Article

Discourses of Digitalisation and the Positioning of Workers in Primary Care: A Norwegian Case Study

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Abstract
Primary health services are subjected to intensified digitalisation to transform care provision. Various smart and assistive technologies are introduced to support the growing elderly population and enhance the opportunities for independent living among patients in need of continuous care. Research has shown how such digitalisation processes evolve at the intersection of different and often competing discourses, oriented towards service efficiency, cost containment, technological innovation, client-centred care, and digital competence development. Often, increased technology use is presented as a solution to pressing problems. However, how discourses are negotiated in work contexts and their mechanisms of social inclusion/exclusion in evolving work practices have received less attention. This article examines how care workers in the primary health sector are discursively positioned when care technologies are introduced in the services. We employ a perspective on discourses and subject positions in analysing strategic documents and interviews with care workers in a large Norwegian city. We show how managerial discourses that focus narrowly on the implementation and mastery of single technologies provide limited spaces for workers to exert influence on their work situations, while discourses that emphasise professional knowledge or broader technological and organisational aspects provide a variety of resources for workers' agency. The way care workers adopt and negotiate subject positions varies based on their tasks and responsibilities in the organisation. We discuss the need to move beyond "solutionism" in efforts to digitalise care work in order to provide inclusive spaces supporting the contributions of various worker groups.

1. Introduction

Across Europe, primary health services are being subjected to intensified digitalisation with the aim of transforming care provision. Various smart and assistive care technologies have been introduced to address the growing elderly population, often with the stated purpose of enhancing ageing clients' opportunities for independent living and making home-based services more cost-effective. Such strategic initiatives bring new and specialised vocabularies to care organisations and con-

tribute to changing the discursive configuration of services. As discourses mediate ways of thinking and acting in social life, changing configurations also affect workers and other actors.

Researchers have examined how digitalisation processes in the health sector evolve at the intersection of different and often competing discourses, oriented towards different phenomena, such as service efficiency, technological innovation, client-centred care, and digital competence development. On the managerial level, researchers have described an overly techno-optimist

notion that increased technology use will solve pressing problems. According to Lupton (2017, p. 1), the focus is on "what digital technologies can offer both lay people and professionals and how they might operate as 'solutions' to the problems of healthcare delivery, growing medical costs, improving people's health and well-being and preventing illness and disease." This notion is accompanied by a techno-centred approach to technologies as stand-alone solutions that can be implemented in health care to resolve problems of practice (Ajjawi & Eva, 2021; Nerland & Hasu, 2020). Although the local manifestations will vary, this way of thinking may have a strong influence on what groups of actors, practices, and ideas are seen as important in the digitalisation process while simultaneously excluding other stakeholder groups from taking an active role in the process. Further, technologies and the discourses they bring will typically have more and different implications than first envisioned when they are adopted in various settings (Ziebland et al., 2021). Thus, the ways in which they affect work and workers need to be examined in local contexts, with particular attention given to specific digitalisation processes.

This article examines how discourses of digitalisation are mobilised in local working documents aimed at guiding technology implementation in the primary care sector and how they provide discursive resources for workers to draw on. Specifically, we analyse how workers in home-based services are discursively positioned in this context and how the affiliated discursive resources may enable or restrict the inclusion of care workers as active contributors in the development of work practices. We focus on the introduction of a particular type of care technologies, which are described as welfare technologies in the Nordic context (Lo et al., 2019). These technologies include smart devices, such as electronic medicine dispensers, safety alarms, GPS trackers, and various sensor technologies. Such digital technologies provide opportunities for remote care, for instance through alarms and images of the users' situation, which may lead to caring relations that are both more and less intense (Pols, 2012). Hence, the way care workers' positioning and agency are affected is not straightforward.

Our study is situated in Norway, where the National Welfare Technology Programme (WTP) was launched in 2014, within which selected municipalities conducted pilots that were later scaled to integrate welfare technologies in the services on a continuous basis from 2020. This implies an ongoing digitalisation process, as more and new versions of welfare technology become available on the market and are utilised by shifting constellations of care workers and users. As these technologies become more advanced, they are increasingly linked with other technologies in digital infrastructures. This brings additional work tasks and challenges to the fore, such as checking alarms and coordinating information registration across sites and devices.

Based on an analysis of strategic documents and interviews conducted with different groups of workers in one service organisation in a large Norwegian city, we offer novel insights on how discursive resources accompanying digitalisation initiatives may include and exclude worker groups as active participants, thus influencing work and service development. In particular, we discuss how discourses that focus narrowly on the implementation and mastery of single technologies may limit workers' opportunity to exert influence on their work situation, while discourses that highlight broader technological and organisational aspects of work provide resources for workers to participate and build agency in various ways. To provide inclusive spaces for the contributions of various worker groups, we argue that organisations must move beyond the lucrative notion of "solutionism" in efforts to digitalise care work and pay more attention to the implications of these efforts on the micro-level distribution of work tasks and responsibilities.

By doing so, we offer an alternative and more dynamic way of addressing social inclusion in working life, compared to research emphasising inequity related to individual skills and access to technology (e.g., Reisdorf & Rhinesmith, 2020), employability (Bejaković & Mrnjavac, 2020), or workforce diversity (McCarthy et al., 2023). Mechanisms of social inclusion/exclusion in changing work practices emerge at the intersection of the available discursive resources and the way they are adopted and negotiated in everyday work. Hence, they need to be examined in their local work contexts.

2. Conceptualising the Discursive Positioning of Workers

A range of approaches has been used to conceptualise and analyse the role of discourses in organisational contexts. Different approaches highlight how historical lines of reasoning constitute the present, the power mechanisms embedded in contemporary ways of organising work practices and organisations, and the micro-level negotiations and achievements based on language in use (e.g., Alvesson & Kärreman, 2000).

In this study, we understand discourses as cultural ways of thinking, talking about, and understanding the world that shape actions (Jørgensen & Phillips, 2002). Through language and other material means, discourses incorporate established knowledge and belief structures that are prevalent in spheres of social life, including professional work. They serve as intermediaries that condition our ways of viewing and acting upon phenomena. This occurs through processes of categorising practices, responsibilities, and legitimate responses, as discourses "systematically form the objects of which they speak" (Foucault, 1972, p. 42). Discourses contribute to producing the subjects we are and the objects we can know something about (Jørgensen & Phillips, 2002). For instance, the object of good care will be constructed differently through a cost-effectiveness discourse and one focused on autonomous and independent living.

This is not to say that discourses *determine* social practices and their related objects. Rather, different discourses are often available simultaneously and offer different interpretative resources for actors to draw on. Indeed, one could argue that it is impossible to frame and speak about any phenomenon in a sensible way without mobilising discursive resources, such as categories or justifications expressed in language. For instance, objects like welfare technology or good care can be ascribed quite different meanings through the discourses in which they become embedded. Moreover, each discourse provides a limited set of subject positions that are available for people to occupy. As Burr (2015, p. 127) states, "discourses entail within them implicit positions that a person may take up. They address us particular kinds of people: as an old person, as a carer, as a worker, as a criminal and so on." These positions offer perspectives from which to make sense of oneself and one's environment, and present both possibilities and limitations regarding what can be said and done by people who take up and draw on a certain discourse. As part of this dynamic, values are ascribed to different subject positions in the work environment (Angermuller, 2018). For instance, Hodgson (2002) discussed how the introduction of project management models and their inscribed conceptions may change notions of professionalism in ways that improve the status of certain staff members while simultaneously leading to insecurity and a loss of status for workers detached from the circles of project management.

We use documents and interviews as the main data sources to examine the discursive positioning of primary care workers in their local context of digitalisation. Strategic documents, such as those developed to promote the use of digital technologies in care work, have inscribed discourses. These discourses come into view, for example, in the way problems are presented and calls for action are justified. At the same time, these inscriptions are not static. Rather, discourses inscribed in the documents are modified in different ways as they become entangled with other texts, practices, and concerns when different actors approach them. Asdal (2015) showed how policy documents bring *issues* to the forefront and how these issues are transformed through different actors' "modifying work" with the documents (e.g., between local and national political contexts). Issues may be raised and become contested but also closed and naturalised as part of these processes. Further, actors can become detached from or made responsible for handling the issues. Hence, what becomes an issue for some actors can simultaneously become a non-issue for others, thereby marginalising workers who are affected, for example, by a digitalisation initiative in ways that prevent their active participation. We consider strategic documents intended to promote and facilitate the introduction of welfare technologies in care services as providing discursive resources for practitioners to draw on as they adopt subject positions offered in their work environment. These resources

may enable or restrict care workers' inclusion in the collective processes of service development. Hence, adopting subject positions and building agency is a social and relational process that is conditioned but not determined by the discursive resources available in the local work context.

We use these concepts and notions to examine how the discourses that operate in efforts to introduce and legitimise welfare technologies in primary care are translated and mobilised locally, with implications for the inclusion of worker groups in these processes. We do so by pursuing the following research questions:

1. What discursive resources are available for care workers to draw on in the local digitalisation process?

2. How do these resources enable or restrict the inclusion of care workers as active contributors in the development of work practices?

In the next section, we present a brief review of related research.

3. Related Research

Digitalisation in health care leads to the inclusion of new actor groups and ways of organising work. Notable investments in technology are typically accompanied by collaboration with IT service solution firms, systematic project management models, and their related inscribed conceptions. Although many public organisations have found project management models and practices useful, they may generate changes in how professionalism is understood and what forms of expertise should be allocated to different tasks (Hodgson, 2002). Through these processes, workers may become attached to or detached from various change initiatives and their wider rationale.

In the research literature on digitalisation in primary care, the implications of discursive changes have been observed at the level of both work organisation and the workers' practice. Ten Dam and Waardenburg (2020) analysed vocabularies of practice among frontline professionals in a Dutch hospital setting concerning how "patient collaboration" as a new principle was negotiated and made sense of. Their analysis pointed to five dominant discursive logics that interplayed in this setting: a medical professional logic, a managerial logic, a commercial logic, a consultation logic, and a patient-centeredness logic. These logics were related to distinct vocabularies, according to which different tasks and responsibilities were important for the quality of care work. Although this study did not focus on digitalisation processes per se, technologies were found to be prominent drivers of organisational change (ten Dam & Waardenburg, 2020).

Related types of discourses are assumedly present in the strategies and practices for introducing welfare

technologies in primary care. These initiatives include different stakeholders, such as managers, vendors, health professionals, and clients. Hence, we can expect the presence of managerial, professional, commercial, and client-centred ways of thinking. However, researchers have described variations in the way welfare technologies are adopted and approached, which may modify discourses and reduce or strengthen their relative power.

Frennert (2020) identified three distinct approaches to introducing welfare technology in Swedish elderly care: approaching the technology as an end-product that could simply be installed to transform elderly care; as a project in which the assumption is that insights generated in the project would "drizzle through" the organisation and transform care practices; and as a broader strategy directed towards changing the care services as a whole. The three approaches relate to different discourses of change, which had different implications for the temporal organisation of change and how care workers were involved. While the third approach is more inclusive in the way it addresses care practices, it is still characterised by management-level decisions. Hence, Frennert (2020) argued that a focus shift is needed to include the experiences and knowledge of care personnel and users as resources for organisational change.

Another study by Segercrantz and Forss (2019) examined how care workers in Finnish residential care homes identified with or resisted the subject positions provided in the discourses around technology implementation. Care workers were positioned as motivators and implementers, yet they were often excluded from other phases of the planning process. Interestingly, they concluded that what they termed the pro-innovation discourse "primarily invites care workers to implement technologies and motivate older adults to use them, even when care workers see the technologies as a threat to the quality of care" (Segercrantz & Forss, 2019, p. 644). Further, the workers were not likely to resist the subject position offered, although they expressed discomfort with some of its implications, such as reduced face-to-face contact with the care receivers. Hence, Segercrantz and Forss (2019) argued that the pro-innovation discourse may "trap" care workers in this subject position and conceal alternative subject positions that could have been adopted by the workers.

Recently, Nilsson et al. (2022) examined discursive constructions of problems and solutions related to care for the ageing population in Swedish policy documents at the local level. Their study showed that health was not addressed as a domain of professional or medical care. Rather, health was seen as a means to achieve independence among older people, which should be secured through a productive interplay between digital technologies and the support of informal carers (in this case family and friends as care givers). The results indicated that digitalisation discourses in primary care do not necessarily position care workers in a way that supports their engagement. Rather, they may serve to bypass or reduce the role care workers may play in service development.

Tensions and negotiations related to the introduction of welfare technology have also been described in the Norwegian context. Corneliussen and Dyb (2021) identified discursive struggles related to welfare technology in local political contexts and described how issues pertaining to technology implementation and professional care have changed over time. Nilsen et al. (2016) followed the early introduction of welfare technology in selected municipalities over time and analysed forms of resistance among different groups of stakeholders. Their study showed how resistance emerged in response to perceived threats to service stability, role identities, and basic health care values. However, rather than massive and active resistance, concerns were raised in a more passive and subtle manner and intertwined with a productive stance to co-create, evaluate and adapt technologies to meet local needs.

Based on the studies and literature reviewed above, we anticipate that four types of discourses are present in efforts to digitalise primary care: managerial discourse, health professional discourse, service user-centred discourse, and commercial discourse. Within these categories, a range of more specific discursive manifestations can be imagined. The way discourses are modified and given meaning will enhance and restrict opportunities for participation in service development among care workers. These issues need to be examined in their local discursive contexts, into which we turn next.

4. Research Setting and Methodology

4.1. The National Context

The WTP was launched by the Norwegian government in 2014 to increase the focus and support in primary care for implementing welfare technologies in the care services. As part of a wider agenda to cope with challenges facing the welfare state, this programme was one of several policy initiatives aimed at developing "another path to enhanced efficiency than through traditional savings policy and market-oriented thinking" (Norwegian Ministry of Health and Care Services, 2013, p. 10). The programme provided a framework for municipalities to develop and implement welfare technology, and the main objective was to make welfare technology an integral part of care services by 2020 (p. 27). The programme placed expectations and responsibilities on the municipalities to participate in the developing and testing of what was termed "welfare technology solutions" in collaboration with partners in the private sector and within research, development, and innovation. The importance of innovation was highlighted, and the ambitions of the WTP were contextualised within broader initiatives to "promote arenas and meeting places between the supply industry, the health care sector, and public funding

and innovation agencies" (Norwegian Ministry of Health and Care Services, 2013, p. 13).

The WTP went through several phases. The most active piloting phase was in 2015–2019, followed by an evaluation and reorientation phase from 2020 onwards, when the programme initially was expected to end. Through these phases, other resources, policy initiatives, and reforms were launched that added to and partly reframed the issues discursively. For instance, a white paper to the parliament was released in 2018, advocating for "quality reform for older people" (Norwegian Ministry of Health and Care Services, 2018), which positioned the elderly as key service users in primary care and linked the use of welfare technologies to their ability to live active and socially included lives. Further, a variety of framework resources was developed in the context of the WTP, such as a roadmap for service innovation and a package of learning resources aimed at employees in health and care services. Such initiatives brought issues related to competence to the fore. They were again modified and expanded in the evaluation phase (beginning in 2020) when issues related to data management, digital infrastructures, and the quality of digital information registration/retrieval emerged.

As this short historical review illustrates, the policies and national-level initiatives have moved between various discourses, with technological innovation, service users, care workers, and organisational arrangements as their main foci. Throughout the different phases, responsibilities have been allocated to municipalities and their primary care services and supported by various framework resources. The initiatives are still evolving, as the evaluation concluded that the WTP has been and remains an important promoter and facilitator for the municipalities. As of the writing of this article, the programme has been extended for the period 2022–2024.

4.2. Empirical Case and Methodology

Our data were collected in a large Norwegian city comprising several city districts with relatively high autonomy, which has been active in piloting the use of welfare technologies throughout the course of the national WTP. A dedicated welfare technology section was established within the city's Health Agency to support their local initiatives and bridge with the national programme. Four city districts served as frontrunners, whose experiences were later shared city-wide. At first, home-based services were one of the main target areas. A dissemination project (henceforth the Dissemination Project) was organised in 2017–2019, coordinated and led by the Health Agency and its welfare technology section. Through this project, dedicated worker roles were established in the city districts: a welfare technology coordinator in each of the city districts, supported by a varied number of resource persons, who were allocated some working time to support colleagues in engaging with welfare technologies. To enhance knowledge shar-

ing, a network for the coordinators was established and the city districts were grouped in clusters consisting of one frontrunner and three other districts. Since 2020, more responsibilities have been allocated to the city district level, with support from a growing section of the Health Agency that coordinates procurement and organisational interdependencies in the services.

Our data comprise main strategic documents on the municipality level, supplemented with interviews with key persons responsible for organising the implementation of welfare technology in the Health Agency. The selected documents are listed in Table 1 and pertain to the period after the piloting phase.

At the worker level, we recruited welfare technology coordinators from one cluster to participate, before zooming in on one of the city districts that had been particularly active and was approached as a learning model by other municipalities. In sum, our worker-level data comprise in-depth interviews with workers in different positions in the care services: employees in technology coordinator positions (5); middle managers responsible for home care services (3); resource persons (7); and care personnel who were operative workers in the home care services (14). The home care workers were interviewed in groups of three to five participants, while the other participants were interviewed individually. The interviews were conducted across one year, in 2021–2022. Due to the ongoing pandemic, some interviews with coordinators and resource persons were conducted using Microsoft Teams, while the remaining interviews were conducted face-to-face.

All interviews were semi-structured and conducted as a conversation between two interviewers and the informant(s), based on a thematic interview guide. The group interviews with care workers focused on work tasks and responsibilities, changes in work related to the introduction of welfare technologies, experiences and concerns with different types of welfare technologies, and visions for the future development of the services. The individual interviews with technology coordinators and resource persons focused on their working tasks and responsibilities, how they were recruited to these positions, their strategies and experiences with collaboration across personnel groups and work settings, and how they contributed to organising the services for technology use. The interviews lasted 45–60 minutes and were transcribed verbatim and uploaded to NVivo for coding and analysis.

The documents and interviews were analysed separately. In the document analysis, we used the main categories of digitalisation discourses identified above as a starting point for a thematic analysis to identify how various discourses manifested in the municipality strategies (Braun & Clarke, 2006). We then examined how issues were raised and modified in these discursive contexts and how different actors were ascribed status or responsibilities (or not) for the way issues should be handled (Asdal, 2015). Next, we examined the vocabulary used

Table 1. Documents selected for analysis.

Documents used in the analysis	Characteristics of the document
The strategic competence plan for the health and care services (2017–2021)	The municipality's joint competence plan for the health care sectors in all city districts, developed by several city agencies (publicly available).
Steering document providing management guidelines for the Dissemination Project (2019)	Provides joint implementation and project management guidelines for the city districts, developed by the welfare technology section in the municipality's Health Agency (operative document for internal use, i.e., not publicly available).
The final report for the Dissemination Project (2019)	An end report and internal assessment of the Dissemination Project developed by the welfare technology section in the Health Agency (operative document for internal use, i.e, not publicly available).
External evaluation report of the Dissemination Project (2019)	A consultancy firm's external evaluation report commissioned by the welfare technology section in the Health Agency (semi-public document).
Overall diffusion model for the introduction of welfare technology (2020)	Joint dissemination guidelines for the city districts developed by the welfare technology section in the Health Agency (operative document for internal use, i.e., not publicly available).
Two status reports regarding training in welfare technology, basic and advanced levels (2019)	Progress reports reporting on the status of training initiatives for employees (basic level) and resource persons and middle managers (advanced level) and projecting future actions (operative documents for internal use, i.e., not publicly available).
The municipality's long-term plan for welfare technology (2020–2024)	The municipality's overall strategic plan for enhancing and strengthening the use of welfare technology in the city, developed by the Health Agency in collaboration with the city districts and other interest groups (official and semi-public document).

Notes: These documents are specific to the organisation and have been created and distributed to assist in local digitalisation processes on a city district level; the first and last documents listed are official policy documents, while the others are working documents; the documents are written in Norwegian, with titles translated by the authors. For anonymity, the name of the municipality has been excluded; readers seeking additional information about these documents may contact the corresponding author.

by the interview participants to describe their work and justify and legitimise their arguments or claims. Here, we employed an inductive approach to code statements about work, responsibilities, experiences with, or concerns related to welfare technology. The interviews were first analysed within the groups of participants (managers, welfare technology coordinators, resource persons, and care workers) and then read in light of each other to further identify patterns and variations within and between the worker groups.

5. Analysis

5.1. Discourses Guiding the Municipality Strategies

The municipality-level strategic documents were found to incorporate different types of discourses, which also shifted over time in ways that brought different issues to the fore. Generally, managerial discourses were the most prevalent. Reflecting the national-level strategy of making municipalities the key responsible administrative layer in the digitalisation of primary care, the

city districts were seen as the operative organisational units for the implementation and use of welfare technology. Hence, although the municipality-level documents often used a passive voice and avoided naming specific recipient groups, messages from the national WTP were implicitly conveyed to leaders and managers in the city district. The managerial discourses interplayed with different manifestations of service user discourses and discourses addressing the work and workers' competencies. The commercial type of discourse was not prominent in these documents. However, this may be a result of the selection of documents limited to the welfare technology initiatives, as the municipality's wider innovation policies addressed the city and its services more broadly. We elaborate on these overall observations in the following. All quotes in Sections 5.1 and 5.2 are translated from Norwegian by the authors. Table 2 summarises the discursive characteristics of the municipality-level documents.

Concerning managerial discourses, we observed some shifts over time in the way issues were brought up and attached to actor groups. An emphasis on operational project management accompanied the

Table 2. Discourses in municipality-level strategic documents.

Main category	Discourse characteristics
Managerial	Shifting from a generic project management discourse (the Dissemination Project's "management guideline" document) to discourses on organisational coordination, collaboration, and knowledge sharing (the "diffusion model" document of 2020) and further to strategic technology foresight and change management discourses (the "long-term plan" document of 2020–2024).
Service user	Shifting between discourses emphasising welfare technology support for *patients'* individual health with a few referrals to specific groups or medical statuses (dementia, risk of falling) to the role of welfare technology in supporting *citizens'* independence.
Health professional	Absent referrals to health professional groups or medical competences; competence discourse emphasising change management targeting top and middle managers.
Commercial	Only minor signs of discourses emphasising the stimulation of innovation, although vendors are important technology providers.

establishment of the Dissemination Project, which positioned the city districts as co-project managers. A dedicated project coordinator was recruited to work in the welfare technology section of the Health Agency and developed a management guideline document to be used in the city districts. By specifying mandates, goals, resources, and timelines as well as responsible roles and areas of responsibility, this document advocated a generic project management discourse marked by what we can term standard project terminology, such as "implementation," "milestones," "framework conditions," and "success criteria." In addition to specifying the responsibility of department directors related to time allocation, local project managers (i.e., welfare technology coordinators) and resource persons were mentioned as important resources. The document employed a directive voice, underscoring the need to prioritise the implementation of the project: "Time for project work for project managers and resource persons is prioritized by the districts. The implementation projects are prioritized in the districts."

When the Dissemination Project ended, the managerial discourse was modified and oriented towards other issues. As more responsibilities in the subsequent phase were transferred to the city districts, the emphasis on project management was substituted with a retrospective and reflexive discourse focused on legitimising the use and value of welfare technologies for new groups of workers and service users. The diffusion model document (2020) emphasises the importance of "understanding why we use welfare technology, how to communicate in such a way as to create understanding and commitment to welfare technology among senior managers, employees and users/relatives." Here, issues are attached to other actors on the service floor, such as employees and service users. However, rather than being positioned as active contributors, these actors are seen as target groups for the strategy.

In the latter stage, a new discursive framing was introduced in the long-term plan for welfare technology (2020–2024), which connects the past development to the future possibilities of technology. The document introduced the concept of a "technology radar" (a model for technology foresight) in raising the need to monitor future possibilities as an issue: "If a trial shows good results, procurement, piloting, and scaling will be relevant. The technology radar gives us a pointer to technologies that may hit the municipality in the latter part of the planning period."

Through a technology-centred managerial discourse and its specific concepts, this notion generates a local modification of the strategic issues. Again, managers and specific worker groups involved in trials, procurements, and scaling are seen as important contributors. Interestingly, there is no mention of health care professionals or ideas arising from work practices. This managerial discourse on technology foresight incorporates a new specialised language and invites certain expert groups to master it, while other groups are left out.

The managerial discourses interplays with discourses on service users and health care workers. However, in both cases, these target groups are addressed in general terms, with few distinctions or specifications regarding the type of users or care workers. Service users are referred to as citizens who should be supported in their lives more generally: "Coping with everyday life is about citizens being able to cope with their lives and everyday life. This means that we have to review what are important activities for the individual."

Further, the need to adapt to individual users' needs and resources is presented as an issue for service workers. Indeed, a stated ambition of the services is to provide "good service that is based on the individual's resources and what is important to the residents." The usefulness and suitability of welfare technologies for an individual user-patient are not discussed. On the one hand, this

leaves room for local care units and care workers to create and adopt their subject positions in relation to the service user. On the other hand, limited discursive resources are available for this purpose.

This is further supported by the discourses that more specifically address care workers. Overall, the documents make extensive use of generic competence categories and vocabularies, such as "digital competence," and generic leadership vocabularies, such as "change management" and "benefits realisation." However, resources relating to medical or health professional discourses are very limited. Some professional terms and categories are used to highlight the main challenges of the services, such as "clinical understanding of serious and complex disorders" and "everyday rehabilitation and dementia." However, these are not discussed in relation to operative care practices or specific groups of care workers. "Good professionalism" is called for, but what it requires in terms of health professional knowledge and skills is not discussed.

In summary, our analysis identified multiple, mainly managerial discursive manifestations available for care workers but also potential limits in identifying subject positions for accessing these discursive resources.

5.2. Care Workers' Accounts: Discursive Resources and Uptake of Positions

Across the participant groups, we observed an uptake of the discourses presented in the municipality strategies and political ambitions. However, rather than emphasising the overall need for changes in service provision, issues were more often framed within a service user-centred discourse. This was clear in statements like the following:

> Coping and being independent, this is important in the everyday life of the user who makes use of digital welfare technology. (Care worker 6)

> The technology can further assist the user with many tasks in everyday life. This can also contribute to them being able to live at home for longer and have a good everyday functioning in the future. (Home care manager)

These quotes illustrate how some care workers mobilised discursive resources to establish shared visions for the services, which provided a wider framing of their work. At the same time, these statements are formulated on a general policy level, which concerns both the technologies and the service users. Hence, it is not clear what positions are available for the care workers to take up in their everyday work. Moreover, some workers seemed to experience the general ambitions as a rather distant phenomenon, which generated some tensions at the intersection of their experiences:

> I remember now, [the purpose of increased technology use] was, to save and make more efficient...right? But, yes, ethics often comes up. How far should we go to use welfare technology? (Care worker 2)

This example shows how concerns from the front-line services were brought up to modify the expectations in the strategic ambitions. Whether or how the care workers identified with or mobilised the discursive resources offered in the municipality strategies to frame their own work seemed to vary with their organisational position and professional responsibilities. This variation also manifested as differences in the types of discourses they took up.

Not surprisingly, both the technology coordinators and the home care managers drew on resources affiliated with managerial discourses. This could be seen in the way they activated vocabularies that emphasised implementation, changes in a short time span, the economic benefits of technology use, strategic efficiency goals, such as all users living as long as possible in one's own home, and future visions for the services, with an emphasis on coping with everyday life. At the same time, these groups differed in how the resources were mobilised and combined with other discourses in forming their orientations towards digitalisation and care work.

The home care managers were concerned with logistics and with resourcing the home care services as a whole, including human and digital resources. This involved supporting their workers professionally and emotionally to help them "feel safe" and "learn how to perform service work in the future." As one manager stated: "Everything has its process. So, if employees get training and security and know what they are doing, I think it will go very well" (Home care manager 2). The managers were concerned with informing and justifying the need for changes in the services and described themselves as motivators for such changes, primarily for the workers in their unit but also for the patients. In this way, they took up positions constructed at the intersection of managerial and patient–citizen discourses. At the same time, these discourses were modified to focus on confidence and trust in technology-supported care as key issues. One home care manager described how she used arguments related to patient safety to provide the care workers with a rationale for increasing the use of electronic medicine dispensers:

> This has to do with patient safety. That you know that the medicines are given at the right time and to the right person, and things like that. So, you always kind of have to mention it, so that a reason is given for why. (Home care manager 1)

Through these modifications, care workers were attached to the issues, although more as performing workers than as active contributors in the development

of work practices. While the home care managers were concerned with the allocation of health professional expertise, such as making the most of staff nurses and physiotherapists, this was discussed more in terms of resource allocation in the services than through a health professional vocabulary.

The technology coordinators were more specifically oriented towards the welfare technologies and how they could be used in the service chain. As shown in a previous analysis targeting this group (Brandenberger et al., 2023), their tasks and responsibilities were ambiguous and spanned organisational layers. Hence, they differed somewhat in the way they drew on discursive resources and took up subject positions. In general, they activated a pro-innovation type of managerial discourse, through which they were positioned as facilitators, convincers, and motivators in relation to different worker groups in the organisation. In this way, they also became mediators of managerial discourses and strategies in the organisational hierarchy. As one coordinator explained: "My managers are very afraid of communicating that a change is coming. They advise to not talk so much about changes but rather present it as opportunities and let the employees 'seize the chance'" (Coordinator 4).

The care workers raised issues regarding additional tasks and expectations of workers, especially in terms of operating and monitoring welfare technologies. The interviewees stated that they were still responsible for traditional tasks, such as distributing medicine to the patients, as well as for ensuring that the technology (i.e., the electronic medicine dispenser) worked as it should. To make sense of this intensified work situation, they activated resources from a managerial discourse about service efficiency and contrasted it with their own organisational positioning, as in this exchange:

Care worker 7: The question is which tasks then, one sort of thinks that this will replace. Because you understand that…there is a benefit to the technology and that it has been put there so that it will replace some user time, that it will be able to make the service more efficient.

Care worker 8: It certainly does. But in a way it doesn't…at least not to our advantage, if you understand.

However, this discourse was modified by other workers, who reframed the workload issue over a longer time span, which allowed them to take a more active position. This was done by contrasting the managerial discourse present in the earlier phase with their current situation:

You were supposed to free up more health care workers and nurses for other tasks…but then it actually took longer to insert the medicine [in the electronic dispenser], because, maybe the medicine was too big for the machine, right….I stood there for maybe half

an hour, and then you have to call support to get help in another two, three hours. (Care worker 1)

This worker further described that the main issue in the first phase was to speed up the implementation of technologies in patients' homes, without considering how helpful it actually was for the user: "And we realized that it generated more additional work than being useful, but now it has become easier, because now they are more willing to discuss who of our users will benefit from the technology" (Care worker 1). This re-timing allows for a more active way of envisioning ones' own contributions. Although the formulation "*they* are now more willing to…" places decision-making power at the management level, this positioning opens the possibility for care workers to be included by bringing in their knowledge about the respective service users.

An additional task was responding to alarms from sensor systems in the clients' homes and determining whether the alarms were false or required an immediate home visit. Occasionally, they required actions from the worker in charge beyond working hours when assignments from a day shift were left uncompleted. Moreover, the sensor technologies allowed for increased monitoring of service users and care workers. Some workers mobilised patient safety arguments to cope with this issue: "There are a lot of false alarms, but that's better than not actually detecting real falls." Others described how they were positioned to monitor colleagues' work when receiving alarms and checking the photos from the client's home: "It's uncomfortable because I see how other people work, and it was a pretty clear image, so I feel like I'm monitoring it anyway" (Care worker 2). As these examples show, the health professional discourse was modified to include ethical issues, making it possible for the care workers to influence and manage the degree of intrusiveness in work relations.

Another discursive positioning of the care workers was as motivators for technology use by users. In particular, care workers with a background in occupational or physiotherapy were positioned in this way, as one of them described:

We do motivational work. We present the machine to them [the users] and explain what it is and what it is about. They don't always say "yes" straight away, but in most cases, we succeed in providing the user with a machine, and they get used to it. (Care worker 4)

This positioning as a motivator is in part grounded in a user-centred discourse, highlighting the value of independent living. At the same time, it is nourished from a managerial discourse, reflecting the target figures for technology use in the municipality strategies.

While commercial orientations were not prominent in the interviews with the care workers, the analysis showed the presence of a pro-innovation discourse as a basis for their subject positions. Across the group

interviews, the participants agreed that the process of adopting and adapting welfare technologies in the services moved too slowly. Some participants even took advantage of the opportunity to redefine their professional subjectivities and link to broader innovation discourses: "I personally get motivated by working with something that is changing. That's the way technology is. So for me it's only natural to be a part of it in a way" (Care worker 7). However, this discourse was mainly present among workers who had sought new tasks and responsibilities, for instance, by expressing an interest in becoming a resource person in the local care unit.

Finally, the interviewees raised concerns that technology could take the focus away from the patient and opportunities for human care. One concern was related to spending time checking and documenting information on a digital device during a visit to a patient's home, as it is more common to write a report while with the user. When discussing future scenarios for the care services, workers expressed worries about "becoming robots" and losing the sense of meaningful work due to reduced human interaction. These statements can be interpreted as resistance towards managerial and efficiency-oriented discourses in the care services. However, as our analysis has shown, the availability of positions from which such resistance could be activated seemed to be limited at the workers' level.

6. Discussion

The analysis identified a set of discourses that formed digitalisation processes related to welfare technologies. The main types of discourses were identified across the documents and worker groups, but they varied in their strengths and manifestations. Although the analysis showed managerial types of arguing and reasoning across the documents and workers' perspectives, which limited the available subject positions for care workers, we also found interesting variations within and between these groups.

The national WTP provided a wider context for our analysis. This programme is characterised by different discourses with the main objectives of technological innovation, service users, care workers, and organisational arrangements. Municipalities are seen as key partners in piloting and scaling "welfare technology solutions." While the programme provides a set of framework resources affecting care workers' competencies, the relative absence of a professional discourse addressing care work and the health-professional dimensions is striking. Naturally, the national context has specific political and demographic characteristics. However, regarding the reviewed studies on digital health and digitalisation in primary care, we find that the general orientation towards solutionism resonates with initiatives described in other national contexts (Ajjawi & Eva, 2021; Lupton, 2017).

The municipality-level strategies and documents reflected the emphasis on managerial discourses in the

WTP. However, they were modified and configured with other issues over time. In particular, the emphasis on project-organised knowledge sharing and the modification of the service user discourse to the positioning of a citizen (rather than, e.g., patient) provided a wider set of discursive resources pertaining to the care workers. However, in these documents, the health professionals and their expertise were only addressed to a limited degree. The documents did emphasise the importance of competence development, but in a generic and primarily managerial way, related to managing organisational change. Consequently, different manager groups were offered subject positions in these discourses, while the frontline care workers were detached from the issues and therefore marginalised as important contributors to the digitalisation strategy. This relates to Nilsson et al.'s (2022) finding that digitalisation discourses risk bypassing care workers if their contributions as health professionals are not explicitly addressed.

Consequently, these strategic documents offer care workers relatively few positions from which to influence and contribute to the development of services. The overall managerial discourses ascribe value to and offer resources for taking up subject positions as motivators and advocates for technology implementation among service users, reinforced by the overall vision of supporting patient-citizens' independent living at home. However, they do not offer much guidance or discursive resources regarding how to navigate and take an active stance towards service development. Without such resources, alternative subject positions may be concealed.

The analysis of the care worker interviews revealed how the discursive resources were unevenly distributed across the different worker groups, generating more variety in the way subject positions were offered and taken up. In general, our analysis supports the findings of Segercrantz and Forss (2019) regarding how care workers are positioned as implementers and motivators in digitalisation initiatives related to welfare technologies. As in their study, we found mundane forms of resistance and expressed discomfort, but the general impression was that the way of framing the future services in the municipality strategy was adopted at the worker level. Other discourses were available that opened for other positions, such as innovation agents in the services, and professional care work redefined as caring for home-living patients' safety. Still, the opportunity to take up such positions on the service floor seems to depend on the workers' agency and task-related organisational position. In particular, care workers who had expressed personal interest in the digitalisation processes and accepted responsibilities as resource persons in their local organisation were able to draw on a wider set of discursive resources to build agency.

In the wider literature on work and technology, it has been suggested that workers tend to encounter new tools and technologies in different ways relative to

their level of competency and status in the work community (Anthony, 2018). Those with lower status and lower competency tend to accept solutions and procedures as given rather than examining their assumptions and implications. We also found that care workers' approaches to welfare technology varied with their position, tasks, and assumed responsibilities in the organisation. However, our analysis also provides alternative insights on how and why these differences may appear. Rather than assuming strong relationships between orientations towards technology and individuals' level of competency, attention should be given to what discursive resources and opportunities for reflexive engagement the workers at various levels are offered. In our study, the managerial discourses and the emphasis on digital technologies as providing solutions to problems seemed to limit the opportunities for frontline care workers to engage in discursive negotiations related to welfare technologies. This is important, as opportunities to critically reflect on and contribute to shaping the innovation initiatives in one's organisation are crucial for inclusion in the work community and its capacity to attract employees over time (Nerland & Hasu, 2020; Segercrantz & Forss, 2019).

We argue that there is a need to move beyond the notion of "solutionism" in efforts to digitalise work in general and care work in particular and provide inclusive spaces for the contributions of various workers. To maintain the quality of health care services and ensure that workers are given long-term opportunities to stay included in the work community, it is crucial for workers to have access to a wider spectrum of subject positions from which they can make sense of and contribute to changing work practices. Importantly, such positions are not readily offered in the local work organisation itself. Rather, the discursive environment in work organisations is conditioned by wider policy discourses and the way they include or exclude workers' knowledge and perspectives as valuable in change initiatives. As discussed by Angermuller (2018), how challenges and change initiatives are conceptualised matters, not only for the strategies for coping with experienced challenges but also for how values are ascribed to different worker positions in these processes.

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Conflict of Interests

The authors declare no conflict of interest.

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