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Reconfiguring collaborative data work

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Abstract. Remote care solutions are implemented in primary and secondary care to improve the treatment and follow up of patients with chronic conditions. However, each context of use has specific characteristics related to the clinical conditions of patients and the work arrangements for providing care remotely. In this paper we explore the data work required in the implementation and scaling of remote care in Norwegian healthcare. Specifically, we focus on the reconfiguration of data work in various contexts of use. We find that implementing remote care requires reconfiguration of collaborative data work to ensure reliable and trustworthy data, to make patient-generated data useful in clinical assessment, and to maintain continuity of care in the illness trajectory. Our findings show the continuous configuration and re-configuration that takes place.

Introduction

International strategies have brought attention to the need for new care models that enable patient-centered services and a shift from hospital-centered to more integrated care structures (European Commision, 2018). This shift is expected to improve care processes while also reducing healthcare expenditures. Digital technologies have emerged as a potential solution, offering options such as digital remote care to address these concerns. While numerous pilot projects and trials have demonstrated the positive effects of digital remote care (Morton et al., 2017), challenges in scaling these solutions have been identified (Barlow et al., 2012). Researchers are grappling with the challenge of how remote modalities can be maintained beyond pilots (Greenhalgh et al., 2022) and to understand why as digital remote care scales, digital solutions that work well in one practice do not work at all in another (Greenhalgh et al., 2022).

Studies in CSCW have focused on the design and use of technologies to support remote care and have shown how remote care technologies have transformed the patient-physician relationship (Bardram et al., 2005), the importance of aligning the concerns of patients and clinicians (Andersen et al., 2018), and proposed maintenance-centered design as a strategy to design CSCW tools for digital health (Verdezoto et al., 2021). The increasing use of remote care technologies has also illustrated the emerging role of data work in healthcare. Studies have shown for instance that data work plays an even more central role than in traditional care (Grisot et al., 2019), and that frontline care workers are the crux of data-driven configuration (Sun et al., 2023). A recent scoping review on data work in healthcare illustrated that this research stream is emerging and promising (Bertelsen et al., 2024).

The aim of this study is to understand data work in the context of remote care, and the overall research question is: *how is data work configured and re-configured in the scaling of remote care?*

To address this question, we have studied the process of implementing and scaling digital remote care as an integrated part of the health and care service in Norway. Specifically, our study focuses on two contexts (hospital and municipality) where the same remote care technology is implemented and taken into use in novel areas of use. We find that implementing remote care requires reconfiguration of collaborative data work to ensure reliable and trustworthy data, to make patient-generated data useful in clinical assessment, and to maintain continuity in the illness trajectory. We base our understanding of reconfiguration on the notion of human–machine reconfiguration as an ongoing accomplishment (Suchman, 2007). We discuss how reconfiguration of collaborative data work is critical to the implementation and scaling of remote care. We also contribute to the literature on data work by showing how data work emerges and is configured and reconfigured according to the contextual situation.

The paper is structured as follows: first we present relevant research on data work in CSCW, and then present our conceptual framework. Then, we describe the research context and case, and our research methodology. We then present the findings where we show how data work was reconfigured to ensure reliable and trustworthy data, to make patient-generated data useful in clinical assessment, and to maintain continuity in the illness trajectory. Finally, we discuss the contribution of our study in relation to the CSCW literature on data work and to how to support scaling of remote care solutions.

Related research and analytical framework

Data work has for a long time been part of daily practice in healthcare, however increased digitization has led to an increased volume, velocity, and variety of data which has led to more data work in all parts of healthcare ((Bossen et al., 2019). Researchers in the CSCW community have defined data work as "any human activity related to creating, collecting, managing, curating, analyzing, interpreting, and communicating data" (Bossen et al., 2019 p.466). Based on this understanding, a study by Grisot et al. (2019) focused on novel nursing practice in the context of remote care and claimed that data work is crucial in remote care and plays an even more central role than in traditional care. Furthermore, they argued that data work is not only about analyzing the data element accumulated in the system but also includes the work of deciding what is relevant data and "guiding the patients into co-producing these data" (p.615). A similar study on the use of patient-generated health data illustrated how new forms of data collection triggered a shift in the division of work and how patients and nurses translated and recontextualized data during consultation (Cerna et al., 2020). A study on data-driven long-term care identified several types of data work such as: "constructing, maintaining and updating data infrastructures, articulating the distributed and fragmented data, and repairing the breakdown of data infrastructures" (Sun et al., 2023 p.13). The studies presented above show that healthcare data are not passively available to users and emphasizes human effort to produce, maintain and use data in a meaningful way.

In this study, we build on previous research on data work and on the notion of human-machine reconfiguration as an analytical framework to explore how data work is enacted in practice. "Human-machine reconfiguration" is concerns the question of "how humans and machines are figured together – or configured – in contemporary technological discourses and practices, and how they might be reconfigured, or figured together differently" (Suchman, 2012, p.49). Suchman's research has highlighted how situated agency emerges in sociomaterial arrangements that is enacted in particular ways in particular settings. Situated agency is thus not fixed by predefined specifications, but generated through specific human and non-human entities (Suchman, 2007). The notion of "configuration" provides an analytical framework to explore how sociomaterial arrangements have been shaped through being joined together (Grønsund & Aanestad, 2020 p.3), and how arrangements that produce effective forms of agency emerge in ongoing work (Mazmanian et al., 2014). In our study, we are interested in understanding how this configuration is carried out in different practices with attention to data work in remote care implementation and scaling.

Research site and methods

This study is part of a larger research project on the implementation, use, and scaling of digital technologies supporting high-quality remote patient monitoring of care. In this study, we have followed the implementation and scaling of digital remote care in two different settings. The first setting is a municipality that has adopted digital remote care by participating in a national trial that lasted from 2018 and 2021. Target population for the trial has been patients with chronic diseases such as chronic obstructive pulmonary disease (COPD), diabetes, cardiovascular disease, as well as mental disorders and cancer. Based on the experience gained in the national trial, it has been decided to scale the digital solution to more users and user areas in the health and care services. The second setting is a university hospital who underwent a procurement process in 2021 and signed an agreement with a digital remote care provider. The hospital has implemented a remote care solution for the digital outpatient clinic and digital home hospital for children with diabetes and the further strategy is to scale the digital solution to other use areas. The two research settings included in the study use the same digital solution developed by a Norwegian IT company.

The digital solution is an integrated collaborative solution, based on health management cloud platform technology, and connected digital devices. The solution consists of a web-based patient monitoring portal for clinicians, and a patient application, as well as a set of connected measuring devices. The patient monitoring portal for clinicians is developed for healthcare professionals to handle digital home follow-up, which integrates a range of patient-driven medical devices that support home-based care, such as medical measurements, symptom reporting and rehabilitation. The mobile application designed for patients' end is used with digital measuring equipment, which automatically transmits the measurement results via Bluetooth to the patient's tablet or smartphone (for example, measurement of blood pressure, blood sugar levels, weight, temperature, pulse, oxygen saturation, lung function and capacity, etc.). The measurement results are immediately visible to the patient on the tablet, where they can also answer clinical questions and register symptoms and side effects. The results are simultaneously transferred to a web-based patient monitoring portal so that health personnel can follow up the values that come in and provide individual follow-up. The platform enables integration of novel and appropriate measuring devices. The digital user interface also offers video conferencing and chat functionality that enables synchronous and asynchronous communication between patients and health professions.

In this study, we have followed the interpretive approach to case study research (Walsham, 1995). Our aim was to uncover our informants' understanding of how data work is configured and reconfigured across different contexts of use in the context of remote care implementation and scaling. Furthermore, we have emphasized the relational aspect of data and how data work is reconfigured in relation to existing technologies, practices, and habits.

We have collected data conducting semi-structured interviews and collecting archival documents. In the first phase of the study, we collected publicly available documents and internal project reports to gain insight into the historical development of digital remote care in Norway. In the second phase, we carried out 25 interviews with key stakeholders in the project, i.e., health professionals, employees at the IT department and the supplier. Most of the interviews were conducted in the local context in the municipality or at the hospital, while some interviews were conducted on zoom (because of the pandemic). The interviews lasted approximately 45 – 60 minutes, were recorded and fully transcribed.

We analyzed the data according to the hermeneutic circle (Klein & Myers, 1999), which is a process of going back and forth between data collection and analysis to understand the different contexts and the use of digital remote care. Furthermore, the analysis was inspired by a grounded theory approach and the area of enquiry guided the coding process (Charmaz, 2014; Urquhart et al., 2010). The initial step in the analysis was based on open coding to identify incidents related to adoption, use and scaling. All the incidents/events identified in the empirical material were assigned a code and a descriptive label. When all the data had been examined, the initial codes were organized and reassembled in a new way. This involved specifying the properties and dimensions of the initial categories such as condition, action / interaction, and consequences. The axial coding technique provided an analytical lens for moving back and forth between the initial categories, exploring the relationship between data, and re-organizing sub-categories and high-level concepts. NVivo software package (version 12) was used throughout the analysis to code, organize and visualize data.

Findings

Our findings are organized in three parts, corresponding to reconfiguration of data work with the aim to ensure reliable and trustworthy data, to make patient-generated data useful in clinical assessment, and to maintain continuity in the illness trajectory.

Reconfigure data work to ensure reliable and trustworthy data

The digital remote care solution provides some basic functionalities that were developed in collaboration with the vendor and health professionals as part of the national trial. A key issue during this process was to figure out how to ensure reliable and trustworthy data. The target group for the national trial was patients with chronic diseases and in the trial the patients received digital devices for measuring vital signs such as blood pressure, body temperature, heart rate, and blood oxygen. In addition, questionnaires to collect data on the patient's experience of the health condition have become an important part of the digital follow-up, both in the municipality and hospitals. The municipality has mainly chosen to use self-defined questionnaires. One way the municipality worked to ensure data reliability was by developing the questionnaires based on both national guidelines and professional consensus locally. Also, as they over time gained experience with using the questionnaires, they created templates specific to the various diagnoses or clinical issues, and made these available in the digital solution as illustrated in a quote from a nurse:

> “It has probably developed a bit because at first, I used to create questionnaires for each individual patient, but eventually I saw that there were templates which were very useful. And then you can add questions if there is something the user wants you to ask about because the questionnaires have been created by us together with the patient”

This way they ensured a tight relation between the specific clinical conditions of each patient, and the data collected, making the collected data relevant to the condition. A quote from another nurse illustrates how the questions were adapted to the clinical trajectory:

> “you have to make sure that they understand the questions and that the answers make sense to them. If you ask a patient with severe COPD whether they have had phlegm today - Yes/No - then they may always have phlegm, so you have to turn it around and ask in a different way because otherwise it generates red or yellow alerts”.

These adjustments were critical to make sure that the collected data were reliable for clinicians. In the same way, the municipality adopted self-care plans, which are a plan for how the patient can manage their condition. A nurse in the municipality emphasized the central role of the self-care plan and stated that “it doesn't help to measure if you don't have any interventions”. Like the questionnaires, templates have been created for self-care plans, to make sure that the collected data were the relevant ones for clinical follow up. The templates for the self-care plans are then individually adapted to the patient's condition and needs, as a nurse explains:

> “we have templates for heart failure and COPD and diabetes and the most common clinical cases, and then they are adapted individually …. because it is important to include what is important to the patient... I can focus on something to do with the heart failure and then the user can focus on something completely different that is important. For him, it may be important that he is able to stay healthy for the one week in the summer when his grandson is getting married or something like that”.

These quotes illustrate how nurses need to adjust measurement arrangements to ensure that patient-generated data make sense to both patients and healthcare professionals.

As briefly outlined above, configuration of measuring arrangements involved preparatory work to facilitate patient-generated data. However, further scaling of the digital solution involved reconfiguring measurement arrangements. For example, cancer patients have been enrolled in digital remote care and a project nurse in the municipality stated that:

> "Then we had to create new pathways for this group because they had to be followed up by other resources and a completely different arrangement (...)"

In this instance, specialized nurses participated in the preparatory work which involved the use of validated questionnaires. The participation of expert nurses ensured that the configuration for collecting data targeted the relevant data for each patient also in this case. Furthermore, digital remote care has been put into use in various departments at hospitals, which involves further reconfiguration of measuring arrangements. For example, the endocrinology outpatient clinic offers digital follow-up to all patients with diabetes. The preparations began as an innovation project, and they have adopted both standardized and locally adapted questionnaires that patients respond to in advance of the annual consultations. They have put a lot of effort into validating and developing the questionnaires to ensure data reliability. For instance, during the project, they collected questionnaires (PROMs[1]) for diabetes patients, but realized that these needed to be adjusted for more open-ended questions that were adapted to clinical use.

> "(…) we found that many PROM forms, especially those developed for research, were a bit problem-focused, so the nurses were concerned that we must ask more positive, open questions (...).

When preparing locally adapted questionnaires, they have been inspired by other hospitals and professional communities that emphasized the patient perspective and thus invited a user group of patients who gave input to the questionnaires.

As digital questionnaires have gradually been adopted, modifications have also been made to the digital solution as explained by an employee at the vendor:

> "A lot has happened from 2018 - 2021 (...) You can build it up with yes/no questions, multiple choice questions, scales from 1-10 or as free text".

This flexibility in the design of the questionnaire makes it easier to adapt to different user groups; for example, some people find it easier to answer yes/no questions. During the implementations, this flexibility has been critical to ensure data reliability as the solution could be adapted and adjusted (e.g. templates, questionnaires) to collect data specifically relevant to specific patient groups, or even at individual level.

1 Patient-reported outcome measures (PROMs)

Reconfigure data work to make patient-generated data useful in clinical assessments

As briefly outlined above, several self-management tools have been used to ensure that relevant patient-generated data is available in the digital solution. Part of this work included training and guiding patients to ensure that the collection of data is carried out correctly. Health professionals have thus been given a new role that is organized differently in the municipality and the hospital.

The municipality provides health and care services to a large population, and several telemonitoring centers have been established that play a key role in digital follow-up. First and foremost, employees at the telemonitoring center provide guidance to the patients in the start-up phase of digital remote care. Furthermore, they are responsible for the daily follow-up of patients that involves the assessments of patient-generated data. When a new patient has been enrolled in the service, the nurses make a home visit to get to know the patient, deliver equipment and provide training in the use of the digital solution. This is typically the start of a 14-day test period where the patient's measurements are followed carefully to form a basis for threshold values for the measurements as well as the preparation of a questionnaire and self-care plan. Furthermore, threshold values and self-management arrangements are verified and approved by a GP or a doctor at the hospital.

Further work at the follow-up center mainly involves analyzing, filtering, and verifying patient-reported data. An overview of patient-reported data is available in the user interface of the digital platform and enable triage of the measurements' (green, yellow, red). The threshold of the measurement values for the individual patient defined by health professionals enables the automation of the triage. Thus, the nurse can quickly sort out measurements that requires attention and action. However, manual work to verify the measurements is also necessary and if the measurements are in a red or yellow zone, they make a phone or video call to the patient to clarify the situation. The nurses also use various data sources to assess and clarify the situation as explained by a nurse at the follow-up centre:

> "You must have the skills to compare different measurements and different information against each other. As I said, you have measurements, you have the question forms and, in addition, you have previous reports from the electronic patient record (EPR). So you have to be able to combine a lot of information, and work from that. Then you must be very systematic with the assessment you make, and not just, oh, you have high blood pressure, now you have to go to the hospital" (…) You must be able to interpret and be somewhat critical of the measurements. I always ask the user; How did you do the measurements? Did you dry your finger when you measured your blood sugar? Was your finger cold when you used the pulse oximeter? We must remind them of such things all the time".

A statement from the Norwegian Medical Association also illustrates this issue:

> "What does it mean that blood pressure is high? The interpretation differs according to how the pressure is measured, the situation the patient is in and whether it is measured in a special situation or routinely. Context can disappear by focusing only on individual parameters".

These quotes illustrate how different types of data are used to analyze and validate patient-reported data, which in turn forms the basis for decisions in practice. The user interface in the platform provides a graphical overview of measurement data that gives the nurse a good overview of trends that provides an overview of the clinical situation over time. All this type of interpretation and assessment work of data requires both professional knowledge and digital skills:

> "you need the best of the best. Firstly, because you have so many different fields that you should know something about. The second is that you don't see them, you have to communicate with them via chat or phone, so there is something about ... you can't see and feel, and you have to use completely different senses than what you are used to as a clinician (...) I think there will be a specialization within a few years".

Another nurse highlighted a similar issue:

> "I would never put a newly graduated nurse to work on this because it requires experience, you must be able to examine patients and you must be able to recognize symptoms".

As briefly outlined above, digital follow-up includes different types of data work and involves a combination of automated processes and human work. They have gradually configured the new practice and organization of digital follow-up. So far, the municipality has established telemonitoring centers that are located close to home care in the districts that have adopted digital remote care. However, in the further scaling to new districts, they are considering a common telemonitoring center, as explained by a project nurse in the municipality.

> "There are advantages and disadvantages to all types of organization. If you have a common one, it may be cheaper to operate, but then you lose the closeness to the user that you have if it is local, where you may work more interdisciplinary together with physiotherapists and occupational therapists and other groups, which you lose if there is a large common center .... so that is the assessment you have to make, but there is something about the fact that at a larger center you can have nurses who have more specialized expertise."

Digital remote care is used in a similar way in the hospital, but modifications and adaptations of data to many different clinical pathways are an ongoing process in the scaling of the digital solution. A lot of preparation data work is also required in this context and the scaling of digital follow-up at the hospital is organized by a team at the IT department that guides superusers in the various departments as explained by a member of the team:

> (…) we talk about the process and then we have a phase where we discuss how we work today and then we have a phase where we look at how we want to work, and then all the good ideas come to the table and many good discussions".

The superusers play a key role in this process by developing data and care procedures, training employees, and providing input to the team when modifications are needed. The digital follow-up of the patients is carried out by the nurses at the wards and the frequency of the interaction depends on the course of the illness. For example, children with newly diagnosed diabetes are followed up at home hospitals for children. The initial treatment starts when the child is physically admitted to the hospital. They are then offered the opportunity to be transferred to the home hospital for further follow-up until blood sugar level is stabilized. In this case, the patient uses a sensor that continuously measures blood glucose in the tissue under the skin and the values are automatically transferred to an app on the mobile phone. The patient manually enters the blood glucose values from the measuring device into the digital platform, as well as answering a questionnaire about carbohydrate intake and insulin dose. The nurse thus has access to patient-reported data in the digital solution instead of having to travel to the patient's home to collect data. In addition, asynchronous and synchronous messaging is regularly used in this context. For example, chat functionality is regularly used to clarify issues and inform patients about assessments that have been. The messages are also stored in the system and thus provide a historical overview of the interaction between patient and nurse which is used in the further assessment. In addition, synchronous communication such as video is used if the patient/relative needs guidance in the use of medical equipment and so on. The patient and relatives receive close follow-up for several weeks until they are able to manage the disease and are then followed up by the pediatric outpatient clinic until they are 18 years old and then at the endocrinological outpatient clinic.

Traditional follow-up at the outpatient clinic has been two consultations a year; one with a doctor and one with a nurse. One of the main challenges has been that many patients did not attend the agreed appointment, and the digital solution enabled a more needs-driven follow-up instead of calendar-driven consultations. Patient-reported data from measurement devices and questionnaires are also used in this context and they act on yellow and red alerts. In the assessment of patient-reported measurements, a specialized software is also used which provides more detailed data and trends of glucose values. In addition, the chat functionality in the digital solution is used to clarify the situation as stated by a nurse:

> "It works brilliantly and clarifies many things continuously where we would normally receive by phone calls that would have taken much more time".

This example illustrates that, in the various contexts of use of remote care, several self-management tools have been used to ensure that relevant patient-generated data is available in the digital solution, and consequently for clinical assessment. It also shows the configuration and reconfiguration of data work needed to make sure the generated data is adjusted to the contextual conditions of the care situation.

Reconfiguring data work to maintain continuity in the illness trajectory

The digital remote care platform is mainly used by nurses as the follow-up of patients is one of the nurses' primary tasks. However, interdisciplinary collaboration and collaboration across healthcare providers in this context is important to ensure continuity of care as good follow-up of the care pathway. Our informants report for instance that the use of digital remote care has increased the interaction between the municipality, the GPs, and the hospitals. A nurse in the municipality stated that:

> "My experience is that we sit in the middle and fill a gap that has been there for the chronically ill patient".

As mentioned, the nurse collaborates with the GP in preparing self-care plans, questionnaires, and threshold values for measurements. These guide and structure the data generation tasks. However, digital data, once generated by patients and received in the remote care system, are still difficult to share further. While information is shared via electronic messages between the municipality, the GP and the hospital, these are not integrated with the remote care system. The lack of integration results in additional work where data have to be copied and re-entered as explained by a nurse:

> "It is not smoothly to use, to punch in measurements for a month".

Another challenge is the formatting of electronic messages, as explained by a project nurse in the municipality:

> "It works, you get the message across, but even if it looks fine when I send it from our EPR system, there is something about the formatting, the message can look completely different when it is opened at the GP or the hospital. Then it can be messy and very difficult to read, so visually there is room for improvement".

Some of the issues mentioned above illustrate the need to reconfigure data sharing between actors involved in digital remote care to ensure continuity of care. Our informants mentioned an ongoing project in the municipality to figure out how internal and external interaction can be improved in this context. Internal interaction is described as 'almost resolved', as the data produced in the digital remote care solution have recently become available in the EPR system in the municipality. The project is now working on sharing measurement data with GPs and hospitals. This work is quite complex and involves the IT provider, healthcare professionals and lawyers to understand how data can be shared to meet healthcare needs as well as legal requirements. Thus, there is an ongoing reconfiguration of data work for continuity of care among GP, hospitals, and municipal care.

Health professionals at the hospital have experienced similar challenges in ensuring data sharing for continuity of care. For example, clinical notes produced in the digital remote care solution are still transferred manually to the EPR system used at the hospital. Furthermore, several advanced measurement devices are used at the hospital but are not integrated into the digital remote care solution for digital follow-up. For example, sensor technology is used at the endocrinology outpatient clinic to monitor the patients' blood sugar. However, the lack of integration of these devices with the remote care solution means that they use two different types of devices generating data in the follow-up of the patient. To integrate the hospital devices with the remote care solution is a complex effort involving the hospital IT-department and two vendors. An employee at the IT department describes this issue as follows:

> "There is a flora of applications and systems emerging in this area, and it is clear that "packaging" it to both health professionals and patients in a way that means that you do not have 6-7 apps, but that you still have the opportunity to use different types of solutions for different types of use (…) we see this as our foremost task - to be able to stitch this together in some sensible way".

The implementation of remote care in the municipality and the hospital context is not only about generating data, but also sharing across technologies and contexts of use supporting the collaborative work for remote care. As remote care technologies are novel in this case, the technical integrations are still not in place and data have to manually be copied, pasted, sent and shared to ensure continuity of care for patients.

Discussion

In this paper we address the research question: *how is data work configured and re-configured in the scaling of remote care?* To address this question, we have used the notion of reconfiguration as an ongoing accomplishment (Suchman, 2007) to study the data work of participants in the implementation and scaling of remote care. Our study shows the ongoing reconfiguration process involving modifications and adjustments to ensure the reliability and trustworthiness of data, effectively utilize patient-generated data in clinical assessment, and maintain continuity throughout the illness trajectory.

Through data work reconfiguration, the nurses experiment how to make the solution work in specific contexts of use. Our data show for instance how the nurses adapt and modify the questionnaires to make sure they capture relevant data to inform care decisions. In addition, our study shows how, as the solution is scaled to novel contexts of use, this work varies in different contexts, for instance the way nurses work with configuring the questionnaires varies in the municipality and in the hospital, and for different patient groups. However, this data work is explorative, not given or decided a priori. The nurses experiment data in relation to the data generated by patients and collected and displayed by the system. Data work is thus not just set as the system is taken into use, but data work is experimented upon and transformed by the specificities of the context, of the patients' group, of the work practices and of the existing sociotechnical arrangements in place. We contribute to the emerging research on data work in healthcare (e.g. Bjornstad and Ellingsen, 2019, Fiske et al., 2019, McVey et al., 2012, Pedersen and Bossen, 2024) with insights into the experimental, context dependent and provisional nature of data work.

We also stress the collaborative aspect of data work by showing how data work is collaborative as it takes place in the collective interpretation and meaning making of data. Collaborative data work refers to the collective efforts and processes involved in managing, analyzing, and utilizing data in the context of remote care. Our findings show the many instances in which nurses strive for data standardization. However our findings also show the tension between standardization and flexibility characterizing data work. On the one side, the nurses recognize the importance of personalizing and adjusting data collection (via e.g. questionnaires) to the specific characteristics of patients, while on the other side sharing data across levels of care and healthcare organizations requires standardization. As Berg and Goorman (1999) point out, health information is entangled with its context of production, and work is required to make data mobile and suitable for accumulation and further re-use and analysis. The nurses work with data both in the context of production, to make sure the generated data are reliable, and for other contexts of re-use for continuity of care. In conclusion, our study emphasizes the critical role of reconfiguring data work in the implementation and scaling of remote care.

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