images of 'disruptive' technology (the idea that advances in science and technology will bring about an ideal society) and pointed to the unintended consequences of technology use and the power structures embedded in digital health. Lupton also questioned what values may be lost when digitising healthcare and body care. Lupton drew on theoretical perspectives such as socio-materialism, Foucauldian theory and surveillance and privacy theories. In this way, her work has provided food for thought throughout my PhD thesis since these theories are in the same vein as my theoretical and methodological points of departure. In short, Lupton's (2018) 'digitized healthy citizen' is, in my understanding, an amalgamation of two concepts; i) the figure of the 'digitally engaged patient' who in policy and from corporate developers is encouraged to take control and self-manage their health as an active consumer, and ii) the 'idealised healthy citizen' concept positioning people as willing to seek relevant health information and morally obligated to maintain good health, where empowerment is used in prevailing discourses as a motivation for shifting the responsibility from the state to the individual. Lupton (2018) pointed to how the idea of the responsible healthy citizen and the use of digital technology draws attention away from the social determinants of health[4]. Namely, working conditions, unemployment, access to essential goods and services, housing and access to healthcare. Lupton also highlighted how the use of digital technology changes health and medical work, providing both support but also undermining the status of the medical profession, as well as our own understandings of health and illness following what Lupton refers to as the biomedicalisation of everyday life, which she argues is largely driven by digital health technologies. I subsequently return to Lupton's work in the discussion of my findings.

Digital exclusion among older people and their informal carers

Digital exclusion can be seen as a crossroads where the key concepts of my thesis meet and interact, namely welfare technology, ageism and inequalities in health among older people and their informal carers. When addressing the topic of digital exclusion, it is important to note that it is often not a matter of a binary between included and excluded. Rather, the empirical literature describes digital inequalities on three levels. The first level being access, the second level being skills, participation and efficacy, and the third level referring to disparities in benefits and concrete outcomes that users can gain

---

[4] For more about social determinants of health see: CSDH (2008). *Closing the gap in a generation: health equity through action on the social determinants of health*. Final Report of the Commission on Social Determinants of Health. Geneva, World Health Organization.

(Elena-Bucea et al., 2021; Ragnedda et al., 2020; Robinson et al., 2015). A recent report from the Swedish Internet Foundation (2022) highlighted how Sweden is, on the one hand, a society with high internet connectivity (94% of the adult population) but also a society with a higher proportion of older people who experience digital exclusion. For example, 20% of pensioners (66 years and older) do not use the internet, and 40% don't use e-health services. Only 10% of pensioners have used a healthcare app for a doctor's visit. Further, insecurity and difficulties in using technology (for example understanding system messages, error messages and understanding and using cloud storage) limit more than half of the older population, in particular the oldest old, born in the 1920's and 1930's, who experience these insecurities and difficulties as the biggest obstacles for using technology. Finally, financial circumstances limit 17% of people born in the 1920's and 1930's; 8% are unable to afford a smartphone (The Swedish Internet Foundation, 2022). Given the recent cost-of-living crisis, these numbers can be expected to rise further.

Robinson et al. (2015) argued that digital inequalities deserve a place among more established forms of inequality and that it is increasingly clear that individuals' digital engagements and digital capacity play key roles in a range of outcomes, including health services uptake. Importantly, those who function and participate more fully digitally enjoy advantages over digitally disadvantaged counterparts. In fact, digital inequalities carry over pre-existing differences in human capital (the social network) into online settings. Ragnedda et al. (2020) pointed to how the uneven distribution of resources and capital such as economic, social and cultural capital, is at the base of digital inequalities. Income, education, age and geographical location are all identified as affecting people's level of digital inclusion/exclusion (Elena-Bucea et al., 2021; Ragnedda et al., 2020; Robinson et al., 2015).

Turning to informal carers of older people, Robinson et al. (2015) highlighted that for the so-called sandwich generation- meaning those simultaneously taking care of both young children and older parents-, those who can make more effective use of digital resources, caretaking burdens can be eased and time can be more effectively used by the possibility of keeping close contact with the next-of-kin via social media or remote sensor technology, for example. However, Bangerter et al. (2019) highlighted differences among informal carers seen to the difficulty and confidence connected to health information seeking. Bangerter et al. (2019) acknowledged that a particularly vulnerable subgroup is informal carers within the immigrant population, as they are more likely to experience barriers in both accessing resources and services due to language difficulties, low SEP, or a limited social network.

For older people and their informal carers, digital inequalities are an increasingly important aspect to consider. Kickbusch et al. (2021) argued that digital transformations have been so pervasive that they might soon become a dominant prism through which we understand and address health and wellbeing dynamics, including for those who remain unconnected. The authors further noted that these changes come with a clear social and political cost. Kickbusch et al. (2021) and Bangerter et al. (2019) purported that the effects of digital technologies and services can be considered determinants of health, and universal and meaningful connectivity for all is to be regarded in a rights-based approach.

To summarize this section about welfare technology, even though technology in eldercare is not a brand-new phenomenon, the above literature showed that there has been a large increase in the number of studies in the last ten years approximately. Even though there was a large variation regarding study designs, recurrent issues focused on data storage, privacy and safety for the users. Signs are pointing to how existing inequalities in health persist and might even be exacerbated through en increased use of digital technology. In my thesis, I’ve strived to capture and use these trends to inform the research design (in terms of aims, research questions and study populations, for example) in all my four studies.

Contextualizing the thesis

In this chapter, I describe the historical background and national policy context regarding formal and informal care of older people. I begin with a historical overview of the care of older people, with particular attention to the role of informal care, focusing on the Swedish context. After that, I have a short paragraph describing the welfare state, which I argue is key to understanding how current policy approaches and positions older people and their informal carers with regards to expectations and roles. In this section, I expand the perspective to include the other Nordic countries. Finally, I return to the Swedish context with an overview of the current Swedish policy context and health and social care systems. The picture that emerges from this chapter has supported the analyses of formal and informal care in studies II-IV and my concluding discussion.

Formal and informal care in a historical context

The core concepts of this thesis, formal and informal care of older people and the more recent phenomenon of welfare technology did not arise out of a vacuum and are not devoid of connection to the past. Discourses are historically and culturally situated, representing the knowledge of a particular period in time (Gibbs, 2015). Therefore, I include a section overviewing the informal and formal care of older people from a historical perspective, with a focus on Sweden. However, the section does not aspire to be seen as a complete review of the historical literature in the field.

Care of older people from the 14th century to the end of WWI

Odén et al. (1993) stated that there can be no doubt that the responsibility for the care of older people relied on the family and heirs in medieval society, as stipulated by legislation. In the classical work “Family forms in historic Europe”, Gaunt & Wall (1983) wrote that only three laws in medieval Sweden specified an obligation to care for older parents; these were Uppland, Västmanlanna and Södermanna landscape laws. In the mid-14th century, this was incorporated into the law for the realm. There was an option for older people to bring a gift to the church and receive care in return, which was called; the soul gift. The monasteries also had rooms for people without family or livelihood, offering a way for the public to support the poor, thereby investing in their own eternal life. A system based on the catholic religion that ended in the 16th century (Gaunt & Wall, 1983). The multigenerational households started to disappear in the 16th century and instead, older people were referred to contracts, which secured the right to food and housing when ownership was ceded, to secure support and care in old age (Odén et al., 1993). From the 17th century, the picture of the rural living population started to emerge with the retirement caretaking agreements for retired peasants. This system, where older peasants transferred the land to a younger generation in exchange for food and care, did not always work out well, as conflicts between generations reoccurred (Guant & Wall, 1983). In the agricultural society, productive capacity and food consumption were key factors that changed with family composition. As the population grew in the 18th and 19th centuries, followed by crop failures and farms with sometimes several caretaking agreements, the system became unsustainable (Gaunt & Wall, 1983). Data points to positive caring relationships, but there is also data pointing to conflicts and violence between generations (Odén et al., 1993). Nilsson & Eriksson (2020) investigated female violence with a particular focus on the 19th century. They described tensions and violence following property transfer from one generation to the next.

In 1752, the first hospital opened in Sweden. However, it is important to note that these were not dedicated to the needs of older people. Instead, the focus was on curing and rehabilitating sick younger people to ensure the supply of the growing need for labour (Odén et al., 1993). In 1763, the legislation stated that people suffering from long-term illness and old age should be cared for by their home parish (Carlström, 2005). During the 19th century, there was a population increase but also an increase in poverty. The legislation focused on caring for the poor (often those lacking families to provide for them) in what was known as the poor house. As a reaction to the harsh legislation and the situation in the poorhouses where older people were mixed with individuals with mental illness or chronic disease, a committee was formed and based on a private donation, an inquiry was launched in 1904 (Edebalk, 2022).

Improvements in eldercare (1918-1990)

In 1918 the poorhouses were replaced by eldercare facilities or homes for the aged as the name was changed to (Carlström, 2005; Edebalk, 2011, 2022; Gaunt & Wall, 1983). However, the facilities were small, and the municipalities had difficulties recruiting staff, especially in the more rural areas, and the housing standards were often severely substandard. The criticism of the homes for the aged was vividly articulated in both radio, journal articles and later a book by the journalist Ivar Lo Johansson[5] where he described vivid images, including paternalism from care workers, and older people living in passivity, with a loss of zest for life and deprivation of human dignity (Edebalk, 2011). The strongest opponents to this criticism were found among the National Board of Health and Welfare Sweden (Edebalk, 2022). 1949 was a pivotal year in this regard when the opinion swung, and the movement for ageing in place started (later expressed as the leading principle in the governmental proposition 1957:38), supported by the newly formed pensioners' organizations with governmental propositions in the '50s (Edebalk, 2022; Gaunt, 1995; Odén et al., 1993). Home help was introduced and expanded based on housewives who worked part-time for a non-market-based salary (Edebalk, 2011).

During the years of GDP growth, as the welfare state expanded, there were no explicit priority issues. Policymakers agreed that older people should receive care of good quality. The social profile among the care recipients was no longer only those who lacked family or resources, it was for all citizens, which was the explicit purpose of the 1956 Social Services Act. It is important to note that the obligation for adult children to provide care and financial support to older parents was removed from the legislation in 1956. The home help workforce changed as the supply of housewives working part time decreased, and costs increased. When the growth slowed down in the '70s, older people's care became more of a political issue again. However, despite a shift of government during the 70's, there were no clear ideological differences seen in the eldercare (Edebalk, 2022; Johansson et al., 2018; Odén et al., 1993).

In 1980, due to growing problems between the county councils and the municipalities, the government commissioned an inquiry to investigate the need for coordinated efforts for older people. The proposition in 1988 paved for the so-called Ädel reform, where the municipalities were handed the responsibility to provide health and social care for older people and around

---

[5] Lo-Johansson, I. (1949). *Ålderdom*. Stockholm: Koop. förb.

55 000 employees gained a new employer (the municipalities) (Carlström, 2005; Edebalk, 2022). This was the start of reducing the institutionalized eldercare, where hospital beds and nursing home beds were significantly reduced, a development that took place at the same time as the amount of older people increased (Johansson et al., 2018). However, this reform's most significant characteristic feature was a change in perspectives. The medical view of the person had to stand back for a more social view based on theories from social work (Vingare, 2019).

Decades of crisis and austerity (1990-2010)

During the economic crisis at the beginning of the ’90s, public spending decreased, and austerity was considered necessary. In 1997, the nurse assistant Sarah Wägnert drew media attention to cases of neglect in the care of older people and following other alarms of neglect, the government increased the resources and launched a national action plan for eldercare (Proposition 1997/98:113) (Edebalk, 2022). The role of informal carers as resources in the care of the older person became more visible when municipalities had to prioritise those with the greatest needs without access to informal care support (Vingare, 2019). Johansson et al. (2018) showed that from 1975 to 2009, formal care services for older people decreased. Further, the authors (2018) highlighted how the self-reported needs for help and support have also dramatically decreased over the last 50 years, a trend that is explained by improvements in health status, economy, housing conditions and other community services. In 2001 as a response to the increased role of informal care, an amendment was made to the Social Services Act urging municipalities to provide support for informal carers and as part of the aforementioned action plan, the municipalities received a yearly governmental stimulation grant starting from 1999-2001, in what was called “Informal Carer 300” (Edebalk, 2022). This grant was so called because 300 million SEK in total were available for development projects to stimulate the development of support for carers in the municipalities (NBHWS, 2002).

At the beginning of the new millennium, eldercare was faced with more savings in public spending and despite growing numbers of older people there were fewer beds in nursing homes and only a slight increase in older people receiving home help (Edebalk, 2022). Birkelöf (2009) revealed how the rights-based law for “impaired individuals”- people living with extensive and permanent functional disabilities (LSS- Support and Service for Persons with Certain Functional Impairments) unintentionally had the effect of crowding out public spending on eldercare when the municipalities had a strained economic situation. The ageing-in-place ideal from the 50's thrived as more older people with more complex needs were provided home help, and it is important to note that more or less all municipalities weighed in the access to spouse or adult children for help with domestic work, as part of the needs assessment (Edebalk, 2022). Since the pressure on informal carers increased, the government continued with a further government grant to stimulate the development of support for informal carers, and the parliament expressed a wish to strengthen the social services act to an obligation for the municipalities to provide support for informal carers. Something the municipalities' association (Kommunförbundet) was strongly against, as it was considered an intervention in the local self-government (Edebalk, 2022).

The mid-right wing parties (Alliance for Sweden) won the 2006 election and emphasized the renewal of health and social care by introducing choice in eldercare. Vingare (2019) wrote that the liberal reforms in eldercare had turned older people and their carers into coordinators of care rather than recipients of care. Informal care of older people changed towards speaking for the older next-of-kin in contact with authorities, checking there was sufficient quality in the care and coordinating services, while at the same time supplementing the formal home care. This could be seen as a challenge due to the lack of a legal base or framework for the informal carers to represent the older care recipient (Johansson et al., 2018). In a proposition (2008/09:82), the government made it an obligation for the municipalities to provide support for informal carers. Knowledge dissemination was considered a key factor for strengthening the quality of eldercare and therefore, the Swedish Family Competence Centre (SFCCC) and Swedish Dementia Centre (SDC) were established and funded by government grants (Edebalk, 2022).

The shortcomings of formal elder care (2010-2022)

In the last decade, the decrease in the number of beds in nursing homes has slowed down, and the proportion of older people having some form of public eldercare has also decreased (Edebalk, 2022). National population surveys conducted in 2012 (NBHWS, 2012) and 2018 (NBHWS, 2020) revealed that while the share of informal carers in the adult population remained largely the same, nevertheless there was an increase in the amount of caregiving activities provided by informal carers. The pandemic in 2020 turned the spotlight on the shortcomings of public eldercare. The appointed Corona Commission (2020) pointed to several weaknesses in the health and social care system. Namely, a fragmented organization in the care of older people with three different levels and 311 responsible authorities, something the Ädel reform tried to remedy, yet insufficient coordination and responsibility have prevailed. The Commission highlighted how the regions and municipalities that had implemented the reform "Good quality, local healthcare" (Committee of Inquiry for Coordinated Development for Good Quality, Local Health Care, 2020), had to a greater extent better channels for communication already in place. The Commission also pointed to already well-known challenges in terms of insufficient staffing, a lack of continuity and the need for nurses to be present in daily care, urging the government to seek a solution. The Commission also highlighted how regions' responsibility for providing primary care physicians in municipal care was not deemed to be sufficient.

In response to the isolation of older people in care homes, the Commission underscored the importance of family being allowed to visit and how leaving older terminally ill people alone in the final time of their lives was unacceptable. Regarding welfare technology, the Corona Commission (2020) concluded that it was unacceptable to do remote medical assessments in cases where the patient and family were unknown to the health care professional carrying out the assessment (p. 273).

Based on this historical overview, it is possible to conclude that the care of older people has been a responsibility for the family with weaker or stronger support from the local authorities at different times in history. Even at times of a more robust public responsibility, the role of informal carers has been present, and the repeated crisis in public eldercare has affected informal carers and arguably also impacted on the trust in publicly provided eldercare. Given this historical overview of public eldercare struggling with various challenges, it could be thought that public opinion would favour care from the family as the first choice. However, in opposition to that notion stands the principle of a strong welfare state that has shaped the Swedish society since the beginning of the 20th century.

The welfare state and role of the family

To gain an understanding of formal and informal care for older people from a Nordic perspective, the welfare state is essential for that understanding. There is arguably tension in the views on the role of family and that of society and the view on solidarity and collectivity versus individualism and independence. In the following section, I shed some light on how the role of the family can be understood in the Nordic or social democratic welfare state.

The Nordic countries are well-known for the welfare state; however, there is no accepted standard definition of this concept. It is used as a shorthand for the State's role as a key provider of care services and social transfers (Eikemo & Bambra, 2008). Esping-Anderson's (1990) typology of welfare state regimes divided them into three different groups: Liberal, Conservative and Social Democratic, based on the level of decommodification, social stratification and the role and relationship between the state, family, voluntary sector and the market for providing welfare. Commodification refers to the extent to which workers and their families rely upon the market sale of their labour. Labour became extensively commodified during the industrial revolution. The welfare state decommodified labour when certain services and standards of living became a right of citizenship. Defamilisation, another characteristic of the Nordic welfare state, according to Esping-Anderson, means the degree to which individual adults can uphold a socially acceptable standard of living independently of family relationships. The Social Democratic welfare state, where the Nordic countries are grouped, is historically characterised by universalism, generous social transfers, and redistributive social security system promoting social equality and providing highly decommodifying programmes (Eikemo & Bambra, 2008). However, Esping-Anderson's typology has been criticized, since it is argued that many countries no longer fully fit within the classic typology (see for example, Wennemo, 2020). And even though there are many commonalities, within the Nordic countries, nevertheless there are also differences. For example, Norway has unemployment insurance administered by the State, while Denmark, Finland and Sweden have union-based unemployment insurance. Sweden and Norway have had large sick leave rates despite a high level of health, while Finland and Denmark have had periods with a high share of unemployed (Wennemo, 2020), differences that arguably deserve attention when talking about the Nordic Social Democratic welfare state. Further, Esping-Andersen limited the analysis to formal social rights; however, it can be a limitation not knowing the application of the regulatory framework in practice. For example, the Swedish Social Services Act opens up for interpretations of how the law can be applied in practice (Blomberg & Petersson, 2016).

The historical precondition for the welfare state is the family pattern of Western Europe, which in turn is highly interesting to consider also from an informal care perspective. This pattern is separate from the rest of the world, with small family units, and younger people getting married later when they could afford their own household. These small units made cooperation outside of the family necessary. Wennemo (2020) stated that the old parishes and, later on, municipalities in the Nordic countries could be viewed as associations that worked in the rural agricultural society. Everyone had insight, and everyone was obliged to provide help but could also expect help when in need. The transformation to an industrialized society made people even more vulnerable to lack of income and poverty, and social reforms took shape following other European examples. The general support and willingness to pay for welfare are high for childcare, healthcare, eldercare, and education, something that is often used in political slogans. The support is less evident for unemployment-insurance and general health insurance (Wennemo, 2020).

However, the small municipalities were not always smooth working associations where everyone agreed, and Berggren and Trägårdh (2015) highlighted a further perspective, emphasizing how the ideas underpinning the welfare state came from a desire to be free from neighbours and family. The welfare state promised independence from other citizens and the in-between institutions, in accordance with the thoughts of Rousseau. The so-called "in-between" institutions like families, charities, corporations and churches became deeply problematic and associated with inequality, hierarchies, and even humiliation. An important exception was the unions.

The social contract in Sweden is based on the pursuit of equality and independence. Swedish society is not based on collectivity but on an alliance between the state and the individual to release citizens from dependence on the family and other in-between institutions (Berggren & Trägårdh, 2015). Through generous access to social services, the welfare state strengthened economic independence and autonomy, both for women as primary care providers and for care recipients (Katzin, 2014). From this follows the state-individualism treaty. While solidarity and equality are accepted values for the social democratic party, the need for independence is not as pronounced or highlighted since it is seen to be too close to egoism and liberal individualism (Berggren & Trägårdh, 2015). Still, the need for independence is the driving force of the state-individualism treaty. But it is not only an escape from social relations but a voluntariness of relations. In the dynamic of the family, the dilemma of dependence becomes clear (Berggren & Trägårdh, 2015).

The welfare state is the framework where care is situated. Fine (2015) stated that a response to the need for care is shaped by and in turn central to culture and further refers to Tronto (1994), who argued that care in our culture is not understood as work but as an emotional activity, traditionally performed in Western history by “slaves, servants and women” (Fine, 2015). The programs for decommodification and defamilisation are distributed via several different governmental systems, among them, and in focus for this thesis, is the Swedish Health and Social care systems.

The Swedish health and social care systems

The Swedish health and social care systems are de-centralised, universal and tax-based. Municipal and regional bodies enjoy considerable financial autonomy from the central government. Regional council- and municipal taxes along with national government contributions, cover around 85% of the costs, the remaining 15% is covered by patient/service user fees. The health and social care are governed on three levels. The central government establishes legislation and national health and social care policy. The 21 regions are responsible for hospital and outpatient medical care, and the 290 municipalities are responsible for social services and institutional as well as home health care (Marczewska, 2011), in line with the 1992 Community Care Reform (Johansson & Schön, 2017). Municipalities and regions’ extensive autonomy arises from local self-government, a concept that started in 1862 and that has been part of Sweden’s constitution since 1974. The principle of local self-government is exercised by political assemblies elected in general elections (SALAR, 2022b).

In 2019, the total health and social care costs amounted to 550 billion SEK, representing 10.9 per cent of the Swedish Gross Domestic Product (GDP). As for all OECD-countries, the share of the GDP spent on health and social care has increased over the last forty years. Sweden, however, is ranked sixth in terms of the percentage of GDP spent on health and social care (Svensson, 2022). Of particular interest for this thesis is the health and social care of older people, accounting for 26% of the total expenditures. Several governmental reports have discussed if and how much the costs for health and social care for older people will continue to increase (see, for example, Municipal Committee of Inquiry, 2020) as more people reach advanced old age. Public expenditures are higher at higher ages, starting to increase from the age of 55-60 on average (Svensson, 2022).

Overview of the Swedish policy landscape regarding care for older people and support of informal carers

In the following paragraphs, I will highlight current policy in health and social care for older people followed by current policy directed to informal carers. These national policies form the context against which the findings in studies II-IV can be understood. Generally speaking, the municipalities need to relate to the designated focus in national policy and the government grants that are specified in this section. I begin with the overarching reform Good quality, local healthcare (Committee of Inquiry for Coordinated Development for Good Quality, Local Health Care, 2020), which aimed to create a more coherent healthcare system and to which all other policy proposals relate. After that follows four policies in the area of eldercare, namely the proposal for an Elder Care Law (Committee of Inquiry Regarding an Elder Care Law and Strengthened Medical Competence in Municipalities, 2022), the report from the National Coordinator for skills supply (Committee of Inquiry for National Coordinator for Skills Supply within Health and Social Care for Older People, 2021), the memorandum for Increased opportunities for the use of welfare technology in eldercare (Ministry of Health and Social Affairs, 2022b), and finally the memorandum from the Welfare Commission (Ministry of Finance, 2021). The policies can be viewed as a response to the long-term care staff recruitment problems and the expected increase in demand for welfare services as outlined in the introduction, thus as expressions of the welfare technology solution discourse. The policies urge the need for creating appropriate preconditions for welfare technology, stating there is a need for changes and amendments to the current legislation to facilitate the implementation of welfare technology.

The policy area for supporting informal carers of older people is finally highlighted, focusing on the newly launched National Carer Strategy, to strengthen a carer perspective (Ministry of Health and Social Affairs, 2022a). In the following section, I describe the overarching reform work in Sweden, including the views on care and how the concept Person centred care came to be central to the reform.

Good quality, local health care and person centred care

The overarching recent major health policy reform "*Good quality, local health care. A reform for a sustainable health care system*" (2020) aimed at creating a health care system that is sustainable across all aspects: social, environmental and economic. It purported that based on strong and adequately resourced primary care, future healthcare will be more equitable and accessible. The inquiry (Committee of Inquiry for Coordinated Development for Good Quality, Local Health Care, 2020) highlighted digitalisation as one of several success factors and the inquiry provided case-descriptions of welfare technology solutions, thereby pointing out the direction for future health and social care, such as video consultations and psychology treatment via internet solutions. A key concept in the reform and subsequent proposals and agreements is person centred care. Winblad et al. (2020) pointed to how the inquiry (Committee of Inquiry for Coordinated Development for Good Quality, Local Health Care, 2020) came to be central for pointing out the direction towards person centred care, though not having that as part of their mission. Several important referral agencies were positive to the proposal. The person centred care philosophy, based within dementia care and rooted in the concept of personhood was first developed and described by Kitwood (1997) and subsequently built on by McCormack (2004). Later it gained increased attention from Swedish health and caring science researchers and policymakers and was further operationalised by Ekman et al. (2020) in their regional research and development centre for person centred care. The central parts of the concept, Person centred care include recognition of the patient's personhood, current experience and life story, a partnership between professional caregivers and the patient and a formal agreement between them. Kristersson Uggla (2020) positioned person centred care as a reaction towards objectification in healthcare, a consequence of increased specialization, standardization and larger scale. The philosophical foundations are placed in the work by Paul Ricœur and Hans Georg Gadamer, forming an ethical basis for the concept (Kristersson Uggla, 2020).

In the latest agreement (2022) between the previous government and the Swedish Association of Local Authorities and Regions (SALAR) following the Good quality, local health care reform, the government emphasised that the aim for the reform requires a person centred approach. SALAR has come to hold a central role in the implementation of the reform and the governance, and Winblad et al. (2020) pointed to how SALAR seems to have large room for manoeuvre in terms of the design of interventions. SALAR conducts their own work focused on person centred care through knowledge dissemination and information to the regions and municipalities. That said, it can be argued that there is still large room for the regions and municipalities to adapt person centred care and the overall reform to their own preconditions (Winblad et al., 2020), thus there can potentially be 311 different ways of operationalizing person-centred care within the Good quality, local healthcare reform (2020), following local self-government. To summarise, since the reform focuses on primary care and healthcare at a distance using digital technology, it can be argued that the reform sets the agenda for how local policy and policymakers relate to care for older people using welfare technology (studies II and III).

Recent policies within health and social care for older people

Turning the focus to the policy directly targeting eldercare, the Committee of Inquiry regarding an Elder Care Law and Strengthened Medical Competence in Municipalities (2022) positioned their proposal as the next step following the Ädel-reform, to strengthen the Swedish eldercare and municipal primary care. The proposal should also be viewed in light of the Covid 19-pandemic and the proposals made in the 2020 report by the Corona Commission (2020) regarding sufficient staffing and a general increase in the level of ambition. In the proposal for an Elder Care Law (2022), several suggestions were made to clarify the mission and content of care for older people. The proposal is thought to strengthen participation for the older care recipient, increase the continuity of care and reduce the need for informal carers to be coordinators of social care and healthcare for the older person. The proposal highlighted the benefits of welfare technology, and even though the inquiry emphasized the importance of avoiding digital exclusion for older people, the ways to achieve inclusion for all nevertheless remain rather unclear. The inquiry (Committee of Inquiry regarding an Elder Care Law and Strengthened Medical Competence in Municipalities, 2022) joined in the advocacy for person centred care in the needs assessment process and implementation.

Prior to the Covid 19 pandemic, the Government appointed a national coordinator to support the municipalities in laying a foundation for sustainable health and social care for older people. The report (Committee of Inquiry for National Coordinator for Skills Supply within Health and Social Care for Older People, 2021) from the inquiry chair included recommendations to ensure skills supply and the necessity to raise the level of ambition in eldercare. The report highlighted that the level of education within long term care needed to be raised, and the report advocated for paid education and secure employment conditions for long term care staff. Finally, the report advocated welfare technology, to improve the situation for both care recipients and staff and increase efficiency. All municipalities were encouraged to adopt a politically anchored plan for the implementation and use of welfare technology in the care of older people (Committee of Inquiry for National Coordinator for Skills Supply within Health and Social Care for Older People, 2021).

The legislative memorandum for Increased opportunities for the use of welfare technology in elder care (Ministry of Health and Social Affairs, 2022b) came as a response to a previous inquiry regarding welfare technology in eldercare (SOU 2020:14), which stated the need for clarification regarding if and how welfare technology could be used in social care. The proposal (Ministry of Health and Social Affairs, 2022b) suggested an amendment to the Social Services Act (2001:453), clarifying that digital technology can be used in eldercare. The proposal especially discussed remote monitoring and suggested how the access and storage of personal data should be regulated (Ministry of Health and Social Affairs, 2022b). The proposed legislative change can be viewed as a way to facilitate the implementation of remote technology for remote supervision and speed up the implementation process. Studies III and IV duly highlighted and discussed the issue of remote monitoring (see Findings section).

Finally, the Welfare Commission (Ministry of Finance, 2021) was commissioned to identify and analyse measures to strengthen the municipalities' ability to provide welfare services of good quality. The Welfare Commission highlighted age composition as central to the development of welfare and how an ageing population will entail a cost increase and possibly a funding deficit. Digitalisation and welfare technology were considered necessary, but the welfare commission also emphasized the need to investigate support for financially disadvantaged municipalities and regions. This report helped to form an important part of the understanding of the findings in studies II and III regarding the high expectations and positioning of welfare technology in the care for older people.

Taken together, the policies can be viewed as expressions of the welfare technology solution discourse pointing out the direction for the municipalities regarding formal care of older people. Edebalk (2022) highlighted how recent national policy proposals might entail cost increases, but if the funding issue cannot be resolved in the municipalities, cutbacks will take place, and the informal carers risk having an even greater responsibility (Edebalk, 2022). This leads to the next policy area, namely policy with regards to support for informal carers.

Informal care policy

Turning to policy in the area of informal care, as outlined above, the responsibility for adult children to provide and care for their parents was removed from Swedish legislation in 1956. In Sweden, the municipalities carry the responsibility for inhabitants to receive the support and help they need, according to the Social Services Act (2001:453) (Katzin, 2014). In 1998, the municipalities were given a voluntary commitment to introduce support services for informal carers. In 2009, it became mandatory for the municipalities to offer support for informal carers via changes in the legislation. However, this legislation did not change any legal obligations for carers to provide care (Katzin, 2014).

Katzin (2014) argued that social care for older people has seen refamilisation, where the welfare state has returned to an ideology positioning the family as the primary caregiver and where the State only steps in when the resources in the family are exhausted, a reasoning also supported more recently by Alftberg (2022). In 2020, the NBHWS published the first of two extensive preparatory reports (NBHWS, 2020) regarding informal carers. In 2022, the Swedish government adopted the first National Carers Strategy (Ministry of Health and Social Affairs, 2022a). The Strategy aims to strengthen an informal carer perspective in health and social care, meaning that public care providers on all levels should recognize and listen to informal carers, keep them informed and be aware of the efforts made by informal carers as well as pay attention to the informal carers' needs. The Strategy (2022) emphasized the role of the healthcare sector in identifying and reaching out to informal carers. Following this strategy, the government commissioned the NBHWS to create support for decision-makers, and managers in health and social care and employers, and to aid administrators and other health and social care staff in implementing the Strategy. The support was stipulated to guide management, governance, knowledge, competence, collaboration and coordination to strengthen a carer perspective. In short, a carer perspective means, based on a family-oriented approach, to view informal carers as partners in care, keeping them informed, and for health and social care professionals to have knowledge of the concept of informal care and to highlight and assess the support needs of informal carers (Carers Sweden, 2021).

This could be seen as another expression of the refamilisation, as suggested by Katzin (2014) and Alftberg (2022). However, the Strategy explicitly stated that caring for individuals with a care need is fundamentally the duty of the public sector, and any informal care should be deemed as voluntary (Ministry of Social Affairs, 2022a, p.6). The obligation to support informal carers of older people is seen to be further emphasized in the recent governmental inquiry regarding an Elder Care Law and Strengthened Medical Competence in Municipalities (2022), which taken together couldbe seen to strengthen the right to support for informal carers.

To summarise, this section has provided a summary of the main Swedish health and social care policies for older people and their informal carers. The findings in studies II-IV should be regarded in light of these national policies and how they point out the direction for future health and social care of older people and alo point to a change in the approach to informal carers in the health and social care sectors.

Theoretical framework

In the introductory chapter, I stated that this thesis uses the welfare technology solution discourse as a unit of analysis to examine how it can provide insights into society's views of formal and informal care of older people. This approach entails certain ontological and epistemological assumptions.

In this chapter, I outline the ontological and epistemological points of departure where social constructionism serves as the theoretical framework for this thesis. Adopting social constructionism as the theoretical framework implies that the key concepts; older people, informal carers, informal care and health are not ascribed any form of essence, instead they are regarded as socially and politically constructed concepts based on both explicit and implicit norms, social practices, perceptions and assumptions. Following this, I describe and exemplify how discourse analysis provides the more specific theoretical point of departure, seen to assumptions about key concepts on which this thesis is based. In the final paragraph of this chapter, I provide an example of a discourse in the field of technology for older people, which I've related to, as a way to form my understanding of the welfare technology solution discourse.

Ontology

Ontology engages in the perception of the nature of reality. Starting from the well-founded claim that an objective reality exists, it is reasonable to assume that factors such as power and economy affect priorities and perceptions within social sciences and also natural sciences to a certain extent (Sturmark, 2015).

This thesis is based on social constructionism, meaning that nothing can be a research problem if no one perceives it and describes it as such. The subjective definition is a necessary condition to be able to speak of a problem. Comparing objectivism with social constructionism, there is a difference in the choice of research questions. While more objective approaches focus on the prevalence and trends of a phenomenon, constructionist approaches focus on the ideas underpinning the phenomenon and suggested interventions and how these might be made legitimate (Sahlin, 2013).

A phenomenon, like informal care or the long-term care of older people, for example, can be considered a problem in one society, and as insignificant in another. A certain way of doing things can be considered respectable in one culture, reprehensible in another, and uninteresting in the third. Social constructionism is interested in the processes of construction, suggesting that a phenomenon can pose a problem despite not being real. Constructions can in themselves, cause problems (Sahlin, 2013).

Hacking (1999) argued that the questions about what is constructed must be given different answers depending on whether it is about physical things that in themselves cannot be affected by constructions, or if it is about ideas and knowledge that do not exist before being constructed.

It is, however, a challenge to keep a strict constructionist approach due to the contradictions involved. Sahlin (2013) proposed to use provisional realism, meaning that the researcher can treat a particular phenomenon, like gender or ethnicity, as objectively existing temporarily whilst investigating the phenomenon in focus. It is hard to conduct the analysis without such realism, given that ontological assumptions are embedded in language (Sahlin, 2013).

Epistemology

By adopting social constructionism as a theoretical framework, it entails the knowledge claim that knowledge is socially constructed and, therefore, cannot provide an objective reflection of the phenomenon. No knowledge is considered independent from its historical and cultural context or the stakeholders' social position and perspective. Even if accepting an independent existence of a phenomenon, it is not self-evident how the phenomenon should be interpreted or classified. That means, society's views on formal and informal care are dependent on the historical and cultural context and reflect current power positions in society.

Interpretation and classification are a form of power exercises. In a given society, there are a number of interpretation options available for challenges on both individual and societal levels (Sahlin, 2013). However, it is rarely up to the older person or the informal carer themselves to choose how the challenges should be interpreted. The idea of social constructions is important when analyzing the society (context) in which we live. However, to confuse social constructions with reality can become problematic (Sturmark, 2015), for example the traditional construction of older people as a negative stereotype has been shown to have a negative impact on the health of older persons (Chang et al., 2020). Hacking (1999) explained that the idea of social constructionism has been liberating and opened us up to know more discursive possibilities or to question dominant discourses (namely, the welfare technology solution discourse, in this thesis). However, Hacking (1999) also made the important point that social constructionism can be reifying and become reductionist if the analysis is reduced to merely the social constructions overlooking all other factors, such as biological, psychological, medical and so on, and that the analysis disregards any other reading outside the social constructionist perspective that might be possible in any given situation.

Given that there is no consensus on overcoming the epistemological challenges in constructionism, it is reasonable to be humble and careful when formulating research questions and presenting the results (Jönson, 2008).

In this thesis, I use social constructionism as the theoretical framework. Social constructionism makes it possible to use a discourse, in this case, the welfare technology solution discourse, to form an understanding of how key subjects and objects are framed within a discourse by different actors and stakeholders. Analysis of discourse, language and narratives makes it possible to highlight underlying assumptions, perceptions, values and power relations within formal and informal care of older people. Therefore, I will now describe how I've used discourse as a theory in this thesis.

Discourse analysis

This section concerns discourse analysis as theory, not as a particular method. Discourse analysis rests on two key premises; that language is not simply descriptive but a social activity in itself. And secondly, language is influenced by and influences wider society, especially power structures (Gibbs, 2015).

What is a discourse, then? A discourse is an institutionalized way of thinking affecting our views on all things, with social boundaries for how to speak about a certain topic. In other words, the chosen discourse delivers the vocabulary, expressions and style needed to communicate (Gibbs, 2015). The discourse in focus for this thesis, referred to as the welfare technology solution discourse, are visible in policy documents, in media, in statements from politicians and public officials, and from producers of technology, all communicating their ideas regarding the use of welfare technology in health and social care.

Michel Foucault is the philosopher most strongly associated with the theory. Through classical works like *Madness and Civilization* (1961), *Discipline and Punish* (1975) and *The History of Sexuality* (1976), Foucault showed how questions of power, knowledge and discourse can be highlighted and analysed using discourse analysis (Bergström & Ekström, 2018). Following this tradition, it is possible to state that discourse is everywhere, in the social practices which shape and influence what we do, all practices have discursive aspects (Hall, 1992). For example, the way older people and their carers interact with health and social care workers has changed over the decades, depending on shifts in legislation, the view on informal carers, and the cutbacks in health and social care services.

Discourse analysis has been critiqued for opening up for relativism, making it problematic to separate what constitutes facts and what does not. However, in response to this, representatives of discourse analysis point to how the theory offers analytical tools to approach and analyze “alternative facts” (Bergström & Ekström, 2019).

As aforementioned, discourse aims at social practices. In this thesis, the social practice in focus is the health and social care for older people and their informal carers. The various sources of data like research articles (Study I), policy documents (Study II), and statements from policymakers and politicians (Study III) are seen as expressions of the welfare technology solution discourse. In the final Study IV, older people, represented by the pensioners’ organisations, offered their perceptions and positions on this social practice and the consequences it entails for older people as care recipients and for informal carers.

The welfare technology solution discourse says something claiming to be the truth about this topic. More precisely, it says something about society’s views of older people and their informal carers, and it says something about the views on health and care for older people. These claims for truth constitute power-relations, illustrated in subject positions. Power is exercised in relations, entailing limitations for some and opportunities for others (Bergström & Ekström, 2018; Gibbs, 2015). It is possible to ask what subject positions are available for older people and their informal carers? In studies II and III, the subject positions are explained and analysed in more detail.

The ageing and innovation discourse

In Study II, I described the characteristics of the welfare technology solution discourse, as evident in Swedish health and social care policy. As an analytical point of reference, I used the Ageing and innovation discourse which describes how international research positions ageing as a problem and technology as a possible solution (Neven & Peine, 2017). This discourse uses a powerful rhetorical combination, stating that new technology will provide a triple-win for 1) older people, 2) society and 3) private investors and companies (Oudshoorn et al., 2016). This discourse is not neutral but affirms normative role models and values (Neven & Peine, 2017). Neven and Peine (2017) argued there are three major problems with this rhetoric, used at all levels of government, and that these problems risk leading to the development of technologies that are unfit to use by older people. First, the discourse makes every technological development related to ageing legitimate and relevant and offers no means to assess the quality of the technology. Second, the discourse relies heavily on images of the fourth age (fragility, forgetfulness, illness, weakness and incompetence), in its views of older people. The authors (2017) argued that such a view makes it easier to get governments involved and motivate investments. Technologies based on this discourse run the risk of stigmatising older people as old. And third, the discourse has explicit moral content. Innovations for older people are positioned as something good and come as a solution to a societal problem and to the aid of vulnerable older people. They are thereby creating a moral high ground for the discourse, making it hard to question, for instance, in regard to investment of large sums of money (Neven & Peine, 2017). In the analysis of Study II, I related the Ageing and innovations discourse to the discourse evident in the Swedish policy context, what I refer to as the welfare technology solution discourse.

Material and Methods

In this chapter, I describe and reflect on the design, methods, study participants and the process of collecting and analysing the empirical material within my four PhD studies. Since I seek to understand society's view of formal and informal care for older people, this thesis has an overall qualitative, inductive and flexible research design. Flexible in the sense that the studies have been allowed to evolve during the course of the thesis. A qualitative design considers knowledge as situational and context-bound, and the design strives to form an understanding of the human condition and explain how things have developed in a certain way (Given, 2008). The research design rests upon the ontological and epistemological positions; social constructionism and discourse analysis outlined in the previous chapter. The historical background of formal and informal care of older people, the family's role in the welfare state, and recent policy development play a vital part in contextualizing and situating the main findings of the thesis, thereby helping to form an understanding of society's view of formal and informal care of older people as seen through the lens of the welfare technology solution discourse. The analysis rests on narrative descriptions and interpretations of the empirical data supported by relevant literature in the field. The chapter ends with a section describing the ethical considerations related to my PhD studies.

Methods, participants, data collection and analysis

As an introduction to the methods section, I begin by providing an overview of studies I-IV (see Table 1). The methods employed can be found in the left column; all four studies employed qualitative methods. The next column outlines the context or settings for each study, beginning with the international context, followed by two studies within a local context meaning Swedish municipalities, and ending with the regional context meaning study settings in some of Sweden's 21 regions. This is followed by a column describing the empirical material with temporal demarcations, followed by the sources of data and approaches to data collection. The final column describes the methods for data analysis.

Table 1. Overview of study methods, context, sample, data collection and analysis

	METHOD	**CONTEXT**	**DATA SELECTION/ PARTICIPANTS**	**DATA COLLECTION**	**DATA ANALYSIS**
I	Qualitative knowledge synthesis	International context	Original peer-reviewed research articles 2013-2018	PubMed, Scopus, Web of Science, Cinahl and Psychinfo Hand search of key journals	Scoping review with thematic analysis of results using the WHO framework of healthy ageing
II	Qualitative Discourse analysis	Local context	Local policy documents 2018-2020	Relevant policy documents collected from 8 municipalities	WPR[6]-method
III	Qualitative Discourse analysis	Local context	Local politicians chair of the health and social care committees 2021	12 individual interviews via video-conference	Poststructural Interview analysis
IV	Qualitative Focus groups	Regional context	Board members of the two largest pensioners' organisations 2022	4 focus-group discussions with 33 participants	Process for analysis of focus group discussions[7]

---

[6] "What's the Problem Represented to be" method (WPR) is an analytical tool developed by Carol Bacchi (2009).

[7] Krueger, R.A. & Casey, M.A. (2015). Focus groups: a practical guide for applied research. (5. [updated] ed.) Thousand Oaks, Calif.: Sage Publications.

Ivanoff, S. D., Duner, A., Eklund, K., Wilhelmson, K., Lidén, E., & Holmgren, E. (2018). Comprehensive geriatric assessment of frail older people: ideals and reality. Journal of Interprofessional Care, 32(6), 728-734.

Methods, sample and data collection

Study I

The first study employed a qualitative knowledge synthesis design, with a scoping review method (Arksey & O'Malley, 2005), to map the scope and extent of international empirical literature describing interventions for older people and (where applicable) informal carers, using Ambient Assisted Living technology, and where health-outcomes were assessed.

In a Scoping review (Arksey & O'Malley, 2005), it is important to reflect on how to interpret the information. The scoping review method does not appraise the risk of bias or methodological quality (even though some reviews usefully add those features to their analysis), and the method allows for the inclusion of grey or policy literature. In Study I, a decision was made to solely include peer-reviewed articles as a way to delimit the scope. It is important to note that a scoping review is not a method for evaluating the effectiveness of any particular intervention, and the results should be viewed as an overview of the research field pointing to the research gaps as opposed to answering the question; What works? It is a method that is particularly relevant for identifying how research is conducted, as well as for identifying and analysing knowledge gaps in newer fields of research (Munn et al., 2018), and was therefore deemed suitable to the aims of Study I.

Five electronic databases were searched: PubMed, CINAHL, Web of Science, PsychInfo, and Scopus. A further seventeen scientific journals were hand-searched via Browzine (a web-based software tool that compiles peer-reviewed journals from various publishers). The searches were conducted between June and October 2018 and updated in November 2020. Inclusion criteria were studies published within the last eight years, written in English, with study participants aged $\geq$ 65 with health or care needs and where applicable their informal carers. Studies with a single focus on informal carers were excluded to delimit the scope, as well as studies focusing on technology that was solely a working tool for health and social care staff.

Study II

The second study was a discourse analysis based on the poststructuralist tradition. This tradition proposes that the realities we live in are contingent, open to challenge and change. Social policy is a highly normative discipline that constructs ideal models of society (Bacchi & Goodwin, 2016). The method is considered well-suited for analysis of the normative and complex domain of social care (Daly & Westwood, 2018). The policy documents for this study were collected from 8 Swedish municipalities. The municipalities were randomly chosen based on the SALAR classification system (SALAR, 2016). SALAR's classification defines three main categories (A, B and C) and nine subcategories of municipalities, distinguishing larger cities and towns from smaller and more rural municipalities. The policy documents were on both political and administrative levels in the time span of the last two years when the study was conducted (i.e., 2018-2020). The data collection process started with emails with follow-up phone calls to local officials, together with searches on the selected municipalities' websites. The policy documents were retrieved according to the Principle of Public Access[8] to official documents as stated in the Freedom of Press Act (1949:105).

Study III

The third study was also a discourse analysis, but in this case, the empirical material consisted of semi-structured interviews with 12 local politicians who were chairs of the health and social care committee in their respective municipalities. The rationale being as Marland and Esselment (2019, p.686) eloquently argued; "*In a world of message discipline and fake news, and with researchers turning to other sources of data, uncovering insights via unmediated conversation with officeholders is arguably more relevant than ever*".

We used purposeful sampling, a technique used for the identification and selection of information-rich cases (Patton, 2002). Using the analytical tool SEKOM (Statisticon, 2021), it was possible to identify municipalities with larger socioeconomically disadvantaged groups. In the orange SEKOM group, there are 54 municipalities characterized by diversity and heterogeneity from a socioeconomic point of view, with a high proportion of the population born outside the EU. We consulted expert associate professor Erik Wångmar (political scientist, Linnaeus University), who

---

[8] For more about the Principle of Public Access in Sweden, see: Ministry of Justice (2020) *Public access to information and secrecy. The legislation in brief.* https://www.regeringen.se/contentassets/f381325faa3b41dc859080a0b1b4c994/public-access-to-information-and-secrecy.pdf

suggested that we divided the municipalities into three geographical groups, south (Götaland), centre (Svealand) and north (Norrland) to ensure that all parts of the country were represented. Wångmar then generously shared his extensive material overviewing the 2018 election results, thereby making it possible for us to approach 2 left-wing and 2 right-wing local governments in each geographical group, in total 12 municipalities.

Seven municipalities declined participation, and to maintain an even representation of both geography and political spectrum, we invited one municipality from the Green SEKOM group to participate. The group is similar to the orange group but has a larger share of older people and fewer people with an immigration background.

The interviews were conducted via videoconference during the Autumn 2021 when there was one year left in office for the local politicians. The interview guide was organized around four themes, namely 1) An ageing population and welfare technology 2) Welfare technology and informal carers 3) Welfare technology and health inequalities and 4) Future development of welfare technology in the health and social care of older people. With participants' permission, the interviews were recorded using an external device, there were no files saved in the video-conference software.

Study IV

In the final study, we employed a qualitative inductive design. The empirical material consisted of four focus group discussions (Krueger & Casey, 2015) with board members from the district assemblies of the two largest pensioners' organisations in Sweden; the Swedish National Pensioners' Organization (Pensionärernas riksorganisation, PRO) and the Swedish Association for Senior Citizens (SPF Seniorerna). The organisations together have approximately half a million members, and position themselves as politically independent according to statutes, however, they can be placed on the left/right scale with PRO on the left and SPF on the right (Feltenius, 2008). We approached the district assemblies in a medium-sized region and in two population-wise larger regions. The pensioners' organizations have published position papers and statements, and they have representatives in governmental inquiries and advisory boards on all levels of government. The two organisations have approximately half a million members. The board members of the pensioners' organizations were considered to represent their members, thus with a democratic mandate to speak for these groups. The reason for choosing them to represent the voices of older people was because they are familiar with recent policies in health and social care for older people, and they have a long history of monitoring and highlighting issues relevant to the interests of older people.

The focus group interviews were conducted during face-to-face meetings, apart from one focus group that took place via video conference, as this was the preferred arrangement of the particular board in question. The discussions were recorded using external devices, and there were no files saved in the video-conference software. Focus group interviews are a method held in an informal setting with the purpose of collecting information on a designated topic. The data is generated through interaction and discussions (Krueger & Casey, 2015). The discussion was moderated by the first author (MN), and the second author (SA) participated as an assessor, who kept the time and asked for clarifications, as necessary, during the course of the discussions. The groups were encouraged to share their views and discuss freely.

The interview guide was based on the three previous PhD studies and was theoretically underpinned by the poststructural discourse analysis employed in studies II and III. The interview guide had three themes 1) how and in what way their members had been affected by the implementation of welfare technology in terms of economic consequences, democratic consequences, and consequences related to health (if any)? 2) How and in what way had their members who were also caring for a loved one been affected (if any)? 3) Where does the discursive power and subsequent driving force for the implementation of welfare technology lie, as they perceive it? And who, from their perspective, shapes the agenda and points to what is problematic and how should it be solved? Is it older people themselves, politicians, health and social care professionals or others?

Data analysis

Study I

In the first study, the analysis began by using a descriptive-analytical framework (Pawson, 2002) as a charting table for data extraction. The following information was collected: author, year of publication and place, participants, age-range and setting, intervention content and aims, the methodology employed, outcome measures and summary of key results. The studies were then labelled and categorised based on the aims of the intervention studies. In the second phase of the analysis, the framework for healthy ageing (WHO, 2015) and in particular the five domains of functional ability, were used as a critical lens to analyse if and how the categories corresponded to the WHO framework. This was done by looking at how WHO (2015) described the domains, where the focus was and what was pointed out as central for that domain. These key points were then compared with the aims of the interventions, to see to what extent (if any) they were in agreement. The WHO framework was chosen since it offered a holistic and relatively new (at the start of the study) approach to ageing and health, not restricted to a biomedical perspective but also including a broader environmental perspective. In the final phase of the analysis, the studies were analysed to identify if and to what extent (if at all) informal carers were included and assessed for health outcomes, that is, if the studies applied a dyadic approach. We also identified all studies where informal carers were mentioned, even if they were not assessed for any outcomes. These studies were marked in the descriptive-analytical framework with a short description of the role the informal carers had in that particular study.

Study II

In the second study, 61 documents were collected and analysed. To guide the analysis, the Foucauldian-inspired, “What’s the Problem Represented to be” method (WPR) was used as an analytical tool (Bacchi, 2009). The method offers six analytical questions to identify and unpack the shape and character of problematisation in policy. After initial close readings of the policy documents, all documents were uploaded to the NVivo software program (QSR International, 2021). Via a coding process in NVivo, discursive constructions of older people, informal carers and health were revealed and further examined using Bacchi’s (2009) analytical framework. The analysis was guided by the following four questions:

1) What’s the problem in local policy concerning health and social care for older people and informal carers represented to be?
2) What deep-seated presuppositions or assumptions underlie this representation of the problem?
3) What is left unproblematic in this problem representation? Where are the silences?

4) What discursive, subjectification and lived effects are produced by this representation of the “problem”? (This is not a question of measuring ‘outcomes’).

In the analysis, we reflected on the meanings of the categories: older people, informal carers and health in old age. In line with the method, these categories were considered constructions and proposals rather than fixed natural given categories. The suggested meanings of the categories were discussed in relation to previous empirical research. According to Bacchi (2009), the task is to question and challenge the ideas proposed in the policy text, to open up for alternative representations of the problem.

Study III

The third study also employed a discourse analysis following Bacchi and Goodwin (2016), but the analysis in this study was based on their framework for interview analysis, namely the Poststructural Interview Analysis (PIA). This was because the goal was not to reveal any assumed motives, rather the analysis was focused on what was said and how it was considered legitimate or truthful. We took a special interest in the subject positions that Bacchi and Goodwin (2016) called political subjects and political objects. Informal care was an example of a political object that was analysed. Older people and informal carers were considered political subjects, and it was possible to tease out certain characteristics, behaviours and dispositions that were ascribed to these groups. Finally, we identified comments or statements that could be seen to question the welfare technology solution discourse or offer alternative perspectives. The findings were discussed in contrast to existing empirical research and theories trying to open up alternative interpretations and problem representations, similarly to Study II.

Study IV

To gain an understanding of the perceptions and subsequent positions of the board members of the two pensioners’ organizations regarding the implementation and use of welfare technology, we followed the analysis process described by Krueger and Casey (2015) regarding focus group interviews. Data was generated through discussions and group interaction, and after repeated close readings and listenings, preliminary themes were extracted from the transcripts, which summarised the core topics of the discussions. Within these themes, various perspectives and comments were coded and sorted into categories. Keeping close to the aim of the study, all authors discussed the meaning and interpretation of the categories several times. From these categories, it was possible to identify key positions of the group participants as the final interpretative step.

Ethical considerations

This thesis is conducted following the European Code of Conduct for Research Integrity (ALLEA – All European Academies, 2017), emphasizing reliability in ensuring quality throughout the process, honesty and transparency, respect for all parties involved, for the ecosystem, cultural heritage and the environment and accountability for the research from idea to publication. My research has also been guided by the eight rules of proper research conduct (Swedish Research Council, 2017). Namely, that I have told the truth about my research, reviewed and reported the basic premises of my studies, and accounted openly for my methods, results and potential commercial interest. I have not made unauthorized use of the findings. I have duly kept my research organized through documentation and strived to conduct the research without doing harm to people and been fair in my judgement of others' research to the best of my ability. In studies III and IV, concerning research with humans, the research additionally followed the ethical principles according to the Helsinki declaration (World Medical Association, 2000).

All data for Study I was obtained via open public sources such as PubMed, Scopus, Web of Science, CINAHL and PsychInfo. All included studies could be found in the reference list and can easily be accessed.

Data for Study II were obtained via the principle of Public Access (SFS 2009:400), see footnote 8, p. 67. The municipalities that were contacted in Study II were assured that the study would protect their integrity and anonymity. No documents containing personal data of any kind were collected. A list of the complete names of the documents can be accessed upon request since the names of the documents were anonymized whenever the name of the municipality was part of the document title or identification code.

The participants in Study III were elected officials and thus in compliance with Swedish legislation on research ethics concerning humans (2003:460), therefore ethical approval was not formally required. Nevertheless, an ethical assessment and advisory statement were obtained from the Ethical Advisory Board of Southeast Sweden (Dnr. EPK 746 – 2021). The participants were assured anonymity for themselves and for the municipalities they represented. They received written and oral information prior to the interview and gave their full informed consent to participate. The principle of informed consent emphasises the researcher's responsibility to fully inform participants of the nature of the study, the participant's potential role, the identity of the researcher and the financing body, the objective of the research and how the results will be published and used (Sanjari et al., 2014).

In the context of Study III, assuring anonymity for public figures required a more robust approach than simply changing names. Willis (2018) acknowledged that the amount of context given to the data might need to be limited. Study III participants were indeed public figures, and the information about the municipalities is publicly available. The authors strived to maintain a balance of protecting the anonymity of participants while still providing sufficient context for the analysis to be deemed transparent and trustworthy. For example, by providing a detailed summary description of the municipalities in demographic terms.

For Study IV, an application for formal ethical approval was made to the Swedish Ethical Review Authority, which replied that the study did not require formal ethical approval but nevertheless provided an advisory statement (Dnr 2022-02478-01). The focus group participants were provided with written information about the study prior to the respective session, and the information was repeated at the start of the meeting during a short presentation, after which they provided their written consent. The online focus group participants received the same information, followed by their oral consent which was duly recorded.

The storage of signed consent forms (IV), background data (IV,) and audio files with verbal consent, background data and interview material/focus group discussions (III and IV) are regulated by the General Data Protection Regulation (GDPR 2016/679) and protected by provisions on confidentiality under the Public Access to Information and Secrecy Act (SFS 2009:400), which means that no unauthorized person may access the information. The data was stored by the thesis author in a locked fireproof cabinet at the Linnaeus University so that no unauthorized individual can access it. The data will be stored for a minimum of ten years, after which time it will duly be destroyed.

The findings and implications of the PhD thesis will be widely disseminated with the academic community, relevant policy and decision maker stakeholders and wider society following the PhD defence, with the help of Linnaeus University’s and Nka’s communication channels for research dissemination and knowledge translation. In particular, the municipalities providing the documents (Study II) and participants in Study III will be contacted and offered a presentation and opportunity to discuss the findings. Likewise, the participant pensioners’ organisations (Study IV) will be invited to presentations and webinars following the provisional acceptance for publication of the study. The first author will also disseminate the results at conferences organized by the pensioners’ organisations.

Findings

In this chapter, I provide a summary of the findings from each of the studies I-IV. In the following Discussion chapter, these findings will synthesized, followed by suggestions for interpretation and possible explanations to advance an understanding of the combined findings.

Study I

Study I aimed to scope and review the nature and extent of prior intervention studies involving ambient assisted living technology-mediated interventions for older people and their informal carers, and how and in what ways (if any) the goals and aims of these interventions reflected the domains of the World Health Organization framework for healthy ageing. A total of 85 studies were included in the scoping review. The findings provided a map of nine intervention categories. The two largest categories, seen in relation to the number of included studies, were *Exercise to improve physical fitness* and *Activities for social engagement, comfort or well-being*. Using the framework of Healthy ageing (WHO, 2015) as an analytical lens, we were able to show how the field of AAL-technology mediated interventions for older people and their informal carers related to the concept of healthy ageing. The domains “Ability to be mobile” and “Ability to meet basic needs” were mirrored by several intervention categories. However, the domain “Ability to contribute” was not reflected by any intervention categories, which indicated a gap in this rapidly emerging field that stands in contrast to the intentions of the UN resolution (75/131) Decade of Healthy Ageing. This resolution stated the need to provide opportunities for active participation and substantial contributions of older persons in society (UN, 2020). One of the largest categories, *Activities for social engagement, comfort or wellbeing*, could not be seen to reflect any of the domains of healthy ageing (Ability to learn, grow and make decisions, Ability to be mobile, Ability to meet basic needs, Ability to build and maintain relationships and Ability to contribute). We found this to be interesting since the category was made up of interventions directed to the care of people with a diagnosis within the spectrum of dementia. The framework promoted healthy ageing as relevant to everyone (WHO, 2019), thus it was arguably remarkable that the interventions did not focus on maintaining abilities for this group of people.

We then turned the focus to the inclusion and role of informal carers in these studies. We could conclude that informal carers were included to some extent in over half of the studies. However, in most studies where informal carers were included, their situation and health and wellbeing were of subordinate interest. The informal carers were included as potential resources for alleviating professional staff, supporting or providing information about the care recipient in various ways. Only 14% of the included studies assessed health outcomes for both the older person and their informal carers, thereby adopting what we defined as a dyadic approach (Scherrer et al., 2014). Our findings indicated that so far in the empirical research, most technology-mediated interventions have largely failed to recognize the role of caring relationships between the older person and informal carer. As new interventions are introduced, there is arguably an opportunity to change and rethink the approach, but so far, based on the scoping review findings it can be argued that the interventions are not disrupting the underpinning ideas of informal carers as assistants or in a marginalized role, but instead perpetuating them.

The AAL-technology-mediated interventions had an overall focus on the individual, thereby running the risk of overlooking environmental factors affecting the older care recipient. The WHO proposal Decade of Healthy Ageing 2020-2030 (WHO, 2019) stated that healthy ageing is closely linked to social and economic inequity. We noted that this link becomes severely downplayed, following the individual focus in the interventions using AAL-technology.

Finally, the category of monitoring symptoms for self-care was focused on increasing the self-management skills of older people with chronic conditions, thereby decreasing the need for use of healthcare. We acknowledged the importance of access to information and the potential sense of control for older care recipients and their informal carers. However, Schou and Hjelholt (2017) stated that it could also reflect a subtle shift in responsibility from clinicians to the patient her/himself. A shift that could potentially increase the existing inequalities in health as more formally educated and digitally connected groups are arguably better able to navigate the field compared to people with less formal education and smaller social networks.

Study II

This qualitative study analysed 61 policy documents from 8 Swedish municipalities regarding health and social care for older people, including strategies for digitalisation and strategies and position papers regarding support for informal carers. The findings highlighted that the welfare technology solution discourse (stating that welfare technology and digitalisation are vital parts of the solution/s to challenges in the health and social care sector) was present without exceptions. Welfare technology was promoted as a necessary part of older people's future health and social care, without any critical analysis. The role of private investors or private companies was not mentioned at all. The policies were focused on the expected gains for the users and society. Given that private companies often develop innovations using digital technology and arguably attract creative and competent minds to their workforce, we found it surprising that the policy documents failed to mention them as a resource for digital development, in which they so strongly believe.

E-health strategies in the municipalities were rarely concerned with the concept of health. Instead, the strategies could be viewed as propositions of how to solve the issues of an underfinanced care system. Overall, health was treated as a means to avoid future increased costs instead of a value in its own right. Health promotion was exemplified by fall prevention, webcam surveillance, video calls and gaming. We suggested that this focus reflects society's view of older people primarily as potential care recipients as opposed to active contributors to their communities.

Further, the concept of health was referred to in terms of healthy lifestyle, and the policies emphasized the importance of individual responsibility for one’s health. We argued that this approach overlooks how socioeconomic differences throughout the lifecourse may play a significant role in the ageing process (Graham, 2007). For example, factors stemming from circumstances out of individual control for the older person, such as working life conditions, unemployment insurance and structural changes in the labour market, structural discrimination or environmental changes.

We also noted that the discursive construction of older people was built on the presupposition that older people are at risk for dependence and passivity. The group was referred to as a homogeneous group with ever-increasing needs for care and support. The policies emphasized independence for older people, a term equivalent in these policies to ageing in place. In this way, the policies prescribed the expectations of the older person, describing the desirable outcome of independent and active older people living in their own homes.

The policies further emphasized how digital technology is expected to contribute to increased safety and security for older citizens. However, the meaning of safety and security varied. Ljunggren (2015) wrote about emotional politics using safety and security in opposition to anxiety as a rhetorical strategy for the Social Democratic party during the building of the welfare state. In the policies in Study II, the use of safety and security was reoccurring, and a suggested interpretation is that the policies strived to capture a sense of anxiety among older people and their informal carers and as a response, pointed to how digital technology offers safety and security. Thus, digital technology is transferred into welfare technology, by incorporating the vision of safety and security, a core value in the social-democractic welfare state model.

Finally, informal carers were discursively constructed in correspondence with the classic work of Twigg & Atkin (2002) and their typologies of "carers as co-clients" and "carers as resources". "Carers as co-clients" refers to seeing informal care as burdensome and the informal carer as an additional care recipient in need of support, overlooking any aspects of meaning or reciprocity for the informal carer arising from informal caring. "Carers as resources" refers to how the health and social care sector take the caring efforts of the informal carer for granted, without any concern for the needs or preferences of the informal carer her/himself (Twigg & Atkin, 2002). We found it somewhat surprising that digital technology was absent in the policy documents concerned with support for informal carers, despite the overall high expectations of digital technology visible in the local policies. A suggested interpretation is that informal care is not a priority in local policy, and rather than considering the potential of digital technology supporting informal carers, the implicit idea is that digital technology can replace informal care in the long run. This thinking is in line with Twigg & Atkins' (2002) typology of the "superceded carer", in which the formal care sector completely takes over the informal carer's role without consulting with or including them in the care process of the older person.

Study III

The findings in this study were based on individual interviews with 12 local politicians chairing the health and social care committee in their respective municipalities. The participants described welfare technology as Sweden's salvation to meet the expected imbalance between formal care skills supply and demand for long-term care services. Independence, autonomy and activity were all key values tied to the welfare technology solution discourse, values echoing from the WHO's (2002) Active Ageing theory. This theory has been criticized for prescribing an ideal of ageing without regarding inequalities related to race, ethnicity or gender, for example. Welfare technology was promoted as highly valuable for preventive purposes. It was worth noting how the participants did not discuss potential gains of welfare technology for older people with more extensive care needs living in nursing homes. The focus was on older people living in their own homes, and it is reasonable to ask what room there is for older people to acknowledge vulnerability or mental health issues when positioned in this way?

The night camera, used to monitor the older care recipient while asleep, was highlighted by almost all the participants. Interestingly, they all positioned an in-person visit as an intrusion and monitoring as a more dignified way of providing care at night-time.

The implementation process was described as a struggle on many fronts such as the ability to secure adequate financial backup, a lack of competence among care staff and technology becoming outdated before the procurement and implementation process was completed. In this process, older people were considered receivers of a product or service, but not in any way involved in the implementation process, but instead regarded as end customers.

Informal carers were positioned in a social role and as observers of the formal care provided. This was exemplified by statements about how welfare technology enabled families to communicate with their older next of kin and have Sunday coffee at a distance. When asked about technology that could help make informal caring activities provided by informal carers of older people easier, the participants could not think of any such technology. Nor did they give any examples of welfare technology that could be used to support informal carers directly. This is problematic because the political subject; informal carer is not in agreement with what informal care actually entails, in terms of the usually unpaid caring activities provided on a regular basis. Following this line of argument, developing support for informal carers might be difficult as long as this gap between ideology and informal care practices remains.

When asked about the effects on inequalities, whether the welfare technology could be expected to increase or decrease inequalities in health, or possibly have no impact, participants placed a high reliance on the needs assessment, ensuring that all citizens received the welfare technology services they needed regardless of their financial resources. Apart from a couple of participants, there was a lack of a focus on digital literacy, financial resources or access to face-to-face support that might affect the possibility of making optimal use of technology-mediated services.

Finally, the participants described both high expectations for the future of health and social care for older people using welfare technology, but there were also signs of concern. Some participants feared that in-person visits would be replaced with technology and that future care would be less humane. These concerns were not expressed until asked about the future, raising the question of whether they felt they influenced the development or if the development agenda lay outside their power.

Study IV

The final study findings arose from four focus group discussions with board members from the two largest pensioners' organisations in Sweden. The district boards represented members in 141 SPF associations and 171 PRO associations. In total, 33 individuals participated in the focus group sessions.

Three central positions emerged from the focus group discussions. Namely

1) how the participants perceived the implementation and use of welfare technology with concern for increased loneliness for those older people without informal carers, 2) how they emphasised the importance of everyone's opportunity for participation and a perceived lack of influence in the decision-making process and 3) how they positioned themselves as well-informed technology optimists but with reservations.

The board members perceived that the introduction of welfare technology runs the risk of increasing loneliness and feelings of abandonment among older people (their members). Loneliness was a subject close to the hearts of all the groups, leading to a strong emotional engagement in the discussions. All groups repeatedly stated that implementing welfare technology must not come at the cost of losing human contact. The discussions highlighted that the pensioners' organisations tended not to trust society to fully meet all older people's health and social care needs. Therefore, they discussed alternative ways, such as communal living, to address the situation when they perceived society to be withdrawing from its responsibilities.

Informal carers were seen as a critical resource for older people. The findings suggested that the introduction of welfare technology and digitalisation of services could be expected to increase the dependency of older people on informal carers. There was a perceived increased risk for vulnerability and exclusion for those older people with no informal carers. In this way, older people without informal carers could be exposed to double forms of exclusion in terms of loneliness and poor access to health and social services. Informal carers, particularly children and grandchildren, were pointed out as important as support for the older technology user and as a motivation for the older person to continue to learn and stay connected. But informal carers were not only deemed important to welfare technology but perceived to play an overall crucial role, which the groups expressed as: If you have informal carers, then at least you have a chance. This finding was somewhat unexpected, seen in the context of the welfare state historically characterized by a high degree of both decommodification and defamilization, and considering that the board members grew up during the golden years of the welfare state. However, despite acknowledging the critical role of informal carers, the pensioners' organisations lacked a more elaborate position regarding the issue of informal care, suggesting that informal carers of older people and older informal carers are also a relatively silent group within these organizations.

The findings also suggested that full participation in society was significantly hindered when services were digitalised and delivered using welfare technology, especially for those experiencing digital exclusion as a result of scarce economic resources, lack of knowledge and/or declining health. The groups were concerned about what they perceived as an increasing gap between digitally excluded and digitally included people. All groups expressed solidarity with excluded older people and discussed ways of reaching out to them. They made it clear that they considered it was unacceptable that older people are excluded as a result of the digitalisation of society. The discussion findings suggested that the implementation and use of welfare technology did not come with an increased agency for the pensioners' organisations. Instead, they were largely presented with ready-made solutions and often left with only symbolic participation in the decision-making process and an expectation to be ambassadors for welfare technology to their members.

Finally, the participants expressed and verbally corrected themselves in accordance with the welfare technology solution discourse, keen to position themselves as generally pro-technology. The more critical concerns were highlighted only after a while, addressing privacy and integrity issues.

Discussion

In this PhD thesis, I examine how the welfare technology solution discourse can provide insights into society's views of formal and informal care for older people. Based on the overall aim, I discuss the main findings of studies I-IV and present the central arguments of my thesis. The chapter starts with a synthesis of the four study findings outlined in the previous chapter. After that, the main findings and synthesis are discussed in relation to the overall research questions. There then follows an assessment of the methodological rigour and a discussion of the strengths and limitations of the design and methods of my Phd studies. Finally, I present my central arguments and recommendations for future policy, research and practice.

The following central research questions guided the thesis:

1) What are the major driving forces in research and policy for implementing welfare technology within care for older people?
2) What subject positions become available for older people and their informal carers following that discourse?
3) In what way/s are the concepts of health of older people and formal and informal care for older people constructed within the discourse?
4) What potential consequences for older people and their informal carers can be identified following the welfare technology solution discourse?

Synthesis of the findings

With regards to the situation of older people, the picture that emerged from international empirical research (I) and the Swedish policy context (II and III) indicated that welfare technology or services using welfare technology turn the focus to individual factors, thereby placing a large responsibility on the individual for their health and wellbeing. By implication, this approach then tends to disregard contextual factors relating to the welfare technology solution discourse, subsequently making it less of a political issue.

There was an overall focus on prevention (I, II, III) to promote independence and activity of older people, even if there were services for older people with severe cognitive decline (I). Passive remote monitoring technology (II and III) was thought of as a way for people with care needs to feel safe and remain in their own homes. The ideas underpinning implementation and use were predominantly driven by decreasing the need for care services. The services delivered using welfare technology in the studies (I, II, III) did not focus on enhancing participation and inclusion in society for those older people with extensive care needs. The pensioners' organizations (IV) identified a widening gap between those older people who are socially included and those who are not. They emphasized the importance of public services that work for all, including those with extensive care needs. The Public Health Agency of Sweden (2022b) clearly stated that it is necessary to promote influence and participation for all in society and daily life, regardless of age, to achieve good and equal health. The PhD thesis findings suggest that with declining health and functional capacity, participation and inclusion of older people are no longer a priority from a policy perspective. The services described for older people with extensive care needs focused on gaming, robotic pets and other diversions. It is inevitable to ask if gaming, robotic pets and webcams align with good care and the values we put into that concept? The pensioners' organisations (IV) emphasized the need for those older people with the greatest care needs to be included and given a voice in the digitalised society. Currently, the services for those with the greatest needs for care do not adequately meet this requirement (I).

Looking at informal care through the lens of welfare technology, none of the studies (I, II or III) provided any new thinking regarding informal care and carers. As it played out in the Swedish context, the welfare technology solution discourse did not appear to include new innovative ways to empower and support carers nor ways of making informal carers equal partners in care. Further, Study IV findings underlined how informal carers are irreplaceable for many older people as a support in using welfare technology, navigating digitalised public services, and providing motivation for staying digitally connected. Based on studies II, III and IV, it is possible to suggest that the informal carers' role is currently overlooked in the welfare state. The historically well-anchored state-individual treaty makes it sometimes difficult even to find reflected positions on informal care (II, III and IV), and the positions expressed (III and IV) are unilaterally focused on the burden of informal care. This is unfortunate because informal carers are often affected by policy and decisions, such as the decision to move healthcare to the older people’s own home supported by primary care (Committee of Inquiry for Coordinated Development for Good Quality, Local Health Care, 2020). Still, their opinions and knowledge are not incorporated into the decisions, nor do they have any legal right to represent their next-of-kin, but they are often questioned when they do (III and IV).

The synthesis of the thesis findings could not give a clear answer for health inequalities following the welfare technology solution discourse. Previous research shows that the use of welfare technology runs the risk of increasing inequalities, but the studies (I, II or III) did not show clear indications in this regard. The main finding was that neither empirical research (I) nor policy (II, III) seemed to prioritize the issue of health inequalities in any significant way. In Study IV, the focus group findings identified how loneliness, low income and fear of technology often interacted, creating a toxic mix leading to social exclusion of older people. The pensioners’ organisations (IV) raised concerns about how the use of welfare technology could further increase social exclusion among already socioeconomically vulnerable groups of older people. The organisations considered reaching out to these groups in solidarity as a top priority and emphasized the importance of not leaving anyone behind.

Health was positioned in many ways (I, II and III) as an individual responsibility and a means to avoid care. The aspects mostly in focus were physical health in terms of exercise and activity, and older people who were physically active were spoken of as possessing high status. In this way, the welfare technology solution discourse became part of and enhanced ideas in line with what Lupton (2018) referred to as the idealized healthy citizen. When handing over the responsibility to older adults (who in turn are often supported by informal carers [I, IV]) using home monitoring equipment, for example, older people with more extensive care needs were deemed to be at risk of being sidelined. If the prerequisite for using home monitoring equipment is that you can manage independently or supported by informal carers, some people may not be given the opportunity to benefit from these services (IV). This is arguably a question of justice and equality. Older people with extensive needs for care and support should be equally entitled to the available support to achieve or regain their health and continue to be valued participants in society. For the pensioners’ organisations (IV), health was mainly discussed based on the consequences of loneliness and in terms of increased stress, anxiety and alienation in what they deemed to be an increasingly harsh and impersonal society.

Finally, it is interesting to note that while welfare technology was ascribed to enhance safety and security (II and III), the pensioners' organizations (IV) described how their members perceived welfare technology as a cause for worries and anxiety, basically the opposite of what policy and politicians visualized. Welfare technology aimed to enhance independence (II and III), but for activities such as booking an appointment for a health care visit, people who previously did this independently have now become dependent on informal carers within younger generations to get this done (IV). Further, local politicians were aware of "selling it in the right way" (III), and the pensioners' organizations (IV) were equally aware of what was "the right way" of talking about welfare technology. This could be argued to reflect technologies of government within the welfare technology solution discourse, meaning the mechanisms and techniques that connect the goals of governments with an individual's way of behaving and self-regulating (Lolich & Timonen, 2021; Rose, 1999).

From this synthesis of the thesis findings, I will now turn to a discussion structured around the four central research questions of this thesis.

What are the major driving forces in research and policy for implementing welfare technology within care for older people?

Based on the findings outlined above, it was possible to identify two major driving forces underpinning the implementation of welfare technology. First, a shift in the responsibility moving the responsibility for health from professional care providers to the individual. And secondly, a striving for active and independent older people to counteract future increases in the demand for care. I will discuss these driving forces and what can be found to be problematic with them in the following paragraphs.

A shift in responsibility to the individual

The implementation and use of welfare technology focusing on physical fitness, mobility and monitoring symptoms for self-care (I) indicated an ongoing shift, placing responsibility for one's health and care on the individual. The focus was basically on individual factors, and it is possible to view this shift of responsibility as one of the driving forces for implementing welfare technology. This shift has previously been discussed by Lupton (2017), who primarily focused on younger individuals taking up self-tracking habits. However, the findings from studies I and III showed how the tendency was also present in the care of older people. Lupton (2017) wrote about how individuals with chronic diseases like diabetes or high blood pressure can use mobile self-monitoring devices for self-care. While many people choose to engage voluntarily, for their own reasons, in some cases, self-tracking is imposed on people (Lupton, 2017). That is not to say that welfare technology is imposed on older people "per se", at least not yet. Nevertheless, the welfare technology solution discourse encourages the use of welfare technology to take control of one's health (II and III), thereby promoting the ideals that Lupton (2017) refers to as the "responsibilised, self-managing and entrepreneurial citizen". Lupton (2017) usefully pointed to how little we know about how marginalized groups engage in self-tracking, resist or even re-invent it. She argued that digital technology could promote health and well-being but could also further contribute to socioeconomic disadvantage and marginalization (Lupton, 2017). It is arguably problematic to ignore structural inequalities. Buffel et al. (2021) showed that older people living in socio-economically deprived urban areas were particularly disadvantaged in times of crisis and suggested for policy to support the most vulnerable and prioritise resources in deprived areas (Buffel et al., 2021). The view of ageing as an individual enterprise could potentially constitute an obstacle to such investments.

Further, it is important to note that not all individuals wish to become reflexive, agential and empowered consumers of health care (Lupton, 2012; 2013a). This is also supported by Nilsen et al. (2022), who showed that some older participants actually preferred limited involvement in decision-making regarding their healthcare and might not fully understand or appreciate the shift in responsibility. Similarly, Offerman et al. (2023) showed that the group of older people in their study demonstrated significantly less interest in technologies to monitor health compared to younger generations.

The shift in responsibility to the individual could offer an explanation for the Study IV findings regarding the view of informal carers as valuable assets for those older people not fully digitally included. Informal carers support the older individual in fulfilling the expected role of a "self-caring entrepreneur". And when policy places new expectations upon individuals to manage their health and be entrepreneurial (Lupton, 2017) supported by welfare technology, informal carers become one of the few remaining options for older people who need more support than the technology currently offers. This notion is supported by Alexopoulou and Åström (2022), who showed how the family is the most important resource for keeping up in the digitalised society.

Digital patient engagement, as seen in digital health practices, requires the older person to conform to precise daily schedules of monitoring and discipline. Patients' resistance to using digital health devices for self-care is often explained by factors such as incompetence, indifference, ignorance or even technophobia on the part of older people in relation to using these technologies (Lupton, 2013a). Ageist assumptions regarding the use of technology persist, including forms of internalized stereotypes (Köttl et al., 2021). This can help to explain why the board members of the pensioners' organisations (IV) underlined that they were not negative to technology in any way. However, even younger people who are often more experienced in the use of digital technologies may resent, challenge or simply ignore the tasks and responsibilities demanded of them by telemedicine (Oudshoorn, 2011). Therefore, it is interesting to note that it is predominantly older people who are being positioned as "incompetent" and "helpless" (Köttl et al., 2022).

Striving for active and independent ageing

Promoting active ageing and independence were seen as major driving forces in the welfare technology solution discourse responding to the expected imbalance between care skills supply and demand for health and social care services. The findings in studies II and III could be seen to align with the Active ageing[9] concept as a set of activities aiming to affect the ageing process from a preventive focus, also in agreement with Successful ageing (Rowe & Kahn, 1997). However, the policy approaches (II, III) did not discuss active and *productive* ageing (UN, 2002). The active ageing focus in policy aligns with previous research describing notions of older people as capable and duty-bound to live a self-reliant life. Van Dyk (2014) stated that there is cultural agreement on a general tendency towards old age

---

[9] For a comprehensive overview of the emergence of the Active ageing concept in international policy see Moulaert, T., & Biggs, S. (2013). International and European policy on work and retirement: Reinventing critical perspectives on active ageing and mature subjectivity. Human relations, 66(1), 23-43.

activation in Western industrialized countries. Active ageing is not only an economic necessity but is presented as a win-win situation for society and older people. However, structural inequalities (such as gender, ethnicity or class) might make it an opportunity for some and difficult and even threatening for others (van Dyk, 2014). What is striking here is not the built-in weaknesses of the active ageing approach; the critique has been out there for more than 20 years (see, for example, Estes & Mahakian, 2001), but how versions of the rhetoric are thriving and being reproduced in the national and local policies for welfare technology (II, III) lacking any critical discussion with regards to structural inequalities.

Further, the findings showed how independence was considered a goal to strive for, where health became a means to achieve that goal (II, III). Portacolone (2011) examined how the discourses around independence were translated among older adults in San Francisco, showing that living independently was not a choice but rather inevitable and part of the identity, and entailed a struggle to keep up with the norm. Portacolone et al. (2019) examined the lived experience of older adults living alone with cognitive impairment. Wanting to be independent was shown in how the participants struggled to manage on their own, and sometimes concealed the impairment from others. The logic behind promoting health as a means to achieve independence has a weakness when the pressure associated with upholding that independence threatens one's health, as is the case in Portacolones' (2011, 2019) studies. The focus groups in Study IV highlighted a similar concern, exemplifying how loneliness and social exclusion lead to poor mental health among older men, especially. This is a group that presumably holds the independence ideal in high regard and for whom social exclusion sometimes can have tragic outcomes, as highlighted by the pensioners' organisations (IV). Hedna et al. (2020)'s study supports this argument by pointing to how being unmarried was a risk factor for suicide in older Swedish men and discussing how male stereotypes (strong and stoical) and stigma around mental illness might pose obstacles to help-seeking.

Interestingly, independence is not a universal or innate value. In some countries, being dependent on family and friends are a sign of high status (Portacolone, 2011). Autonomy and independence have historically been in alliance in the Global North and gendered "male" (Chatzidakis et al., 2020). The findings in studies II-III regarding independence as a goal should be understood in the context of a cultural system that rewards independence. In an attempt to challenge the goal of independence placed upon older people in the welfare technology solution discourse (I, II and III), the concept of *interdependence* can provide support in this regard. Interdependence refers to a relationship in which various actors all need access to each other's resources (physical, financial, knowledge, skills, legitimacy, time, and efforts) to reach their goals (Bevir, 2009). Bringing to the forefront that we live in constant and often invisible interdependence with one another, institutions, family, friends, and citizens arguably adds a layer to the discussion about independence.

In Kittay's (2001) work, the author argued for the inclusion and recognition of persons with developmental disabilities and their informal carers and the reconfiguration of care as a key function in any decent and just society. In forming the arguments, Kittay (2001) critically questioned the concept of independence by asking who in any complex society is not dependent on others for mobility and other tasks making it possible to function in daily life. Independence is fiction, argued Kittay (2001), but it turns those dependent into pariahs, makes them objects of disdain or pity, and causes refusal to assistance when needed. In this way, Kittay (2001) argued that liberalism invokes a notion of political participation, dependent on the conception of the person as independent, rational and capable of self-sufficiency. This can be seen in the Swedish emphasis on choice in eldercare linking freedom of choice to individual self-determination (Peterson & Brodin, 2022). Kittay (2001) argued that being a person has little to do with rationality and everything to do with relationships. Tronto (1994) argued that we must rethink the liberal (Hobbesian) conception of human nature and argued for an ethics of care that builds on the premise of human interdependence where everybody is engaged in the process of being caregivers as well as care receivers throughout the life course.

Therefore, it is arguably problematic that the highest goal in the welfare technology solution discourse is independence as opposed to health. As shown above, the socially constructed concept of independence arguably sidelines older people and their informal carers, who may not be willing and/or able to live up to the norm for various reasons. A well-founded alternative would be for the welfare technology services to build on and support interdependence instead of independence with a focus on relationships as purported by Kittay (2001) and Tronto (1994).

What subject positions become available for older people and their informal carers following the discourse?

The subject positions that I discuss were mainly highlighted in the findings in studies II and III. The policy texts (II) positioned older people as "the others" and informal carers were positioned as part of the social sphere in Study III. There was a contrasting position in the findings from Study IV regarding informal carers as essential resources for older people. I will discuss these subject positions and provide some perspectives that might explain these findings.

Older people as the others

The findings in studies I- III showed how welfare technology was promoted as a solution by one group (possibly identifying as part of the middled aged group) to solve the problems of another group (older people). In studies II and III, older people were talked about as a different group as those at risk of becoming dependent and who should remain independent via welfare technology. In both studies II and III, there was a focus on targeting those still active, with supportive efforts at what seemed to be at the expense of older people with more extensive care needs. Another way to describe this would be to state a preventive, supportive focus on Third Age and less focus on Fourth age. Van Dyk (2016) discussed what she stated is a dual process of othering of old age and argued that conceptual insights from Postcolonial studies[10] (Said, 1994) can shed light on the social figure of "the other". Van Dyk's argument is that while active older people (Third age) are *valued* as the other, the oldest old (Fourth Age) are *disdained* as the other. However, it is still a process of othering in both cases and both groups are still defined in relation to middle age and how they differ from this (Van Dyk, 2016). Looking through a postcolonial lens means switching the view, and in the original work, Said (1994) revealed how the stereotyping of the Oriental is deeply embedded in systems of representation, structured hierarchically, describing who is universal (the Occident) and who is deviant (The exotic Oriental, a culturalized other) (Said, 1994). Van Dyk (2016) explained that the older person becomes the deviant, differing from the universal non-aged

---

[10] Saids' work on Orientalism being the cultural representations created by Western academics and writers claiming to know about the real Oriental. The concept is linked to power in colonial systems.

middle age. Even though active tech-savvy older people are considered high status, they are still hierarchically subordinate to the middle-aged (Van Dyk, 2016).

Van Dyk (2016) proposed that these hierarchies can be affected by challenging the middle age norms of independence and autonomy, which she stated can be seen as the structure for assessing all life stages. In line with Kittay (2001), van Dyk (2016) argued that the fictive image of pure independence in middle age feeds into the negative stereotyping of dependency in old age. The welfare technology solution discourse evident in studies II, III and IV did not challenge the norm but could instead be seen to reinforce the positioning of entrepreneurial middle age rationality as the goal to strive for.

In Study III, the local politicians identified the lack of digital skills among older users as an obstacle to implementation. This is in line with previous research showing how older people are positioned as being at risk of marginalization in the digitalised society. Rahm and Fejes (2017) described how digital skills education has gone from being directed to everyone to currently focusing on those deemed to be at risk of exclusion. The non-users are no longer described as left behind but positioned as excluded. Thus, through the digitalisation of society and the introduction of welfare technology, older people are positioned as "the others", as those that need to be re-included in a society that they are already part of (Rahm & Fejes, 2017). Clearly, there is power built into the notion of digitalisation as inevitable, seemingly in a non-ideological way.

Two opposing positions regarding informal carers

The findings showed how informal carers were also marginalized and considered part of the social sphere or as assistance to the older person (I, II, III). These findings were contrasted, however, by how the pensioners' organisations (IV) ascribed them an essential role for the older care recipient.

A suggested explanation for the positioning of informal carers in the social sphere is the ideological underpinnings of the Swedish welfare state model. As described in the background, the welfare state is characterized by decommodification, meaning the extent to which individuals are sufficiently emancipated to sustain their livelihood independent from having to participate in the labour market. Important policies for decommodification include unemployment insurance, social assistance, sickness leave and disability benefits. Further, defamilisation can be defined as the extent to which adults are emancipated to sustain livelihoods independent of financial and non-financial support from other family members (Israel & Spannagel, 2019). Examples of policies are parental leave or care policies that allow periods of leave to care for a family member with long-term care needs. Sweden is ranked 15 on the decommodificaiton ranking and number 9 on the defamilisation ranking (Israel & Spannagel, 2019). The historically generous provision of social services has previously unburdened the family, the formal obligation to care for older parents was removed, and there are no strong norms to care for older parents (Rostgaard et al., 2022). This arguably paints the picture of an informal social network consisting of family and friends with no obvious role in providing informal long-term care services. However, previous empirical research (Rostgaard, 2022, Ulmanen & Szebehely, 2015) clearly highlighted that spouses and adult children are important sources of informal care for older people in the Nordic countries. Nevertheless, that position is not recognized or problematized in policies (II and III). Arguably, policymakers will come to a point where it is necessary to engage with the issue of informal care and its place in the welfare state, not least with regards to the implementation of the National Carers Strategy (Ministry of Health and Social Affairs, 2022a). Currently, local policies (II and III) seem to adopt an approach clinging on to the norms of the welfare state and thus implicitly state that the answer to any downside of informal care (such as economic or social exclusion) is that care should be a public responsibility (provided with welfare technology as the first choice). This can be referred to as what Twigg and Atkin (2002) labelled the superceded carer, where formal care takes over and excludes the informal carer from all care.

On the other hand, the pensioners' organizations positioned informal carers in a highly different light (IV). They regarded informal carers as essential resources that made the difference for the older person's overall health and opportunity for participation. This positioning of informal carers could be connected to the recent decades of austerity and care crisis in the elder care sector, as described in the background section (Edebalk, 2022). Alarming news about an ongoing care crisis, facing a shortage of formal caregivers are a recurring feature in the national news feed (see, for example, Gunnarsson & Larsson, 2022). Tronto (2015) argued that with increased emphasis on personal responsibility, care is framed as an individual problem. Care is marketized, and care resources and care itself become more and more unequal (Tronto, 2015). Taken together, the pensioners' organisations might be under the impression that public welfare can no longer be reckoned with, and informal carers are thus ascribed a more central role. I will return to the consequences of the crisis rhetoric in the final section of the discussion.

That being said, there is also a clear-cut example that might help explain why the pensioners organisations position informal carers as essential. A quote from Swedish Radio's national news broadcast March 23[11], 2023 can serve as an example:

> *"Here in Sweden there is currently major problems with the safety alarm pendants in more than half of the municipalities due to technical disturbances. There is currently no forecast for when the problems will be fixed, instead informal carers are asked to call and check that everything is fine with the older care recipient."*

Given this quote, the conclusion drawn by the pensioners' organisations appears to be plausible, "If you have informal carers, then at least you stand a chance".

Studies II and III highlighted that informal carers appear to be sidelined in policy. The focus in health and social care is towards person centred care (Ekman, 2020), and the ongoing reform in Swedish health and social care called "Good Quality, Local healthcare (Committee of Inquiry for Coordinated Development for Good Quality, Local Health Care, 2020) has been identified as the central driving force in that development (Winblad et al., 2020). Person centred care, as interpreted by authorities and the previous government, emphasizes shared decision-making in partnership and support for self-care, but also consideration of the needs of informal carers. Even though informal carers are included in many position papers (SALAR, 2023; Swedish Nurses Association, 2022; Swedish Nurses Association, Swedish Medical Association & Swedish Association of Clinical Dietitians, 2019; The Swedish Agency for Health and Care Services Analysis, 2018), it is still inevitably the case that partnerships seem to be primarily between the

---

[11] https://sverigesradio.se/avsnitt/2132105

patient/service user and health and social care staff (see for example SALAR, 2023). A previous critique concerning the concept of person centred care has been that the approach fails to fully recognize the importance of relationships between all parties concerned, especially when the concept is operationalized it then tends to focus on the primacy of personhood of the care recipient and the role of health and social care professionals, at the expense of recognition of informal carers' role and an emphasis on caring relationships between all three parties, so-called relationship centred care (Nolan et al., 2001; 2003). Relationship-centred care usefully captures the importance of interactions among people as the foundation of any activity aimed at promoting health. Based on this perspective, caring relationships, both formal and informal, should promote a sense of security, belonging, continuity, purpose, achievement and significance for all parties involved (at its core, older people, informal carers and health/ social care professionals) (Nolan et al., 2003).

It remains to be seen whether the implementation of the National Carer Strategy in the municipalities and regions will in due course help to change the position of informal carers in policy, away from a purely social role (Study III) towards recognition of their caring efforts as part of the long-term care system and to more effectively address their support needs. From an international perspective, the concept of integrated, people-centred care which recognises informal carers as a partner alongside the patient/service user and formal health and care professionals (WHO, 2016), has received increased attention in recent policy in order to ensure sustainable long term care systems within Europe (European Commission 2022; WHO, 2022).

In what way/s are the concepts of health of older people and formal and informal care for older people constructed within the discourse?

Based on the findings from studies I, II and III it was possible to identify how the welfare technology solution discourse viewed health for older people and how care was discussed. Health became identical to physical activity in many ways. And while the meaning of the care concept did not receive an extensive room in studies II or III, the findings regarding remote monitoring offered some insights. Finally, informal care was marginalised in the discourse, and I discuss some suggested explanations as to why that might be the case.

The concept of health in old age

In Study II, the concept of health was mainly used to refer to physical health and physical activity. Social relationships and participation in society were downplayed if even mentioned. Lupton (2013b) stated that humans are now becoming another node in the Internet of Things, and the body is positioned as a smart machine with inputs and outputs that can be measured.

To advance the understanding of health in old age, I started out using the WHO (2015) healthy ageing as a theoretical framework for analysis in Study I. However, interestingly it was the older version of Active Ageing (2002) that resonated through the policy documents in Study II and from the reasoning from the local politicians in Study III. I will take a moment to put this in a historical context. Beginning in the 16th century Bondestam (2020) described how the view on ageing formed a movement of increasing and later waning strength. An image that, over time, came to take the form of the well-known age staircase. However, Bondestam (2020) emphasized that the focus was on the soul and how to prepare for the afterlife; the focus was seldom on bodily strength for the individual (Bondestam, 2020). This contrasts with current ideas visible in the findings (I, II, III), where there was a focus on physical strength and mobility to such an extent that it was elevated to the norm for older people. From a historical focus on the soul, it can be argued that we have come to shift to focusing on the body, with moral implications for what is desirable and where health means physical activity, as shown in Study II. On the other hand, a resemblance between the two views is the belief that we can optimize ourselves through the "right" conduct". Blaxter (2010) pointed to how it is not so much health itself that is seen as virtuous, but the presence of [physical] health reflects the correct behaviour, self-discipline, willpower and virtue. It is interesting to note how words like self-discipline and virtue echo from a culture historically based in a Judeo-Christian cultural sphere.

In an attempt to challenge the current focus on physical activity as the hallmark of health in the welfare technology solution discourse, I ask whether it would be possible to apply the concept of Planetary health. Following my argument for interdependence, there are reasons to pay more attention to ecological changes, climate change, land use and food production in line with the Planetary health approach (Whitmee et al. 2015). The planetary health concept requires sustainability based on natural resources and biodiversity, as well as equity in health. The analytical questions that would follow are if and how the welfare technology solution discourse enhances or undermines the health and sustainability of individuals, communities and ecosystems. Arguably, the planetary health approach would begin to offer a more holistic framework for assessments of outcomes in relation to health.

Care of older people – an issue of privacy and civil liberties for both older people and their carers

Care for older people will be discussed based on how the welfare technology solution discourse framed the web camera and sat nav devices for distant monitoring in Study III. Berridge and Wetle (2020) described a disagreement regarding in-home surveillance between older care recipients and adult children (informal carers). The adult children favoured the use of monitoring technology, while the older care recipients did not. In this way, family members placed less weight on autonomy and privacy than the older care recipients. In light of the fact that technology can pose privacy and security concerns for older users, Frik et al. (2019) examined older adults' perceptions and preferences regarding data privacy and security. The findings showed that older people often lacked a nuanced understanding of technologies and data collection, leaving them especially vulnerable to privacy and security violations.

The Foucauldian concept of the panopticon offers another perspective to the understanding of Study III findings. Panopticon refers to the monitoring gaze operating centrally to observe inmates unaware of when they were being watched. This allowed a small number in charge to observe a large number of individuals. Lupton (2012) argued that it has a clear resonance for surveillance society today. "The panoptic gaze in this case becomes inverted, so that instead of the few watching the many, the many are watching the few." (Lupton, 2012, p. 236).

Further, the finding that local politicians and policy regarded surveillance as good care with preventive potential (studies II and III) arguably requires further scrutiny. The camera technology is currently being further developed by Chinese companies, refining and optimizing its capabilities and use. Schiffer and Ricchetti (2020) described how the Chinese government employs facial recognition technology, surveillance cameras and big data analysis to profile and categorize individuals, track movements, predict activities and preemptively take action. China is deploying 200 million cameras throughout the country in public spaces. Integrating artificial intelligence (AI) programs allow the authorities to churn through major amounts of data, thus increasing the system's efficiency. Schiffer and Ricchetti (2020) raised personal privacy and civil liberties concerns. Similarly, Prague Security Studies Institute (2020) wrote about the Serbian Safe City project (resting on reducing the crime rate and ensuring safety and security) using the same technology. Prague Security Studies Institute (2020) raised concerns about where the data will be stored, who will be responsible for data processing, and the mechanisms for protection against misuse.

Similar technology to that used by authoritarian regimes in public spaces is currently being installed in the most private spaces of older people's own homes in Sweden (namely, the bedroom). The findings in Study III showed how the monitoring equipment was framed as good care, lacking any critical discussion or raising any potential risks. The pensioners' organisations in Study IV pointed to what they perceived as a movement in societal positions where previous privacy protection was now subordinate to safety and security. It should be pointed out that it is still a choice for the older person to accept this form of care (see for example, Case no. 4506–17 Administrative Court of Appeal, Gothenburg), but there is currently no legal option for the informal carer to oppose it in the shared home (Takter, 2017). Arguably, there is a need for an inclusive public debate on the necessity, sustainability and implications of introducing surveillance equipment in the homes of older people. Given the thesis findings, it can be argued that the implications for civil liberties and privacy are not thus far given sufficient attention. Further, health and medical data are critical targets of cybercriminals and hackers who are able to use the data for fraudulent activities (Ablon, Libicki, & Golay, 2014). It appears that digital care in this form comes with a price, and it is reasonable to ask whether we are willing to pay with our personal data and privacy?

The concept of informal care and the welfare state ideology

The findings in studies I, II and III indicated that the welfare technology solution discourse did not provide any new or innovative ways for how to approach the concept of informal care. Throughout history, informal care as well as formal care has been a part of the domestic sphere, a gendered issue belonging to the home, lacking status (Tronto, 2015). Johansson et al. (2018) pointed to the precariousness of doing comparisons of informal care over time, since circumstances on both microlevel and societal level differs. That having said, looking at the larger features, the care arrangements for older people and the role of informal care have changed over time as the economic systems and available resources have made previous arrangements unsustainable (Gaunt, 1995). Arguably, the current view on informal care as shown in study II, III and IV, is shaped to a high degree by the tension in the view of the family's role and the society, stemming from the welfare state ideology emphasizing the dual-earner system and care as a public responsibility. As the need for informal care has increased due to the gaps in the provision and adequacy of formal long-term care (Szebehely & Meager, 2018) and the municipalities are searching for alternatives to meet the needs of older people, it is reasonable to assume that future studies of local policy might find a shift in the approach. That is, towards a greater recognition and acknowledgement of the role of informal carers, together with more tailored and flexible support for informal carers still premised, however, on the voluntariness of the role, as advocated in the National Carers Strategy (Ministry of Health and Social Affairs, 2022a). This line of thinking tends to reflect the focus in current EU policy. In particular, the European Care Strategy (European Commission, 2022) which views formal and informal long-term care as two sides of the same coin which are interdependent of each other in order to adequately address the needs and preferences of citizens with continuing care needs. However, recognizing current societal challenges of acute staffing shortages and recruitment problems in the formal long-term sector, exacerbated by the COVID-19 pandemic (Florek, 2021), together with a trend towards a reduction in the availability and potential willingness of family and friends to provide informal care (Spasova et al., 2018; Vos et al., 2022) arguably indicates that the issue of formal and informal care needs continued political attention.

What potential consequences for older people and their informal carers can be identified following the welfare technology solution discourse?

The consequences that I will discuss are derived for the most part from Study IV, based on the risks highlighted by the pensioners' organisations themselves. They identified that the gaps between those included and those excluded might widen following the implementation of welfare technology as part of a digitalised society. They also identified the informal carers as pivotal to older people to ensure their needs are adequately met. I will also discuss the consequences of the welfare technology solution discourse derived from the crisis rhetoric, cautioning about the demographic crisis and emphasizing the need for more efficiency in care arrangements, consequences that might not be evident at first sight. Finally, I discuss the possible future role of informal carers that might come about as part of the discourse.

Social exclusion and unmet care needs

Kröger et al. (2019) introduced the concept of care poverty, meaning a situation where people in need of care do not receive sufficient assistance from formal and/or informal sources, thus, the care needs are not met. Kröger et al. (2019) explained that care poverty results from an interplay of individual factors (such as lack of close family members) and structural issues (such as poorly developed welfare state provisions). The vital role of informal carers and the more exposed situation for those lacking close kin as perceived by the pensioners' organization (Study IV) seems to have support in Krögers' recent work. Further, Verdery et al. (2019) stated that previous empirical research has established how close relations are critical to both social and economic wellbeing and health of older adults. In 2015, the share of Swedish adults aged 50 and above lacking a spouse or child was 6.78%. For most European countries, the figures state 6% - 9% of people aged 50 as lacking close kin, and shares are expected to increase (Verdery et al., 2019). Deindl and Brandt's (2017) European level study showed that informal care of childless older people was often taken over by siblings, extended family or neighbours and that formal care was also used to a greater extent. The authors (2017) highlighted however that the extended informal care network could not compensate for more extensive care needs.

Since the pensioners' organisations described how informal carers were the ones that bridged the gap and provided necessary support when the welfare technology malfunctioned (IV), an interesting question arises whether the digitalisation and use of welfare technology further increase the role of informal carers? And whether the increased proportion of older people without close bonds to younger generations could be expected to face even more challenges when services are provided via welfare technology and digital channels? For example, Tsai et al. (2017) showed how social support from family and friends was critical for the older participants learning to use a digital tablet. This support was perceived as critical to gaining sufficient confidence to continue learning. The authors pointed to how older adults lacking family support might have difficulties receiving information and finding the appropriate learning environment with support (Tsai et al., 2017).

As Kröger et al. (2019) pointed out, the other critical component is the structural issues, basically being about potentially unequal outcomes of social policy and poorly developed welfare state provisions. As stated in the background, in the Swedish context, informal carers often carry an important role in navigating and coordinating a fragmented care system. The question arises whether care services delivered by welfare technology and digital channels act as an equalizer and ensure that older people's needs are adequately met according to the goals of universalism. The local politicians (Study III) had high hopes it would, whereas the pensioners' organisations (Study IV) feared it would not. The Lancet and Financial Times Commission on governing health futures 2030 (Kickbusch et al., 2021) stated that since social determinants of health (age, ethnicity, socioeconomic position [SEP] for example) play an important role in how digital technologies are used for health purposes, and how meaningful use is dependent on the user's digital and health literacy, disparities in the use of digital technology could mediate or reinforce inequities in income, social status and/or access to health and care services.

Further, unmet care needs were associated with suburban or sparsely populated areas (Köger et al., 2019). Wimo et al. (2020) identified that informal care is more frequent in rural areas. Could this point to a less developed public care provision in rural areas? The pensioners' organizations (IV) were under the impression that older people were more exposed to the risk of social exclusion, including the risk of digital exclusion, when living in rural areas, not least seen to the lack of support in person. The studies in this thesis were not focused on the rural areas, apart from Study II, which included local policy from rural municipalities. The second study could not identify any major differences.

Radhakrishnan (2021) investigated ethical problems when technology companies combined patient diagnosis with experimental AI trials among underserved (in terms of access to healthcare) and socioeconomically disadvantaged groups in remote and rural areas in India. These groups were left with very little agency when the alternative to enter an experimental trial involving AI was no medical care at all (Radhakrishnan, 2021). Though Radhakrishnan's findings are not directly transferrable to a Swedish context, nevertheless it is still interesting to note that welfare technology is positioned as especially valuable to older people living in rural areas (The Swedish Agency for Health and Care Services Analysis, 2020). Thus, there is arguably a need for more in-depth, systematic studies regarding the consequences of welfare technology use in rural areas of Sweden.

Welfare technology, ageing in place and the crisis rhetoric

The welfare technology solution discourse cautioning about the demographic crisis and emphasizing the need for more efficiency in care arrangements, as shown in Study II, legitimizes the implementation and use of welfare technology in the health and social care sectors. The rhetoric regarding welfare technology in the health and social care of older people presents the implementation and use as unavoidable and necessary, appearing to be solely about technology rather than ideology. As shown in Study III, the ageing-in-place ideology has been incorporated into the discourse, stating that welfare technology can support older people to live independently in their own homes. However, Björnsdottir et al. (2015) pointed to the following weakness; living at home may become too difficult for both older people with long-term care needs and their informal carers, and if nursing home placements are scarce, this can be perceived as a failure by the government to adequately respond to the needs of older people, in countries that have proudly defined themselves as social democratic welfare states.

Study II findings showed how the welfare technology solution discourse is underpinned by the need to increase efficiency and control costs. A possibly less noticed consequence of this could be that it appears as though society can no longer afford to uphold welfare for older people. Altermark and Plesner (2021) argued that current problematisations about too extensive public spending that needs to be controlled are based on ideas that are fundamentally critical to the welfare state itself. Cost-cutting measures within eldercare and healthcare are considered responsible social policy irrespective of left- or right-wing governments. Altermark and Plesner (2021) argued that this has opened up for pointing to the costs of immigration, placing groups against each other as more or less deserving. This is supported by Chatzidakis et al. (2020), who in the Care Manifesto, argued, that prioritizing the interests and flows of financial capital with subsequent austerity policies has effectively undermined the formal health-and social care sectors. Chatzidakis et al. (2020) argued that defensive self-interest thrives when the sense of security and comfort is fragile, and nationalistic and authoritarian logics rearticulate care and our caring inclinations towards "people like us". The austerity measures in the elder care sector were well known to the pensioners' organisations (IV). Their positioning of informal carers as essential and the increased vulnerability of those lacking informal carers could be interpreted as an outcome of an undermined health and social care sector, as Chatzisakis et al. (2020) purported. Importantly, the Swedish National Audit Office (2014) earlier pointed to how voluntariness in informal care is dependent on their elder relative's access to publicly provided care of sufficient quality. Further that the best form of support for informal carers, as deemed by carers themselves, was publicly provided (formal) high quality health and social care for their older next of kin. The pensioner's organisations (Study IV) witnessed the crisis rhetoric, and to them, the rhetoric raised deep concerns about loneliness, abandonment and a harsher impersonal society for their members and, more broadly, older people in general.

Informal carers as the digital support centre and backup plan

The Study IV findings can be seen to point to informal carers as the new digital support centre, supporting self-care and digital care programs for chronic disease when the care is placed as an individual responsibility. It is reasonable to ask, can it be called self-care if it is performed by the older person in cooperation and supported by the informal carer? Isn't it more of a teamwork, a joint effort? In that sense, the use of the word self-care hides the support provided by informal carers.

As the responsibility shifts to the individual (I, II and III), there is an obvious risk that informal carers will be the ones bridging the gaps, managing the situation in the home when professional care occurs at a distance. Since von Saenger et al. (2023) showed that gender and socioeconomic differences among adult children caring for a parent persist in Sweden, it is essential to carefully monitoring the development and create policy that counteracts inequalities in informal care. The overall digitalisation policies and programs outline ambitious plans, however, these plans are a long way from the reality of many citizens who are deeply digitally alienated (Kaun & Forsman, 2022). People with less developed digital skills will arguably be more dependent on others when using welfare technology, thus leaving them more exposed (Kickbusch et al., 2021). In light of this and supported by previous findings (see for example Deindl & Brandt, 2016), informal care appears as the invisible safety net and general backup plan for the future health and social care of older people in this thesis' research and policy context.

Methodological discussion

In the introduction of my thesis, I described how the Swedish welfare system is under pressure and how the public welfare sector faces major recruitment problems and staff shortages in the coming years. To meet these challenges, policy is arguing for a changed way of working by making use of welfare technology as part of the digitalisation of formal health and social care for older people, in a discourse that I refer to as the welfare technology solution discourse. This discourse can be used as a lens to provide insights into society's views on care for older people and the role of their informal carers. This acted as the point of departure for the aim of this thesis: to examine how the welfare technology solution discourse can provide insights into society's views of formal and informal care of older people. To achieve this aim, I chose an inductive qualitative design with a constructionist approach meaning that knowledge is a product of social processes and constructed through interactions between people and the world, and what is thought of as natural, in terms of categories and concepts that we use, are an effect of history and culture (Burr, 2015). In this final section, I will discuss the overall design in the thesis, the methods that I've used and reflect on the strategies applied to achieve methodological rigour, using Lincoln and Guba's (1985) four principles of trustworthiness: *credibility*, *transferability*, *dependability* and *confirmability*. Finally, I end the section with a paragraph highlighting reflexivity, meaning practices through which I've critiqued, appraised, and evaluated how my subjectivity and context have influenced the research process (Olmos-Vega et al., 2023). Bacchi (2009) argued that reflexivity is necessary because we are immersed in the conceptual logics of our era.

Credibility

Credibility refers to the believability of the findings and if the findings reflect a credible interpretation of the data (Lincoln & Guba, 1985). Study I was a qualitative knowledge synthesis, a scoping review to synthesise evidence. To achieve credibility, the Scoping review included several exhaustive systematic searches for information, with transparent search protocols making it reproducible and with a structured presentation of all the data (Munn et al., 2018). The selection of articles for Study I required several considerations regarding criteria for inclusion and exclusion. In this broad field, selecting studies that assessed health outcomes for older people was deemed relevant for identifying technology mediated interventions targeted at people with a need for care, help or support. Otherwise, it would have been illogical to search for informal carers in these studies. Still, it was also deemed important to decide on inclusion criteria that would allow for a broad view of health beyond the purely biomedical. Wilson and Cleary's (1995) conceptual model focused on both biomedical outcomes as well as societal factors for health, though still in a strictly individual way. Further, participants in the studies had to be 65 years or older or with clear case descriptions regarding participants within this age criteria. By reviewing the 85 selected articles, it was possible to paint a picture of technology for older people and (in some cases) for their informal carers. By using Pawson's (2002) descriptive analytical framework, nine categories of interventions emerged.

Regarding the studies that focused on physical activity, external expertise was consulted to discuss and confirm my interpretation of the outcome measures that were often based on outcome measures within physiotherapy. The analysis then moved on by using the Healthy Ageing Framework (2015) and the five domains of abilities, which proved to be useful in gaining an understanding of the view of older people through the interventions. The view on informal carers was illuminated by thematically sorting each study according to if and how informal carers were mentioned or included in the study. A more formalized and validated protocol for assessing the degree of inclusion of informal carers in research could potentially be a recommendation for future development. Taken together, credibility was strengthened by systematic searches, transparent study protocols, and a systematic presentation of all included articles.

In Study II, I turned to the local context and examined local health and social care policy in the area of care for older people and support for their informal carers. To achieve credibility, the study design and sample procedure were discussed with external expertise in social policy analysis. To find municipalities that were representative in demographic terms, the sampling strategy used the SALAR's classification scheme of municipalities (2016). The SALAR classification has nine groups of municipalities, and I approached one randomly selected municipality in each group. However, one municipality did not send any documents despite reminders, which could be a potential limitation in the study. It is important to remember that this took place during the Covid -19 pandemic, and it was clear that the municipalities were under tremendous pressure. However, seen in retrospect, the lesson learned is not to wait so long hoping for the best when other municipalities had easily accessible documents online. Still, since the policy documents showed very little variation, it is unlikely that adding another municipality would have affected the overall analysis work.

The analysis was conducted using Poststructural policy analysis (Bachi & Goodwin, 2016), which draws on a Foucauldian-influenced perspective, where objects and subjects are not essences, but provisional and in formation, thus in line with the ontological and epistemological assumptions of social constructionism. The political ethic of poststructuralism suggests that the policy proposals prescribe different ways of being (Bacchi, 2016), thus offering an analytical tool for understanding society's views on formal and informal care of older people. To further strengthen the credibility and before engaging with the method of analysis, I discussed with research colleagues experienced in the use of the method, and the findings were continuously discussed within the research supervision group.

Study III was a qualitative discourse analysis, and data was based on interviews with 12 local politicians chairing the health and social care committees. Regarding the sampling strategy, I wanted to form an understanding of welfare technology in relation to socioeconomic differences. Therefore, Study III used the SEKOM tool (Statisticon, 2021) to identify municipalities with socioeconomically disadvantaged groups. The assumption was that the municipalities with a larger proportion of socioeconomically disadvantaged groups could be expected to have more developed reasoning about the issues of welfare technology in relation to disadvantaged groups of older people and that the credibility of findings thus would be strengthened.

Further, the sample was chosen based on even geographical location and attempting an even representation of political parties. The sampling procedure was discussed with external expertise in the field of political science. Taken together, it was assumed that the study sample reflected the perceptions and assumptions among Swedish local politicians in municipalities with a heterogeneous population.

To prepare and discuss the semi-structured interview protocol, I had several meetings with local coordinators and health and social care experts in two other municipalities to check that the questions were relevant and easy to understand and not out of context.

The analysis of the interviews was conducted using the Poststructural Interview analysis (Bacchi & Goodwin, 2016), thus also in line with the theoretical assumptions of this thesis. Another strength of the findings is that I, as the first author, carried out all the interviews in Study III, thus, the data were analyzed in their original form within the given context (Morse, 2018). The semi-structured interviews allowed for focus and flexibility during the interviews, providing several opportunities for the politicians to expand their answers and develop their reasoning.

Though the participants represented both left- middle and right-wing parties, we couldn't find any major political differences. This might be a possible limitation in the design of interview questions, whether we asked the "wrong" questions or failed to go sufficiently deep enough with follow-up questions. On the other hand, Edebalk (2022) highlighted how elder care has historically been mostly outside of ideological differences, which provides support for the findings in this study.

In the final Study IV, I wanted to include the voices of those groups that were in focus for my thesis, namely older people and their informal carers. Regarding privileging one voice over the other, constructivist[12] inquirers have a special obligation to take a posture of advocacy and activism with respect to all stakeholder groups with which they interact, particularly those that are in some way disempowered (Lincoln & Guba, 2013). In my thesis, the pensioners' organisations were considered the voice of older people and informal carers. The sampling strategy was purposeful sampling, and we approached district boards in three Swedish regions, medium- or densely populated, organizing four focus groups, two groups with PRO and two with SPF.

The focus group method is based on a qualitative approach resting on social constructionism (Kitzinger & Barbour, 2007). The method was chosen in line with the ontological and epistemological underpinnings of this thesis. It was used to contrast the previous findings in studies I, II and III by examining the positions of representatives of older people and

---

[12] Though I do not argue that constructivism can be used interchangeably with constructionism I find the work by Lincoln and Guba (2013) highly relevant.

informal carers themselves, thus can be seen as a strategy for strengthening the credibility of findings in the thesis as a whole. Dahlin Ivanoff & Holmgren (2017) argued that viewing the participants as experts and organizing groups with participants with similar experiences can help to give them a strong voice. A critique regarding focus group studies is that dissenting opinions do not emerge, but participants adapt to the dominant ideas of the group. Judging by the vivid discussions that took place, the participants felt comfortable discussing and highlighting different opinions. However, due to time restraints and the number of participants, there is always a risk that some points of view were not highlighted. One of the focus groups was conducted using videoconference, in which there was also a vivid discussion, though it must be said, not equal to the discussion that took place in the round-table discussions. This is not to argue against online interviews but given that the method is based on analysis of discussions and not individual statements, this might be a possible limitation. Nevertheless, it was deemed that the online focus group contributed to the overall findings.

Regarding representing the diverse group of older people, I searched for statistics describing the diversity of the pensioner's organisations in terms of SEP and ethnic background. However, the organisations did not collect these statistics, and since we regarded the participants in Study IV as representatives of their members and not speaking for themselves per se, we did not collect background data regarding their SEP (apart from education) or ethnic background. A possible limitation is that the pensioners' organisations do not reflect the entire heterogenous group of older people in current Swedish society. However, given the number of associations and members they represent, the assumption that they could give a voice to the group of older people, including informal carers, seemed reasonable.

Similarly to Study III, the credibility of the findings was strengthened by the fact that I, as the first author, moderated all four focus groups in Study IV, and thus I was familiar with the data and the context (Morse, 2018). Further, I had a prolonged engagement with the groups, where I participated in their conferences and had follow-up discussions, thus enhancing my familiarity with the study setting (Forero et al., 2018).

As the issue of informal care was highlighted in Study IV, it became clear that this topic had not been processed in the same way as elder care within the organisations, which was an interesting finding. Thus, the findings offered an important perspective on informal care, but apart from brief examples, the findings could not aspire to representatively reflect the voices of informal carers of older people, which is a limitation of the study. Even though there were some board members with previous or current experience of being informal carers themselves, it was clear that informal care was not high up on the pensioners' organisations' agenda, in comparison to issues about loneliness or social exclusion of older people, for example. The lesson learned is to create groups with representatives of associations for informal carers, that can be assumed to have processed these issues in more depth.

In Study IV, another strategy to strengthen the credibility was that the analysis of discussions was based on both sound recordings, field notes and transcripts, following the research process described by Krueger and Casey (2015). The sound recordings were particularly useful in capturing the positions and how something was said.

Finally, the use of quotes in studies II-IV can be seen to strengthen the credibility and dependability of the findings, as they provided a direct insight into what the findings were based on.

Since I aimed to examine inequalities in health in relation to welfare technology, an overall limitation of this thesis, is that while age and socioeconomic categories are highlighted, other categorisations such as gender, ethnicity and sexual orientation, for example, have not received specific attention. Adopting an intersectional perspective (Crenshaw, 1990), meaning how different categories are connected to normative assumptions and how these work at the same time and together, could be beneficial (Andersson & Samulowitz, 2022) to advance the understanding of if and how the welfare technology solution discourse affects inequalities in health. On the other hand, when focusing on the group of older people and people in socioeconomically disadvantaged groups, it could inadvertently amplify already existing implicit and explicit bias and a binary view of these groups. A critique might be that the research area and population choice reflect the author's implicit biases. A further risk with these categorisations is that interventions towards specific groups can entail simplistic notions regarding these groups, thereby, leading to potential ignorance of individual needs (Andersson & Samulowitz, 2022).

Transferability

Transferability refers to the extent to which the findings and recommendations can be transferred to other contexts (Lincoln and Guba, 1985). The transferability of the findings in this thesis rests upon rich and detailed context descriptions (Phillips & de Wet, 2017). In Study I, all included studies are systematically described in the appended matrix, carefully outlining study context, detailed descriptions of study sample, outcome measures and actual outcomes. Thereby, readers can determine whether the findings apply to their context. A word of caution, though, Ilicki (2022) usefully pointed to how the field of technology is highly contextual and rapidly changing with a large variety of interventions using digital technology. Nevertheless, to explicitly describe the geography and mix of patients, study aims and outcome measures, increases the possibility of assessing the transferability of findings (Ilicki, 2022).

In studies II, III and IV, the context is carefully outlined in the background section and discussed in relation to the findings. The studies are set in the Swedish context and can likely be transferred to other municipalities and regions in Sweden. Possible transferability to other contexts must consider local self-governance and the state-individualism treaty, which is distinctive for the Swedish context. The state-individualism treaty is likely to influence the role ascribed to informal carers (II and III), since dependence on family is traditionally considered as negative and care is regarded as a public sector responsibility (Berggren & Trägårdh, 2015). Further, the transferability of findings is affected by the level of digitalisation. Sweden is one of the most digitalised societies (European Commission, 2022b), something that must be taken into account as other countries might not have met the same challenges yet to the same extent. Further, when discussing how technology affects inequalities in health, the policy context is an important parameter to weigh in, even though previous research has shown a lack of association between the extent of welfare policies and the magnitude of health inequalities (Mackenbach, 2012). Finally, the local pensioners' councils (IV) that work as a forum for influence on local level is context-bound. Sweden has a long tradition of involving older people in policy planning (Cox, 2020), though the level of true influence varies, and it is not an obligation for the municipalities to have a council.

Lincoln and Guba (2013) stated that the end result of research within the constructivist paradigm is working hypotheses and narratives, from which there is an option for learning. Hopefully, the findings and central arguments in this thesis can adhere to that objective and can, after carefully considering the context characteristics, be transferable to other countries with similar governance structures.

Dependability

Dependability refers to the consistency, coherence, logic and stability of the study process and analysis (Phillips & de Wet, 2017) and what can be said to be stability of findings over time (Lincoln & Guba, 1985). To ensure that there was consistency and coherence both internally in each study, and also externally between the studies, the sampling procedures relied on detailed protocols and process notes during the research process. The process documentation and field notes were shared and discussed within the supervisor group on a regular basis. The study context went from a broad international perspective in Study (I) to a Swedish local context (II and III) and, finally, a Swedish regional context (IV), thus the dependability of findings is strengthened by coherence in terms of study context.

Lincoln and Guba (2013) stated that constructivism studies the context or setting of participants and that the voice that is heard in any construction is that of the constructor. In this thesis, there are several voices. It is the voice of researchers (I), the voice of policymakers and local officials (II), local politicians (III), the voice of pensioners' organisations (IV) and the voice of the author of this thesis together with co-authors in the PhD studies. A potential limitation is that this thesis did not include the voices of health and social care professionals or public officials (apart from Study II). It is essential to include these groups in future research, to broaden the understanding of the welfare technology solution discourse. This was highlighted by the local politicians (III), who perceived that a fair amount of influence was to be found among the public officials. Another overall limitation is that the context and participants in all studies are situated in the Western culture in WEIRD (western, educated, industrialized, rich, democratic) societies, thus largely absent of voices from other cultural traditions. Possibly, other cultural traditions can offer perspectives regarding health, elder care and informal care that might have contributed to challenging the understanding of these concepts even further.

Finally, the problematizations in this thesis can be viewed as set by those in positions of authority (us as researchers) and the problematizations and proposals in this thesis must be critically evaluated regarding how they reproduce or disrupt modes of governing, enhancing or challenging forms of marginalisation (Bacchi & Goodwin, 2016). It is my expressed aim to challenge marginalisation and normative views on older people, though I'm aware that by highlighting the group of older people, especially in socioeconomically disadvantaged groups, I might inadvertently have contributed to stereotyping.

Confirmability

Confirmability refers to what extent the findings of the research study can be confirmed by other researchers and whether the findings can be viewed as reasonably impartial and representative of the stakeholder groups (Phillips & de Wet, 2017, see also Lincoln & Guba, 1985). As a strategy to strengthen confirmability, steps have been taken for other researchers to confirm the findings and for the stakeholder groups to be able to view the findings as reasonably impartial and representative (Phillips & de Wet, 2017) to examplify; the findings have been presented in research seminars, conferences and networks for stakeholder groups. Throughout the research process, the interpretations of empirical material during analysis in the studies were discussed within the PhD supervision group. A challenge in Study I was that the rapidly emerging field of welfare technology with different interventions being themselves highly contextual (Ilicki, 2022), and an updated review might reflect somewhat different findings. Confirmability was strengthened by having a transparent and reflexive approach meaning sensitivity to the ways in which the researcher and the research process have shaped the data (Mays & Pope, 2000).

Reflexivity

My relation to the field of welfare technology for older people and their carers started in 2000 as a student in Caring Science. The research process started in 2018 from this background in the Caring science perspective, which is visible in the choices of the Scoping review and subsequent choices for inclusion and exclusion criteria in Study I. As I continued the process, the constructionism perspective was chosen and impacted the choice of research design of the thesis (Olmos-Vega et al., 2023).

Throughout the research process, many of my research ideas stemmed from personal experiences and observations in the field, being my well over 15 years of experience as a registered nurse in various healthcare settings, including elder care and primary care. Together with my supervisors' experiences, this contributed to the analysis and critical reflections regarding data and study findings, which is an overall strength for the trustworthiness of findings and policy recommendations. My background was a particular strength for understanding and assessing health outcomes, often with a medical focus. Moving on to policy analysis, my experience in the field of eldercare together with my supervisors, who were highly familiar with municipal health and social care, was used in the analysis of studies II and III, and thus can be regarded as a strength. Throughout the research, I kept weekly fieldnotes, reflecting on my own assumptions and presuppositions regarding the field of welfare technology, fieldnotes that my supervisors responded to, thus providing another mirror to my own process. A wide range of empirical literature has also been used to shed new light on my previous experiences and observations, allowing me to challenge those assumptions and thus enrich my understanding.

Regarding power differentials and dynamics (Olmos-Vega et al., 2023) in study III and study IV, I had no previous relation to the participants and I came in the role of researcher. That role, as mentioned above, can be considered as high status. In both study III and IV, I had to think carefully through how I impacted data through my questions, body language and reactions, trying to encourage all expressions and discussions. Also, here, I could draw from my prior experiences as a nurse, where I'm used to listening actively and endeavour to avoid jumping to conclusions. I continuously discussed the dynamics of the data collection process with my supervisors, reflecting on my own assumptions and reactions.

However, one obvious bias was my view of digital technology. I belong to a generation growing up in Sweden during the 90's, when the internet was introduced in schools and at home (at least for the middle classes), opening up the world to us as teenagers. My understanding of technology has been shaped by the development of disruptive technologies such as Ipads and AI, and the emergence of social media, in an overall enthusiastic approach to technology. It is, therefore possible and even highly likely that I had and maybe to some extent still have an overconfidence in the capacity of digital technology. This overconfidence was called out already at the first research seminar and by the findings in Study I. By familiarizing myself with the literature in the field of critical digital health and socio-material studies, it was possible to view the data with more critical glasses. Still, I choose to view this bias as a potential strength, in that I'm not against welfare technology as such but convinced that we could do so much better in the ways we approach technology in the field of care for older people and their informal carers based on more agency and empowerment approaches.

Central arguments and policy recommendations

Looking at formal and informal care of older people through the lens of the welfare technology solution discourse, based on my thesis' findings and discussion I would like to highlight the following gaps within this prevailing discourse; the current one-sided focus on welfare technology as the necessary solution in policy (II and III) which ignores several resources and problem statements that would open up for other ways to approach the societal challenges (a shortage of skills supply and increased demands for health and social care services). Currently, older people are not owners of the welfare technology agenda, nor active agents in the process but rather presented with ready-made solutions (IV). Informal carers are not considered equal partners in the care of older people but are kept at a distance (I, II and III). It is reasonable to assume that were older people and informal carers and their organisations given more room for manoeuvre at local level, in terms of participation and contribution, they would be able to offer further ideas for how to think about care (formal and informal), ways that would benefit the health of older people, informal carers, as well as the community at large.

Therefore, I argue that:

1) Health and social care interventions and services using welfare technology should be targeted towards participation, and contribution in accordance with the UN resolution (75/131) for an inclusive society. Public perceptions are still formed around ageing as someone else's problem, seeing older people as an "otherized" group. A just society strives to treat everyone as equal participants.
2) Informal care of older people needs to be lifted up on the political agenda at all governmental levels. It needs to be illuminated in all its complexity, moving the group of informal carers from the shadows to the forefront. A public debate, informed by research, seeking to understand and negotiate the role of informal care for older people in the current Nordic welfare state is arguably called for.
3) The concept of health in old age needs to be understood much more broadly than activity and independence, preferably in line with the

Planetary health concept underlining how we are all in interdependent relationships with each other and with the environment.

4) Formal and informal care of older people should place relationships at its centre, including all relationships that are formed and maintained between health and social care practitioners, older people, informal carers, families and the wider community, ensuring an appropriate balance between the needs of all involved in these so-called reciprocal relationships. The relationship-centred care concept could serve as a guiding principle in this regard.
5) Future policy could usefully adopt a more critical approach to the implementation and use of welfare technology, carefully outlining and evaluating the potential risks, vulnerabilities, and ethical conflicts involved. There needs to be a discussion about civil liberties, privacy and health inequalities when implementing and using welfare technology for remote monitoring of older people, clearly outlining what values are at stake for older end users and informal carers.
6) The pensioners' organisations have a relatively large number of members, a number of them providing informal care to a next of kin. In view of the fact that the organisations have position papers on healthcare and pensions, for example, they might consider facilitating a discussion about informal care for their members. By summarizing recommendations from their point of view to share with policy makers and decision makers, they could help shape the debate on the role and value of care in society.

When the above points have received sufficient attention, it is then possible to turn the attention to services using welfare technology that promote interdependence – connection with others and the sense of empowerment deriving from social interactions. The use of welfare technology in the formal care of older people should arguably be one of many options, not as promoted now- largely positioned as the sole way forward. Future health and social care policy should usefully promote services for older people that consider interdependence instead of purely independence of older people. Person centred care is at the heart of the current health- and social care reform in Sweden, however, the concept has been criticized for being associated more with services than people and with an implicit emphasis on individual needs and autonomy (Nolan et al., 2006). A complementary approach for policy and practice could be to focus on relationships and reciprocity, where everyone (older person, informal carer, family, care professionals, community) achieve a sense of belonging, a sense of purpose, and a sense of significance that they matter (Nolan et al., 2006). This is further supported by Olaison et al. (2021) who showed how older people wished to have long-lasting relationships with their professional caregivers, positioning stability and continuity as a prerequisite for their possibility to participate in their care.

Suggestions for future studies

The findings (III, IV) indicated that older people and informal carers living in rural areas might be experiencing more challenges relating to the use of welfare technology and less access to support in person. This arguably needs more empirical research to advance an understanding of how older people and informal carers living in rural areas are affected by and perceive the welfare technology solution discourse.

In methodological terms, a protocol to systematically assess the level of inclusion of informal carers in both research and projects concerning welfare technology for older people would arguably be a valuable addition to the research toolbox.

In the current debate within the welfare technology solution discourse, the focus is predominantly on the formal care sector, while informal care is invisible. Future studies could usefully explore the conceptualisation of informal care within a Nordic welfare state perspective. A possible approach would be to use Blended Learning Networks (Hanson et al., 2011), to increase understandings and share views and experiences among all stakeholders concerned and thereby contribute to an expansion of perspectives in the ongoing dialogue of the future direction and sustainability of the Nordic welfare state model.

To conclude, the welfare technology solution discourse is part of an ongoing shift in the provision of health and social care for older people in the current Swedish welfare state. I've argued that this shift entails a change in the positioning of health as an individual responsibility where more vulnerable groups of older people are at increased risk of social and digital exclusion. When health is reduced to a means to achieve a goal there is an obvious risk that both older people and informal carers are reduced to objects of care or data points on a chart, as an apolitical problem to be solved. Currently, there are limits placed upon our caring capacities in society, as the ideal is the entrepreneurial individual whose only relationship to other people is competitive self-enhancement and the dominant social organisation is that of competition (Chatzidakis et al. 2020). I end this thesis by arguing, in line with the Care manifesto (Chatzidakis et al. 2020), the urgent need for politics that challenges these limitations and one-sided problem statements and recognises interdependencies throughout society and how we all, regardless of age and other constructions, matter.

Acknowledgements

To the participants in study III and IV, local politicians and board members in the pensioners' organisations. Thank you for sharing your time and knowledge and for exciting discussions and engagement. Without you, there would be no thesis.

To my main supervisor, Professor Elizabeth Hanson and co-supervisor, associate professor Lennart Magnusson. Thank you for giving me the opportunity and for believing in me. Thanks to you, I have been given so many opportunities to try my wings in different contexts during my PhD-studies, and you have guided me with a steady hand. Thank you for all the times you've challenged me to go that extra mile (or miles). To give an account of all that I have learned from you during these years would be an extremely long list. Therefore, I just say a big thank you, for everything!

To my co-supervisor, senior lecturer Stefan Andersson, thanks for your guidance and support. The first time I came to the newly built house Vita in Kalmar, I got lost and ended up in the corridor outside the science laboratories. I called you, slightly stressed, and you came to meet me and showed me where to go. In my work with this thesis, you've done so many more times. Our discussions have been invaluable, and I've enjoyed working together these years.

To external experts, Johan Söderström, Patrick Hall, Erik Wångmar and Dino Viscovi. Many thanks for your time and generously sharing your expertise in your areas. Many thanks, indeed.

To Professor Sue Yeandle, Director and Principle Investigator at the Centre for Care, Sheffield, together with Kelly Davidge and Dan Williamson, and researchers, staff and former PhD-students involved in the research network and the Sustainable Care research program. Many thanks to you all. Your work has been and continues to be an inspiration as well as motivation, and the trips to Sheffield University have been major highlights during these years.

To Frida Andreasson, Camilla Malm, Joana Vicente and Miriam Svensson, we have shared this journey in different phases as PhD students at the Swedish Family Care Competence Centre. Your friendship has meant a lot to me during these years. Thank you!

To my dear colleagues at the Department of Health and Caring Sciences in Växjö and Kalmar, and at the Nka (Swedish Family Care Competence Centre). Thank you for the interesting discussions and many laughs during these years. Small words of encouragement and faith have meant a lot when there have been headwinds and uphill along the way. Many thanks to all of you!

To Mikael Svensson, former manager at the Operation Unit, Växjö central hospital, for encouraging me, as a brand-new specialist nurse, to go on to a master's degree back in 2014. Your encouragement and belief in me meant a lot to me in daring to take the steps that eventually led to this thesis. The thesis is now my way of saying thank you for believing in me.

And finally, to my family. A big thanks for your support and understanding and for keeping me grounded at all times. When I've been overthinking and worried about everything and nothing, you all have a way of saying, "Oh, just get on with it".

Thank you!

Svensk sammanfattning

Välfärdsteknik för äldre och deras anhöriga - En analys av samhällets syn på vård och omsorg för äldre och anhörigas roll sett genom diskursen om välfärdstekniska lösningar

Introduktion

Den här avhandlingen tar sin utgångspunkt i det svenska välfärdssystemet och mer precist, i hälso- och sjukvård samt vård och omsorg för äldre, som är under hög press. En åldrande befolkning, färre i arbetsför ålder som vill arbeta långsiktigt i vård och omsorg, och en förväntad ökning av vård- och omsorgsbehov i gruppen äldre med kroniska sjukdomar, gör att kommuner och regioner har tilltagande utmaningar att fullgöra sitt uppdrag. För att lösa problemen och bibehålla kvalité i hälso- och sjukvård samt vård och omsorg framhålls välfärdsteknik och digitalisering som den givna lösningen. Uppfattningen som förs fram i politisk debatt, policydokument och i traditionell och internetbaserad media av politiker och tjänstemän på alla nivåer, ses som den dominerande diskursen (dvs. resonemang, idéer, ideal och argument) i svensk styrning av hälso- och sjukvård samt vård och omsorg. I denna avhandling benämner jag denna diskurs; diskursen om välfärdstekniska lösningar.

I min avhandling analyserar jag diskursen om välfärdstekniska lösningar, och jag intresserar mig för hur man med hjälp av diskursen kan få en bild av hur samhället betraktar äldre människor (>65år) med behov av vård och/eller omsorg och deras anhöriga. Anhöriga definieras i den här avhandlingen som personer som ger vård, hjälp och/ eller stöd till någon närstående, regelbundet och oftast obetalt, utanför ett formellt ramverk. Den närstående är i den här avhandlingen definierad som den person, som tar emot vård, hjälp eller stöd.

I den här avhandlingen analyserar jag hur äldre och deras anhöriga konstrueras i diskursen om välfärdstekniska lösningar, och hur viktiga begrepp så som hälsa och vård framställs i diskursen. Välfärdsteknik kan delas upp i fyra huvudkategorier: 1) teknik för trygghet 2) teknik för att kompensera nedsatt funktion och förmåga, och för välmående 3) teknik för sociala kontakter och 4) teknik för kontakt och behandling från hälso- och sjukvård samt vård och omsorg. Välfärdsteknik definieras i den här avhandlingen som all digital teknik och tjänster, som levereras med denna inom någon av ovanstående kategorier. Thygesen (2019) menar, att det är sammanhanget som avgör om digital teknik eller tjänster är välfärdsteknik eller inte. Till exempel så blir mobiltelefonen välfärdsteknik när den används för ett videosamtal med vårdcentralen, eller för att bli påmind om nästa gång det är dags att ta medicin.

Med äldre avses personer som är 65 år eller äldre med någon form av behov av vård och/eller omsorg. Andelen äldre i Sverige uppgår till över 20 procent. Åldrandet är dock ingen enhetlig process. Det finns starka samband mellan hälsa och socioekonomisk position (dvs. utbildning, inkomst, yrke, boendesituation), där personer med högre socioekonomisk position lever längre och med bättre hälsa jämfört med personer i lägre socioekonomisk position.

Anhöriga till äldre är en ofta bortglömd grupp i samhället, trots att deras insatser står för den största andelen av vård och omsorg i Sverige. Utan anhöriga skulle inte äldreomsorgen klara sitt uppdrag. Av Sveriges ca 1.3 miljoner anhöriga ger fler än hälften vård, hjälp eller stöd till en äldre person. Av alla anhöriga är nästan 1 av 4 själva 65 år eller äldre.

Sammanfattningsvis så tar den här avhandlingen sin utgångspunkt i diskursen om välfärdstekniska lösningar i hälso- och sjukvård samt vård och omsorg, och hur den kan antas påverka äldre och deras anhöriga sett till hälsan. I en tid av snabb utveckling och förändring av hälso- och sjukvård samt vård och omsorg, är det av högsta vikt att granska diskursens underliggande drivkrafter och möjliga konsekvenser avseende hälsa för äldre och deras anhöriga.

Syfte

Syftet med avhandlingen är att undersöka hur diskursen om välfärdstekniska lösningar kan spegla samhällets syn på vård och omsorg för äldre och anhörigas roll.

Följande forskningsfrågor har styrt avhandlingsarbetet:

1) Vilka är de stora underliggande drivkrafterna för forskning och för policy, för att implementera och använda välfärdsteknik i hälso- och sjukvård samt vård och omsorg för äldre?

2) Vilka subjektspositioner (roller och förväntade beteenden) blir möjliga för äldre personer med vård- och/eller omsorgsbehov och vilken roll blir möjlig för deras anhöriga i diskursen?

3) På vilket/vilka sätt konstrueras och förstås begreppen äldres hälsa och vård och anhörigas insatser inom diskursen?

4) Vilka potentiella konsekvenser relaterat till hälsa kan identifieras för äldre personer och deras anhöriga genom diskursen om välfärdstekniska lösningar?

Delstudier

Avhandlingen är en sammanläggningsavhandling bestående av 4 delstudier.

Studie I var en omfattande litteraturöversikt som gav en överblick över internationell forskning inom området välfärdsteknik för äldre. Syftet med studien var att kartlägga interventionsstudier med välfärdsteknik för äldre och deras anhöriga, och hur och på vilka sätt syften och mål med interventionerna stämde överens med WHO:s ramverk för ett hälsosamt åldrande.

Studie II förflyttade sig till lokal svensk kontext. Lokala policydokument inom vård och omsorg för äldre inklusive strategidokument för stöd till anhöriga granskades i en analys av policy. Syftet med studien var att analysera diskursen om välfärdstekniska lösningar i lokala policydokument. Särskilt fokus lades på hur äldre och deras anhöriga konstrueras i dokumenten och på hur hälsa konstrueras och förstås.

Studie III fortsatte i den lokala kontexten med intervjuer med lokala politiker, som satt ordförande i vård- och omsorgsnämnden. Syftet med studien var att undersöka lokala politikers uppfattningar gällande vård och omsorg för äldre och stöd till anhöriga med hjälp av välfärdsteknik.

Studie IV övergick till regional kontext med fokusgrupper. Fokusgrupperna bestod av representanter för distriktsstyrelser i Pensionärernas riksorganisation (PRO) och SPF seniorerna (SPF). Syftet med studien var att undersöka hur representanter för pensionärsorganisationerna uppfattade och formulerade positioner i förhållande till implementering och användning av välfärdsteknik för deras medlemmar med behov av vård/omsorg och för medlemmar i rollen som anhöriga.

Avhandlingen har ett antal avgränsningar. Som sagts innan så inriktar jag mig på personer, 65 år eller äldre, med någon form av vård och/eller omsorgsbehov och deras anhöriga (från 18 år och uppåt). Genom denna avgränsning vill jag understryka, att jag inte anser att alla äldre behöver eller erhåller regelbunden hjälp av anhöriga. Men samtidigt är det viktigt att understryka, att det inte är önskvärt att lyfta ut gruppen äldre med vård- och omsorgsbehov i en skarp avgränsning gentemot de som är ”oberoende”. I avhandlingen argumenterar jag för att vi alla är beroende av hjälp och stöd genom livet, oavsett ålder, och därför vänder jag mig emot att dela in människor som beroende eller oberoende. Med det sagt kommer jag härefter att skriva om äldre och deras anhöriga. Anhöriga till äldre avser anhöriga som ger vård, hjälp eller stöd till en person i samma hushåll, någon som bor i eget hushåll nära intill eller på längre avstånd från den anhörige eller på vård-omsorgsboende.

Avhandlingen avgränsas tidsmässigt av perioden från 2013–2022. En period som avslutades med Corona-pandemin, vars effekter sannolikt kommer att påverka framtida policy inom området för hälso- och sjukvård samt vård och omsorg på många sätt, något som är synligt i förslaget till ny äldreomsorgslag.

Metod

Avhandlingen genomfördes med en kvalitativ induktiv design baserad på socialkonstruktionism och diskursanalys. Socialkonstruktionism, som teori och perspektiv, uppfattar samhället som konstruerat av språk, kultur och mänskliga överenskommelser (Hacking, 1999). Diskurser är ett sätt att prata om något bestämt tema och styr hur detta tema behandlas (Gibbs, 2015).

Studie I var en kvalitativ litteraturöversikt med internationellt fokus. 85 artiklar, publicerade i vetenskapliga tidskrifter under åren 2013–2020, som beskrev studier med välfärdsteknik för äldre, kartlades systematiskt i en matris och analyserades enligt Scoping review-metoden (Arksey & O’Malley, 2002), som är en metod för att systematiskt söka, samla in och sammanställa forskning.

Studie II var en diskursanalys av 61 lokala policydokument gällande tiden 2018–2020 från åtta svenska kommuner. Kommunerna hade valts ut baserat på Sveriges Kommuner och Regioner (SKR):s klassificering av svenska kommuner. Utifrån SKR:s nio grupperingar gjordes ett slumpmässigt urval i varje grupp. Exempel på policydokument som ingick var verksamhetsplaner för vård- och omsorgsnämnden, vision- och strategidokument för hälsa, vård, och omsorg, digitaliseringsplaner, budget för vård- och omsorgsnämnden, lokala digitaliseringsprojekt och strategistöd samt verksamhetsplaner för stöd till anhöriga. Policydokumenten analyserades med Carol Bacchis ”What’s the problem represented to be”-metod. Metoden betraktar policydokument som förslag till lösningar på ett givet samhällsproblem, och genom att analysera dessa lösningar formas insikter om hur det underliggande problemet/problemen uppfattas i policy.

Studie III var också en diskursanalys där 12 lokala politiker intervjuades. Politikerna valdes ut baserat på geografi (södra, mellersta eller norra Sverige), SEKOM – socioekonomisk analys av kommuner (Statisticon, 2021) och politisk partitillhörighet. Intervjuerna analyserades med hjälp av Bacchi och Goodwins metod för poststrukturell intervjuanalys, en metod som intresserar sig för vad som sägs och hur det sägs, i vilket sammanhang det sägs, och vad som gör det legitimt att uttrycka något på ett visst sätt.

Sista och avslutande studie IV var en fokusgruppstudie. Fokusgrupper innebär att mellan 6-12 personer samlas och utifrån ett givet ämne med öppna frågor för en diskussion. Fyra fokusgruppdiskussioner organiserades, två med distriktsstyrelser för PRO och två med distriktsstyrelser för SPF. Urvalet av pensionärsorganisationer var strategiskt urval, dvs grupper tillfrågas baserat på en uppfattning att gruppen besitter mycket erfarenhet och kunskap inom givet område. Totalt 33 personer deltog i fokusgrupperna och bidrog i diskussionerna. Fokusgrupperna analyserades med hjälp av Krueger och Casey’s (2015) beskrivning för analys av fokusgruppsdiskussioner, en metod som fokuserar på gruppens förståelse. Förståelsen byggs på under diskussionens gång genom utbyte av synpunkter och erfarenheter.

Etiska överväganden

Avhandlingen har genomförts med beaktande av Den europeiska kodexen för forskningens integritet, baserat på principerna om tillförlitlighet, ärlighet, respekt och ansvarighet (ALLEA – All European Academies, 2017), Vetenskapsrådets rekommendationer för God forskningssed

(Swedish Research Council, 2017) och i studie III och IV enligt Helsingforsdeklarationen (World Medical Association, 2000).

Studie I var en litteraturöversikt. Alla inkluderade studier hade publicerats i vetenskapliga tidskrifter och återfinns i referenslista för Studie I.

Studie II baserades på kommunala policydokument som var tillgängliga enligt offentlighetsprincipen för offentliga dokument (SFS 2009:400). Tillfrågade kommuner erhöll skriftlig information om studiens syfte, ansvariga forskare, och en försäkran om att deltagande kommuner inte skulle publiceras med namn. Det samlades inte in några dokument med personuppgifter.

Deltagarna i studie III var valda representanter för sitt parti och svarade i rollen som hälso- och omsorgsnämndens ordförande i sin kommun, alltså i en offentlig roll. Etiskt tillstånd var därför inte nödvändigt. Men Etikkommittén Sydost utfärdade ett rådgivande utlåtande (Dnr. EPK 746 – 2021).

Deltagarna fick skriftlig information med studiens syfte, samt en försäkran om skydd för deras personuppgifter och anonymitet i studien. Före intervjun fick de en genomgång av studiens syfte, bakgrund, att det var frivilligt att delta och att de när som helst kunde avbryta sin medverkan. Därefter lämnades muntligt medgivande till deltagande i studien.

I studie IV lämnades en ansökan om etikprövning till Etikprövningsmyndigheten. Svaret blev att etikprövning inte var nödvändigt, men myndigheten lämnade ett rådgivande utlåtande (Dnr 2022-02478-01). Deltagarna i fokusgrupperna fick skriftlig information före mötena och en muntlig genomgång av studiens syfte och frivillighet att delta innan mötet startade. Deltagarna lämnade sedan skriftligt medgivande att delta. Gruppen som medverkade via Zoom videokonferens lämnade muntligt medgivande.

Allt insamlat material med personuppgifter förvaras i ett låst och brandsäkert skåp vid Institutionen för hälso- och vårdvetenskap, Linnéuniversitetet i Kalmar. Linnéuniversitet är ansvarigt för att personuppgifter förvaras i enlighet med gällande lagstiftning och utan åtkomst för obehöriga. Materialet kommer att förvaras i minst 10 år för att sedan förstöras.

Resultat och diskussion

Resultaten i delstudierna visade att diskursen om välfärdstekniska lösningar fokuserade på förebyggande åtgärder för fysisk aktivitet och självständighet för äldre. Övergripande målsättning var att undvika ökade vårdbehov hos äldre. Hälsa sågs som ett medel för att uppnå detta mål och som den äldres egna ansvar. Att lägga ansvaret för hälsa som ett individuellt ansvar medför en risk att bortse från socioekonomiska, miljömässiga och strukturella förutsättningar, som kan se olika ut för äldre och påverka möjligheter att ta ansvar för sin hälsa.

Övervakning på distans och digitala tidsfördriv i form av spel och robotdjur betraktades som god vård, och som ett sätt att öka de äldres trygghet. Det ansågs också befrämja kvarboende i eget hem under längre tid. Samtidigt saknades välfärdsteknik som möjliggjorde delaktighet och inflytande för äldre, inte minst för äldre med mer omfattande behov av vård och omsorg.

Pensionärsorganisationerna uppfattade att gapet i samhället ökade mellan de som var digitalt inkluderade och de som var exkluderade i digitalt utanförskap. De underströk vikten av att samhällets tjänster måste vara tillgängliga för alla, också för dem med mer omfattande behov av vård och omsorg.

Anhöriga till äldre personer var involverade i 33 av 85 studier i litteraturöversikten. Men det var endast ett fåtal studier som mätte hälsoutfall för anhöriga eller intresserade sig för anhörigas behov eller preferenser. I de allra flesta studier som inkluderade anhöriga var de med som assistenter och gav stöd åt den närstående. De lokala policydokumenten problematiserade inte anhörigas roll i hälso- och sjukvård samt vård och omsorg i någon större omfattning. Trots hög tilltro till välfärdsteknik var det anmärkningsvärt att strategier för stöd till anhöriga inte innehöll någon välfärdsteknik. Lokalpolitikerna positionerade anhöriga i den sociala sfären, t ex. som någon kommer förbi på söndagen för kaffe och en stunds samvaro.

Detta är problematiskt, eftersom den positioneringen bortser från och osynliggör anhörigas insatser i form av regelbunden vård, hjälp eller stöd till den närstående. Lokalpolitikerna kunde inte ge exempel på välfärdsteknik med mål att ge direkt stöd och underlätta deltagande i vården för anhöriga.

Pensionärsföreningarna positionerade anhöriga i ett mycket annorlunda ljus. De såg anhöriga som en mycket värdefull tillgång, närmast ovärderliga för den äldre. Enligt pensionärsorganisationerna var det anhöriga som överbryggade klyftan när välfärdens tjänster levererades via digitala kanaler och som hjälpte till när välfärdstekniken krånglade. Vikten av anhöriga underströks ytterligare i pensionärsorganisationernas klart uttryckta oro för de äldre som helt saknade anhöriga. Deras ensamhet och isolering riskerade att förvärras genom införande av välfärdsteknik i hälso- och sjukvård samt vård och omsorg, menade pensionärsorganisationerna.

Varken forskning eller policy problematiserade ojämlikheter i hälsa för äldre och deras anhöriga i relation till välfärdsteknik i någon högre utsträckning. Även om vissa av politikerna kunde se risker med ökad ojämlikhet till följd av implementering av välfärdsteknik, så var de flesta trygga i att biståndsbedömningen utgjorde en utjämnande faktor och att tekniken i sig utjämnade skillnader. Detta kan uppfattas som problematiskt, då tidigare forskning inom området för digitalt utanförskap pekar mot att ökad användning av välfärdsteknik kan utgöra en risk för ökade skillnader i hälsa.

Hälsa i diskursen om välfärdsteknik hade främst fokus på fysisk aktivitet i förebyggande syfte. Hälsa positionerades som ett mål för att uppnå självständighet och oberoende, något som kunde översättas med att man bor kvar i sitt eget hem. Detta blir problematiskt, när fokus läggs på förebyggande insatser för fortsatt självständighet, eftersom äldre med mer omfattande behov riskerar att osynliggöras. Pensionärsorganisationerna uttryckte konsekvenser för hälsan främst i form av risken för ökad ensamhet, när välfärdsteknik införs. De uttryckte också att medlemmar kände stress och oro kring att delta i det digitala samhället och få vård och omsorg med hjälp av välfärdsteknik. Det är anmärkningsvärt att medan forskning och policy på både nationell och lokal nivå framhåller välfärdsteknik som positivt för trygghet och självständighet, så framhöll pensionärsorganisationerna att implementeringen riskerar leda till mer osäkerhet och oro, och att man blir beroende av hjälp för vardagliga aktiviteter som till exempel att boka tid för ett läkarbesök. Aktiviteter som man tidigare klarade självständigt.

Slutsatser, implikationer för policy och rekommendationer för fortsatt forskning

Avslutningsvis vill jag lyfta några punkter som jag ser som problematiska i diskursen om välfärdstekniska lösningar. Det nuvarande ensidiga fokuset på välfärdsteknik som den enda och nödvändiga lösningen för hälso- och sjukvården samt vård och omsorgens utmaningar ignorerar flera resurser och alternativa problemformuleringar, som skulle öppna upp för andra sätt att ta sig an dessa utmaningar. Äldre personer äger inte agendan eller har problemformulerings-utrymme. Istället presenteras de med färdiga lösningar. Anhöriga till äldre görs inte delaktiga i partnerskap med vården och omsorgen utan hålls på avstånd. Det är rimligt att anta att om dessa grupper fick mer utrymme på lokal nivå, så skulle de kunna komma fram med alternativa idéer för hur man organiserar vård och omsorg för att gynna hälsan hos äldre, anhöriga och samhället som helhet.

Därför argumenterar jag för att:

Hälso- och sjukvård samt vård och omsorg, som använder välfärdsteknik, bör ha målsättning att möjliggöra delaktighet och möjlighet att bidra till samhället i enlighet med FN-resolutionen (75/131) för ett inkluderande samhälle.

Anhöriga till äldre behöver lyftas upp på den politiska agendan. Förståelsen av vad det innebär att vara anhörig behöver belysas i all dess komplexitet och synliggöra anhörigas situation, förutsättningar och konsekvenser av anhörigskap. Det behövs en offentlig debatt som syftar till att omförhandla och tydliggöra anhörigas roll i välfärdsstaten.

Hälso- och sjukvård samt vård och omsorg för äldre bör placera relationen i centrum. Med det avses alla relationer som utvecklas mellan vård och omsorgspersonal, äldre, anhöriga, familjer och omgivande samhället. Vården behöver säkerställa en lämplig balans mellan behoven hos alla involverade. Arbetssättet relations-centrerad vård och omsorg (Nolan et al. 2003) kan fungera som vägledande teoretiskt ramverk.

Framtida hälso- och sjukvård samt vård och omsorg bör främja tjänster för äldre, som bevarar och stärker relationer och ömsesidighet, istället för självständighet och oberoende. Ett förhållningssätt där alla (den äldre personen, anhöriga, familj, vård och omsorgspersonal, övriga samhällsinvånare) ges en känsla av tillhörighet, syfte och betydelse (Nolan et al., 2006). Detta stöds ytterligare av Olaison et al. (2021) som visade hur äldre människor positionerade relation, stabilitet och kontinuitet som en förutsättning för deras möjlighet att bli delaktiga i sin vård och omsorg.

Förslag till framtida studier

Resultaten pekade mot att äldre personer och anhöriga som bor på landsbygden kan uppleva större hinder i användningen av välfärdsteknik och ha mindre tillgång till stöd från det offentliga. Detta behöver undersökas för att öka förståelsen för hur äldre personer och anhöriga på landsbygden påverkas av och uppfattar diskursen om välfärdstekniska lösningar.

I den nuvarande debatten inom diskursen om välfärdstekniska lösningar ligger fokus övervägande på den offentliga vården och omsorgen, medan anhörigas insatser är osynliga. Framtida studier bör utforska begreppet anhörigomsorg inom ett nordiskt välfärdsstatsperspektiv. Ett sätt att gå till väga skulle kunna vara att använda så kallade Blandade lärande nätverk (Hanson et al., 2011). Detta i syfte att, i samverkan med anhöriga, äldre, intresseorganisationer, yrkesverksamma och beslutsfattare i hälso- och sjukvård samt vård och omsorg och med politiker och forskare, utöka förståelsen och lyfta begreppet anhörigomsorg och dess roll i den pågående debatten om framtidens vård och omsorg i den Nordiska välfärdsstaten.

Avslutande kommentarer

Diskursen om välfärdsteknologiska lösningar är en del av en pågående förändring av tillhandahållandet av hälso- och sjukvård samt vård och omsorg för äldre i den svenska välfärdsstaten. I denna avhandling har jag argumenterat för, att förändringen innebär en förskjutning i positioneringen av hälsa mot ett individuellt ansvar, där mer sårbara grupper har en högre risk för social och digital exkludering. När hälsa reduceras till ett medel för att uppnå ett mål finns det en uppenbar risk att både äldre och deras anhöriga reduceras till objekt för vård och omsorg eller datapunkter i ett diagram. Det blir som ett neutralt ickepolitiskt problem som ska lösas med teknik. Jag avslutar denna avhandling med att argumentera för att det finns ett brådskande behov av politiska idéer som utmanar dessa ensidiga problemformuleringar. Det är av stor vikt att lyfta betydelsen av relationer och hur vi alla, oavsett ålder, kan bidra för ett mer äldrevänligt och anhörigvänligt samhälle.

References

Ablon, L., Libicki, M. C., & Golay, A. A. (2014). *Markets for cybercrime tools and stolen data: Hackers' bazaar.* Rand Corporation.

Achenbaum, A. W. (2013). Past as prologue: Toward a Global History of Ageing. In D. Dannefer & C. Phillipson (Eds.), *The Sage Handbook of Social Gerontology*. Los Angeles: Sage Publications Ltd.

Alexopoulou, S., & Åström, J. (2022). How the Responsibility of Digital Support for Older People is Allocated? The Swedish Welfare System at the Crossroads. *Research on Ageing and Social Policy,* 10(1), 48-76.

Alftberg, Å. (2022). Refamilisering och responsibilisering. In Jönson, H. (Ed.), *Perspektiv på utsatthet och problem under åldrandet* (pp. 190-205). Lund: Social Work Press.

ALLEA – All European Academies. (2017). *The European Code of Conduct for Research Integrity*. Revised Edition. Berlin: ALLEA All European Academies. https://www.allea.org/wp-content/uploads/2017/05/ALLEA-European-Code-of-Conduct-for-Research-Integrity-2017.pdf

Altermark, N., & Plesner, Å. (2021). *Vi skär ner i välfärden för att rädda välfärden. Det socialdemokratiska självbedrägeriet*. Katalys No. 97. Rapport. https://www.svet.lu.se/en/niklas-altermark/publication/acd8132d-b331-49c9-86bd-60900dbac968

Andersson, T., & Samulowitz, A. (2022). Intersektionalitet – flera normer som samverkar. In Dahlborg, E., & Tengelin, E. (Eds.), *Jämlik vård: normmedvetna perspektiv*. (Andra upplagan). Lund: Studentlitteratur.

Arksey, H., & O'Malley, L. (2005). Scoping studies: towards a methodological framework. *International Journal of Social Research Methodology,* 8(1), 19-32. doi:10.1080/1364557032000119616

Ayalon, L., & Tesch-Römer, C. (2018). *Contemporary Perspectives on Ageism* (Volume 19.0). Cham: Springer Open.

Bacchi, C. L. (2009). *Analysing policy: what's the problem represented to be?* Frenchs Forest, N.S.W.: Pearson.

Bacchi, C., & Goodwin, S. (2016). *Poststructural policy analysis : a guide to practice.* New York, NY: Palgrave Pivot.

Bambra, C., Riordan, R., Ford, J., & Matthews, F. (2020). The COVID-19 pandemic and health inequalities. *J Epidemiol Community Health*, 74(11), 964-968.

Bangerter, L. R., Griffin, J., Harden, K., & Rutten, L. J. (2019). Health information–seeking behaviors of family caregivers: analysis of the health information national trends survey. *JMIR aging*, 2(1), e11237.

Baum, F. (2016). *The new public health*. South Melbourne, Australia: Oxford University Press.

Beard, J. R., Officer, A., de Carvalho, I. A., Sadana, R., Pot, A. M., Michel, J.-P., . . . Chatterji, S. (2016). The World report on ageing and health: a policy framework for healthy ageing. *The Lancet*, 387(10033), 2145-2154. doi:10.1016/s0140-6736(15)00516-4

Berggren, H., & Trägårdh, L. (2015). *Är svensken människa? : gemenskap och oberoende i det moderna Sverige.* Stockholm: Norstedts.

Bergström, G., & Ekström, L. (2018). Tre diskursanalytiska inriktningar. In Boréus, K., & Bergström, G. (Eds.), *Textens mening och makt: metodbok i samhällsvetenskaplig text- och diskursanalys.* (Fjärde [omarbetade och aktualiserade] upplagan). Lund: Studentlitteratur.

Berridge, C., & Wetle, T. F. (2020). Why older adults and their children disagree about in-home surveillance technology, sensors, and tracking. *The Gerontologist*, 60(5), 926-934.

Bevir, M. (2009). *Interdependence*. SAGE Publications Ltd, https://doi.org/10.4135/9781446214817

Birkelöf, L. (2009). *Spatial interaction and local government expenditures for functionally impaired in Sweden*. (PhD dissertation, Nationalekonomi, Umeå universitet). http://urn.kb.se/resolve?urn=urn:nbn:se:umu:diva-30216

Björnsdóttir, K., Ceci, C., & Purkis, M. E. (2015). The 'right' place to care for older people: home or institution?. *Nursing Inquiry,* 22(1), 64-73.

Blackman, S., Matlo, C., Bobrovitskiy, C., Waldoch, A., Fang, M. L., Jackson, P., . . . Sixsmith, A. (2016). Ambient Assisted Living Technologies for Aging Well: A Scoping Review. *Journal of Intelligent Systems,* 25(1), 55-69. doi:10.1515/jisys-2014-0136

Blaxter, M. (2010). *Health.* (2. ed.) Cambridge: Polity.

Blomberg, S. & Petersson, J. (2016). Offentlig äldreomsorg som del i ett socialt medborgarskap, *Socialvetenskaplig tidskrift* 10(4). doi: 10.3384/SVT.2003.10.4.2653.

Blumer H. (1969). *Symbolic interactionism: perspective and method.* Prentice Hall.

Bondestam, M. (2020). *Människans metamorfos: ålder och den mognande kroppens politik. 1580-1850.* Nora: Nya Doxa.

Borg, J., Gustafsson, C., Landerdahl Stridsberg, S., & Zander, V. (2022). Implementation of welfare technology: a state-of-the-art review of knowledge gaps and research needs. *Disability and Rehabilitation: Assistive Technology*, 1-13.

Bosch-Farre, C., Garre-Olmo, J., Bonmati-Tomas, A., Malagon-Aguilera, M. C., Gelabert-Vilella, S., Fuentes-Pumarola, C., & Juvinya-Canal, D. (2018). Prevalence and related factors of Active and Healthy Ageing in Europe according to two models: Results from the Survey of Health, Ageing and Retirement in Europe (SHARE). *PLoS One*, 13(10), 19. doi:10.1371/journal.pone.0206353

Boyle, D. (2023). Caregiving Within the Context of Elder Care. In Charalambous, A. (Ed.) *Informal Caregivers: from Hidden Heroes to Integral Part of Care*. Springer International Publishing AG

Braga, J. (2022). Philosophy of Care: *New Approaches to Vulnerability, Otherness and Therapy*. Cham: Springer International Publishing AG

Braveman, P., & Gruskin, S. (2003). Defining equity in health. *J Epidemiol Community Health*, 57(4), 254-258. doi:10.1136/jech.57.4.254

Broese van Groenou MI, De Boer A. (2016). Providing informal care in a changing society. *Eur J Ageing* 13(3):271-279. doi: 10.1007/s10433-016-0370-7.

Brynn, R. (2016). Universal design and welfare technology. *Studies in Health Technology and Informatics,* 229:335–344.

Buffel, T., Yarker, S., Phillipson, C., Lang, L., Lewis, C., Doran, P., & Goff, M. (2021). Locked down by inequality: Older people and the COVID-19 pandemic. *Urban Studies*, 00420980211041018.

Burr, V. (2015). *Social Constructionism*. Routledge.

Carers Sweden [Anhörigas Riksförbund]. (2021). *Definition Anhörigperspektivet.* Anhörigas Riksförbund 25/08/2021. https://anhorigasriksforbund.se/site/wp-content/uploads/Definition_Anhorigperspektiv_20210811v4-.pdf

Carlström, E. (2005). *I skuggan av Ädel: integrering i kommunal vård och omsorg*. Diss. Göteborg : Göteborgs universitet, 2005.

Chang, E., Kannoth, S., Levy, S., Wang, S., Lee, J., & Levy, B. (2020). Global reach of ageism on older persons' health: A systematic review. *PloS One*, 15(1), E0220857.

Chatzidakis, A., Hakim, J., Littler, J, Rottenberg, C., & Segal, L. (2020). *The Care Manifesto. The politics of Interdependence. The Care Collective*. London/New York: Verso Books

Committee of Inquiry regarding an Elder Care Law and Strengthened Medical Competence in Municipalities. (2022). *Nästa steg Ökad jämlikhet I vård och omsorg för äldre personer.* SOU 2022:41. https://data.riksdagen.se/fil/EBBB83C7-183C-4DAB-B803-B22D7528612E [Accessed 12 October 2022].

Committee of Inquiry for Coordinated Development for Good Quality, Local Health Care. (2020). *Good Quality, Local Health Care: A Reform for a Sustainable Health Care System.* SOU 2020:19. http://www.sou.gov.se/wp-content/uploads/2020/06/Sumary.-2020.19.-FINAL1.pdf [Accessed 12 October 2022]

Committee of Inquiry for National Coordinator for Skills Supply within Health and Social Care for Older people. (2021). *Vilja välja vård och omsorg. En hållbar kompetensförsörjning inom vård och omsorg om äldre.* SOU 2021:52. https://www.regeringen.se/49d3fe/contentassets/2196bb3f12654c7f910f45dea2e10317/sou-2021_52.pdf [Accessed 12 October 2022]

Corona Commission. (2020). *The elder care in the pandemic*. SOU 2020:80. https://coronakommissionen.com/wp-content/uploads/2020/12/summary.pdf [Accessed 18 April 2023]

Cox, C. (2020). The sustainable development goals and aging: Implications for social work. *Journal of Human Rights and Social Work*, 5(1), 39-47.

Crenshaw, K. (1990). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review*, 43, 1241

CSDH. (2008). *Closing the gap in a generation: health equity through action on the social determinants of health*. Final Report of the Commission on Social Determinants of Health. Geneva: World Health Organization.

Dahler, A. M., Rasmussen, D. M., & Andersen, P. T. (2016). Meanings and experiences of assistive technologies in everyday lives of older citizens: a meta-interpretive review. *Disability and Rehabilitation: Assistive Technology*, 11(8), 619-629. doi:10.3109/17483107.2016.1151950

Dahlin Ivanoff, S. & Holmgren, K. (2017). *Fokusgrupper.* (Upplaga 1). Lund: Studentlitteratur.

Daly, M., & Westwood, S. (2018). Asset-based approaches, older people and social care: An analysis and critique. *Ageing and Society,* 38, 1087-1099.

Deeken, F., Rezo, A., Hinz, M., Discher, R., & Rapp, M. A. (2019). Evaluation of technology-based interventions for informal caregivers of patients with dementia—a meta-analysis of randomized controlled trials. *The American Journal of Geriatric Psychiatry*, 27(4), 426-445.

Deindl, C., & Brandt, M. (2017). Support networks of childless older people: Informal and formal support in Europe. *Ageing & Society*, 37(8), 1543-1567. doi:10.1017/S0144686X16000416

Diener, J., Rayling, S., Bezold, J., Krell-Roesch, J., Woll, A., & Wunsch, K. (2022). Effectiveness and acceptability of e-and m-health interventions to promote physical activity and prevent falls in nursing homes—a systematic review. *Frontiers in Physiology,* 958.

Domínguez-Rué, E., & Nierling, L. (2016). *Ageing and Technology : Perspectives from the Social Sciences* (Vol. 9). Bielefeld: Bielefeld: transcript Verlag.

Edebalk, P.G. (2022). *Äldreomsorgen: en aktuell historia.* Lund: Studentlitteratur.

Edebalk, P. G. (2011). *Gustav Möller och åldringarna*. Research Reports in Social Work 2011(4). Socialhögskolan, Lunds universitet.

Eikemo, T. A., & Bambra, C. (2008). The welfare state: a glossary for public health. *Journal of Epidemiology and Community Health* , 62(1), 3-6. doi:10.1136/jech.2007.066787

Ekman, B., McKee, K., Vicente, J., Magnusson, L., & Hanson, E. (2021). Cost analysis of informal care: estimates from a national cross-sectional survey in Sweden. *BMC health services research*, 21(1), 1-9.

Ekman, I. (Ed.) *Personcentrering inom hälso- och sjukvård: från filosofi till praktik.* (Andra upplagan). Stockholm: Liber.

Elena-Bucea, A., Cruz-Jesus, F., Oliveira, T., & Coelho, P. S. (2021). Assessing the role of age, education, gender and income on the digital divide: Evidence for the European Union. *Information Systems Frontiers*, 23, 1007-1021.

Elmersjö, M. (2020). The principle of help to self-help in Sweden. A study of representations and norms regarding old age and care needs and their moral and ethical implications for care work. *Nordic Social Work Research*, 10(3), 270-282, doi: 10.1080/2156857X.2018.1551240

Esping-Andersen, G. (1990). *The three worlds of welfare capitalism*. London: Polity

Estes, C.L., & Mahakian, J.L. (2001). The political economy of productive aging. In Morrow-Howell, N., Hinterlong, J., & Sherraden, M. (Eds.), *Productive Aging, Concepts and challenges,* (pp. 197-213). Johns Hopkins University Press, Baltimore/London

Eurocarers. (2018). *Informal care, poverty and social exclusion.* https://eurocarers.org/publications/informal-care-poverty-and-social-exclusion/ [Accessed 4 April 2023]

Eurocarers. (2021). *The gender dimension of informal care.* https://eurocarers.org/publications/the-gender-dimension-of-informal-care/ [Accessed 5 May 2023]

Eurocarers/IRCCS-INRCA. (2021). *Impact of the COVID-19 outbreak on informal carers across Europe – Final report.* Brussels/Ancona. https://eurocarers.org/wp-content/uploads/2021/05/EUC-Covid-study-report-2021.pdf [Accessed April 25 2023]

Eurocarers. (2023). *About carers.* https://eurocarers.org/about-carers/ [Accessed 5 May 2023]

Eurofound. (2017). *European Quality of Life Survey 2016: Quality of life, quality of public services, and quality of society*. Luxembourg: Publications Office of the European Union.

Eurofound. (2020). *Long-Term Care Workforce: Employment and Working Conditions.* Luxembourg: Publications Office of the European Union. https://www.eurofound.europa.eu/sites/default/files/ef_publication/field_ef_document/ef20028en.pdf [Accessed 25 April 2023]

European Commission. (2020). *Transformation of Health and Care in the Digital Single Market.* https://ec.europa.eu/digital-single-market/en/policies/ehealth [Accessed 8 August 2022]

European Commission. (2021). *Study on exploring the incidence and costs of informal long-term care in the EU.* VC/2019/0227. Luxembourg: Publications Office of the European Union. doi:10. 10.2767/06382

European Commission. (2022a). *Communication From The Commission To The European Parliament, The Council, The European Economic And Social Committee And The Committee Of The Regions on the*

European care strategy. COM (2022) 440 final. https://ec.europa.eu/social/main.jsp?langId=en&catId=89&furtherNews=yes&newsId=10382#navItem-relatedDocuments [Accessed 18 Sept 2022]

European Commission. (2022b). *Digital Economy and Society Index (DESI) 2022* Thematic chapters. https://digital-strategy.ec.europa.eu/en/library/digital-economy-and-society-index-desi-2022 [Accessed 25 April 2023]

Feltenius, D. (2008). From Outsiders to Influential Insiders: Pensioners' Organisations in the Policy Process in Sweden. *Journal of Comparative Policy Analysis,* 10(1), 29-46.

Fine, M. (2015). Cultures of Care. In Twigg, J., & Martin, W. (Eds.), *Handbook of Cultural Gerontology* (pp. 269-276). Abingdon UK: Routledge.

Florek, K. (2021). *Resilience of the Long-Term Care Sector. Early Key Lessons Learned From the Covid-19 Pandemic.* October 2021. European Public Service Union https://www.epsu.org/sites/default/files/article/files/Resilience_of%20the%20LTC%20sector_V3.pdf [Accessed 28 April 2023]

Foster, L., & Walker, A. (2015). Active and successful aging: a European policy perspective. *Gerontologist*, 55(1), 83-90. doi:10.1093/geront/gnu028

Forero, R., Nahidi, S., De Costa, J., Mohsin, M., Fitzgerald, G., Gibson, N., ... & Aboagye-Sarfo, P. (2018). Application of four-dimension criteria to assess rigour of qualitative research in emergency medicine. *BMC health services research*, 18(1), 1-11.

FrameWorks Institute (2017) Framing Strategies to Advance Aging and Address Ageism as Policy Issues. https://www.frameworksinstitute.org/publication/framing-strategies-to-advance-aging-and-address-ageism-as-policy-issues/ [Accessed 3 February 2023]

Frennert, S., & Östlund, B. (2018). Narrative Review Technologies in Eldercare. *Journal of Adhesion Science and Technology*, 6(1). doi:10.5324/njsts.v6i1.2518

Frik, A., Nurgalieva, L., Bernd, J., Lee, J., Schaub, F., & Egelman, S. (2019). *Privacy and security threat models and mitigation strategies of older adults.* In Fifteenth symposium on usable privacy and security (SOUPS 2019) (pp. 21-40).

Gaunt, D. (1995). Ivar Lo, de radikala pensionärerna och striden mot ålderdomshemmen 1949. *Socialvetenskaplig tidskrift*, 4.

Gaunt, D., & Wall, R. (Eds.), (1983). *Family forms in historic Europe*. Cambridge: Cambridge U.P

Gibbs, G. R. (2015, May 6). *Discourse Analysis Part 1*. Discursive Psychology. [video] https://youtu.be/F5rEy1lbvlw

Given, L. M. (2008). Politics of qualitative research. In *The SAGE encyclopedia of qualitative research methods* (pp. 641-643). SAGE Publications, Inc., https://dx.doi.org/10.4135/9781412963909.n326

Graham, H. (2007). *Unequal lives: health and socioeconomic inequalities*. Open University Press, Maidenhead.

Gunnarsson, C., & Larsson, J. (2022). Tiotusentals fler anställda i välfärden är inte realistiskt. *Dagens Nyheter*. https://www.dn.se/debatt/tiotusentals-fler-anstallda-i-valfarden-ar-inte-realistiskt/ [Accessed 18 April 2023]

Gustafsson, C. (2021). Introduktion till hälso- och välfärdsteknik. In Frennert, S., & Gustafsson, C. (Eds.), *Hälso- och välfärdsteknik: vård i en föränderlig värld.* (pp 23-44) (Upplaga 1). Lund: Studentlitteratur.

Hacking, I. (1999). *The social construction of what?* Cambridge, Mass.: Harvard Univ. Press.

Hall, S. (1992). The west and the Rest. In Hall, S., & Gieben, B. (Eds.), *Formations of modernity*. Cambridge: Polity Press.

Hanson, E., & Champeix, C. (2023). Informal Caregivers: The advocacy and Policy Perspective. In Charalambous, A. (Ed.), *Informal Caregivers: from Hidden Heroes to Integral Part of Care* (pp. 173-188). Springer International Publishing AG.

Hanson, E., Magnusson, L., & Sennemark, E. (2011). Blended learning networks supported by information and communication technology: An intervention for knowledge transformation within family care of older people. *The Gerontologist*, 51(4), 561-570.

Hedna, K., Hensing, G., Skoog, I., Fastbom, J., & Waern, M. (2020). Sociodemographic and gender determinants of late-life suicide in users and non-users of antidepressants. *European Journal of Public Health,* 30(5), 958-964.

Herrman, M., & Castillo, I. A. (2022). Ålder – normer genom livet. In Dahlborg, E., & Tengelin, E. (Eds.), *Jämlik vård: normmedvetna perspektiv.* (Andra upplagan). Lund: Studentlitteratur.

Holman, D., Salway, S., & Bell, A. (2020). Mapping intersectional inequalities in biomarkers of healthy ageing and chronic disease in older English adults. *Scientific Reports,* 10(1), 13522. https://doi.org/10.1038/s41598-020-69934-8

Huber, M., Knottnerus, J. A., Green, L., Horst, H. v. d., Jadad, A. R., Kromhout, D., . . . Smid, H. (2011). How should we define health? *BMJ*, 343, d4163. doi:10.1136/bmj.d4163

Hung, L., Wong, J., Smith, C., Berndt, A., Gregorio, M., Horne, N., ... & Young, E. (2022). Facilitators and barriers to using telepresence robots in aged care settings: a scoping review. *Journal of Rehabilitation and Assistive Technologies Engineering*, 9, 20556683211072385.

Ilicki, J. (2022). Challenges in evaluating the accuracy of AI-containing digital triage systems: A systematic review. *PloS One*, 17(12), e0279636.

Israel, S., & Spannagel, D. (2019). Material deprivation in the EU: a multi-level analysis on the influence of decommodification and defamilisation policies. *Acta Sociologica*, 62(2), 152-173.

Ivanoff, S. D., Duner, A., Eklund, K., Wilhelmson, K., Lidén, E., & Holmgren, E. (2018). Comprehensive geriatric assessment of frail older people: ideals and reality. *Journal of Interprofessional Care*, 32(6), 728-734.

Jegermalm, M., & Joy Torgé, C. (2021). Three caregiver profiles: who are they, what do they do, and who are their co-carers?, *European Journal of Social Work*, doi: 10.1080/13691457.2021.2016647

Ji, Y. A., & Kim, H. S. (2022). Scoping Review of the Literature on Smart Healthcare for Older Adults. *Yonsei Medical Journal*, 63(Suppl), S14.

Johansson, L., & Schön, P. (2017). *CEOUA LTC Network Quality and Cost-effectiveness in Long-term Care and Dependency Prevention.* Stockholm: Country report Sweden 2017. Report, Aging Research Center, Karolinska Institutet & Stockholm University & Stockholm Gerontology Research Center. https://aldrecentrum.se/wp-content/uploads/2020/07/quality_and_cost-effectiveness_in_long-term_care_and_d.pdf [Accessed 20 May 2022].

Johansson, L., Sundström, G., & Malmberg, B. (2018). Ett halvt århundrade svensk äldreomsorg–var står stat och familj?. *Tidsskrift For Omsorgsforskning* 4(1), 62-68.

Jovanovic, M., Mitrov, G., Zdravevski, E., Lameski, P., Colantonio, S., Kampel, M., ... & Florez-Revuelta, F. (2022). Ambient Assisted Living:

Scoping Review of Artificial Intelligence Models, Domains, Technology, and Concerns. *Journal of Medical Internet Research,* 24(11), e36553.

Jurado de los Santos, P., Moreno-Guerrero, A.-J., Marín-Marín, J.-A., & Soler Costa, R. (2020). The Term Equity in Education: A Literature Review with Scientific Mapping in Web of Science. *International Journal of Environmental Research and Public Health,* 17(10), 3526. MDPI AG. Retrieved from http://dx.doi.org/10.3390/ijerph17103526

Jönson, H. (2008*). Att studera sociala problem som perspektiv*. Working paper-serien; Nr. 6. Socialhögskolan, Lunds universitet.
https://lup.lub.lu.se/search/ws/files/4282018/1433350

Jönson, H., & Harnett, T. (2015). *Socialt arbete med äldre*. Stockholm: Natur & Kultur.

Katzin, M. (2014). Tillbaka till familjen: privat och offentligt ansvar i den svenska äldreomsorgen. Retfærd: *Nordisk Juridisk Tidsskrift* (2), 37-53.

Kaun, A., & Forsman, M. (2022). Digital care work at public libraries: Making Digital First possible. *New Media & Society*, 14614448221104234.

Kernisan, L. (2016). Promises and Pitfalls: Technology and the Future of Delivering Eldercare. *Generations-Journal of the American Society on Aging*, 40(1), 92-98.

Kickbusch, I., Piselli, D., Agrawal, A., Balicer, R., Banner, O., Adelhardt, M., ... & Wong, B. L. H. (2021). The Lancet and Financial Times Commission on governing health futures 2030: growing up in a digital world. *The Lancet*, 398(10312), 1727-1776.

Kittay, E. (2001). When Caring Is Just and Justice Is Caring: Justice and Mental Retardation. *Public Culture*, 13(3), 557-580.

Kitwood, T. (1997). *Dementia reconsidered*. Buckingham: Open
University Press.

Kitzinger, J., & Barbour, R. (Eds.), (1999). *Developing focus group research: politics, theory and practice.* Sage.

Kokorelias, K. M., Nelson, M. L., Tang, T., Steele Gray, C., Ellen, M., Plett, D., ... & Singh, H. (2022). Inclusion of older adults in digital health technologies to support hospital-to-home transitions: secondary analysis of a rapid review and equity-informed recommendations. *JMIR Aging*, 5(2), e35925.

Koohsari, M.J., Nakaya, T., Oka. K. (2018). Activity-Friendly Built Environments in a Super-Aged Society, Japan: Current Challenges and toward a Research Agenda. *Int J Environ Res Public Health*. Sep 19;15(9):2054. doi: 10.3390/ijerph15092054.

Krekula, C., Nikander, P., & Wilińska, M. (2018). Multiple Marginalizations Based on Age: Gendered Ageism and Beyond. In Ayalon, L., & Tesch-Römer, C. (Eds.), *Contemporary Perspectives on Ageism* (pp. 33-50). (Volume 19.0). Cham: Springer Open.

Kristersson Uggla, B. (2020) Personfilosofi – filosofiska utgångspunkter för personcentrering inom hälso- och sjukvård. In Ekman, I. (Ed.), *Personcentrering inom hälso- och sjukvård: från filosofi till praktik* (pp 58-105). (Andra upplagan). Stockholm: Liber.

Krueger, R.A., & Casey, M.A. (2015*). Focus groups: a practical guide for applied research.* (5. [updated] ed.) Thousand Oaks, Calif.: Sage Publications.

Kröger, T., Puthenparambil, J. M., & Van Aerschot, L. (2019). Care poverty: unmet care needs in a Nordic welfare state. *International Journal of Care and Caring*, 3(4), 485-500.

Kröger, T. (2022). *Care Poverty: When Older People's Needs Remain Unmet*. Cham: Springer Nature, Web.

Köttl, H., Gallistl, V., Rohner, R., & Ayalon, L. (2021). "But at the age of 85? Forget it!": Internalized ageism, a barrier to technology use. *Journal of Aging Studies,* 59, 100971.

Köttl, H., Tatzer, V. C., & Ayalon, L. (2022). COVID-19 and everyday ICT use: The discursive construction of old age in German media*. The Gerontologist,* 62(3), 413-424.

Lancet Regional Health – Europe (2023a) *The cost-of-living crisis is also a health crisis.* The Lancet Regional Health-Europe, 27:100632 https://doi.org/10.1016/j.lanepe.2023.100632

Lancet Regional Health Europe (2023b). *Sweden's economic inequality gap is widening and worrying.* The Lancet Regional Health-Europe, 26. https://doi.org/10.1016/j.lanepe.2023.100610

Li, J., & Song, Y. (2019). Formal and Informal Care. In: Gu, D., Dupre, M. (Eds.), *Encyclopedia of Gerontology and Population Aging.* Springer, Cham. https://doi.org/10.1007/978-3-319-69892-2_847-1

Lincoln, Y.S., & Guba, E.G. (1985). *Naturalistic inquiry*. Beverly Hills, Calif.: Sage.

Lincoln, Y. S., & Guba, E. G. (2013). *The constructivist credo*. Left coast press.

Liu, H., & Lou, V. (2019). Transitioning into spousal caregiving: contribution of caregiving intensity and caregivers' multiple chronic conditions to functional health. *Age Ageing*, 48(1), 108-114. doi:10.1093/ageing/afy098

Ljunggren, J. (2015). *Den uppskjutna vreden: socialdemokratisk känslopolitik från 1880- till 1980-talet*. Lund: Nordic Academic Press.

Lo-Johansson, I. (1949). *Ålderdom.* Stockholm: Koop. förb.

Lolich, L., & Timonen, V. (2022). The ageing entrepreneur: Co-opting older adults into the siliconisation of care. In Hirvonen, H., Tammelin, M., Hänninen, R., & Wouters, E. J. (Eds.), *Digital transformations in care for older people: Critical perspectives.* (pp. 35-53) Routledge.

Lupton, D. (2012). M-health and health promotion: The digital cyborg and surveillance society. *Soc Theory Health* 10, 229–244. https://doi.org/10.1057/sth.2012.6

Lupton, D. (2013a). The digitally engaged patient: Self-monitoring and self-care in the digital health era. *Social Theory & Health,* vol. 11, no. 3. pp. 257–270.

Lupton, D. (2013b). Understanding the human machine [Commentary]. *IEEE Technology and Society Magazine*, 32(4), 25-30.

Lupton, D. (2017). Self-tracking, health and medicine. *Health Sociology Review*, 26(1), 1-5.

Lupton, D. (2018). *Digital health : critical and cross-disciplinary perspectives*. Milton Park, Abingdon, Oxon ;: Routledge.

Mackenbach, J. P. (2012). The persistence of health inequalities in modern welfare states: The explanation of a paradox. *Social Science & Medicine,* 75(4), 761-769. doi:10.1016/j.socscimed.2012.02.031

Mannheim, I., Wouters, E. J., Köttl, H., van Boekel, L., Brankaert, R., & van Zaalen, Y. (2022). Ageism in the Discourse and Practice of Designing Digital Technology for Older Persons: A Scoping Review. *The Gerontologist*. gnac144, https://doi.org/10.1093/geront/gnac144

Marczewska, N. (2011). Swedish Healthcare: Overview of the Health System. ICU *Management & Practice*, 11(1) https://healthmanagement.org/c/icu/issuearticle/swedish-healthcare-overview-of-the-health-system

Marland, A., & Esselment, A.L. (2019). Negotiating with gatekeepers to get interviews with politicians: Qualitative research recruitment in a digital media environment. *Qualitative Research* : QR, 19(6), 685-702.

Marmot, M. (Jan 14, 2021). *Social justice, health equity and covid 19*. [video] YouTube. https://youtu.be/JAbCPZS1r6I

Marmot, M. (2015). *The health gap: the challenge of an unequal world*. London: Bloomsbury.

Mays, N., & Pope, C. (2000). Qualitative research in health care. Assessing quality in qualitative research. *BMJ* 320(7226):50-2. doi: 10.1136/bmj.320.7226.50. PMID: 10617534; PMCID: PMC1117321.

McCormack, B. (2004). Person-centredness in gerontological nursing: an overview of the literature. *Journal of Clinical Nursing*, 13, 31-38.

Ministry for Foreign Affairs. (2022*). EU strategy for global health*. 2022/23:FPM41 https://www.regeringen.se/contentassets/1802029f28b14ed5aa3f63c08e1a7012/fakta-pm-41-eus-strategi-for-global-halsa-fungerar.pdf [Accessed 14 February 2023]

Ministry of Health and Social Affairs & Swedish Association of Local Authorities and Regions. (2016). *Vision for eHealth 2025* https://www.government.se/4a3e02/contentassets/b0fd09051c6c4af59c8e33a3e71fff24/vision-for-ehealth-2025.pdf

Ministry of Health and Social Affairs. (2019). *Committee Directive National coordinator for a sustainable skills supply within municipality financed health and social care for older people*. Dir. 2019:77. https://www.regeringen.se/contentassets/a01d70ccea7f4af5b26409a51b2f60e0/dir.-2019-77.pdf [Accessed 5 May 2020]

Ministry of Health and Social Affairs. (2022a). *Nationell anhörigstrategi—inom hälso- och sjukvård och omsorg*. https://www.regeringen.se/498267/contentassets/29579d4400834b759d3c78faf438dece/nationell-anhorigstrategi-inom-hals—-och-sjukvard-och-omsorg.pdf [Accessed 18 August 2022]

Ministry of Health and Social Affairs. (2022b). *Legislative memorandum for Increased opportunities for the use of welfare technology in elder care*. Ds 2022:4. https://www.regeringen.se/contentassets/1ab9d14e5c8d4aa1a0ed4de61049d315/okade-mojligheter-till-anvandning-av-valfardsteknik-inom-aldreomsorgen---ds-2022-4.pdf [Accessed 17 November, 2022]

Ministry of Health and Social Affairs and SALAR. (2023). *Good quality, local health care 2023. A restructuring of health and healthcare with primary care as a hub. Agreement between the State and SALAR.* https://skr.se/download/18.6a40047a185e2f0179f1e22e/1674823955025

/Overenskommelse_-_God_och_nara_vard-2023.pdf [Accessed April 2, 2023]

Ministry of Finance. (2021). *The Welfare commission final report to the Government* (Ministry of Finance) Memorandum 2021-12-14 Fi2021/ https://www.regeringen.se/contentassets/213b0fbd978744fab844b3d181f8ba98/valfardskommissionens-slutredovisning-till-regeringen-finansdepartementet.pdf [Accessed 18 April 2023]

Ministry of Justice. (2020). *Public access to information and secrecy. The legislation in brief.* https://www.regeringen.se/contentassets/f381325faa3b41dc859080a0b1b4c994/public-access-to-information-and-secrecy.pdf

Morse, J. (2018). Reframing Rigor in Qualitative Inquiry. In Denzin, N. K., & Y. S. Lincoln. (Eds.), *The SAGE Handbook of Qualitative Research*. (pp. 796-817) Fifth edition. Los Angeles: Sage, Print.

Municipal Committee of Inquiry. (2020). *Starkare kommuner – med kapacitet att klara välfärdsuppdraget.* SOU 2020:8. https://www.regeringen.se/contentassets/39c4816961934a4ca8bd627868fd4423/starkare-kommuner--med-kapacitet-att-klara-valfardsuppdraget-sou-20208.pdf [Accessed 6 March 2023]

Munn, Z., Peters, M. D., Stern, C., Tufanaru, C., McArthur, A., & Aromataris, E. (2018). Systematic review or scoping review? Guidance for authors when choosing between a systematic or scoping review approach. *BMC medical research methodology,* 18, 1-7.

NBHWS - National Board of Health and Welfare Sweden. (2002). *Anhörig 300 Slutrapport.* https://www.demenscentrum.se/sites/default/files/globalassets/myndigheter_departement_pdf/02_socialstyrelsen_anhorig300.pdf

NBHWS – National Board of Health and Welfare Sweden. (2012). *Anhöriga som ger omsorg till närstående*. Stockholm: Socialstyrelsen.

NBHWS - National Board of Health and Welfare Sweden. (2020). *Anhöriga som vårdar eller stödjer närstående äldre personer. Underlag till en nationell strategi*. https://www.socialstyrelsen.se/globalassets/sharepoint-dokument/artikelkatalog/ovrigt/2020-11-7045.pdf [Accessed 16 October 2022]

Neven, L., & Peine, A. (2017). From Triple Win to Triple Sin: How a Problematic Future Discourse is Shaping the Way People Age with Technology. *Societies,* 7(3). doi:10.3390/soc7030026

Nilsen, E. R., Hollister, B., Söderhamn, U., & Dale, B. (2022). What matters to older adults? Exploring person-centred care during and after transitions between hospital and home. *J Clin Nurs*. 31: 569– 581. https://doi.org/10.1111/jocn.15914

Nilsson, M. (2008). *Våra äldre : Om konstruktioner av äldre i offentligheten* (PhD dissertation). Linköping University Electronic Press, Linköping. http://urn.kb.se/resolve?urn=urn:nbn:se:liu:diva-14934

Nilsson, R., & Eriksson, M. (2020). *Ilska, desperation och lömska försåt: våldsamma kvinnor i 1800-talets Sverige*. Lund: Nordic Academic Press.

Nolan M., Davies S., & Grant G. (2001). Integrating perspectives. In Nolan M., Davies S., & Grant G. (Eds.), *Working with Older People and their Families: Key Issues in Policy and Practice* (pp. 160–178). Open University Press, Buckingham,

Nolan, M. (2001). Successful ageing: Keeping the 'person'in person-centred care. *British Journal of Nursing*, 10(7), 450-454.

Nolan, M., Grant, G., Keady, J., & Lundh, U. (2003). New directions for partnerships: relationship-centrered care. In: Nolan, M., Lundh, U., Grant, G., & Keady, J. (Eds.), *Partnerships in family care: [understanding the caregiving career] (*pp. 257-291). Maidenhead: Open University Press.

Odén, B., Svanborg, A., & Tornstam, L. (1993). *Att åldras i Sverige*. Stockholm: Natur och Kultur.

OECD. (2019). *Health in the 21st Century: Putting Data to Work for Stronger Health Systems*. OECD Health Policy Studies, OECD Publishing, Paris, https://doi.org/10.1787/e3b23f8e-en.

Offerman, J., Fristedt, S., Schmidt, S. M., Lofqvist, C., & Iwarsson, S. (2023). Attitudes related to technology for active and healthy aging in a national multigenerational survey. *Nature Aging*, 1-9.

Olaison, A., Cedersund, E., Marcusson, J., Valtersson, E., & Sverker, A. (2021). Maneuvering the care puzzle: Experiences of participation in care by frail older persons with significant care needs living at home. *International Journal of Qualitative Studies on Health and Well-being,* 16(1), 1937896.

Olmos-Vega, F. M., Stalmeijer, R. E., Varpio, L., & Kahlke, R. (2023). A practical guide to reflexivity in qualitative research: AMEE Guide No. 149. *Medical Teacher,* 45(3), 241-251.

Oudshoorn, N., Neven, L., & Stienstra, M. (2016). How diversity gets lost: Age and gender in design practices of information and communication technologies. *Journal of Women & Aging*, 28, 170-185. doi:10.1080/08952841.2015.1013834

Oudshoorn, N. (2011). *Telecare Technologies and the Transformation of Healthcare.* Houndmills, UK: Palgrave Macmillan.

Patton, M.Q. (2002). *Qualitative Research & Evaluation Methods*. (3. ed.) London: SAGE.

Pawson, R. (2002). Evidence-based Policy: In Search of a Method. *Evaluation*, 8:2. doi:10.1177/1358902002008002512

Peterson, E., & Brodin, H. (2022). Choice, needs or equality? Discursive struggles about defining home care for older people in Sweden. *Ageing & Society*, 42(10), 2433-2453.

Phillips, T., & de Wet, J. P. (2017). Towards rigorous practice: A framework for assessing naturalistic evaluations in the development sector. *Evaluation (London, England. 1995)*, 23(1), 102–120. https://doi.org/10.1177/1356389016682777

Ploeg, J., Ali, M.U., Markle-Reid, M., Valaitis, R., Bartholomew, A., Fitzpatrick-Lewis, D., McAiney, C., & Sherifali, D. (2018). Caregiver-Focused, Web-Based Interventions: Systematic Review and Meta-Analysis (Part 2) *J Med Internet Res*; 20(10):e11247 doi: 10.2196/11247

Portacolone, E. (2011). The myth of independence for older Americans living alone in the Bay Area of San Francisco: A critical reflection. *Ageing & Society*, 27, 166–174. doi:10.1016/j.jaging.2013.01.001

Portacolone, E., Rubinstein, R. L., Covinsky, K. E., Halpern, J., & Johnson, J. K. (2019). The precarity of older adults living alone with cognitive impairment. *The Gerontologist,* 59(2), 271-280.

Prague Security Studies InstitutePrague Security Studies Institute. (2020). *The Sum of All Fears–Chinese AI Surveillance in Serbia.* Western Balkans at the Crossroads: Analytical study. https://www.pssi.cz/download/docs/8447_the-sum-of-all-fears-chinese-ai-surveillance-in-serbia.pdf

Public Health Agency of Sweden. (2022a). *Folkhälsans utveckling. Årsrapport 2022*. Folkhälsomyndigheten. https://www.folkhalsomyndigheten.se/contentassets/c8374b60c7174b2592ba7f76f52c3165/folkhalsans-utveckling-arsrapport-2022.pdf [Accessed 27 April 2023]

Public Health Agency of Sweden. (2022b). *Folkhälsopolitikens målområden. Målområde 7: Kontroll, inflytande och delaktighet.* Folkhälsomyndigheten. https://www.folkhalsomyndigheten.se/contentassets/712964cfa98a4385b7053342c552e0aa/folkhalsopolitikens-malomraden-malomrade-7-kontroll-inflytande-delaktighet.pdf

QSR International. (2021 May 25). *Powerful research simplified*. https://www.qsrinternational.com/nvivo-qualitative-data-analysis-software/about/nvivo [Accessed 15 May 2021]

Radhakrishnan, R. (2021). Experiments with social good: Feminist critiques of artificial intelligence in healthcare in India. *Catalyst: Feminism, Theory, Technoscience,* 7(2).

Ragnedda, M., Ruiu, M. L., & Addeo, F. (2020). Measuring digital capital: An empirical investigation. *New Media & Society*, 22(5), 793-816.

Rahm, L., & Fejes, A. (2017). Popular education and the digital citizen: a genealogical analysis. *European journal for Research on the Education and Learning of Adults,* 8(1), 21-36.

Robinson, L., Cotten, S. R., Ono, H., Quan-Haase, A., Mesch, G., Chen, W., ... & Stern, M. J. (2015). Digital inequalities and why they matter. *Information, communication & society*, 18(5), 569-582.

Rose, J., & Johnson, C.W. (2020). Contextualizing reliability and validity in qualitative research: toward more rigorous and trustworthy qualitative social science in leisure research. *Journal of Leisure Research*, 51(4), 432-451, doi: 10.1080/00222216.2020.1722042

Rose, N.S. (1999). *Governing the Soul, the Shaping of the Private Self.* London: Free Association Books.

Rostgaard, T., Jacobsen, F., Kröger, T., & Peterson, E. (2022). Revisiting the Nordic long-term care model for older people—still equal? *European Journal of Ageing*, 19(2), 201–210.

Rouzet, D., Sánchez, A. C., Renault, T., & Roehn, O. (2019). *Fiscal challenges and inclusive growth in ageing societies*, OECD Economic Policy Papers, No. 27, OECD Publishing, Paris, https://doi.org/10.1787/c553d8d2-en.

Rowe, J. W., & Kahn, R. L. (1997). Successful aging. *The Gerontologist*, 37(4), 433-440.

Sacco, L. B., Konig, S., Westerlund, H., & Platts, L. G. (2020). Informal Caregiving and Quality of Life Among Older Adults: Prospective Analyses from the Swedish Longitudinal Occupational Survey of Health

(SLOSH*). Social Indicators Research.* doi:10.1007/s11205-020-02473-x

von Saenger, I., Dahlberg, L., Augustsson, E., Fritzell, J., & Lennartsson, C. (2023). Will your child take care of you in your old age? Unequal caregiving received by older parents from adult children in Sweden. *European Journal of Ageing*, 20(1), 8.

Sahlin, I. (2013). Sociala problem som verklighetskonstruktioner. In Meeuwisse, A., & Swärd, H. (Eds.), *Perspektiv på Sociala Problem* (Vol. 2:a omarbetade utgåvan, s. 129-149). Stockholm: Natur och Kultur.

Said, E.W. (2003[1994]). *Orientalism.* ([25th anniversary edition]). New York: Vintage Books, a division of Random House.

Saif-Ur-Rahman, K. M., Mamun, R., Eriksson, E., He, Y., & Hirakawa, Y. (2021). Discrimination against the elderly in health-care services: a systematic review. *Psychogeriatrics,* 21(3), 418-429.

Sanjari, M., Bahramnezhad, F., Fomani, F. K., Shoghi, M., & Cheraghi, M. A. (2014). Ethical challenges of researchers in qualitative studies: the necessity to develop a specific guideline. *Journal of Medical Ethics and History of Medicine*, (7)14.

Scherrer, K. S., Ingersoll-Dayton, B., & Spencer, B. (2014). Constructing couples' stories: Narrative practice insights from a dyadic dementia intervention. *Clinical Social Work Journal*, 42, 90-100.

Schiffer, M., & Ricchetti, D. (2020). The new Big Brother. China and Digital Authoritarianism. A Democratic Staff Report Prepared for the use of the Committee on Foreign Relations United States Senate. https://www.foreign.senate.gov/imo/media/doc/2020%20SFRC%20Minority%20Staff%20Report%20-%20The%20New%20Big%20Brother%20-%20China%20and%20Digital%20Authoritarianism.pdf [Accessed 18 April 2023]

Schou, J., & Hjelholt, M. (2017). Digitalising the welfare state: citizenship discourses in Danish digitalisation strategies from 2002 to 2015. *Crit Pol Stud*. 13:1-20.

SFCCC (in manuscript). *Older carers of persons with care needs: Informal care and care— support - a national survey 2018.* Kalmar: The Swedish family care competence centre

Shin, J. Y., Kang, T. I., Noll, R. B., & Choi, S. W. (2018). Supporting caregivers of patients with cancer: a summary of technology-mediated interventions and future directions. *American Society of Clinical Oncology Educational Book*, 38, 838-849.

Siira, E., Olaya-Contreras, P., Yndigegn, S., Wijk, H., Rolandsson, B., & Wolf, A. (2022). Older adults' provision of informal care and support to their peers - A cornerstone of swedish society: Demographic characteristics and experiences of social isolation. *Scandinavian Journal of Caring Sciences*, 36(2), 468-481.

Sohn, M., Yang, J., Sohn, J., & Lee, J. H. (2022). Digital healthcare for dementia and cognitive impairment: A scoping review. *International Journal of Nursing Studies*, 104413.

Spasova, S., Baeten, R., Coster, S., Ghailani, D., Pena-Casas, R., & Vanhercke, B. (2018). *Challenges in long-term care in Europe. A study of national policies 2018. European Commission*. Directorate-General for Employment, Social Affairs and Inclusion.

Statisticon. (2021). *Befolkningsprognoser Statistiska analyser om Sveriges invånare*. https://befolkningsprognoser.se/ (accessed 8 August 2021).

Statistics Sweden. (2022). *After age 60. A description of older people in Sweden* (Efter 60 En beskrivning av äldre I Sverige) Demografiska rapporter 2022:2 https://www.scb.se/contentassets/c4ac9fb5ad10451aab0885b7160de9b0/be0701_2022a01_br_be51br2202.pdf

Sturmark, C. (2015). *Upplysning i det 21:a århundradet : Tro och vetande 3.0*. Lidingö: Fri tanke.

Swedish Agency for Health and Care Services Analysis. (2018). *Från mottagare till medskapare. Ett kunskapsunderlag för en mer personcentrerad hälso- och sjukvård.* Rapport 2018:8. https://www.vardanalys.se/rapporter/fran-mottagare-till-medskapare/ [Accessed 2 May 2023]

Swedish Agency for Health and Care Services Analysis. (2020). *Innovation efter funktion. Välfärdsteknikens effekter ur fyra perspektiv*. Rapport 2020:2. https://www.vardanalys.se/rapporter/innovation-efter-funktion/ [Accessed 2 May 2023]

Swedish Association of Local Authorities and Regions [SALAR]. (2016). *Classification of Swedish municipalities 2017*. https://skr.se/download/18.6b78741215a632d39cbcc85/1487772640274/Classification%20of%20Swedish%20Municipalities%202017.pdf

Swedish Association of Local Authorities and Regions [SALAR]. (2022a). *Välfärdens kompetensförsörjning. Personalprognos 2021-2031 och hur* *välfärden kan möta kompetensutmaningen.* https://skr.se/download/18.1eb2584e1850542abfaac29/1670940688212/Valfardens-kompetensforsorjning.pdf (Accessed 25 April 2023)

Swedish Association of Local Authorities and Regions [SALAR]. (2022b, Feb 16). *Det här är kommunalt självstyre*. Swedish Association of Local Authorities and Regions. https://skr.se/skr/demokratiledningstyrning/styrningledning/kommunaltsjalvstyre/detharарkommunaltsjalvstyre.61407.html (Accessed 24 Sept 2022).

Swedish Association of Local Authorities and Regions [SALAR]. (2023). *Personcentrerat förhållningssätt.* https://skr.se/skr/halsasjukvard/utvecklingavverksamhet/naravard/personcentreratforhallningssatt.16029.html

Swedish government and SALAR (2020, Nov 18) *Strategi för genomförande av Vision e-hälsa 2025* https://skr.se/download/18.124948ae175d7914e4e1fba1/1605702594101/Strategin_vision_ehalsa_2020-2022_ny.pdf

Swedish Internet Foundation. (2022, October 11). *The Swedes and the internet*. The Swedish Internet Foundation. https://svenskarnaochinternet.se/rapporter/svenskarna-och-internet-2022/ [Accessed 14 March 2023]

Swedish National Audit Office. (2014). *Stödet till anhöriga omsorgsgivare*. RIR 2014:9. Stockholm: Riksdagens Interntryckeri. https://www.riksrevisionen.se/download/18.78ae827d1605526e94b2fdfa/1518435441301/RiR_2014_9_Anh%C3%B6rigst%C3%B6d_Anpassning3.pdf [Accessed 3 May 2023]

Swedish Nurses Association. (2022 [2010]). *Personcentrerad vård.* https://swenurse.se/publikationer/personcentrerad-vard [Accessed 1 May 2023]

Swedish Nurses Association, Swedish Medical Association & Swedish Association of Clinical Dietitians. (2019). *Personcentrerad vård – en kärnkompetens för god och säker vå*rd. https://www.sls.se/globalassets/sls/dokument/personcentrerad-vard-2019_digital.pdf [Accessed 1 May 2023]

Swedish research council. (2017). *God forskningssed*. VR1708. https://www.vr.se/download/18.2412c5311624176023d25b05/1555332112063/God-forskningssed_VR_2017.pdf

Svensson, M. (2022). *Höga kostnader och låg patientnytta – att värdera insatser i hälso- och sjukvård.* Forskningsrapport. Stockholm: SNS Förlag. https://snsse.cdn.triggerfish.cloud/uploads/2022/03/hoga-kostnader-och-lag-patientnytta--att-vardera-insatser-i-halso-och-sjukvard.pdf

Szebehely, M., & Meagher, G. (2017). Nordic eldercare – Weak universalism becoming weaker? *Journal of European Social Policy*, 28(3), 294-308. doi:10.1177/0958928717735062

Takter, M. (2017). *Vem är den enskilde i ett gemensamt hem? : En studie av hur biståndshandläggare förhåller sig till anhörigas möjligheter till frivillighet, autonomi och personlig integritet* (Licentiate dissertation, Malmö högskola). https://doi.org/10.24834/2043/22933

Taylor, A., Tieman, J., & Maeder, A. (2021). Digital innovations for aged care: Impacts in the COVID-19 pandemic. *Studies in Health Technology and Informatics,* 276, 51-57.

Thygesen, H. (2019). Velferdsteknologie og nye tjestelösningar. In: Moser, I. (Ed.), *Velferdsteknologi. En Resursbok*. Oslo: Cappelen Damm Akademisk.

Tornstam, L. (2005). *Åldrandets socialpsykologi*. Stockholm: Norstedts akademiska förlag.

Tornstam, L. (2018). *Åldrandets socialpsykologi*. Lund: Studentlitteratur.

Tronto, J. C. (2015). *Who cares?: How to reshape a democratic politics*. Cornell University Press.

Tronto, J. C. (1994). *Moral boundaries: a political argument for an ethic of care*. (First edition). New York, NY: Routledge.

Tsai, H. Y. S., Shillair, R., & Cotten, S. R. (2017). Social support and "playing around" an examination of how older adults acquire digital literacy with tablet computers. *Journal of Applied Gerontology*, 36(1), 29-55.

Twigg, J., & Atkin, K. (2002). *Carers perceived: policy and practice in informalcare.* McGraw Hill.

United Nations. (2020). *United Nations Decade of Healthy Ageing (2021-2030)* 75/131. https://digitallibrary.un.org/record/3895802. [Accessed 27 April 2023]

Wagg, E., Blyth, F. M., Cumming, R. G., & Khalatbari-Soltani, S. (2021). Socioeconomic position and healthy ageing: A systematic review of cross-sectional and longitudinal studies. *Ageing Research Reviews*, 69, 101365.

Walker, J., Martin, M., Seery, E., Abdo, N., Kamande, A., & Lawson, M. (2022). *The commitment to reducing inequality index 2022*. Oxfam and DFI Research Report October 2022. DFI Development Finance International and Oxfam. https://oxfamilibrary.openrepository.com/bitstream/handle/10546/621419/rr-cri-2022-111022-en.pdf;jsessionid=8697D961308C01C686CD41F3A85B2FCB?sequence=33

Van Dyk, S. (2014). The appraisal of difference: Critical gerontology and the active-ageing-paradigm. *Journal of Aging Studies*, 31, 93-103.

Van Dyk, S. (2016). The othering of old age: Insights from postcolonial studies. *Journal of Aging Studies*, 39, 109-120.

Wennemo, I. (2020). *Det gemensamma: om den svenska välfärdsmodellen*. Stockholm: Premiss förlag.

Verbakel, E., Tamlagsronning, S., Winstone, L., Fjaer, E. L., & Eikemo, T. A. (2017). Informal care in Europe: findings from the European Social Survey (2014) special module on the social determinants of health. *Eur J Public Health,* 27(suppl_1), 90-95. doi:10.1093/eurpub/ckw229

Verdery, A. M., Margolis, R., Zhou, Z., Chai, X., & Rittirong, J. (2019). Kinlessness around the world. *The Journals of Gerontology*: Series B, 74(8), 1394-1405.

Whitmee, S., Haines, A., Beyrer, C., Boltz, F., Capon, A. G., de Souza Dias, B. F., ... & Yach, D. (2015). Safeguarding human health in the Anthropocene epoch: report of The Rockefeller Foundation–Lancet Commission on planetary health. *The Lancet*, 386(10007), 1973-2028.

WHO. (2015). *World report on ageing and health*. Luxembourg: World health organisation.

WHO. (2016). *Framework on integrated, people-centred health services*. Report by the Secretariat. A69/39. 15 April 2016. https://apps.who.int/gb/ebwha/pdf_files/WHA69/A69_39-en.pdf [Accessed 2 May 2023]

WHO. (2019). *Decade of healthy ageing 2020-2030.*World Health Organisation. https://www.who.int/initiatives/decade-of-healthy-ageing

WHO. (2022). *Rebuilding for sustainability and resilience: strengthening the integrated delivery of long-term care in the European Region*. Copenhagen: WHO Regional Office for Europe. https://apps.who.int/iris/bitstream/handle/10665/353912/WHO-EURO-2022-5330-45095-64318-eng.pdf [Accessed 18 April 2023]

Vicente, J., McKee, K. J., Magnusson, L., Johansson, P., Ekman, B., & Hanson, E. (2022). Informal care provision among male and female working carers: Findings from a Swedish national survey. *Plos One*, 17(3), e0263396.

Willis, R. (2018). Constructing a "Representative Claim' for Action on Climate Change: Evidence from Interviews with Politicians. *Political Studies,* 66(4), 940-958. doi:10.1177/0032321717753723

Wilson, I. B., & Cleary, P. D. (1995). Linking clinical variables with health-related quality of life - a conceptual model of patient outcomes. *Jama-Journal of the American Medical Association,* 273(1), 59-65. doi:10.1001/jama.273.1.59

Wimo, A., Handels, R., Elmståhl, S., Fagerström, C., Fratiglioni, L., Isaksson, U., Larsen, O., Sanmartin Berglund, J., Sjölund, B-M., Sköldunger, A., & Wahlberg, M. (2020). *Informell och formell vård hos äldre personer i ordinärt boende: Förändringar och samspel över tid 2001-2015 i SNAC-projektet.* SNAC. Accessed 140223 https://www.snac-k.se/wp-content/uploads/2021/03/SNAC_Informell_formell_vard_2020.pdf

Winblad, U., Fredriksson, M., Mankell, A. & Swenning, A-K. (2020). Förutsättningar för personcentrerad vård: Hur sker den nationella styrningen? In Ekman, I. (Ed.), *Personcentrering inom hälso- och sjukvård: från filosofi till praktik.* (Andra upplagan). (pp. 106-125) Stockholm: Liber.

Vingare, E. (2019). *Paradoxer i välfärden: när anhöriga blir lösningen på demensomsorgens utmaningar.* Dissertation. Växjö: Linnéuniversitetet, 2019.

World Medical Association. (2000). Declaration of Helsinki: Ethical principles for medical research involving human subjects. *JAMA: Journal of the American Medical Association*, 284(23), 3043–3045. https://doi.org/10.1001/jama.284.23.3043

Vos, E. E., Hilderink, H. B. M., de Bruin, S. R., van der Beek, A. J., & Proper, K. I. (2022). The Working Informal Caregiver Model: A Mixed Methods Approach to Explore Future Informal Caregiving by Working Caregivers. *Sustainability*, 14(6), 3519. MDPI AG. http://dx.doi.org/10.3390/su14063519

Zigante, V. (2018). *Informal care in Europe. Exploring formalisation, availability and quality.* European Commission, Directorate-General for Employment, Social Affairs and Inclusion Directorate A —

Employment and Social Governance, 4-38. https://op.europa.eu/en/publication-detail/-/publication/96d27995-6dee-11e8-9483-01aa75ed71a1/language-en

Östlund, B., & Frennert, S. (2021). How Have User Representations Been Sustained and Recreated in the Design of Technologies Between 1960 and 2018? In Peine, A., Marshall, B. L., Martin, W., & Neven, L. (Eds.), *Socio-Gerontechnology – Interdisciplinary Critical Studies of Ageing and Technology*. 1st.ed. Routledge