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RETHINKING SOLIDARITY THROUGH WELFARE TECHNOLOGY FOR OLDER ADULTS

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Abstract: The welfare state is under pressure. Demographic changes, high expectations for services, and limited resources demand new approaches to service provision. In Norway, national authorities advocate for the use of technology and the involvement of volunteers in health and care services. This paper explores the relationship between solidarity, technology and volunteerism by asking whether the use of technology in health service delivery aligns with the values of solidarity. The empirical basis of the paper is qualitative sub-studies from the research project *Caring Futures*, as presented in three articles. The sub-studies reveal that technologists strongly support increased use of technology. By framing technology as a means to promote autonomy, they implicitly downplay human dependency. As a result, technology appears to conflict with a concept of solidarity rooted in mutual interaction. In contrast, relatives of nursing home residents recognise and accept dependency. Rather than attempting to eliminate it, they embrace dependency as a foundation for social connection, mutual responsibility and solidarity.

Keywords: *Autonomy, elderly care, solidarity, technology, volunteerism, welfare state*.

Introduction

The tax system plays a central role in redistributing resources to promote social welfare in a welfare state. Such a system fundamentally relies on solidarity across generations, from individuals with income to those without, and from the healthy to the ill. Some forms of solidarity are unconditional, meaning that direct reciprocity is expected. This is often the case with society's support for individuals with disabilities. However, in many, perhaps in most, cases, solidarity is underpinned by a sense of mutuality. It is shaped by both explicit and implicit expectations that those who receive support will, at some point, contribute to society. For example, welfare services for children are rarely questioned, as there is an expectation that they will become future taxpayers. Similarly, there is a broad consensus that older people deserve adequate services,

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having contributed through a lifetime of work and taxation. In contrast, solidarity with refugees is often more contested. This is partly because it is uncertain whether they can contribute economically to the future, for instance, through employment and tax contributions.

Every democratic welfare state depends on the support of its population. A decline in solidarity thus poses a significant threat to its sustainability. Today, welfare states face additional challenges due to demographic shifts observed in many countries. These include an increasing number and proportion of elderly people, and a shrinking working-age population, responsible for financing and delivering welfare services. Advances in medical care, which enable people to live longer with chronic illnesses, further intensify these pressures. Governments respond to these challenges in different ways. In Norway, for example, greater reliance on technology and volunteerism is being explored. Authorities are particularly optimistic about the potential of new technologies to enhance service delivery.

This paper explores how such technological developments might influence the concept and practice of solidarity. The central research question is whether the use of technology in health service delivery relates to values of solidarity. It is based on findings from a research project called "Caring Futures" as reported in three articles (Gjerstad et al., 2025; Hellstrand et al., 2024; Teig et al., forthcoming). The project aimed to generate research-based knowledge that contributes to the quality of technology-mediated care practices. The project revisited care ethics in practice - and experience-near contexts, at a time of changing health, care, and welfare policies, services, and practices, asking how technology-mediated care practices can become care-ethically sound, and, correspondingly, how care ethics can become more technology-aware. The findings presented in this paper are drawn from an interdisciplinary research project conducted in collaboration with national and international partners and funded by the Norwegian Research Council.

Background: challenges in the welfare state

Norway is one of the richest countries in the world. It offers extensive welfare and tops the league in Europe when it comes to resources used for health and care services (NOU 2023:4). The need for health and care services is nevertheless constantly expanding, not least because of the growing proportion of the elderly. And the population's expectations for services are high. Norwegian authorities are therefore concerned about increasing costs and lack of resources, particularly in terms of personnel. There is already a shortage of staff, as many health and care services have changed from being institution-based to home-based care (NOU 2023: 4). The shortage is estimated to increase (Saunes et al., 2020).

The costs have long given rise to concerns about the sustainability of the welfare state (Rahman, Skorstad 2018), and the demographic development adds to these concerns. In ageing industrial democracies, concerns about the fiscal sustainability of the welfare state are at the top of the political agenda (Goerres, Tepe, 2010). Luckily for Norway, except for a few years, the unemployment rate has been low over the last 50 years (ssb.no). It has not exceeded 5% since the early nineties. High employment is necessary because the welfare is mainly financed by tax revenues. To ensure high employment, in Norway as well as in other European countries, there has been a

development in welfare policy for many years where the right to benefits is linked to an obligation to actively contribute to reducing the need for the benefit (Kildal, 2012). For example, the right to unemployment benefits during unemployment is not only based on the previous job as it is also linked to an obligation to actively seek jobs. Increasingly, sanctions are faced if one does not fulfil the obligations. In Norway, "The work first approach» as long been important in social policy (Halvorsen et al., 2022). The principle refers to a policy that prioritises work and employment as the main means of achieving social inclusion and economic independence. The idea is that it should always be more rewarding to work than to receive benefits. This presents a dilemma for the authorities when determining the size of benefits. It should not be attractive to receive benefits, and consequently benefits cannot be too high. At the same time, there is an objective of avoiding poverty, which means that they cannot be too low. Critiques claim that the workfare principle expresses a lack of trust; as long as the benefit is small enough, the recipient will be able to fend for themselves (Halvorsen et al., 2022).

By linking entitlement to benefits to the fulfilment of obligations, the responsibility for one's own welfare was placed more on the individual. In general, social rights to benefits that "lie at the intersection of work and welfare" have been weakened in recent years by an increasing number of conditions and individual obligations (Kuhnle, Kildal, 2019). Some researchers see this development as a result of a neoliberal turn in social policy and social work, where social problems are made into individual problems (Kamali, Jönsson, 2018; Lorenz, 2016; Marthinsen et al., 2019). In addition to privatize what was previously part of public welfare services, neoliberal policies enter discourses about individual independence and responsibility (Lorenz, 2016). Lorenz (ibid.) claims that social work today is adapting to this by adopting various activation techniques and individualising follow-up work.

The fear of free riders can be seen as an aspect of this individualisation. A free rider is someone who benefits from the welfare state without making a fair contribution to its support. A key argument among some of the critics of the welfare state is the danger of many free riders. Free riders represent an economic challenge but also threaten solidarity (Cappelen, 2019). Experiments show that, in general, people are willing to contribute to public goods; however, if they suspect that others are free riders who do not contribute, their motivation to contribute sinks (Cappelen, 2019).

Both economic and social sustainability are topics in general discussions about the welfare state. When the discussion is limited to elderly care, the challenges are mostly about finances and staffing. Social sustainability, i.e. solidarity, is rarely questioned. This can be seen as an indication that the solidarity in the population with the elderly is strong. In Norway, the elderly are often referred to as "those who built the country". Norway has experienced significant economic growth over the past century, and the term refers primarily to those who have worked in industry, agriculture, fishing and other sectors that have been crucial to this growth, but also to those who contributed to the establishment of various social institutions. The term expresses recognition of a hard and long working life, and as such is often used to honour the elderly's effort. Although the phrase "worthily needy" is no longer acceptable in Norwegian policies, when used in debates about elderly care, the term "those who built the country" implicitly states that the elderly are "worthily needy". Not everyone is equally

enthusiastic about the concept and argues that both previous and later generations have contributed to the country's growth and development.

Nevertheless, there is broad agreement among the population, among all generations, that elderly care cannot be weakened. According to Dahl (2022), that is, however, exactly what has happened. She argues that although Nordic welfare states are often referred to as 'caring states', major changes characterised by neoliberalism and austerity have taken place. Media reports of cases indicate that sick older adults with massive needs are living at home without getting sufficient care. The documentary "*Omsorg bak lukkede dører*" ("Care behind closed doors") broadcasted by the Norwegian Broadcasting Corporation January 2023, showed persons who received public care services, but still did not get the medication, food or care they needed and were entitled to.

Technology as a solution to challenges

Already in 2005, technological solutions were presented as ways to increase productivity and reduce personnel requirements (Meld. St. 25 (2005-2006); Meld. St. 29 (2012-2013); NOU 2011: 17). To indicate more specifically which technology is involved, the concept "welfare technology" has been introduced. In Scandinavia, the term usually refers to technologies that in different ways support people in their daily lives in their homes (Zander et al., 2023). In this paper, we rely on a commonly used definition in Norway which states that welfare technology is "[…] Technology that can contribute to increased security, safety, social participation, mobility and physical and cultural activity, and that strengthens individuals' ability to manage for themselves in everyday life despite illness and social, mental or physical disability. Welfare technology can also function as technological support for the next of kin and otherwise help to improve accessibility, resource utilization and the quality of service provision. Welfare technology solutions can, in many cases, prevent the need for services or hospitalization" (NOU 2011: 11:100). Examples of such technologies are different sorts of alarms (for example, fall detection devices), and timers that deactivate devices like stoves and coffee machines after a defined time to prevent the devices from being left on when they should be off.

Norwegian governmental plans and strategies for welfare technologies are accompanied by guidelines, conferences and seminars, research programmes, and a National Welfare Technology program, all aiming at supporting the implementation of technology in the health and care sector. The authorities' expectations regarding technology in health and care services are very optimistic (Jacobsen, 2022; Kamp et al., 2019; Alvsåker, Ågotnes, 2022), as they are also in many other countries. Many studies view technology as a solution to the growing demand for healthcare services (Syeda, Syeda & Babbar, 2022).

Voluntary work as a solution to challenges

WHO promotes socially innovative community and voluntary-based services for older people, as do Norwegian authorities (Jenhaug, 2018). Care from family and volunteers is often a prerequisite for older people with significant care needs to be able to live at home. Relatives already account for a large part of the care of the elderly. For Norway,

calculations show that the total effort from relatives is of the same extent as the effort from the public health and care services (Daatland, Veenstra 2012). Younger seniors (i.e. people aged 60+) are the ones who contribute the most to voluntary work related to health and social services (NyAnalyse, 2017). Still authorities want care from relatives to increase, as well as informal care by social networks and local communities (Meld. St. 29 (2012-2013). Current policy discussions emphasize the role of voluntary engagement in elderly care (Meld. St. 15 (2017-2018)), yet sustainable and structured models for such involvement remain underdeveloped. Moreover, demographic changes will also impact the availability of volunteers – an aspect that appears to have been overlooked in the political ambition to expand volunteer work (Blix et al., 2021). In addition, the potential for increased volunteering from the 50–80 age group is conditioned by several factors (Hansen, Slagsvold, 2020). A survey showed that relatively few of the 4,000 participants in the study were willing to commit to volunteering, and only half were willing to participate in volunteering even if they were allowed to decide the scope and timing. Qualitative research also indicates that older adults engaged in volunteering do not always want to contribute in the ways, or through the activities, that health and care services expect or prioritize (Blix et al., 2021).

Same objectives, different means

Technology and volunteerism are two fundamentally different solutions to the same problem. While there has been relatively little attention paid to the political desire for more volunteer work in health and care services, the focus on welfare technology has been discussed and explored through several studies.

Many have been critical of plans to use more technology in health and care services. In general, technology is associated with values such as efficiency, speed, productivity, resource exploitation, simplification, and accuracy (Kjøllesdal, 2010). It develops fast, and ethical guidelines may therefore not be up to date. Technology is based on, and expresses, an instrumental rationality: it is a means to an end (Hofmann 2010). Hofmann contrasts this instrumental rationality with the concept of care, which is inherently relational and grounded in compassion, competence, confidence, conscience, and commitment – framed by sharing understanding and mutual respect (Cronquist et al., 2004). Care holds intrinsic value. While technology may be guided by good moral intentions, there is a risk that instrumental rationality could encroach upon the domain of care, for instance, when human contact is replaced by machines (Hofmann, 2010).

The fear of technology becoming too dominant is not new. Ellul (1964) claimed already in the 60ies that society is governed by technology. Perceptions that technological development "takes over" and becomes governing for us, so that we must adapt to it and not vice versa, are well known in social sciences and referred to as “technological determinism”. According to Ellul (1964), technology encompasses all aspects of modern society, which leads to all of society's problems being defined as technological. Consequently, attempts are made to solve them through technology. A modern example relevant to academics is students cheating on exams. It is described as a technological problem (it is due to the easy access to information via smartphones, iPads and computers), and it is attempted to be solved with the help of technology (computer programs that identify transcripts). Alternatively, one could have seen it as a

moral problem that one tried to solve with lectures on ethics, or as a methodological problem that one tried to solve by being clearer about how students should relate to the work of others. Another fear is that assessments will be based too much on perceptions of efficiency and productivity, and too little on other things, such as ethics.

Volunteerism can be seen as the opposite of technology. It serves a purpose, but still it is very much based on empathy and a desire to contribute to society without necessarily expecting anything in return. Hustinx and Lammertyn (2003) distinguish between collective and reflexive volunteerism. Collective volunteering is described by long-term and regular commitment and effort, most likely involving permanent organizational membership. It is often linked to ideologically or religiously based altruism. They are also motivated by others' expectations and sense of duty. Reflective (or individualistic, as they also are called) volunteers are more oriented towards the specific activity, or the cause it promotes, than group affiliation. Their organizational affiliation is loose, and they often participate for shorter periods of time. They might consider several options and choose the form of volunteer work that matches their own interests and expectations. In Norway, the findings from a survey among elderly show indicate that most people are reflective volunteers: only a minority is willing to commit six months to volunteer work or to adjust leisure and vacation in order to do voluntary work, and only 50 percent are willing to do volunteer work only if they can decide how much and when (Hansen, Slagsvold, 2020).

Authorities appeal to citizenship, shared responsibility and solidarity between generations (Meld. St. 29 (2012-2013)). When volunteer work is to be included as part of public services, problems may arise. Lorentzen and Tingvold's study (2018) documents challenges regarding recruiting volunteers and coordination between service providers and volunteers. Furthermore, the study shows a lack of agreement on the division of tasks.

Conceptualising solidarity

Solidarity is conceptualised in various ways. In everyday language, it is often understood as a form of sympathy that fosters unity and a willingness to act in the interest of others. Durkheim (as cited in Veiden, 2022) distinguishes between two forms of solidarity: **mechanical solidarity**, characteristic of traditional societies where individuals share common values, beliefs, and work; and **organic solidarity**, which defines modern societies marked by specialised roles. In societies with mechanical solidarity, cohesion arises from homogeneity, whereas in those with organic solidarity, it stems from interdependence. This interdependence is a product of the division of labour, which necessitates individuals relying on one another to fulfil diverse functions.

Norway exemplifies a highly specialised society. This is evident, among other indicators, in the fact that many professions, including practical roles such as cleaning, require formal education or favour educated personnel. At the same time, Norway is a welfare state that provides extensive services to its citizens. It can therefore be argued that the welfare state represents, to varying degrees, the institutionalisation of solidarity at the societal level, manifested through mechanisms such as unemployment benefits, national insurance (including maintenance obligations), and public health care (based on the insurance principle).

While these systems are the result of long-term political development, critics of the welfare state argue that they shift the responsibility for solidarity from individuals to an impersonal state. This may lead to a decline in personal responsibility for others and, consequently, a weakening of social cohesion. Archer (2013) offers a contrasting perspective on the role of the state. She does not oppose the welfare state assuming responsibilities traditionally associated with solidarity, but she emphasises the importance of the state actively fostering solidarity. According to Archer, this is especially vital in societies where traditional sources of cohesion, such as religion, shared culture, and common values, are in decline (ibid.). She underscores the relational nature of human existence, asserting that solidarity is cultivated through shared projects and mutual recognition. In other words, solidarity emerges from social interaction. Therefore, public authorities should play a role in facilitating these relational processes.

Methods

The discussion will be based on findings presented in articles from the Caring Futures project, in particular from a work package that focused on managers and advisors in municipal health and care services and technologists. This work package was a qualitative study that included nine individual interviews and four interviews with two participants each, altogether 17 participants. The participants were 1) five representatives of technology developers and suppliers, and 2) 12 advisors and managers within healthcare at different levels in the municipalities. We refer to them as "technologists" and "municipal participants" respectively, regardless of education and professional background. The technologists were involved with different technologies as they represented a company that offered GPS solutions, a company that offered medicine dispensers and a robotics developer company. The municipal participants were relevant, as while the central government holds overarching authority and supervises municipal practice, each municipality, regardless of size, serves as the main provider of welfare services across the country.

The interviews were conducted in 2022. They were semi-structured with open-ended questions, allowing the participants to talk about and reflect on their experiences and expectations regarding welfare technology. Separate interview guides were used for municipal participants and technologists, each featuring questions aimed at exploring their perspectives on 1) cooperation, 2) technologists' responsibility and 3) the impact of increased technology use. Conducted via video calls, the interviews were recorded with participants' oral consent and lasted about an hour each. All interviews were transcribed verbatim.

The discussion will also draw on a study of relatives' experiences with and views on the use of technology in nursing homes. The study was another sub-study from the Caring Future project. The study consisted of eight qualitative interviews with altogether ten relatives of nursing home residents aged 54-79 years. As relatives, they had a caring relationship with spouses, parents, siblings or other family members, respectively, who all lived in nursing homes and had varying degrees of physical and cognitive functional levels.

Both studies were approved by the Norwegian Office of Research Ethics (now SIKT). Before the interviews, the participants were informed that participation was

voluntary, and they were informed about the study's details, including anonymity, confidentiality, and their right to withdraw at any time. Informed consent was obtained either via email or orally at the start of the interview.

Findings

Some of the key findings from our work package in the *Caring Futures* project were that technologists questioned the healthcare sector's capacity to provide adequate services to older adults and individuals with chronic illnesses (Gjerstad et al., 2025). In doing so, they aligned with a broader discourse concerning the challenges facing the health and care sector. Eager to contribute what they considered a much-needed solution, they strongly advocated for the implementation of technology. The notion that these challenges must be addressed through technological means has been repeated so frequently that it is increasingly perceived as an established truth. By aligning with dominant narratives about the sector's problems and proposed solutions, the technologists justified their claim to a central role as key actors within the healthcare sector (Teig et al., forthcoming).

Technologists stated that technology *is* care (Gjerstad et al., 2025). The main reason they could equate technology with care was that technology provides freedom and independence, something that the technologies believe is lacking in today's service delivery. As documented in Gjerstad et al. (2025:7), one of the technologists described this lack in the following way:

"Today, there are very many people who are deprived of the opportunity to live a more independent life. They are almost imprisoned in their own home. Because they will have visits from the home care services 2-3 times per day, only to give one dose of medicine in their hand." (Pill dispenser company A).

Gjerstad et al. (2025:8) also show that technologists think that the visits from the home care services "imprison" the patient as he/she has to be at home to meet the service providers. Patients should rather be independent:

"To handle one's own medication is extremely important. Independence, coping, flexibility, not the least in everyday life, is of value for patients who depend on a service and who have to wait for a service provider to come." (Robotics developer)

Technologists took the desire to be independent for granted. One claimed that being able to be independent and to fend for themselves instead of depending on others seemed to be deeply ingrained in people (Pill dispenser company A). In other words, independence was presented as a fundamental value, assumed to be universally desired. Similarly, other terms that were used, like freedom and flexibility, have very positive connotations.

While autonomy was applauded among all informants, healthcare personnel also reflected critically on the potential negative aspects of technology. One element in this regard was that more autonomy for the patient requires closer follow-up to ensure that the patient's condition is adequately monitored and to be able to detect and act on the deterioration of his/her condition. Another element presented by healthcare managers was whether more autonomy in healthcare services could safeguard a dignified life for older adults.

In the study of attitudes towards technology among relatives of nursing home residents (Hellstrand et al., 2024), relatives were engaged in the well-being of family

members residing in nursing homes. They visited them and helped them with different tasks. They also tried to ensure that the resident got sufficient care at the nursing home.

The study was conducted shortly after a period of COVID-19 restrictions, meaning that the relatives had been through a period where physical visits were not allowed. They understood and respected the need to keep a distance; however, they found it hard. This might have affected their attitudes, as they were positive about technology. At the same time, they did not see technology as a replacement for care and emphasised that the use of technology must not come at the expense of safe and good services.

They acted as drivers and suggested technology both for keeping contact with "their" resident, for communication with staff at the nursing home, and for communication between staff and the residents. Some of them reflected on the difficulties during COVID-19 restrictions and imagined that the physical distancing might have been less painful with the use of technological devices for contact. However, use of technologies would require support from staff, for example, in cases where the residents did not know how to FaceTime. The relatives were frustrated about the lack of support from the staff. One example was a relative of a resident with a hearing device. The relative feared that the staff did not understand or did not have time to take proper care of the hearing device (for example, to load the batteries).

One of the factors motivating the relatives to engage in the resident's situation was that they knew the resident well. They knew his/her needs and preferences, and they wanted the staff to know these and to take them into account. Relatives tried in different ways to communicate such information to the staff, but they could not see that the staff treated the resident according to the information. They did not know if the staff had not received the information or if there were other reasons they did not follow up.

Hellstrand et al. (ibid.) suggest that technology highlights the importance of other conditions, as the relatives' attempts to bring technology into the nursing home revealed how poor the communication between relatives and staff was and how stressful the staff's daily work was. According to relatives, technology can alleviate an already stressful situation for health personnel.

Does technology support solidarity in elderly care?

The empirical foundation for this paper is a series of interviews concerning technological devices primarily designed for the older adults. Accordingly, the form of solidarity under discussion is, first and foremost, solidarity with older adults. As previously noted, general solidarity with the older adults appears to be strong. Ageing is a universal phase of life. Everyone, barring premature death, will eventually grow old. Yet paradoxically, few people seem to want to be old. Resistance to appearing old, such as reluctance to use assistive devices like walkers, is widespread.

The World Health Organization (WHO) defines ageism as stereotypes (how we think), prejudice (how we feel) and discrimination (how we act) towards others or ourselves based on age[1]. According to the WHO, ageism manifests in different contexts such as institutional settings, interpersonal interaction, and internalised

[1] https://www.who.int/health-topics/ageism#tab=tab_1.

attitudes. It most commonly targets older adults. Globally, half the population holds ageist attitudes toward older people, and in Europe, younger people report experiencing more ageism than other age groups. While some cultures associate old age with wisdom and respect, Norway is not typically seen as one of them. Although older generations are sometimes referred to as "those who built the country", there is also criticism that society marginalises them by placing them in nursing homes. Thus, societal attitudes towards the older adults can be described as ambivalent.

As described in the previous section, autonomy is a central theme in the context of welfare technology. It aligns with a core philosophical and political ideal that individuals are free, autonomous, and capable of self-determination. In health and care services, autonomy is a foundational principle, underpinning rights such as user participation and influencing policies on the use of coercion. The prevailing belief is that rational, free individuals are best positioned to make decisions about their own lives. Practically, autonomy is often equated with self-reliance – a view echoed by the technologists in our study. They see self-reliance as a means of liberating individuals from the limitations imposed by dependency.

This raises the question: Is the development and provision of autonomy-enhancing technology an act of solidarity? On the surface, it appears so. Technologists emphasise the urgent need for solutions in the healthcare sector and the benefits that welfare technology offers to older adults. However, their involvement is not purely altruistic – they also have commercial interests. Can their actions still be seen as part of what Archer (2013) describes as a “shared project” based on mutual recognition, which she identifies as a foundation of solidarity?

Nevertheless, this is debatable. It is difficult to view an industry driven by national policy frameworks defining healthcare challenges and solutions as a shared project between technologists and the older adults. One may counter this by pointing to efforts by authorities and technologists to involve users in strategy development, technology design, and implementation. Yet, much of this user participation appears to involve municipal staff rather than the older adults themselves. Initiatives rarely, if ever, originate from older adults. This casts doubts on whether the kind of social interaction Archer (2013.) associates with solidarity is truly present.

Durkheim (as cited in Veiden 2022) argued that in modern societies, social cohesion is rooted in interdependence. The division of labour creates a system in which individuals rely on others to perform roles they cannot fulfil themselves. This interdependence, he claimed, fosters solidarity through the complementarity of roles (ibid.). It is plausible to view the relationship between technologists, who develop and sell technology, and older adult individuals, who require assistance due to functional decline, as one of interdependence. Technologists possess the knowledge and resources to create solutions that older adults lack. However, it remains unclear whether this interdependence binds them together. One could argue that vast differences in knowledge, technological literacy, and lived experience may divide rather than connect these groups. It is important to note that our project did not include interviews with elderly patients, so we cannot make definitive claims about their perspectives on interaction and mutual recognition. However, we did gather data from municipal staff. A key finding from Gjerstad et al. (2025) is that staff continued to practice ethical care discretion in their care decisions and resisted pressure to provide technology when they

deemed it professionally inappropriate. Despite being expected to consider cost-efficiency, their resistance to technology, often seen as a cheaper alternative to personnel-based support, can be interpreted as acting in the patients' best interests rather than those of the municipality.

A similar question arises regarding the relatives of nursing home residents: Were their calls for more communication technology and assistive devices acts of solidarity? Unlike technologists, these relatives have no commercial interests. Their motivations appear to be improving communication and enhancing the quality of life for their loved ones – intentions that could be described as altruistic. However, applying Hustinx and Lammertyns' (2003) concept of collective or reflective/individualistic voluntarism complicates this view. The relatives' efforts seem to be directed toward specific family members, not toward broader volunteer work benefiting all residents. Nonetheless, familial bonds likely foster a sense of mutual cohesion. The informal, face-to-face nature of their interactions, talking, responding to requests, and offering help, suggests a recognition and acceptance of the resident's vulnerability. Rather than emphasising autonomy, the focus is on how the environment can best meet the residents' needs.

This could be interpreted as intergenerational solidarity, but the findings in our project (Hellstrand et al., 2024) suggest that such solidarity is largely confined to one's own family. That narrows down the solidarity. However, there are many examples of volunteerism where helpers and recipients are not related (in fact, some definitions of volunteer work do not include informal care that is carried out by family members), and which involve everyday interactions. This supports Archer (2013) claim that (everyday) interactions foster solidarity. In addition, the difficulties experienced by relatives' during their engagement in the wellbeing of their family members, suggest a need for better facilitation for informal care. Such facilitation can benefit from relatives' solidarity and strengthen their roles as volunteers.

Concluding remarks

Many studies have emphasised the welfare state's reliance on solidarity, arguing that a lack of solidarity poses a significant threat to its sustainability. However, in the Norwegian context, much of this research has focused specifically on public attitudes toward migrants and migrant policies (see Bay et al., 2007 for an example). In this paper, we highlight the significance of solidarity within other (policy) fields. While the relevance of solidarity in the context of voluntarism may be readily apparent, its importance in shaping our understanding of technology and autonomy is less often acknowledged. Technological solutions aimed at promoting autonomy can implicitly downplay or even deny the reality of human dependency. These solutions often align with an ideal of self-sufficiency, suggesting that the goal is to minimize reliance on others. However, this framing of autonomy does not easily align with a concept of solidarity grounded in mutual interaction and interdependence.

While independence may be empowering for some, it also risks reinforcing a cultural discomfort with vulnerability and dependence, particularly in old age. Recognizing and valuing dependency as a condition for social connection may be essential for fostering a more inclusive and solidaristic approach to care and technology.

Engaging volunteers acknowledges dependency as a legitimate and enduring aspect of the human condition. Volunteer involvement is grounded in the recognition that some individuals are unable to manage on their own and require the support of others. Rather than seeking to eliminate dependency, this approach embraces it as a basis for social connection, mutual responsibility and solidarity. It affirms the value of care and relational support, positioning assistance not as a problem to be solved through technological innovation, but as an essential expression of human interdependence.

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Conflict of Interests

The authors declare no ethical issues or conflicts of interest in this research.

Ethical Standards

The authors affirm this research did not involve human subjects.